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COCCINELLIDÆ.

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A REVISION

OF

THE COLEOPTEROUS FAMILY

COCCINELLIDÆ.

BY

GEORGE ROBERT CROTCH, M.A.
" "

London :

E. W. JANSON, 28, MUSEUM STREET.

1874.

PREFACE.

HAVING spent many happy hours with the lamented author in the examination of the beautiful forms of which this book treats, I have felt it a pleasant thing to be associated, even in so humble a capacity, with its introduction to the Entomological world; and the little service I have had the privilege of rendering in the revision of the proof-sheets of the latter half of the work, has been quite a labour of love—enabling me to offer a slight testimony of affection to a kind friend, and of my personal interest in that family of the Coleoptera which had first attracted my attention by the singular loveliness of its numerous species.

A careful revision by the author himself would have been of incalculable value to the work; its usefulness would also have been greatly enhanced, had it been possible for him to have made those modifications and additions which his investigations in America afforded materials for. But, of course, this was not possible. There is, however, the consolation of knowing that the student can obtain the results of those later researches, in the author's memoir, entitled "Revision of the Coccinellidæ of the United States," to which Mr Janson refers in the note which follows this preface.

When, in the autumn of 1872, Mr Crotch took his departure for the United States of America, as the first

stage of his proposed Natural History expedition to the South Seas, only a part of this book had passed through the press, and had had the advantage of his personal revision. At a much later period, and after considerable delay (the reasons for which are given in a note received from Henry Bradshaw, Esq., King's College, Cambridge, which will be found at page ix.), it became my duty to assume the responsibility of supervising its completion. This task was rendered much easier by the valuable aid of Edward W. Janson, Esq., of London, who kindly added or verified such references to works as were not to be found in the Cambridge University Library.

It may be due to the author and the reader to say that Mr Crotch was a hard worker; and by the aid of much practical knowledge of his subject, and of its literature in several languages, together with the possession of an unrivalled collection which he had spared no trouble or expense to render as perfect as possible, and an intense enthusiasm, he was able to accomplish, in a comparatively short period, what might reasonably be expected to have required years. During the last few months ere he left England, I am aware that he often spent days and nights, with but brief periods of rest, in preparing the present monograph, and accumulating materials for an equally elaborate one on the Family of the *Erotylidae*. During his sojourn in the United States he must have worked with the same unflinching ardour till within a short period before his death, judging only by what he accomplished. On referring to a letter of his sent me from San Francisco, dated Oct. 7, 1873, I find him saying, "I have described about 500 new North American Coleoptera, and am in fact an authority on them now. I have to study *Curculionidae* in the winter,

beautiful, but very difficult, I fear. I have found some splendid *Coccinellidæ* here; and made out all the North American species satisfactorily now. Have been from S. Diego to Cariboo, far up on the Frazer, almost to Hudson's Bay. I am now through my first year's work, and shall go back to the East to count up and describe novelties. I have taken vast numbers of things, though hardly as many as I had hoped. They are not so common as in Spain....."

By reference to Mr Janson's note, it will be seen that "The Revision of the *Coccinellidæ* of the United States" became a part of his labours. Besides this, he contributed some Papers to American Entomological Journals, treating of the *Dytiscidæ*, *Buprestidæ*, *Phytophaga*, *Erotylidæ*, and *Endomychidæ*; and brought out a new Catalogue of the United States Coleoptera, north of Mexico, which was printed at Salem, in addition to work done at the Museum of Zoology at Cambridge, Mass., and preparations for further explorations.

It was therefore not a matter for surprise if, under such incessant labour, while almost ignoring the requirements of the body, his health, never so perfect as he imagined it to be, at last seriously broke up, and he was seen to be a dying man months before he would acknowledge the fact to himself or others. Happily, in America as in England, he won the respect and love of all who became acquainted with him; and before the end came, Providence had placed him as a dying guest in a home where kindly and gentle hearts and hands cared for and tended him as if he were a beloved brother or son, while every friend besides, whom he had won in the good city of Philadelphia, did his or her best to render his last days of life as pleasant and easy as his painful illness would permit. All honour to them for it!

On the 16th of June, 1874, he died of consumption, in the 33rd year of his age, deeply lamented by a world-wide circle of friends, who feel that thereby the science of Entomology has also lost an accomplished and useful worker, who would have done still greater things if he had been spared a few more years.

It only now remains for me to give an indication, in the form of a table of tribes and genera, of the author's arrangement of, and additions to, the family of the *Coccinellidae*, trusting that in some way this may render the work slightly more easy for reference and study. In hoping that his labours may be the means of encouraging many to study this beautiful but comparatively neglected family of beetles, and prove of value to those who already know much about them, I am, I believe, only expressing that which Mr Crotch had so fervently at heart, when he prepared the work.

ROBERT H. F. RIPPON.

9, PETERSFIELD, PARK SIDE, CAMBRIDGE,
September 1st, 1874.

The Author of the present treatise, well and widely known to entomologists for the zeal and ability with which he devoted himself to the study and pursuit of his favourite science, and endeared to those intimately acquainted with him by his keen sense of honour, frankness, manly courage, and loving unselfish nature, having left England on a long projected entomological journey to the southern hemisphere *viâ* the United States of America, and California, during its progress through the press, his friend, Mr R. H. F. Rippon, of Cambridge, undertook the onerous task of supervising the concluding portion of the work¹.

¹ Pages 1—160 were revised by Mr Crotch, and printed off prior to his leaving England in October, 1872.

In a memoir, entitled "Revision of the Coccinellidæ of the United States," communicated by Mr Crotch to the American Entomological Society, and published in its Transactions, Vol. iv. p. 363 (April, 1873), it will be seen that an inspection of the North American collections has necessitated the establishment of no less than three new genera, viz., *Ceratomegilla*, Crotch (having the *facies* of *Hippodamia*, but structurally more nearly allied to *Megilla*), type *C. Ulkei*, Crotch, n. sp.,—*Hyperaspidius*, Crotch (related to *Hyperaspis*, but differing in having the elytral epipleuræ simple, *i.e.* destitute of foveæ for the reception of the femora), type *trimaculata*, Linn.,—and *Cephaloscymnus*, Crotch (distinguished by its narrow transverse thorax with immarginate base, its large porrected head, etc.), type *C. Zimmermanni*, Crotch, and the description of eleven new species of previously recognised genera, viz. *Hippodamia oregonensis*, *H. falcigera*, *H. americana*, *Coccinella difficilis*, *C. annectens*, *Mysia Hornii*, *Brachyacantha indubitabilis*, *B. Bollii*, *Hyperaspis dissoluta*, *H. Lewisii*, and *H. Hornii*: an investigation also of the actual types of several North American species involved certain modifications in nomenclature, which, unfortunately, could not be inserted and adopted in the present work, owing to the portions in which they occurred having been printed off long ere the advent of the memoir.

EDWARD W. JANSON.

LONDON,

31st August, 1874.

KING'S COLLEGE, CAMBRIDGE,

August 31, 1874.

MY DEAR SIR,

The whole expense of printing Mr Crotch's *Revision of the Coccinellidæ*, which you have so kindly undertaken to see through the press, has been borne by the Syndics of the University Press; and I can only say, what Mr Crotch would have said, that all thanks are due to them for their liberality in the matter.

Thus much it is necessary for me to say in answer to your question. But there has been so much delay in the publication of the work, that I cannot let it go out without a few words from me, to shew that neither Mr Crotch nor Mr Janson and yourself have been in any way responsible for its late appearance.

The work, as you are only too well aware, was only in part printed when Mr Crotch left England on the first of October, 1872. The manuscript of the remainder was left with me to see to its completion; but owing partly to an unfortunate mistake of mine, it was mislaid and only discovered in the autumn of 1873. Since that date I know that no time has been lost on your part in correcting the sheets and making the necessary verifications of references.

Yours truly,

HENRY BRADSHAW.

R. H. F. RIPPON, Esq.

A TABLE OF THE GENERA.

[N.B. Names of Genera with a star before them, as “*—,” indicate that such genera were also created by the Author, and published in a Catalogue of Coccinellidæ previous to the preparation of this work.]

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By the foregoing index and list it will be seen that the author includes in his arrangement 7 sub-families, viz. (1) COCCINELLIDÆ; composed of tribes *Epilachnides* of 4 genera, and *Coccinellides* of 65 genera. (2) TYTTASPIDES, of one genus only. (3) CHILOCORIDES, of 21 genera. (4) HYPERASPIDES, of 7 genera. (5) SCYMNIDES, of 4 genera. (6) EXOPLECTRIDES (divided into group 1 *Ortalia*, 5 genera; group 2 *Azyæ*, 2 genera; group 3 *Exoplectræ*, 8 genera). (7) RHIZOBILIDES of 20 genera, the last 6 forming Tribe 3 *Discotomides*.

The total number of genera is 137. Of these 21 are new, and 13 more were previously published by the author. (Crotch, *Cat. Cocc.*)

The number of species included in this book is 1341; of which 33 are species dubiæ, and 239 new to science.

R. H. F. R.

*THE expense of printing this volume has been
defrayed out of the Funds of the SYNDICS
OF THE UNIVERSITY PRESS.*

HISTORY OF THE GENUS.

C. LINNÆUS. Systema Naturæ. Ed. x. 1758.

Coccinella. (36 sp.)

p. 364.	1.	unipunctata ...	... [<i>Silphidæ</i>].
	2.	bipunctata ...	... <i>Adalia</i> .
365.	3.	3-punctata ...	... <i>Cocc. 11-punctata</i> var.
	4.	hebræa ...	... <i>Anatis ocellata</i> var.
	5.	5-punctata ...	... <i>Coccinella</i> .
	6.	3-fasciata ...	... <i>Coccinella</i> .
	7.	hieroglyphica	... <i>Coccinella</i> .
	8.	7-punctata ...	... <i>Coccinella</i> .
	9.	9-punctata ...	... <i>C. 11-punctata</i> var.
	10.	10-punctata <i>Coccinella [variabilis]</i> .
366.	11.	11-punctata <i>Coccinella</i> .
	12.	13-punctata <i>Hippodamia</i> .
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	14.	ocellata <i>Anatis</i> .
	15.	19-punctata <i>Anisosticta</i> .
	16.	22-punctata <i>Thea</i> .
	17.	24-punctata <i>Lasia</i> .
	18.	25-punctata ...	... <i>Lasia 24-punctata</i> var.
	19.	conglobata ...	... <i>Propylea</i> .
	20.	conglomerata ...	... <i>Cocc. 10-punctata</i> var.
367.	21.	guttato-punctata	... <i>Ibid.</i>
	22.	14-guttata ...	... <i>Calvia</i> .
	23.	16-guttata ...	... <i>Halyzia</i> .
	24.	18-guttata ...	... <i>Myrrha</i> .
	25.	20-guttata ...	... <i>Sospita tigrina</i> var.

p. 367.	26.	oblongo-guttata	...	Mysia.
	27.	obliterata	...	Adalia.
	28.	bipustulata	...	Chilocorus.
	29.	4-pustulata	...	Exochomus.
	30.	6-pustulata	...	Adalia bipunctata var.
368.	31.	10-pustulata	...	C. 10-punctata var.
	32.	14-pustulata	...	Coccinella.
	33.	16-pustulata	...	?
	34.	gigantea (<i>De G.</i>)	...	[<i>Erotylidæ</i>].
	35.	pantherina	...	Adalia bipunctata var.
	36.	tigrina	...	Sospita.

C. LINNÆUS. Fauna Suecica. Ed. ii. 8. 1761.

One species only added

156. 483. **16-punctata** (*Mod.*) ... *Micraspis*.

N. J. PODA. Insecta Musei Græcensis. 8°. 1761.

He enumerates 10 species, giving the Linnæan diagnoses.

25.	6.	12-guttata	...	Vibidia.
26.	11.	14-maculata	...	<i>Propylea conglobata</i> (<i>L.</i>).

E. GEOFFROY. Histoire abrégée des insectes qui se trouvent aux environs de Paris. 2 tom. 4°. 1762.

320.	1.	C. bipunctata <i>L.</i>	...	
	2.	C. 5-punctata <i>L.</i>	...	
321.	3.	C. 7-punctata <i>L.</i>	...	
322.	4.	C. 9-punctata <i>L.</i>	...	= C. 11-notata <i>Schn.</i>
322.	5.	C. variegata <i>Gz.</i> (<i>carpini Fc.</i>).		
324.	6.	C. 13-punctata <i>L.</i>	...	
324.	7.	C. vittata <i>Gz.</i> (<i>trinaeris Fc.</i>).		
	8.	C. flava <i>Gz.</i>	...	...
325.	9.	C. argus <i>Fc.</i>	...	= <i>Epilachna</i> .
	10.	C. 19-punctata <i>L.</i>	...	

- p. 326. 11. *C. 24-punctata* *L.* ...
 12. *C. conglobata* *L.* ...
 327. 13. *C. 14-guttata* *L.* ...
 14. *C. albomarginata* *Gz.* ... = *Calvia 15-guttata* (*F.*).
 327. 15. *C. 14-punctata* *L.* ... *Propylea conglobata*.
 329. 16. *C. suturata* *Gz.*... ... *Micraspis 16-punctata*.
 17. *C. 22-punctata* *L.* ...
 330. 18. *C. 14-pustulata* *L.* ...
 19. *C. 10-pustulata* *L.* ...
 331. 20. *C. 6-pustulata* *L.* ... *Adalia bipunctata* var.
 332. 21. *C. subvillosa* *Gz.* (*fasciata* *Fc.*) = *Scymnus*.
 22. *C. luteorubra* *Gz.* (*villosa* *Fc.*) = *Platynaspis*.
 333. 23. *C. interrupta* *Gz.* ... = *Scymnus*.
 24. *C. rubromaculata* *Gz.* (*pygmæa* *Fc.*) = *Scymnus*.
 25. *C. 4-pustulata* *L.* ... = *Exochomus*.
 334. 26. *C. bipustulata* *L.* ... = *Chilocorus*.
 27. *C. nigromaculata* *Gz.* = *Exochomus*.

C. LINNÆUS. *Centuria Insectorum*. 4°. Upsal. 1763.

Two new species are added to the genus.

- p. 11. *sanguinea* *Cycloneda*.
 12. *surinamensis* [*Erotylidæ*].

E. PONTOPPIDAN. *Det Danske Atlas*. 4°. Kjöb. 1763.

He gives 20 species as inhabitants of Denmark; the three new ones are rudely figured.

- T. XVI. 7. *4-punctata* *Harmonia*.
 8. *12-pustulata* *Propylea conglobata* (*L.*).
 9. *bimaculata* *C. 10-punctata* var.

A. J. SCOPOLI. *Entomologia Carniolica*. 8°. Vind. 1763.

He describes 18 species, associating with them several spotted *Chrysomelidæ*; the new ones are 5 in number.

77. 241. *18-punctata* *Harmonia*.

- p. 78. 242. 20-punctata [*Chrysomelidæ*].
 79. 243. tessulata Propylea conglobata.
 247. fasciata [*Tenebrionidæ*].
 80. 250. 4-maculata Adalia bipunctata.
 81. 251. 10-maculata C. 10-punctata *L.* var.

The known species are, 234. bipunctata, 235. 7-punctata, 236. 9-punctata† [= constellata], 237. 10-punctata, 238. 13-punctata, 239. 24-punctata, 240. 16-punctata† [= 18-punctata *Scop.*], 244. 4-pustulata† [= bipunctata v.], 245. 6-pustulata, 246. 14-pustulata, 248. 14-guttata, 249. 16-guttata.

O. F. MUELLER. Fauna insectorum Fridrichsdalina.
 8°. Argent. 1764.

He enumerates 59 species, one new.

6. 50. 8-punctata ? C. 10-punctata *L.*

J. C. SCHAEFFER. Icones insectorum Ratisbonensium.
 4°. Erlangæ. 1766-8.

He figures several species accurately enough, but without names.

C. LINNÆUS. Systema Naturæ. Ed. xii. 8°. Holmiæ. 1767.

The number of species is here raised to 49.

579. 1. **marginata** (*Brünn.*)... Mononeda.
 4. **impunctata** Cynegetis.
 5. annulata (*Schreb.*) ... C. bipunctata var.
 580. 9. 4-punctata || (*Schreb.*) ... C. 10-punctata var.
 12. 6-punctata C. 10-punctata var.
 585. 19. 12-punctata Micr. 16-punctata (*L.*).
 582. 24. 18-punctata || Lasia 24-punctata (*L.*).
 27. 23-punctata (*Schreb.*) ... *Ibid.*
 583. 33. **10-guttata** Calvia.
 584. 40. impustulata (*Schreb.*) ... Harm. 18-punctata (*Scop.*).
 41. **cacti** Chilocorus.

- p. 592. 45. **Chr. trimaculata** ... Hyperaspis.
 „ „ **Chr. gigantea** (*L.*) ... [*Erotylidæ*].

J. R. FORSTER. *Novæ species insectorum.* 8°. Lond. 1771.

18. 13-maculata C. 10-punctata *L.*

P. S. PALLAS. *Appendix ad iter.* T. III. 4°. 1773.

29. 71. **axyridis** Coccinella.
 72. ocellata *Anatis ocellata* (*L.*).
 30. 73. **cimicifugæ** *Cocc. trifasciata* *L.*

C. DE GEER. *Mémoires pour servir à l'histoire des insectes.* T. v. 4°. Stockholm. 1775.

He describes 30 species at some length. The new ones are :

373. 5. **7-maculata** Hippodamia.
 376. 10. 15-punctata (T. XI. f. 1-9) *Anatis ocellata* (*L.*).
 378. 11. rosea Harm. 18-punctata (*Scop.*).
 380. 13. 22-punctata-obscura *Lasia* 24-punctata (*L.*).
 383. 17. tessellata Prop. conglobata (*L.*).
 383. 18. livida Ad. obliterata (*L.*).
 392. 1. **maculata** Megilla.
 393. 2. **3-pustulata** Exochomus.

J. C. FABRICIUS. *Systema Entomologiæ.* 8°. 1775.

He describes 54 species from various sources. The new ones are :

79. 5. **lineola** (*Banks*) ... Verania. T.
 80. 8. **inæqualis** (*Banks*) ... Cælophora. T.
 12. **glacialis** (*Drury*) ... Hippodamia.
 81. 14. 8-punctata || C. 10-punctata *L.* var.
 15. 9-punctata || (*Banks*) ... Cæloph. inæqualis var. T.

p. 82.	18.	dilatata (<i>B. M.</i>)	... Caria.	
	21.	chrysomelina (<i>Banks</i>)	Epilachna.	T.
	22.	borealis (<i>Drury</i>)	... Epilachna.	
	23.	cassidea (<i>B. M.</i>)	... ? <i>Cassida argus</i> <i>Hb.</i>	
83.	24.	13-maculata ||	... C. 10-punctata (<i>L.</i>).	
84.	30.	20-punctata	... Thea 22-punctata (<i>L.</i>).	
	34.	28-punctata (<i>Koen.</i>)	... Epilachna.	
85.	36.	detrita (<i>Banks</i>)	... [<i>Chrysomelidæ</i>].	T.
86.	48.	lunata (<i>Banks</i>)	... Cheilomenes.	T.
87.	51.	guttato-pustulata (<i>Banks</i>)	Epilachna.	T.
	52.	felina (<i>Drury</i>)	... Sp. dub.	
	54.	leonina (<i>Banks</i>)	... Coccinella.	T.

The known species described are all Linnæan :

1. marginata, 2. surinamensis, 3. sanguinea, 4. impunctata, 6. bipunctata, 7. hieroglyphica, 9. trifasciata, 10. 4-punctata, 11. 5-punctata, 13. 7-punctata, 16. 9-punctata, 17. 10-punctata, 19. 11-punctata, 20. 12-punctata, 25. 13-punctata, 26. 14-punctata, 27. ocellata, 28. 18-punctata, 29. 19-punctata, 31. 22-punctata, 32. 25-punctata, 33. 24-punctata, 35. conglomerata, 37. 10-guttata, 38. 14-guttata, 39. 16-guttata, 40. 18-guttata, 41. 20-guttata, 42. oblongo-guttata, 43. impustulata, 44. cacti, 45. bipustulata, 46. 4-pustulata, 47. 6-pustulata, 49. 10-pustulata, 50. 14-pustulata, 53. pantherina.

J. C. H. BOERNER. (*Oecon. Nachr. d. Gesell. in Schles. iv.*) 1776.

p. 250. transverse punctata ... Sp. dub.

[I have not been able to see this work.]

O. F. MUELLER. *Zoologia Danicæ prodromus.* 8°. 1776.

He describes with extreme terseness 38 species ; they are for the most part quite irrecognisable ; n. 613 is for example described as " tota atra."

65.	613.	<i>minima</i>	...	...	? <i>Scymnus</i> .
	614.	<i>pusilla</i>	...	...	? <i>Scymnus</i> .
66.	619.	<i>marginella</i>	...	...	Harm. 4-punctata (<i>Pont.</i>).
	622.	6-punctata (<i>Linn.</i>)	...	...	C. 10-punctata var.
	630.	<i>tessulata</i> (<i>Scop.</i>)	...	...	Prop. conglobata.
67.	631.	14-punctata ||	...	...	C. 10-punctata var.
68.	647.	<i>cineta</i>	...	...	A. bipunctata var.
	648.	<i>fasciata</i>	...	...	Chil. bipustulatus.
	648.	<i>didyma</i>	...	...	C. 10-punctata var.

J. H. SULZER. *Abgekürzte Geschichte der Insekten*. 4°. 1776.

He figures two species under new names.

T. III.	6.	8-guttata	...	...	A. bipunctata var.
	7.	<i>fimbriata</i>	...	...	Pr. conglobata var.

F. v. PAULA SCHRANK. *Beiträge zur Naturgeschichte*.
8°. 1776.

62.	4.	<i>austriaca</i>	C. 10-punctata var.
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J. C. FABRICIUS. *Genera insectorum. Mantissa specierum*.
8°. Lips. 1777.

7 species are here given as new, only one of which stands.

p.	216.	<i>unifasciata</i> (<i>Schulz</i>)	...	...	Adal. bipunctata.
	217.	<i>flexuosa</i> (<i>Schulz</i>)	...	...	Cocc. hieroglyphica.
	„	7-maculata (<i>De Geer</i>)	...	...	Hippod. 7-maculata (<i>De G.</i>).
	„	15-guttata	...	...	Calvia.
218.		<i>hæmorrhoidalis</i> (<i>Schulz</i>)	...	...	Lasia 24-punctata (<i>L.</i>).
	„	<i>variabilis</i> (<i>Schulz</i>)	...	...	C. 10-punctata <i>L.</i>
	„	12-pustulata (<i>Poda</i>)	...	...	Propylea conglobata (<i>L.</i>).

J. A. E. GOEZE. Beiträge zur Entomologie. Bd. 1. 8°. 1778.

A list of 111 species known to him with their synonyms at great length; he gives names to several of Geoffroy's species, *q. v.*

C. DE GEER. Mémoires. T. VII. 4°. 1778.

He describes two species from the Cape; figured on Pl. 48.

- p. 665. 71. **flavomaculata** (f. 24)... Adalia.
72. **sphæroidea** (f. 25) ... [*Chrysomelidæ*].

J. A. BERGSTRASSER. Nomenclator d. Insecten. 4°. 1778.

Pl. IX. f. 4. 8-pustulata (*Sulz.*), 5. 4-pustulata (†*Linn.*),
6. oblongo-guttata, 7. 7-punctata.

J. C. FABRICIUS. Species Insectorum. 2 tom. 8°. 1781.

The number is now raised to 75 species; the new ones (with one exception) are from the Banksian collection.

- | | | | | | | |
|------|-----|--------------------------------|--------------------|-----|---------------------------------------|----|
| 94. | 5. | dimidiata | ... | ... | Leis. | T. |
| | 9. | 6-lineata | ... | ... | Anatis ocellata var. | |
| 95. | 15. | bifasciata | ... | ... | Epilachna. | |
| 96. | 20. | 6-maculata | ... | ... | Cheilomenes. | T. |
| 97. | 24. | transversalis | ... | ... | Cocc. repanda <i>Thunb.</i> | T. |
| | 25. | 8-maculata\|\| | ... | ... | Harm. arcuata (<i>Fab.</i>). | T. |
| | 26. | { 9-maculata | ... | ... | Cœloph. inæqualis (<i>Fab.</i>), v. | |
| | | { = 9-punctata \|\| <i>Fabr.</i> | | | | |
| 98. | 29. | 10-maculata \|\| | ... | ... | Megilla maculata (<i>De G.</i>). | |
| 99. | 33. | variegata | ... | ... | Thea. | T. |
| 103. | 41. | 16-punctata \|\| | (<i>Allion.</i>) | ... | Harm. 4-punctata (<i>Pt.</i>). | |
| 106. | 72. | pardalina | ... | ... | [<i>Chrysomelidæ</i>]. | T. |
| 137. | 75. | canina | ... | ... | Epilachna. | T. |
- Vol. II. Appendix.
- p. 497. limbata (*Seh.*) C. constellata *Lch.* var.
Fabricius also adds C. 6-punctata *L.*

C. P. THUNBERG. *Novæ species insectorum.* P. I. 4°. 1781.

30 new species are described and generally figured, though rudely. Several species have not yet been identified, but nearly all will ultimately have to be accepted. Little or no reliance can be placed on the localities.

p. 11.	<i>fimbriata</i> || f. 10	...	... ? Veran. discolor (<i>Fab.</i>).
	<i>minuta</i>	...	... Sp. dub.
	<i>3-notata</i>	...	... Sp. dub.
12.	<i>japonica</i> f. 12	...	... Sp. dub.
13.	grandis f. 13	...	... Synonycha.
	<i>gibba</i> f. 14	...	... Sp. dub.
	<i>8-maculata</i> || f. 15	...	... ? <i>Epil. alternans</i> <i>Muls.</i>
	<i>psi</i> f. 16	...	... <i>Cœlophora inæqualis</i> (<i>F.</i>) v.
14.	<i>iridea</i> f. 17	...	... <i>Ibid.</i> var.
	<i>oculata</i> f. 18	...	... Sp. dub.
15.	similis f. 19	...	... Chnootriba.
	<i>borealis</i> (<i>Fab.</i>) f. 20	...	... <i>Epilachna borealis</i> (<i>F.</i>).
16.	<i>capensis</i> f. 21	...	... <i>Epil. chrysomelina</i> (<i>F.</i>).
	<i>pusilla</i> || f. 22	...	... <i>Psyllobora</i> — ?
17.	distincta f. 23	...	... <i>Epilachna</i> .
	<i>flexuosa</i> || f. 24	...	... <i>Cheilomenes 6-maculata</i> (<i>F.</i>).
18.	repanda f. 25	...	... <i>Coccinella</i> .
	flavicollis f. 26	...	... <i>Epilachna</i> .
	undulata f. 27	...	... <i>Epilachna</i> .
19.	<i>lunata</i> || f. 28	...	... Sp. dub.
20.	crux f. 29	...	... <i>Verania</i> .
	comma f. 30	...	... <i>Verania</i> .
21.	lineata f. 31	...	... <i>Verania</i> .
	<i>flavipes</i> ...	...	... <i>Exochomus nigromaculatus</i> (<i>Gz.</i>).
	<i>hæmorrhoidalis</i> ||	...	... Sp. dub.

[These two species are Swedish, and are described again in 1794.]

22.	<i>lævis</i> f. 32	...	... Sp. dub.
	<i>rivosa</i> f. 33	...	... <i>Cheil. lunata</i> (<i>F.</i>).
23.	<i>dentata</i> f. 34	...	... <i>Prop. conglobata</i> (<i>L.</i>).
	hirta f. 35	...	... <i>Epilachna</i> .
24.	<i>20-pustulata</i> f. 36	...	... <i>Epil. canina</i> (<i>F.</i>).
	<i>8-guttata</i> || f. 37	...	... <i>Chrysom. æstuans</i> (<i>L.</i>).

Several of these names being preoccupied, the following changes were proposed.

8-maculata = capensis || *Gmel.*, confluens *Oliv.*, 8-notata *Hb.*—
 oculata = circularis *Oliv.*, omma *Hb.*—flexuosa = flexa *Thunb.*—
 lunata = lunaris *Gmel.*, signata *Oliv.*—hæmorrhoidalis = atra *Gmel.*,
 ruficauda *Oliv.*—8-guttata = 8-stagma *Hb.*

J. N. LAICHARTING. Verzeichniß der Tyrolen Insecten.

T. I. 8°. 1781.

p. 119.	5.	notata	...	? Hippod. 7-maculata (<i>De G.</i>).
121.	6.	constellata	...	... Adonia [mutabilis].
125.	9.	tetragonata	...	... Propylea conglobata (<i>L.</i>).

F. v. PAULA SCHRANK. Enumeratio insectorum Austriæ
 indigenorum. 8°. Vind. 1781.

51.	95.	subpunctata	...	... C. 10-punctata <i>L.</i> var.
53.	99.	obverse punctata	...	... Ad. constellata (<i>Laich.</i>).
54.	101.	11-punctata ||	...	... <i>Ibid.</i>
56.	103.	similis	...	... <i>Ibid.</i>
65.	118.	minutissima	...	... Scymnus — ?
84.	157.	Chrys. altica	...	... Sc. frontalis <i>Fab.</i>

[*Vide* Kugel. Ill. Mag. I. 91.]

HANS STRÖM. (Trond. Selsk. Skriv. II.) 1783.

54.	17.	9-pustulata Sp. dub.
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J. G. SCHALLER. (Abh. Gesell. Halle. T. I.) 1783.

He describes carefully and at length 7 species.

260.	marginepunctata	...	Harmon. 4-punctata (<i>Pont.</i>).
262.	undulata ||	...	... Cheil. 6-maculata (<i>F.</i>).

p. 262.	3-lineata	...	... Hyper. 3-maculata (L.).
263.	10-guttata major	...	...
265.	10-guttata minor	...	...
	bis-7-guttata	...	... Calvia 15-guttata (F.).
266.	humeralis	...	... Cocc. 10-punctata var.

G. A. HARRER. Beschreibung Schäffer's "Icones Insectorum."
8°. 1784.

22 species described from Schäffer's figures.

98. 159. C. 11-maculata (Schf. 254. 3). Hipp. 13-punctata (L.).

C. P. THUNBERG. (Nov. Act. Ups. T. iv.) 1784.

9.	14.	pallida T. i. f. 1.	...	Adal. oblitterata (L.).
	15.	6-notata T. i. f. 2.	...	Ibid.
10.	16.	13-notata T. i. f. 4.	...	Cocc. 10-punctata L.
	17.	marginata || [Thunbergi, Gm.]	Ibid.	
	21.	Chrys. bipustulata	...	Hyper. reppensis (Hb.).

J. F. W. HERBST. (Arch. d. Ins. Gesch. iv.—v.) 1784.

He here gives an enumeration of his collection, figuring most of the species on Pl. 22.

42.	1.	livida || f. 1	...	... Lasia 24-punctata (L.) v.
	2.	colon f. 2	...	... Ibid.
	6.	variabilis f. 3	...	... Cocc. 10-punctata L. v.
43.	7.	oblonga f. 4	...	... Hipp. 7-maculata (De G.).
44.	12.	gemella f. 7	...	... Cocc. 18-punctata Scop. v.
45.	17.	100-punctata f. 13	...	... [Erotylide].
46.	18.	3-lineata || f. 12	...	... C. hieroglyphica L. v.
47.	26.	12-guttata f. 21	...	... Vibidia 12-guttata (Podu.).

- p. 48. 28. *reppensis* f. 23 Hyperaspis.
 29. *campestris* f. 24 Hyperaspis.
 49. 34. *russica* f. 26 *C. axyridis* *Pall.*
 32. *Chrys. scutellata* Pl. XXIII. 20 Coccidula.
 14. *Derm. rufus* Pl. xx. 7 Coccidula.

He also figures the following Fabrician species.

5. 14-punctata—6. 16-punctata—8. 12-punctata—9. 19-punctata—10. 20-punctata—11. 24-punctata—14, 15. conglomerata—16. 10-guttata—17. 14-guttata—18. 15-guttata—20. 20-guttata—22. bipustulata—25. fasciata [*Müll.*]
 —27. tigrina.

C. v. MOLL. (*Füssly Neu. Mag. Heft. II. 3.*) 1785.

181. 125. *limbata* ||
 182. 126. *cembræ* *Adalia obliterata* *L.*
 183. 127. *ferrugata* *Scymnus* — ?

These species are not cited by Mulsant.

A. J. FOURCROY. *Entomologia Parisiensis.* 8°. 1785.

He gives names to all Geoffroy's species, and adds two new ones.

151. 28. 16-guttata
 29. 12-guttata [*Poda*] ... = *Vibidia*.

J. F. W. HERBST. (*Arch. d. Ins. Gesch. VI.*) 1786.

He continues his enumeration of his collection, reaching 42 species.

The new ones are all figured on plate 43.

160. 37. *sparsa* f. 11 *Epil. 28-punctata* (*Fab.*).
 38. *undulata* f. 12 *Cheil. 6-maculata* (*Fab.*).
 39. *bimaculosa* f. 13 *Cocc. 10-punctata* var.
 161. 40. *punctum* f. 14 *Cyren. impunctata* (*L.*).
 41. 11-punctata (*Fab.*) f. 15.
 42. 16-guttata (*Fab.*) f. 16.

J. C. FABRICIUS. Mantissa Insectorum. 8°. 1787.

The number of species is now raised to 101; 24 new species, *C. marginepunctata* Schall., and *C. 3-punctata* (L.), being added.

p. 52.	15.	Nit. litura ...	... Rhizobius.	
		Nit. 5-punctata ...	... Coccid. scutellata (Hüb.).	
53.	3.	marginella || (Rom.)	... Epilachna palliata (Fab.).	
	12.	trilineata (Schall.)	... Hyper. 3-maculata (L.).	
54.	13.	oblongo-punctata (Boeb.)	... Anatis ocellata (L.) v.	
	14.	abbreviata ...	... Hipp. glacialis (Fab.) v.	
	19.	rivularis (Payk.)	... Adal. flavomaculata (De G.).	
55.	20.	tricincta (Sch.)	... Cocc. repanda Th.	
	21.	arcuata (Sch.)	... Harmonia.	T.
	22.	undata (Banks)	... [Chrysomelidæ].	T.
	24.	cingulata (Hüb.)	... Harm. arcuata (F.).	T.
56.	29.	4-notata (Dall.)	... Lasia 24-punctata (L.).	
	30.	4-maculata || (Hüb.)	... Cocc. 11-punctata L.	T.
	32.	5-maculata (Hüb.)	... Adon. constellata (Lch.).	
57.	47.	11-maculata (Vahl.)	... Epil. argus (Fourc.).	
58.	55.	ursicolor (Sch.)	... Synon. grandis (Th.).	T.

[Corrected in 1792 to *versicolor*.]

	57.	14-maculata || (Hüb.)	... Prop. conglobata (L.).	
	60.	16-maculata (Hüb.)	... Harm. 18-punctata (Scop.).	
59.	69.	tricolor (Banks)	... Archæioneda.	T.
	71.	8-guttata || (Banks)	... Mysia oblongo-guttata (L.).	
	72.	biguttata (Hunt.)	... Cocc. 10-punctata L. v.	
60.	81.	analís (Hüb.)	... Scymnus.	T.
	82.	frontalis (Hüb.)	... Scymnus.	T.
61.	88.	erythrocephala	... Brachiacantha.	T.

[Schaum saw the type of this at Kiel. Cf. Stett. E. Z.]

98.	ursina (Hunt.)	... Brachiacantha.
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Appendix, p. 379.

379.	12-guttata (Rohr.)	... Calvia cayennensis (Gm.).
	villosa (Rohr.)	... [Tenebrionidæ].

C. P. THUNBERG. (Mus. Acad. Upsal. P. III. p. 33—4.) 1787.

A list of the species presented by him to the University.

C. flexuosa is changed to *C. flexa*; 13-*maculata* Fab. to 13-*notata*;
16-*punctata* Fab. to 16-*maculata*.

J. C. GMELIN. Systema Naturæ. Ed. xiii. T. I. 8°. 1788.

He enumerates all the species known to him (163), and re-names many of them (pp. 1644—1666).

- | | | |
|----------|------|---|
| p. 1646. | 56. | <i>albida</i> [= <i>marginepunctata</i> <i>Schall.</i>]. |
| | 62. | <i>moscovica</i> [<i>oblongo-punctata</i> <i>Fab.</i>]. |
| 1658. | 124. | <i>camtschatcensis</i> [<i>8-guttata</i> <i>Fab.</i>]. |
| 1659. | 156. | <i>cayennensis</i> [<i>12-guttata</i> <i>Fab.</i>] ... <i>Calvia</i> . |
| 1661. | 132. | <i>mutabilis</i> [<i>variabilis</i> <i>Fab.</i>]. |
| 1664. | 143. | <i>atra</i> [<i>hæmorrhoidalis</i> <i>Th.</i>]. |
| 1666. | 153. | <i>Thunbergi</i> [<i>marginata</i> <i>Th.</i>]. |

He also describes from Leske's collection,

C. immaculata, 3-*pustulata*, *lunulata*, *limbata*, *leucocephala*, *nigra* [= *H. reppensis*], *ruficauda*, *bifasciata*; *Silpha melanophthalma* [= *Cocc. scutellata*]; *Nitidula bipunctata* [*Cocc. scutellata*].

N. J. BRAHM. Insekten-Kalender. T. I. 8°. 1790.

Amongst several slight notices, arranged in order of the months of the year, are descriptions of 3 new species.

- | | | | |
|--------|------|------------------------|---|
| p. 30. | 105. | <i>marginemaculata</i> | ... = <i>C. hieroglyphica</i> . |
| 119. | 414. | <i>lunigera</i> | ... = <i>C. 10-punctata</i> v. |
| 221. | 750. | <i>4-guttata</i> | ... = <i>Plat. luteorubra</i> (<i>Gz.</i>). |

D. QUENSEL. (Diss. Ignot. Ins. 8°. 1790.)

- | | | |
|-----|------------------------------|--|
| 9. | <i>Dermestes marginellus</i> | ... = <i>Hyper. reppensis</i> <i>Hb.</i> |
| 10. | <i>D. xanthocephalus</i> | ... = <i>Ibid.</i> ♂ |

PET. ROSSI. Fauna Etrusca. 4°. Pisa. 1790.

He describes 31 Italian species.

p. 61.	151.	3-punctata ||	...	...	C. 5-punctata var.
62.	155.	nigrofasciata	...	...	C. 11-punctata var.
66.	166.	pallida ||	...	...
68.	170.	similis ||	T. VII. f. 4	...	Chil. renipustulatus.
71.	178.	minutissima	Schr.		
	179.	4-maculata ||	...	...	Plat. luteorubra Gz.

L. SCRIBA. Journal für die Liebhaber der Entomologie.

Bd. 1. 8°. 1790.

32 species are described from the neighbourhood of Darmstadt.

183.	141.	mutabilis	...	...	Hipp. constellata (<i>Lch.</i>).
	142.	variabilis	<i>Fab.</i>	...	
188.	143.	argus	<i>Fourc.</i>	...	Epilachna.

A. G. OLIVIER. (*Encyc. Méth. T. VI. 1791.*)

He describes here 165 species from all authors.

The following are either new or have new names.

50.	10.	suturalis	(<i>Banks</i>)	...	?
51.	14.	notata ||	...	...	Harm. 4-punctata (<i>Pont.</i>).
54.	33.	signata	[<i>lunata Th.</i>]	...	?
55.	37.	reticulata	...	...	Epilachna.
61.	60.	oblonga ||	[10-maculata <i>Fab.</i>]	Meg. maculata	(<i>De G.</i>).
61.	62.	confluens	[8-maculata <i>Th.</i>]	?	
62.	64.	circularis	[<i>oculata Th.</i>]	...	?
63.	70.	macularis	(<i>Banks</i>)	...	Adal. flavomaculata.
	71.	innuba	(<i>Mus. Br.</i>)	...	Epilachna — ?
65.	78.	14-maculata	(<i>Fab.</i>)	...	Prop. conglobata (<i>L.</i>).
70.	98.	orientalis	[8-guttata <i>Th.</i>]	Chrysom. æstuans	(<i>L.</i>).
71.	103.	connata	[12-guttata <i>Fab.</i>]	Calv. cayennensis	(<i>Gm.</i>).

p. 73.	111.	<i> analis Fab.</i>	...	...	<i>Scymnus.</i>
77.	123.	<i> hastata</i>	...	...	<i>Adalia bipunctata.</i>
	125.	<i> sulphurea</i>	...	...	<i>Cyd. lunata (Fab.).</i>
79.	133.	<i> zibellina</i>	...	...	<i>Adal. flavomaculata.</i>
81.	141.	<i> pubescens</i>	...	...	<i>Plat. luteorubra (Gz.).</i>
	142.	<i> ruficollis</i>	...	...	<i>Sc. analis (Fab.).</i>
83.	10.	<i> ulmi [11-punctata Fc.]</i>	...	...	<i>C. 10-punctata var.</i>
84.	14.	<i> ruficauda [hæmorrhoidalis Th.]</i>	?		

L. G. SCRIBA. (Beiträge zur Entomologie. Heft II.) 1791.

11 species are here described at great length with all their varieties carefully worked out. 4 are regarded as new.

104.	25.	<i> ribis</i>	...	...	<i>C. hieroglyphica L.</i>
105.	26.	<i> aurita</i>	...	...	<i>Exoch. nigromaculatus (Gz.).</i>
	27.	renipustulatus	...	...	<i>Chilocorus.</i>
107.	28.	<i> unifasciata</i>	...	...	<i>C. 10-punctata var.</i>

J. C. FABRICIUS. *Entomologia Systematica emendata.*

T. I. 8°. 1792.

He now describes 119 species; having sunk *C. 4-punctata*, *14-punctata*, *16-maculata*, *12-pustulata* of his earlier works, and changed *C. ursicolor* into *versicolor*.

The 19 new species are :

267.	5.	<i> immaculata || (Isert)</i>	...	<i>Cycl. sanguinea (L.)</i>	T.
	6.	unicolor (<i>Abildg.</i>)	...	<i>Cœlophora.</i>	T.
	7.	<i>M-nigrum</i>	...	<i>Adalia obliterata.</i>	
269.	16.	vittata (<i>Isert</i>)	...	<i>Cydonia.</i>	T.
	17.	striata (<i>Isert</i>)	...	<i>Alesia.</i>	T.
272.	32.	<i> interrupta (Smidt)</i>	...	<i>Cheil. 6-maculata v.</i>	T.
275.	43.	<i> 7-notata</i>	...	<i>Adonia constellata.</i>	
277.	51.	<i> innuba [Oliv.] (Mus. Br.)</i>	?		
281.	70.	22-maculata (<i>Isert</i>)	...	<i>Leis.</i>	T.
282.	73.	<i> 24-maculata (Lund)</i>	...	<i>Epil. 28-punctata.</i>	T.

p. 282.	76.	<i>conglobata</i> <i>L.</i>		
283.	77.	<i>lineola</i> || (<i>Smidt</i>)	... <i>Psyllobora Fabricii</i> <i>Cr.</i>	T.
284.	83.	<i>bis-sexguttata</i> (<i>Lund</i>)	... <i>Vibidia 12-guttata</i> .	
285.	86.	<i>bis-7-guttata</i> <i>Schall.</i>	... <i>Calvia 15-guttata</i> (<i>F.</i>).	
286.	93.	nitidula (<i>Iserl</i>)	... <i>Exochomus</i> .	T.
286.	94.	<i>parvula</i> (<i>Bosc.</i>)	... <i>Scymn. pygmæus</i> .	T.
287.	98.	<i>oculata</i> ||	... <i>Cycl. binotata</i> (<i>Say.</i>).	
288.	104.	<i>4-verrucata</i>	... <i>Exoch. 4-pustulatus</i> (<i>L.</i>).	
	105.	<i>bisbipustulata</i>	... <i>Plat. luteorubra</i> (<i>Gz.</i>).	
260.	23.	Nit. floralis (<i>Lund</i>)	... <i>Scymnus</i> .	T.

D. E. NAEZEN. (*Vet. Akad. Handl.*) 1792.

170.	<i>segetalis</i> , t. 7, f. 1	...	... = <i>Hipp. 7-maculata</i> (<i>De G.</i>).
171.	<i>sinuata</i> , t. 7, f. 2	...	... = <i>Cocc. hieroglyphica</i> .

J. G. SCHNEIDER. (*Schneid. Mag. II.*) 1792.

He here describes 42 species, and reduces the varieties to their proper types. The only new ones given are :

n. 13.	arctica (<i>Pk.</i>)	...	... <i>Hippodamia</i> .
14.	<i>globosa</i>	...	... <i>Lasia 24-punctata</i> (<i>L.</i>).
29.	frigida	...	... <i>Adalia</i> [<i>hyperborea</i>].
32.	<i>dispar</i> <i>Adalia bipunctata</i> (<i>L.</i>).

C. P. THUNBERG. (*Nov. Act. Ups. v.*) 1792.

p. 105.	31.	<i>C. frontalis</i> ?
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J. F. HERBST. (*Natursystem aller Insekten. Bd. iv.*) 1792.

p. 71.	6.	<i>Sph. bimaculatum</i> , t. 37, f. 6	[<i>Sc. interruptus</i> (<i>Gz.</i>)].
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J. F. W. HERBST. *Natursystem*. Bd. v. 1793.

He describes 128 species, of which 7 are regarded as new; they are mostly figured.

p. 261.	1.	imperialis, pl. 55. 1	...	Synonycha grandis (<i>Th.</i>).
268.	7.	9-signata, pl. 55. 7	...	Hyperaspis — ?
269.	8.	9-notata, pl. 55. 8	...	Coccinella.
		bis-6-pustulata	...	Leis axyridis (<i>Pall.</i>).
		signata||	...	Cocc. repanda <i>Th.</i>
		arctica <i>Schn.</i>	...	Hippodamia.

He alters Thunberg's names as follows, *C. oculata* to *C. omma*; *C. 8-guttata* to *C. 8-stagma*; *C. 12-guttata* *Poda* to *12-gemmata*.

G. W. F. PANZER. *Fauna Germanica*. Heft II. 1793.

4.	<i>Tritoma flavipes</i>	<i>Sc. rubromaculatus</i> (<i>Gz.</i>) ♀.
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Heft XIII. 1794.

2.	<i>parvula</i> <i>F.</i> ,	3.	<i>analisis</i> <i>F.</i> ,	4.	<i>frontalis</i> † [= <i>interruptus</i>],
				5.	<i>bisbipustulata</i> [= <i>pulchellus</i> <i>Hb.</i>].

Heft XXIV. 1794.

7.	<i>C. areata</i>	...	...	<i>C. hieroglyphica</i> (<i>L.</i>).
8.	<i>Sc. 4-pustulatus</i> (<i>Kg.</i>)	...	...
9.	<i>C. lateralis</i>	...	...
10.	<i>Sc. bipustulatus</i>	...	...	<i>Sc. frontalis</i> (<i>F.</i>).
11.	<i>Sc. bipunctatus</i> (<i>Kg.</i>)...	...	...
12.	<i>Sc. nigrinus</i> (<i>Kg.</i>)	...	...	<i>Scymnus</i> .
13.	<i>Sc. pubescens</i>	...	...	<i>Sc. subvillosa</i> (<i>Gz.</i>).

J. G. KUGELANN. (*Schneid. Mag.* IV. 1794.)

He here forms the genus *Scymnus* with 6 species.

4-maculatus † (nec <i>Hb.</i>)	...	= <i>Scymnus pulchellus</i> <i>Hb.</i>
sericea † (nec <i>Fab.</i>)	...	= <i>Sc. rubromaculatus</i> (<i>Gz.</i>) ♀.
4-pustulatus	...	= <i>Platyn. luteorubra</i> (<i>Gz.</i>).
bipunctatus	...	= <i>Scymnus</i> .
nigrinus	...	= <i>Scymnus</i> .
ater	...	= <i>Scymnus</i> .

C. P. THUNBERG. *Insecta Suecica*. P. VIII. 1794.

He here enumerates or briefly describes the species peculiar to Sweden.

SCYMNUS.

auritus	...	...	... Sc. capitatus (<i>Fab.</i>) ♂.
bipustulatus ||	...	...	... Sc. bipunctatus <i>Kg.</i>
bimaculatus	...	...	... Sc. frontalis (<i>Fab.</i>) ♀.
suturalis	...	...	Scymnus [discoideus <i>Muls.</i>].

COCCINELLA.

abbreviata <i>Fab.</i>	...	...
6-maculata	...	...	C. 10-punctata <i>L.</i>
fennica	...	...	Ad. constellata (<i>Laich.</i>).
oculata ||	...	...	C. 11-punctata <i>L.</i>
tricuspis	...	...
arctica ||	...	...	Ad. frigida (<i>Schn.</i>) var.
bimaculata	...	...	C. 11-punctata <i>L.</i>
triangularis	...	...	<i>Ibid.</i>
14-maculata <i>Fabr.</i>	...	...	Propylea conglobata (<i>L.</i>).
16-maculata <i>Fabr.</i>	...	...	Harm. 16-punctata (<i>Scop.</i>).
12-guttata <i>Poda</i>	...	...	Vibidia.
flavipes <i>Th.</i> 1781	...	...	Harm. 18-punctata (<i>Scop.</i>).
marginella	...	...	C. 10-punctata <i>L.</i>
variabilis <i>Fab.</i>	...	...	<i>Ibid.</i>
hæmorrhoidalis <i>Th.</i> 1781	...	...	?
colon	...	...	?
abdominalis	...	...	Chil. renipustulatus (<i>Scriba.</i>).
reppensis <i>Hb.</i>	...	...	Hyperaspis.
4-verrucata <i>Fab.</i>	...	...	Exoch. 4-pustulatus (<i>L.</i>).
8-pustulata	...	...	C. hieroglyphica <i>L.</i>
similata	...	...	C. 10-punctata <i>L.</i>
dentata <i>Th.</i> 1781	...	...	Prop. conglobata (<i>L.</i>).
lapponica	...	...	Ad. arctica (<i>Schn.</i>).
strigata	...	...	Anisosticta.

P. Rossi. *Mantissa Insectorum*. T. II. 4°. 1794.

p. 85. 22. elaterii ... Epil. chrysomelina (*Fabr.*).

G. W. F. PANZER. Entomologia Germaniæ. 8°. 1795.

He here enumerates 77 species, not accepting the recent reductions; he also rejects the genus *Scymnus* and consequently makes the following alterations.

- p. 149. humeralis ... Sc. frontalis (*F.*).
 biverrucata ... Sc. bipunctatus, *Kg.*
 bisbiverrucata (= Sc. 4-pustulatus).

G. W. F. PANZER. Fauna Germanica. Heft xxvi. 1796.

12. *Chrys. scutellata* (*Hb.*)... Coccidula.

Ibid. Heft xxxv.

5. *C. aurora* ... Rhiz. litura (*Fab.*).

Ibid. Heft xxxvi.

4. *C. impunctata* *L.* ... Cycnegetis.

FLORENCOURT DE CHASSOT. (Meyer Zool. Arch. i. 1796.)

23 species from Göttingen.

- p. 211. 62. conspurcata ... ?
 63. fuscopunctata ... ?
 testudo ... *Chilocorus bipustulatus* (*L.*).

J. F. W. HERBST. Natursystem. Bd. vii. 1797.

82. SCYMNUS. (11 sp.) pl. 116.

340. 1. bimaculatus || f. 1 ... *S. interrupta* (*Gz.*).
 341. 2. didymus f. 2 ... *S. frontalis* (*F.*).
 342. 3. pubescens f. 3 ... *S. rubromaculatus* (*Gz.*).
 4. hæmorrhoidalis f. 4 ... *Scymnus*.
 343. 5. bipunctatus *Kug.* f. 5 ... *Scymnus*.
 6. pilosus f. 6 ... *Scymnus suturalis* *Th.*
 344. 7. 4-pustulatus *Kg.* f. 7 ...
 8. nigrinus *Kg.* f. 8 ... *Scymnus*.
 345. 9. collaris f. 9 ... *S. rubromaculatus* (*Gz.*).
 10. pulchellus f. 10 ... *Scymnus*.
 346. 11. pusillus f. 11 ...

J. C. FABRICIUS. Supplementum Entomologiæ systematicæ.
8°. 1798.

16 species are here added.

p. 74.	Nit. fasciata	...	...	Rhiz. litura (<i>Fab.</i>).	
76.	diaphana (<i>Dald.</i>)	...	...
77.	pubescens|| „	...	...	Clanis Fabricii <i>Cr.</i>	T.
	discolor „	...	...	Verania.	T.
	eincta|| „	...	...	Illeis.	T.
	dorsomaculata (<i>Seh.</i>)	...	...	Ad. bipunctata var.	T.
78.	suturalis|| (<i>Dald.</i>)	...	...	Brumus Daldorfii <i>Cr.</i>	T.
	varians „	...	...	Cocc. repanda <i>Th.</i>	T.
	9-notata <i>Hb.</i>	...	...	Coccinella.	
	læta (<i>Lund</i>)	...	...	?
79.	strigata|| „	...	...	Chil. bipustulatus (<i>L.</i>).	T.
	capitatus (<i>Payk.</i>)	...	...	Scymnus auritus <i>Th.</i>	T.
	nigrita (<i>Lund</i>)	...	...	Chilocorus.	T.
80.	rufipes „	...	...	Scymnus [<i>Ahrensii M.</i>].	T.
	12-pustulatus <i>L.</i>				
	argulata (<i>Bosc.</i>)	...	...	Epil. reticulata (<i>Oliv.</i>).	
	vulpina (<i>Dald.</i>)	...	...	Cydon. lunata (<i>Fab.</i>).	

C. P. THUNBERG. Museum Academiae Upsaliensis. P. vi. 1798.

p. 1014. C. brunnea.

G. PAYKULL. (Vet. Akad. nya Handl. 1798.)

148.	2.	flavilabris	...	...	Sc. frontalis (<i>Fab.</i>).
150.	4.	discoidea	...	...	Sc. suturalis <i>Th.</i>
151.	6.	morio	...	...	Sc. nigrinus <i>Kg.</i>
153.	9.	affinis	...	...	Sc. bipunctatus <i>Kg.</i>
154.	10.	abietis	...	...	Scymnus.
154.	11.	aptera	...	...	Cyenegetis impunctata (<i>L.</i>).

N. J. CEDERJHELM. Faunæ Ingricæ Prodrömus. 1798.

22 species from St Petersburg.

p. 50. 160. Boeberi pl. 1. f. m. ... = Anatis ocellata (*L.*) var.

F. v. P. SCHRANK. Fauna Boica. T. I. 1798.

He describes 24 species: 4 as new.

p. 455.	465.	fuscumaculata ||	...	?
	474.	hemisphaerica ...	...	Lasia 24-punctatus (L.).
	482.	mediopustulata	...	Chil. renipustulatus (Scr.).
	483.	varia	...	Cocc. 10-punctata L.

J. W. K. ILLIGER. Verzeichniss der Käfer Preussens. 8°. 1798.

He describes 43 species, with the synonymy carefully worked out after Schneider. Two new names only occur.

7.	4-lunulatus	...	...	= Sc. pulchellus <i>Hb.</i>
9.	discoideus	...	...	= Sc. suturalis <i>Th.</i>

G. PAYKULL. Fauna Suecica. T. II. 8°. 1799.

He describes 45 species from Sweden: three as new.

34.	34.	bothnica	...	...	Adalia.
37.	37.	collaris	...	...
38.	38.	hyperborea	...	...	Adalia frigida (<i>Schn.</i>).

G. W. F. PANZER. Fauna Germanica. 1800.

He figures the following known species.

Heft 78. 1. Chrys. pectoralis (*Fab.*). Heft 79. 1. marginepunctata *Schall.* 2. 16-punctata *Fab.* 3. 7-punctata *L.*
4. 11-maculata *Fab.* 5. 7-notata *Fab.* 6. ocellata *Fab.*

J. C. FABRICIUS. Systema Eleutheratorum. T. I. 1801.

He describes 162 species, without any discrimination.

p. 357.	6.	abietis <i>Payk.</i>	...	...
	9.	coccinea (<i>Lund</i>)	...	Exoplectra.	T.
359.	24.	limbata || ,,	...	Veran. lineata (<i>Th.</i>).	T.
361.	45.	catenata (<i>Bill.</i>)	...	?	

p. 362.	36.	reticulata || (<i>Bill.</i>)	... Heteroneda Fabricii <i>Cr.</i> T.
366.	58.	8-notata „	... Cœl. 9-maculata (<i>Fab.</i>) T.
368.	72.	12-notata (<i>Bosc.</i>)	... Harm. arcuata (<i>Fab.</i>).
369.	75.	dispar || ...	... Epil. reticulata (<i>Oliv.</i>).
370.	82.	16-maculata (<i>Fabr.</i> 1787)	Harm. 18-punctata (<i>Scop.</i>).
	83.	16-notata || (<i>Bill.</i>)	... Call. multipunctata <i>Cr.</i>
373.	95.	confluens || (<i>Lund</i>)	... Psyll. varians <i>Cr.</i> T.
376.	113.	ænea (<i>Seh.</i>) ...	... Exoplectra. T.
377.	118.	discoidea (<i>Ill.</i>) ...	... Scymn. suturalis <i>Th.</i>
	119.	floralis (<i>Fab.</i>) ...	... Scymnus.
378.	120.	biverrucatus (<i>Ill.</i>)	... Sc. bipunctatus <i>Kg.</i>
	123.	thoracica (<i>Lund</i>)	... Scymnus. T.
	124.	marginella (<i>Seh.</i>)	... Hyp. reppensis (<i>Ill.</i>) ?
380.	129.	lateralis (<i>Ill.</i>) ...	...
	132.	morio || ...	... Sc. interruptus (<i>Gz.</i>).
381.	134.	dentipes (<i>Bosc.</i>)	... Brachiacantha.
382.	137.	fasciata || (<i>Seh.</i>)	Cleothera Sehestedtii <i>Cr.</i> T.
	138.	divisa (<i>Lund</i>)	... Psyllobora. T.
383.	143.	bis-3-pustulata (<i>Seh.</i>)	Brach. erythrocephala (<i>Fab.</i>) T.
	144.	6-verrucata (<i>Lund</i>) ...	Cleothera. T.
	145.	8-pustulata || (<i>Seh.</i>)	... Cleothera Lundii <i>Cr.</i> T.
384.	148.	bis-5-pustulata (<i>Seh.</i>)	Cleothera. T.
385.	151.	12-verrucata (<i>Lund</i>)	... Epil. hirta (<i>Th.</i>).

WEBER. *Observationes Entomologiæ.* 8°. 1801.

These species appear not to have been recognized.

1. punctatissima ?
2. remota Hipp. glacialis (*Fab.*).
3. hemisphærica ?
4. dubia Ad. arctica (*Schn.*).

J. W. K. ILLIGER. (*Mag. f. Ins. Bd. i. 1802.*)

179. 11. *C. aucta* (*Hellw.*) ... = *Caria dilatata* (*Fab.*).

THO. MARSHAM. Entomologia Britannica. 8°. 1802.

He describes several merely nominal species.

p. 76.	49.	Derm. coadunatus	...	Rhiz. litura (<i>Fab.</i>).
77.	55.	Derm. absinthii	...	...
77.	51.	Derm. hypomelanus	...	<i>Ibid.</i>
79.	61.	Derm. pallidus	...	<i>Ibid.</i>
		Silph. rosea	...	Coccid. rufa (<i>Hb.</i>).
102.	3.	Byrrh. pini	...	Seymnus suturalis (<i>Th.</i>).

16. COCCINELLA. (51 sp.)

The following are wrongly identified: *impunctata* (*L.*), *marginepunctata* (*F.*), *cacti* (*L.*). He reverts to the old Linnean arrangement, and ignores all the work of Illiger and others.

p. 151.	6.	perforata	...	A. bipunctata (<i>L.</i>) var.
153.	12.	lineolata	...	C. hieroglyphica <i>L.</i>
155.	17.	11-notata	...	C. 10-punctata <i>L.</i> var.
160.	27.	flava	...	C. 10-punctata <i>L.</i> var.
	28.	sinuata	...	C. hieroglyphica <i>L.</i>
	22.	sinuosa	...	<i>Ibid.</i>
165.	40.	7-pustulata	...	C. bipunctata <i>L.</i>
166.	42.	bimaculata	...	Seymnus frontalis (<i>Fab.</i>).
	44.	biliturata	...	Seymnus hæmorrhoidalis <i>Hb.</i>
167.	45.	4-maculata [<i>Rossi</i>]	...	Platynaspis luteorubra (<i>Gz.</i>).
168.	49.	fulvifrons	...	...
	50.	lunularis	...	C. 10-punctata <i>L.</i> var.

N. J. BRAHM. (Naturforscher XXIX. 1802.)

He describes 35 species from the neighbourhood of Mayence.

10.	cardui = C. 11-notata <i>Schn.</i>
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J. C. FABRICIUS. (Ill. Mag. f. Ins. II. 1803.)

He proposes the following changes of preoccupied names (all being unnecessary).

n. 24.	<i>limbata</i> to <i>lineata</i> .	n. 17.	<i>lineola</i> to <i>striola</i> .	n. 3.	<i>marginella</i> to <i>palliata</i> .
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L. PONZA. (Mem. Acad. Taur. x. 1805.)

He figures two new species.

p. 49.	131.	humeralis
	134.	obsoleta

G. A. GOLDFUSS. Enumeratio insectorum Capitis bonæ spei.
8°. 1805.

T. I. f. 1.	fimbriata	Th.	...	...
	2.	striata	Fab.	...
	3.	guttato-fasciata	...	... Epil. hirta (Th.) var.

G. W. F. PANZER. Fauna germanica. Heft 85. 1805.

8.	6-lineata	Fab. = Anatis ocellata (L.) var.
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E. DONOVAN. Natural History of British Insects. T. XI. 1806.

Pl. 362.	1.	oblongo-guttata	L.	2.	13-punctata	L.	3.	7-notata	F.
		4.	24-punctata	L.	5.	Ibid.	var.		

E. DONOVAN. *Ibid.* T. XII. 1807.

Pl. 428.	1.	13-maculata	L.
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J. C. GRAVENHORST. (Zool. Syst.) 1807.

He enumerates 35 species from his collection, briefly indicating
5 as new.

p. 124.	1664.	signata	...	...
	124.	1672.	formosa	...
	127.	1705.	Hoffmanseggii	... Hyperaspis.
		1706.	Illigeri	...
	128.	1722.	auritus	Scriba

C. J. SCHÖNHERR. *Synonymia insectorum*. T. II. 1808.

A general catalogue with full synonymy containing 192 species. *Scymnus* is not accepted, but the results of Schneider and Illiger's work are followed out; 15 are described as new in the notes; Mulsant appears to have had the types of most of them.

p. 152.	10.	circumdata (<i>Gyll.</i>)	... Chilocorus.	T.
157.	20.	pulex (<i>Th.</i>)	... ?	
	21.	connectens (<i>Th.</i>)	T. IV. f. 6 ... Hyperaspis.	T.
158.	29.	hamata (<i>Th.</i>)...	... Alesia.	T.
	30.	albolineata (<i>Gyll.</i>)	... Calvia.	T.
178.	69.	4-fasciata (<i>Th.</i>)	... Megilla.	T.
182.	87.	crucigera (<i>G.</i>)	T. IV. f. 4?	
184.	90.	pupillata (<i>Sw.</i>)	.. Cœlophora.	T.
186.	102.	bis-4-punctata (<i>G.</i>)	... Epilachna.	
195.	128.	4-plagiata (<i>Sw.</i>)	... Cheilomenes.	T.
197.	134.	congener (<i>Billb.</i>)	... Cœlophora.	T.
205.	154.	16-pustulata <i>Linm.</i>	...	
205.	177.	orbicula (<i>G.</i>)	... Cryptogonus.	T.
206.	182.	6-guttata (<i>G.</i>)	... Pharus.	T.
207.	191.	lunigera || (<i>Th.</i>)...	... Scymnus — ?	

A. G. OLIVIER. *Entomologie*. T. VI. 4°. 1808.

He describes and figures 115 species; 18 of which are given as new.

p. 991.	3.	ferruginea t. 5, f. 56...	Cycloneda.	
996.	13.	ramosa f. 61	... ?	
1001.	21.	divaricata f. 67	... Coccinella.	
1018.	45.	11-notata t. 6, f. 76	...	
1020.	48.	regalis t. 5, f. 48	... Cyrtocaria.	
1027.	59.	15-punctata || t. 6, f. 83	Anatis mali (<i>Say.</i>).	
1029.	63.	18-notata f. 86	... Thea variegata (<i>Fab.</i>).	
1039.	77.	velutina f. 93	... Epilachna.	
	70.	dorsalis f. 94	... Cheilomenes.	T.
1040.	79.	vidua f. 95	... Harm. 18-punctata (<i>Scop.</i>).	
1041.	82.	flavilabris || t. 7, f. 98...	Scymn. rubromaculatus.	

p. 1043.	85.	stigma t. 7, f. 101	... Hyper. reppensis (<i>Hb.</i>).
1044.	86.	plagiata f. 102	... Exochomus. T.
1047.	92.	signata || f. 107	Hyperaspis leucopsis (<i>Mels.</i>).
1048.	93.	oncina f. 108	... Cocc. 10-punctata <i>L.</i> T.
1053.	101.	australis f. 111	... ?
1056.	106.	lyncea f. 115	... Coccinella.
1058.	110.	obsoleta || f. 116	... Epil. Olivieri <i>Cr.</i>
1059.	112.	pavonia f. 117	... Epilachna.

C. regalis, *obsoleta*, and *pavonia* are all cited from "Indes orientales," but all three are probably peculiar to Madagascar.

G. W. F. PANZER. Fauna germanica. Heft cvi. 1808.

Seven known species are here figured.

1. bipunctata *L.*
2. 20-punctata *Fab.*
3. conglomerata *Fab.*
4. conglobata *Fab.*
5. 14-guttata *Fab.*
6. 12-pustulata *Fab.*
7. 14-pustulata *Fab.*

P. A. LATREILLE. Humboldt et Bonpland's Voyage.

Zoologie. T. i. 4°. 1811.

229. 56. humeralis || t. 23, f. 8 ... Epil. proteus *Guér.*
 231. 57. 4-plagiata || „ f. 9 ... Epil. Bonplandi *Muls.*

P. A. BONELLI. (Mem. Soc. Agr. Torino. T. ix. 1812.)

182. specularis t. vi. f. 30 ... Harm. 18-punctata (*Scop.*).

A. H. HAWORTH. (Tr. Ent. Soc. Lond. T. i.) 1812.

He gives a monograph of the English species, naming nearly all the varieties separately; he enumerates 38 species exclusive of *Scymnus*.

287. 26. curvipustulata = C. 10-punctata *L.*
 27. bis-3-verrucata = Ad. bipunctata (*L.*).

- p. 288. 29. lunæpustulata = C. 10-punctata L.
 290. 33. bis-4-pustulata = Ad. bipunctata (L.).

The modern works of Illiger, Paykull and others he avowedly had never seen.

- E. DOXOVAN. Nat. Hist. of British Insects. T. XVI. 8°. 1812.
 pl. 542. C. 4-punctata C. bipunctata L.

G. W. F. PANZER. Revision der Insecten-Fauna. 1812.

He here enumerates only 24 species, *Coccidula* being separated under the name *Strongylus*. There are no new species.

- p. 112. aurantiaca = Sc. subvillosa (Gz.).

L. BECK. Beiträge zur baierischen Insecten-fauna. 8°. 1817.

16. plagiata || T. IV. f. 19 Scymnus frontalis F.
 decas ,, f. 20 Adalia oblitterata (L.).

J. F. ESCHSCHOLTZ. (Mem. Acad. Petr. T. VI.) 1818.

He describes 2 species from Livonia.

- p. 464. 14. rufimana
 . 15. exclamationis

P. W. J. MUELLER. (Germ. Mag. d. Ent. T. III. 1818.)

He re-describes Panzer's species of Scymni.

C. bisbipustulata, areata, pubescens.

A. DRAPIEZ. (Ann. Soc. Phys. Brux. T. II. 1819.)

- T. XXV. f. 6. C. elaterii Epil. chrysomelina Fab.

C. P. THUNBERG. Coleoptera Capensia. (Mem. Ac. St. Pet.
T. VII. 1820.) 45 species.

p. 363.	rufa	...	...	...
	pygmæa	...	...	...
	simplex	...	...	...
	divergens	...	...	...
364.	cuneata	...	...	...
	spicillum	...	...	...
	crucigera	...	...	...
365.	circularis	...	...	...
	9-signata	...	...	...
366.	11-signata	...	...	...
	12-maculata	...	...	...
367.	caffra	...	...	...
368.	minima	...	...	...
	pulicaris	...	...	...
	oblongata	...	...	...
369.	atrata	...	...	...

C. M. WIEDEMANN. (Germ. Mag. d. Ent. vi. 1821.)

Three species from the Cape.

182.	98.	erythromela	...	...	Chnoot. similis (<i>Schl.</i>).
	99.	erythrochila	...	...	?
	100.	nigriceps	...	Exoch.	nigromaculatus (<i>Gz.</i>) T.

Id. (Zool. Mag. T. II. 1823.)

Two species from Bengal.

111.	72.	confusa	...	...	Cocc. divaricata <i>Oliv.</i>
112.	73.	dodecastigma	Epilachna.

J. LE CONTE. (Ann. Lyc. N. York. T. I. 1824.)

173.	marginipennis	t. XI. 15	...	Exochomus.
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E. F. GERMAR. *Insectorum species novæ.* 8°. 1824.

8 species from Brazil ; Mulsant saw all the types.

p. 617.	882.	miniata	...	...	Exoplectra.
618.	883.	lineatopunctata	...	...	Epilachna.
	884.	pænulata	...	...	Epilachna.
619.	885.	albicincta	...	...	Epil. marginella (<i>Fab.</i>).
	886.	calcarata	...	...	Exoplectra.
620.	887.	ancoralis	...	...	Coccinella.
	888.	fusco-maculata	...	...	Psyll. divisa (<i>Fab.</i>).
621.	889.	connexa	...	...	Eriopis.

TH. SAY. (*Journ. Acad. Phil.* iv. 1824.)

9 species from N. America.

92.	1.	undulata ||	...	...	Hyperaspis elegans <i>Muls.</i>
93.	2.	mali	...	...	Anat. 15-punctata (<i>Oliv.</i>).
93.	3.	parenthesis	...	...	Hippodamia.
94.	4.	tibialis	...	...	Hipp. 13-punctata (<i>L.</i>).
	5.	bioculata	...	...	Adal. bipunctata (<i>L.</i>).
	6.	albifrons	...	...	Brachiacantha.
95.	7.	abdominalis ||	...	...	Cycloneda Sayi <i>Cr.</i>
	8.	humeralis ||	...	...	Adalia bipunctata (<i>L.</i>) v.
96.	9.	20-maculata	...	...	Psyllobora.

A. D. HUMMEL. *Essais Entomologiques.* v. 1826. 8°.

38.	Faldermanni	= Adalia bothnica (<i>Payk.</i>).
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TH. SAY. (*Journ. Ac. Phil.* v. 1826.)

4 N. American species.

301.	1.	pullata	Mysia.
302.	2.	binotata	Cycloneda.
	3.	normata	...	...	Hyperaspis.
303.	4.	proba	...	...	Hyperaspis.

J. STURM. Verzeichniß seiner Insecten-Sammlung. 1826. 8°.
p. 82. 5-fasciata t. IV. f. 39 Megilla 4-fasciata.

L. GYLLENHAL. Insecta Suecica. T. IV. 8°. 1827.

193. 36. femoralis = Scymn. rubromaculatus (Gz.).

He gives 51 *Coccinella*, and 1 *Coccidula*; the varieties are described at very great length.

A. D. HUMMEL. Essais Entomologiques. VI. 1827. 8°.

15. Karpowkæ ?

43. Lichatschovii Bulaea.

W. S. MACLEAY. App. to King's Voyage to Australia. 1827. 8°.

p. 454. 108. Kingii ?

J. CURTIS. British Insects. T. v. 8°. 1828.

pl. 208. ocellata (L.) Anatis.

E. F. GERMAR. Fauna Insectorum Europæ. XIII. 1828.

pl. 16. hyperborea Adalia.

FR. GEBLER. Appendix to Ledebour's Reise. T. II. 8°. 1830.

p. 223. 1. biocellata C. 10-punctata L. var.

225. 18. 8-signata Brumus.

J. GISTL. (Isis. 1831.)

p. 305. 19. Schlugæ ?

F. W. HOPE. (Gray's Zool. Misc. 1831.)

19 new species from Nepaul. The types are in the British Museum, and have been seen by Mulsant and myself.

30.	miniata ||	...	Palæoneda auriculata (<i>Muls.</i>).
	6-spilota	...	... Aiolocaria.
	15-maculata	...	... Leis.
	15-spilota	...	... Leis [an prec. var.].
	dimidia ||	...	... Leis dimidiata (<i>Fab.</i>).
31.	bicolor	...	... <i>Ibid.</i>
	12-spilota	...	... Aiolocaria.
	pubescens ||	...	... Epil. 28-punctata (<i>Fab.</i>).
	marginicollis	...	... Epilachna.
	straminea	...	... Halyzia.
	vulnerata	...	... Anisocalvia.
	uniramosa	...	... Anisocalvia.
	univittata	...	... Alesia.
	cincta ||	...	... Lemnia circumvelata <i>Muls.</i>
	11-spilota	...	... Epilachna.
	4-spilota	...	... Adalia.
	virescens	...	... [<i>Chrysomelidæ</i>].
	subglobosus	...	... [<i>Chrysomelidæ</i>].
	Chilocorus rubidus	...	... Chilocorus.

M. PERTY. Delectus animalium articulatorum. 4°. 1831.

112. violacea t. XXII. f. 13 ... [*Chrysomelidæ*].

J. A. BOISDUVAL. Insectes du voyage de l'Astrolabe.

Livr. I. Planches. fol. 1832.

The types appear to be in the Paris Museum, and to have been all seen by Mulsant except the fine *Caria* (f. 20). They are all from N. Guinea and the adjacent islands.

T. VIII. f. 19.	hæmatomelas	...	Epilachna.
20.	La Peyrousii	...	Caria — ?
21.	Doreyca	...	Epilachna.
22.	hæmorrhœa	...	Epilachna.
23.	patruelis	...	Cœlophora.
24.	Tongataboæ	...	Cocc. repanda <i>Th.</i>
25.	pteromelas	...	[<i>Chrysomelidæ</i>].
26.	pardalis	...	Epilachna.
27.	strigula	...	Verania.

A. BRULLÉ. Insectes de l'expédition scientifique de la Morée.
4°. T. III. 1832.

p. 272.	551.	pygmæa	T. 44, f. 12... ?
	552.	distincta	„ f. 11... Exoch. 4-pustulata (<i>L.</i>) var.

FR. GEBLER. (Mem. Mosc. VIII. 1832.)

76.	12-maculata	...	Harmonia incarnata (<i>Kirby</i>).
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J. KRYNICKI. (Bull. Mosc. v. 1832.)

177.	19-notata	...	= <i>Bulæa Lichatschovii</i> (<i>Hum.</i>).
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E. MÉNÉTRIES. Catalogue raisonné. 4°. 1832.

Two Armenian species are described as new and 16 are given in all.

240.	1145.	maritima	...	...	Adalia.
	1153.	signata	Hipp. 13-maculata (<i>L.</i>) var.

F. FALDERMANN. (Bull. Mosc. VI. 1833.)

71.	ramosa	T. 3, f. 7	Mysia Gebleri (<i>Dej.</i>).
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J. F. KLUG. (Abh. Akad. Berl. 1833.)

Five species from Madagascar.

p. 214.	211.	midas	Chilocorus.
	212.	flaveola	...	...	Ortalia.
215.	213.	mesomela	...	...	Platynaspis.
	214.	meleagris	...	...	Epilachna.
	215.	pavonia Oliv.	...	...	Epilachna.

P. A. LATREILLE. Voyage de MM. Humboldt et Bonpland.

Zoologie. T. II. 1833.

81.	26.	16-pustulata	|| T. I. f. 13.	Eriopis connexa (<i>Germ.</i>).
91.	37.	bis-6-punctata	T. II. f. 10	Megilla maculata (<i>De G.</i>).
113.	67.	13-notata	T. IV. f. 8	... Epil. borealis (<i>Fab.</i>).

B. ZOUBKOFF. (Bull. Mosc. vi. 1833.)

Two species from Turcomania.

339.	54.	melanocephala	...	...	?
	55.	turkmenica	...	...	?

J. F. STEPHENS. Illustrations of British Entomology. T. IV. 8°. 1834.

He recognizes 5 genera and 57 species. The only new ones are:

374.	4.	Chil. rufipes	...	Exoch. nigromaculatus (<i>Gz.</i>).
395.	15.	Seym. limbatus	...	
396.	16.	Sc. atriceps	...	...

Sphærosoma (*Leach*) = Alexia and belongs to another family.

Several species here recorded as British have never been confirmed: *e. g.* C. impustulata, hyperborea, etc.

A. CHEVROLAT. Coleoptères de Mexique. Fasc. III. 12°. 1834.

70.	immaculicollis	...	Epilachna borealis (<i>Fab.</i>) var.
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W. F. ERICHSON. (Act. Leop. Carol. xvi. Suppl. 1834.)

p. 276. 70. *metallica* [*Tenebrionidae*].

J. A. BOISDUVAL. Insectes du voyage de l'Astrolabe.

Texte, 1835. fol.

He enumerates 35 species from Australia and N. Guinea; regarding 11 as new; these are described from types in Dejean's collection.

590.	2.	26-punctata	...	...	<i>Epilachna</i> .
591.	3.	11-variolata	...	...	<i>Epilachna</i> .
592.	5.	<i>contempta</i>	...	...	<i>Cocc. repanda Th.</i>
593.	7.	Australasiæ	...	...	<i>Orcus</i> .
	8.	signatipennis	...	...	<i>Epilachna</i> .
594.	9.	bilunulata	...	...	<i>Orcus</i> .
	10.	nummularis	...	...	<i>Orcus</i> .
595.	11.	chalybea	...	...	<i>Orcus</i> .
603.	22.	endomycina	...	...	<i>Hysia</i> .
604.	24.	conformis	...	...	<i>Leis.</i>
605.	25.	<i>macularis Oliv.</i>			<i>Adal. flavomaculata (De G.)</i> .

AUG. CHEVROLAT. Colcoptères de Mexique. Fasc. v. 1835.

124. Chil. **pentaspilotus**. *Thalassa*. T.

F. FALDERMANN. (Mém. Peters. Div. Sav. T. II. 1835.)

10 species from N. China and Irkutsk. The types are in the museum at St Petersburg and were seen by Mulsant.

448.	91.	<i>conspicua</i>	...	...	<i>Leis aulica (Fald.) var.</i>
449.	92.	<i>Besseri</i>	...	...	<i>Leis aulica (Fald.) var.</i>
450.	93.	<i>spectabilis</i>	...	...	<i>Leis aulica (Fald.) var.</i>
451.	94.	aulica	...	...	<i>Leis.</i>
452.	95.	tristis	...	...	<i>Chilocorus.</i>
453.	96.	amœna	...	...	<i>Adonia.</i>

- p. 454. 97. **transversoguttata** ... Coccinella.
 455. 98. **fasciatopunctata** ... Adalia.
 456. 99. 19-signata *Leis axyridis* (*Pull.*) var.
 457. 100. *Cacidula villosa* ... Spec. dub.

J. F. KLUG. (Verzeichn. Thiere und Pflanzen. fol. 1835.)

Two species from W. Africa.

49. 197. **distigma** *Chilocorus*.
 50. 199. **gemina** *Alesia hamata* (*Schh.*).

TH. SAY. (Bost. J. N. H. T. I. 1835.)

202. **munda** *Cycloneda*.
 203. **Scymn. terminatus** *Scymnus*.

ANT. VILLA. Supplementum Coleopterorum Dupleta I. 1835.

50. 69. **humerala** ?
 70. **alpina** *Adalia*.

ANT. COMOLLI. Coleoptera Novocomi. 8°. 1837.

51. 108. **padana** = *Hipp. 13-punctata* (*L.*).
 52. 110. *Scymn. obliquus* ... ?

F. FALDERMANN. (N. Mem. Mosc. v. 1837.)

10 new species from Transcaucasia. Several are doubtful.

HIPPODAMIA.

398. 572. **signata** T. 15, f. 2 ... = *H. 13-maculata* (*L.*) var.

COCCINELLA.

399. 573. **saliana** = *Adalia 11-notata* (*Schn.*).
 401. 574. **distincta** || T. 15, f. 3 ... = *C. labilis Muls.* var.
 402. 575. 19-notata (*Bess.*) ... = *Bulea Lichatschovii* (*H.*).
 404. 576. **sinuatomarginata** T. 15, 4 = *Coccinella 14-pustulata* v.
 405. 577. **maritima Mén.** ... = *Adalia*.
 406. 578. **persica** T. 15, f. 5 ... = *Hyperaspis* — ?

SCYMNUS.

- p. 408. 579. **histeroides** T. 15, f. 6. = *Hyperaspis* — ?
 409. 580. **stigmatopterus** ... = *Scymnus* — ?
 410. 581. **spectabilis** T. 15, f. 7... = *Scymnus* — ?

V. DE MOTSCHULSKY. (N. Mem. Mosc. v. 1837.)

15 new species from the Caucasus; the types of all except the first two appear to have been sent to Mulsant.

SCYMNUS.

416. 23. **bimaculatus** || T. 16. d... ?
 417. 25. **bilunulatus** ?
 26. **bipustulatus** || T. 16. e... *Scymnus*.
 418. 28. **rubidus** T. 16. f. ... *Scymnus*.
 29. **biflammulatus** T. 16. g. *Scymnus*.
 419. 31. **juniperi** T. 16. h. ... *Scymnus*.
 32. **testaceus** T. 16. i. ... *Scymnus*.

COCCINELLA.

420. 33. **meridionalis** T. 16. k. ... *Lasia 24-punctata* (*L.*) var.
 421. 35. **6-pustulata** || T. 16. l. ... *Hyperaspis caucasica* (*Cr.*).
 36. **femorata** T. 16. m. ... *Hyperaspis*.
 422. 39. **iberica** T. 16. o. ... *Exochomus*.
 423. 40. **floralis** T. 16. p. *Exochomus 4-pustulatus* (*L.*) var.
 41. **caucasica** ... *Harm. 18-punctata* (*Scop.*) var.
 43. **fulvimana** T. 16. q. *Adal. 11-notata* (*Schn.*) var.
 44. **3-punctata Rossi** T. 16. r. *C. 11-punctata L.* var.

W. KIRBY. Fauna boreali-Americana. T. IV. 1838.

The types are in the British Museum.

1. **episcopalis** *Næmia*.
 2. **13-punctata** *Linn.* *Hippodamia*.
 3. **tridens** *Hipp. parenthesis*.
 4. **5-signata** *Hippodamia*.
 5. **5-notata** *Cocc. transverso-guttata Fald.*
 6. **tricuspis** || *Coccinella Kirbyi Cr.*
 7. **incarnata** *Harmonia*.

J. RANDALL. (Bost. J. N. H. II. 1838.)

These species were found in Maine, U. S.

p. 32.	50.	cardisce	...	...
	51.	bigeminata	...	... Cleothera.
33.	51.	disjuncta	...	...
	52.	obliqua	...	...
49.	26.	notans	...	... Mysia pullata Say.
50.	27.	affinis||	...	...
	28.	similis||	...	...
51.	29.	multiguttata	...	... Psyll. 20-maculata (Say).
	30.	picta	...	... Harmonia.
52.	31.	lugubris	...	...

Probably the American Entomologists will eventually recognize these insects.

O. G. COSTA. Monog. degl' Insecti. dell' olivo. 8°. 1839.

16. C. olivetorum pl. 2, f. 3 ... = Chil. bipustulatus (L.).

V. DE MOTSCHULSKY. (Bull. Mosc. 1839.)

51. colchica ... = Lasia 24-punctata (L.) var.

EYDOUX. (Rev. Zool. II. p. 267. 1839.)

C. **diffinis** ... Epilachna. T.

This species from the Philippines is preserved in Guérin's collection.

E. F. GUÉRIN. (Rev. Zool. p. 42. 1840.)

42. Epilachna **Delessertii** ...

V. DE MOTSCHULSKY. (Bull. Mosc. 1840.)

175. deserta ... Brumus 8-signata (Gehl.).

E. F. LAPORTE. Hist. nat. des animaux articulés.

T. I. 4°. 1840.

- p. 524. 2. azurea = Epil. Proteus var.
 3. flavofasciata = Epil. Proteus var.

These two species are not noticed by Mulsant.

REV. F. W. HOPE. Coleopterist's Manual. T. II. 1840.

He recognizes 8 genera, with types given, which therefore will have to stand.

1. *Coccinella*† *typ. marginata* [= *Neda*]. 2. *Selenites* n.g. *typ. lunata* [= *Cheilomenes* Chev.]. 3. *Micraspis* Chev. *typ. striata*.
 4. *Chilocorus* Leach. *typ. cacti*. 5. *Epilachna* Chev. *typ. borealis*.
 6. *Lasia* n.g. *typ. globosa*. 7. *Hemisphærica* n.g. *typ. 5-signata* [= *Hippodamia* Chev.]. 8. *Leptia* Kirby *typ. Quercus*.

J. W. ZETTERSTEDT. Insecta Lapponica. 4°. 1840.

He describes 3 genera, *Coccinella* (26), *Scymnus* (2), *Coccidula* (1). Numerous valuable notices of habitat are given.

234. 3. *intermedia*
 235. 9. *ephippiata* (*Greenland*). *C. transverso-guttata* (*Fald.*).

P. HUBER. (Mém. Soc. Phys. et H. N. de Genève.

IX. p. 376.) 1841.

He first points out the phyllophagous nature of the *Epilachnidæ*, figuring the mandibles and larvæ, and proposes the genus *Subcoccinella* for the apterous species.

W. F. ERICHSON. (Arch. f. Nat. 1843.)

COCCINELLA.

239. *frenata* *Verania*.

SCYMNUS.

ventralis	...	...	Rhizobius.	
discolor	...	...	Rhizobius.	
stragulatus	...	...	n. g.	T.

All are from Vandiemen's Land.

L. REDTENBACHER. Tentamen dispositionum Coleopterorum pseudotrimerorum. 8°. 1843.

He characterises the genera proposed by Chevrolat, and first gives a classification of the family. The new species are :

HYPERASPIS.

4-maculata	Hyperaspis.
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SCYMNUS.

affinis	Sc. frontalis (<i>Fab.</i>).
flavicollis	Sc. marginalis (<i>Rossi</i>).
quadrillum	Sc. frontalis (<i>Fab.</i>).
bisbignatus	...	...	Sc. frontalis (<i>Fab.</i>).
basalis	...	...	Sc. marginalis (<i>Rossi</i>).

COCCINELLA.

magnifica	...	...	Coccinella.
distincta	...	...	Adal. 11-notata (<i>Schn.</i>).
alpina [<i>Villa</i>]	...	...	Adalia.

Sc. femoralis † = Redtenbacheri Muls.

SUFFRIAN. (Stett. Ent. Zeit. 1843.)

p. 93. Hyperaspis concolor H. campestris (*Hb.*) var.

At p. 330 he describes carefully the varieties of Scymnus frontalis.

FR. GEBLER. (Bull. Peters. I. 1843.)

39. Hipp. scalaris	...	...	H. amœna (<i>Fald.</i>).
Micr. lineola	...	...	Micraspis.

W. F. ERICHSON. (Arch. f. Nat. 1843.)

- p. 266. *C. effusa* (*Angola*) ... Harm. *arcuata* (*Fab.*).
C. nassata ... Thea *variegata* (*Fab.*).
Chil. nigripennis ... Ex. *nigromaculatus* var.

F. V. MANNERHEIM. (Bull. Mosc. XVI. 1843.)

- p. 312. Hipp. **vittigera** ... Næmia.
C. californica ... *C. transverso-guttata* var.
 Sc. **marginicollis** ... Scymnus.

All three are from California.

L. DUFOUR. Excursion Entomologique. 8°. 1843.

116. 754. *C. apicalis* ... = Hyper. *reppensis* (*Ill.*).

L. REDTENBACHER in Hügel's Reise in Kaschmir. 8°. 1844.

- p. 563. *C. basalis* ... Leis *dimidiata* (*Fab.*).
 Epil. **ocellata** ... Epilachna.
 E. 10-maculata ... Epilachna — ?

FR. GEBLER. (Bull. Péters. III. 1845.)

- p. 106. 34. *vittata* || (*Siberia*) ... Hyperaspis *vittifera* *Muls.*

F. W. HOPE. (Tr. Ent. Soc. IV. 1845.)

Three species from N. China. The types of these I have been able to inspect through the kindness of Mr Fr. Moore of the India Museum.

- p. 13. 18-spilota ... Leis *axyridis* (*Pall.*) v.
 succinea ... *id.* var.
 tetraspilota ... Propylea *conglobata* (*L.*) v.

G. R. WATERHOUSE. (Ann. N. H. XVI. 1845.)

p. 41. *Sc. galapagoensis* Scymnus.

V. MOTSCHULSKY. (Bull. Mosc. XVIII. 1845.)

383. *Hipp. lunatomaeculata* ... H. parenthesis (*Say*).
Exoch. 4-oculata Hyperaspis.

A. WHITE. Zoology of the Voyage of the Erebus and Terror.
 Insecta. 4°. 1846.

p. C. *Tasmaniæ* C. *leonina* *Fabr.*

EM. BLANCHARD in D'Orbigny's voyage dans l'Amérique
 méridionale. 4°. 1846.

Epil. *v-pallidum* (*Bolivia*) ... Epilachna.

Numerous species from this voyage are described by Mulsant.

F. E. GUÉRIN. Iconographie du Règne Animal. Texte. 8°. 1846.

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|------|------------------------------------|-----|-----|---------------------------|
| 318. | <i>radiata</i> (<i>Columbia</i>) | ... | ... | Epilachna. |
| 319. | <i>cacica</i> (<i>Bolivia</i>) | ... | ... | Epilachna. |
| | <i>mexicana</i> (<i>Mexico</i>) | ... | ... | Epilachna. |
| | <i>picta</i> | „ | ... | Eupalea. |
| 320. | <i>calliops</i> (<i>Madag.</i>) | ... | ... | Ortalia. |
| | <i>coryphæa</i> | „ | ... | Leis. |
| | <i>Norrisii</i> | ... | ... | Neda. |
| | <i>callispilota</i> | ... | ... | Neda. |
| 321. | <i>erotyloides</i> | ... | ... | Micaria. |
| | <i>Chevrolati</i> | ... | ... | Neda <i>Norrisii</i> var. |
| | <i>opposita</i> | ... | ... | Eriopis. |
| | <i>convergens</i> | ... | ... | Hippodamia. |
| 322. | <i>vittigera</i> [<i>Mannh.</i>] | ... | ... | Næmia. |

E. MULSANT. Coleoptères de France. Sécuripalpes. 8°. 1846.

This work is indispensable to the student of the family, as it contains most minute details of the structure and habits of the species. The synonymy of the European species is also given at very great length. New genera are proposed in some numbers, and are somewhat slightly characterized. The new species described are :

- p. 67. 6. **Idalia inquinata** ...
 84. 4. *Coccinella labilis* ... *C. magnifica* (*Redt.*).
 118. 3. **Harmonia Doublieri**...
 179. 1. *Hyperaspis Hoffmannseggii* [Grav. 1807].
 181. **H. illecebrosa**
 182. **H. Fabricii**
 214. 1. **Nomius cruentatus**
 228. **Scymnus incertus**
 228. 4. **S. Apetzii**
 231. *S. Ahrensii* = *Sc. rufipes* (*Fab.*).
 240. 8. **S. Redtenbacheri**
 259. 17. **S. fulvicollis**
 266. **Rhizobius discimacula**

W. G. ROSENHAUER. Beiträge zur Insectenfauna Europas. 8°. 1846.

64. *C. agnata* (*Hungary*) *Harmonia lyncea* (*Ol.*). v.

MELSHEIMER. (Pr. Acad. Phil. 1847. p. 177.)

17 N. American species.

C. seriata, *concinata* [= *picta* *Rand.*], *venusta*, *modesta*, *Brach. 4-punctata*, *fulvopustulata* [= *10-pustulata* var.], *basalis*, *Hyper. maculifera*, *10-pustulata* [= *Brachiacantha*], *leucopsis*, *fimbriolata*, *Exochomus prætextatus* [= *E. marginipennis* *Lec.*], *Chil. verrucatus* [Ex. *3-pustulatus* *De G.*], *Scymn. collaris*, *punctatus*, *flavifrons*.

W. F. ERICHSON (Arch. f. Nat. XIII. pp. 181—5. 1847.)

25 species from Peru. The types in the Berlin Museum
have been sent to me by M. Gerstäcker.

Hippodamia connexa (Germ.), *Anisosticta 10-maculata* (Fab.),
Coccinella sanguinea L., *cardinalis*, *ostrina*, *patula*, *arcula*, *Pristonema* (g. n.) *coccinea*, *Hyperaspis regularis*, *Epilachna velata*,
præcincta, *peltata*, *discoidea*, *4-plagiata* (Latr.), *fenestrata*, *discolor*,
dorsigera, *humeralis* (Latr.), *dives*, *lepida*, *fausta*, *pruinosa*, *venusta*,
Exoplectra ruberrima, *Scymnus rubicundus*.

H. KÜSTER. Die Käfer Europas. Heft XIII. 1848.

n. 54. Exoch. **pubescens** (*Carthagenæ*). Exochomus.

E. F. GERMAR. (Linn. Ent. III. 1848.)

p. 245. *C. racemosa* (*Adelaide*) ... *C. repanda* Th.

E. MULSANT. (Ann. N. H. I. 1848.)

p. 66. *C. antipodum* (*N. Zeal.*) ... Leis.

E. MULSANT. (Ann. Soc. Linn. Lyon 1849.)

p. 220. Sc. **scutellaris** (*France*) ... *Scymnus*.

This paper was read in 1847.

BERTOLONI. (Nov. Comm. Bonon. 1849.)

Epilachna ocellata|| (*Mozambique*).. = E. Bertolonii Cr.

V. DE MÖTSCHULSKY. (Bull. Mosc. 1849. III. pp. 154....)

C. 27-punctata [*Thea 22-punctata* (L.) var.], *C. pallida* [= *Bulæa*],
Platynaspis flavilabris [= *Exoch. pubescens*].

A. COSTA. Fauna Regno di Napoli. 4°. Fasc. 65. 1849.

This work contains the only good figures of *Coccinellidæ* extant.

- pl. i. 1. *Adonia mutabilis* var. 2. *C. 11-punctata* var. 3. *C. 14-pustulata* var. 4. *Myrrha 18-guttata* var. *formosa*. 5. *Sospita tigrina* v. 6. *Vibidia 12-guttata*.
- pl. ii. 1. *Exoch. 4-pustulatus* var. *meridionalis*. 2. *E. auritus*. 3—4. *Hyp. marginella*. 5. *H. reppensis*. 6. *H. campestris*.
- pl. iii. 1. *Epil. argus*. 2—5. *E. chrysomelina*.
- pl. iv. 1—2. *Plat. villosa* ♂ ♀. 3—4. *Scym. pygmæus* ♂ ♀. 5—6. *S. marginalis* ♂ v.
- pl. v. 1. *S. Apetzii*. 2. *S. frontalis* v. 3. *S. 4-lunulatus*. 4—6. *S. fasciatus* v.
- pl. vi. 1—2. *S. arcuatus*. 3—4. *S. capitatus* ♂ ♀. 5. *S. analis* v. 6. *S. discoideus* v.
- pl. vii. 1 *S. ater*. 2. *S. minimus*. 3—4. *Rhiz. litura*. 5. *R. discimacula*. 6. *Micr. phalerata*.

1850. L. REICHE. Insectes du voyage en Abyssinie par MM. Ferret et Galinier. Fol.

These are all described in Mulsant; the types are now in my possession.

Adalia signifera, *Alesia annulata*, *Verania 3-vittata*, *Oenopia litterata*, *Epilachna vulpecula*, *fulvosignata*, *14-signata*.

— HAMPE (Stett. E. Z. XI. p. 356—7) describes two new species: n. 23, *C. polonica* [= *Daulis sanguinea* (L.)], and, n. 22, *C. viridula* [= *C. impustulata* v.].

1850. BOHEMAN (K. Vet. Handl. 1849) describes a *Scymnus* from Gothland under the name *bisignatus*, which was revived by Thomson in his Skandinavian Coleoptera.
- LECONTE (Lake Sup. pp. 238—9) describes *Oxymychnus* (n. g.) *muerens*, *Scymnus caudalis*, *lacustris*, *ornatus*, and notes 26 species.
- At this point Mulsant's monograph of the exotic species appeared.
1852. LECONTE (Proc. Acad. Phil. vi. 129) describes numerous species from N. America; *Hippodamia Mulsanti*, *ambigua*, *punctulata*, *Coccinella lacustris*, *Mysia Rathroni*, *Coccidula lepida*, *Exochomus Guexi*, *Hyperaspis militaris*, *vittigera*, *arcuata*, *annexa*, *4-vittata*, *consimilis*, *jucunda*, *tæniata*, *pratensis*, *Oeneis puncticollis*, *pusilla*, *Scymnus amabilis*, *guttulatus*, *femoralis*, *nebulosus*, *pallens*, *debilis*, *cinctus*, *suturalis*, *fraternus*, *hæmorrhous*, *puncticollis*, *socer*, *abbreviatus*, *nanus*, *punctum*.

He also makes some very valuable observations on the limits of genera.

1853. MULSANT (Op. Ent. II.) describes three species from France. *Scymnus alpestris*, *anonus*, *Coelopterus* (n. g.) *salinus*.
- MÖTSCHULSKY (Et. Ent. II.) describes *Chilocorus rufitarsis* from N. China.
- MULSANT (Op. Ent. III.) gives a long catalogue of additions and rectifications to his monograph. The new species are for the most part from Deyrolle's collection, and are rather hastily referred to their respective genera.

Eriopis heliophila [= *connexa* var.], *Hippodamia racemosa* [= *5-signata* var.], *Harmonia punctata* [= n. gen.], *Billoti*, *Coccinella transgressa*, *franciscana* [= *transversoguttata* var.], *Anatis thibetina* [= *Cœlophora Mariæ*], *Vodella* (n. g.) *impressa*, *Calvia flaccida*, *Halysia sanscrita*, *Psyllobora Costæ*, *Thea 4-punctata*, *Propylea ob-*

verse punctata [n. g.], *Macaria Endomycha* [= *Schaumii* var.], *Caria superba*, *Leis frigida* [= *19-signata* var.], *Ballia* (n. g.) *Christophori*, *B. Brahmæ* [changed to *Dianæ*, p. 167], *Gustavii* [præc. var.], *Eucharis*, *montivaga* [præc. var.], *testacea* [præc. var.], *Neda flavens*, *æquatoriana*, *illuda* [præc. var.], *Alesia sybillina* [= *Ænopia litterata*], *bidentata* [= *Ænopia*], *Lemnia mystacea* [= *Propylea*], *Cælophora pedicata*, *areata*, *placens*, *Maricæ*, *pentas*, *gratiosa*, *Chilocorus bijugus*, *infernalis* [= *bijugus*], *Orcus Lafertei*, *peleus*, *Exochomus cinctivestis*, *lugubrivestis*, *Jordani*, *decoloratus*, *uropygialis* [= n. gen.], *Cleothera operaria*, *matronata*, *Galliardi*, *spinalis*, *hexastigma*, *sutur-ella*, *micilla*, *limbigera*, *uncinata*, *octupla*, *scapulata*, *lividipes*, *Raynevalii*, *arcualis*, *vexata*, *punctum*, *Armandi*, *troglydites*, *mercabilis*, *serval*, *limata*, *trivialis*, *Hyperaspis Ecoffeti*, *quadrina*, *Guilliardi*, *inaudax*, *pseudopustulata*, *Epilachna nigrofasciata* [= *madida*], *indiscreta* [= *E. borealis* var.], *pandora* [= *guttato-pustulata*], *tricincta* [= *guttato-pustulata*], *bis-7-notata*, *stulta*, *yamuna*, *pagana*, *elvina*, *maculivestis*, *arethusa*, *testicolor* [præc. var.], *Mandjersterne*, *Eupalea foveiventris*, *Ortalia Maklini*, *Rodolia carmelitana*, *carneipellis*, *Guinoni*, *pubivestis*, *Chnoodes trivialis*, *hemorrhoidis*, *Azya ardosiaca*, *Aulis plantaris*, *rufo-vittata*, *noivestis*, *Aspidimerus Ariasi*, *fulvocinctus*, *Cryptolæmus* (n. g.) *Montrousieri*, *Scymnus roseicollis*, *flexibilis*, *martis*, *bistillatus*, *venalis*, *volgus*, *viaticus*, *o-nigrum*, *xerampelinus*, *inclytus*, *pallidivestis*, *melanogaster*, *pallidicollis*, *pyrocheilus*, *plutonus*, *guttifer*, *thelys*, *Bucolus sollicitus*, *Platyomus* (n. g.) *Forestieri*, *lividigaster*, *Calvia* ? *pallide-guttata*, *Pentilia* ? *testivestis*.

1854. WOLLASTON (Ins. Mad. pp. 460--67) describes *Coccinella testudinea* [= *Adalia*], *geniste*, *Scymnus Durante*, *S. flavopictus*, *limnichoides* from Madeira.

— LECONTE (Proc. Ac. Phil. VII.) describes *Cocc. subversa*, *Hippod. moesta* from Oregon.

1856. MULSANT (Ann. Soc. Linn. Lyon III. pp. 135—156. Op. t. VII.) adds 14 species, nearly all from China and in the

collection of M. Buquet; these types are fortunately now in the British Museum.

Hippodamia leporina [= 5-signata var.], *Anisosticta Dohrniana* [= strigata Schn.], *Adonia interrogans* [= Hipp. sinuata], *Harm. dionea* [= Propylea 14-punctata var.], *Coccinella juliana* [= trifasciata var.], *Anatis circe* [= Leis 19-signata], *Cleis licia* [= Verania discolor], *Propylea conglobata* [= 14-punctata var.], *Leis calypso* [= Lemnia || oculata Fab.], *Celophora symbolica* [= psi var.], *Chilocorus monachus*, *Orcus cerberus* [= Chiloc. nigrifus], *Epilachna serva*, *Aspidimerus ? stellaris*.

1857. MONTROUZIER (Ann. Soc. Agr. Lyon. vii. p. 75) describes from the Island of Woodlark :

Cocc. 28-punctata [= *Epilachna*], *C. cyanoptera* [? huj. fam.], *C. Richesiana*, *C. musce* [= *patruelis*], *C. tricornata* [= *Epil. guttatopustulata*], *C. cassidoidea* [= *Synia melanaria*], *C. cristovallensis*, *C. Laportei*.

— MOTSCHULSKY (Et. Ent. vi.) describes *Epil. 28-maculata* [= 28-punctata Fab.] from Japan.

— LECONTE (Reports of Explorations, ix.) describes *Psyllobora tedata*, *Chilocorus fraternus* from California.

— WOLLASTON (Cat. Col. Mad. pp. 136—40) describes *Scymn. 10-plagiatus* [= *Pharus*], *Rhiz. oculatissimus* from Madeira.

— GREDLER (Kaf. v. Pass.) describes *Coccinella ambigua* from the Tyrol.

1858. MOTSCHULSKY (Et. Ent. vii.) describes from Ceylon and India, *Jauravia* (n. g.) *pallidula*, *limbata*, *Platynaspis circumflexa*, *oculata*, *Scymnus limbatus* || *apiciflavus*, *albopilis*, *hilaris*, *lepidulus*, *suturalis* || [= *Motschulskii*], *quadrillum*, *transversoplagiatus*, *latemaculatus*, *saciformis*, *ceylonicus*.

1859. BOHEMAN (Freg. Eugen. Resa., p. 223) describes several species from California, Taiti etc. The types of these are preserved at Stockholm.

Psyllobora conspurcata, *bicongregata*, *20-signata*, *interspersa*, *Hyperaspis annularis*, *lemniscata*, *Cryptogonus centroguttatus*, *fulvoterminalis*, *Scymnus atramentarius*, *californicus*, *infuscatus*, *vicinus*, *binotulatus*, *fuscatus*, *Kinbergi*, *tenebricosus*, *4-notatus*, *vittipennis*, *insularis*, *innocuus*.

— WEIDENBACH (Bericht Augsb. Ver. XII. p. 86) describes *Exochomus oblongus* from Europe.

1861. MONTROUZIER (Ann. Fr. I. 304) describes from New Caledonia *Daulis Mulsanti*, *bicruciatata*, *Verania artensis*, *Epilachna Buqueti*, *Urvillei*, *unicolor*, *ferruginea*, *pulchella* [typ. perd.].

— CHEVROLAT (Rev. Mag. Zool. XIII. 269) describes *Pharus setulosus* from Algiers.

— WATERHOUSE (Pr. E. S. Lond. p. 4) describes from England *Scymnus Mulsanti*, *limbatus*.

1864. WOLLASTON (Cat. Col. Can. p. 422) describes from the Canaries, *Coccinella miranda*, *Epilachna 4-plagiata* [= *Platynaspis*], *bella* [= *Platynaspis*], *Scymnus canariensis*, *oblongior*, *cercyonides*, *maculosus*.

— BLAND (Proc. Ent. Soc. Phil. III. p. 72) describes from Colorado *Coccinella ethiops*, *Epilachna maculiventris*.

— FAIRMAIRE (Ann. Fr. III. 648) describes *Exochomus xanthoderus* [= *auritus* var.].

1866. CHEVROLAT (R. M. Z. p. 325) describes from the Escorial *Hyperaspis Bellieri*.

— MOTSCHULSKY (Bull. Mosc. XXXIX. 178) describes from Ceylon and the E. Indies, *Novius limbatus*, *Chilocorus sanguinolentus*, *rufoplagiatus*, *sanguinosus*, *Oeneis fla-*

vescens nigritula, lateralis, Yauravia albidula, limbata, Aspidimerus nigrovittatus, Scymnus corporosus, brunescens, uniformis, nitidulus, stabilis, gracilis, Pullus rotundulus.

1866. BRISOUT (Ann. Fr. vi. p. 425) describes *Hyperaspis 6-guttata* from Aranjuez.

— MULSANT (Mon. Cocc. i.) adds 102 species from all parts, many of which are wrongly determined; *Hippodamia ripicola* [= Ad. mutabilis], *Megilla conterminata* [= Eumegilla n. g.], *variolosa* [ibid.], *Næmia fuscilabris*, *Adonia bifurcata* [= mutabilis?], *Kriechbaumii* [= mutabilis?], *Adalia M-fuscum, Ludovicæ, luteopicta, Gemmingeri, gratiosa, Harmonia Julia, Feliciæ* [= Prop. 14-punctata v.], *signatella, crocea* [= Ver. discolor], *viridipennis, Soulyari, V-nigrum, luteipennis, ambitiosa* [= Prop. 14-punctata], *nigrilabris* [= Ver. discolor], *Coccinella boliviana, biscutellata, multiplicata* [= Leis 19-signata], *bacchata* [Proc. Douei], *ægyptiaca* [= Menetriesii], *Bruckii, Eugeni, Mysia lignicolor, Sospita flavolineata* [= V. furcifera], *Calvia septenaria, Psyllobora simplex, configurans, perfida* [Egleis], *18-signata* [Thea variegata], *Bakewellii, consita, subsimilis, conglutinans, tardigrada, meticulosa, feralis, liliputana, Kirschi, picturata, foliacea, Seladia augustiniana, fastuosa* [= bifasciata], *erato* [= bifasciata], *Eugenia* [= erato], *Micaria La Saussayei, biguttulata, Kunkeli* [= biguttulata], *Caria superba* [n. g.], *infirmata, miranda* [= Reichii], *manillana* [= Leis], *distaura, Faurvri, Leis Rougeti* [= Synia melanaria v.], *atrocineta, gibbipennis* [= Caria regalis], *Pelina Mayeti* [= montivaga v.], *zephirina* [= dianæ var.], *Gerstäckeri* [= Mysia], *Neda auriculata* [= miniata || Hope], *bayaderæ* [= Ballia], *Paulinæ* [= Leis], *Sicheli* [n. g.], *Hopferi* [= Alesia torquata], *Emiliæ* [Amandii], *Daulis Minkii, sinopæ, Gilar dini, Girini, ebenina, Steini* [= sanguinea], *Proserpinæ, Darestei, Carolinæ* [= Ver. discolor], *Alesia Gabilloti* [= torquata], *Guerini, inconsiderata* [univittata Hope], *circumflua, Verania Gauthardi* [= V. furcifera], *Lemnia Allardi* [n. g.], *Henricæ* [= Leis aulica], *Cælophora Des-*

jardini, *Dumortieri*, *Dupasquieri*, *ochracea*, *Victoriæ*, *mendica* [psi var.], *Romani*, *Flachati*, *Petrequini*, *Oenopia Sauzeti*.

1867. WOLLASTON (Col. Hesp. p. 158) describes from the Cape de Verde Islands *Coccinella artemisiæ* [= *Vibidia bis-notata*], *Scymnus carbonarius*, *pallidulus*, *nigropictus*, *posticus*, *floricola*, *fractus*, *picturatus*, *maritimus*, *inconspicuus*, *depressiusculus*; and from Madeira *S. epistemoides*.
- THOMSON (Sk. Col. VIII. 331) describes from Sweden *Rhizobius nigriventris*.
- FAIRMAIRE (Ann. Fr. VII. p. 416) describes *Micraspis tetradyma* from Morocco.
1868. MARSEUL (l'Ab. v. 215) describes from Beirut *Scymnus pharoides*, *syriacus*.
- FAIRMAIRE (Ann. Fr. VIII. p. 501) describes *C. Marmottani* from Biskra.
1869. BOLD (Trans. North. Soc.) describes from England *Scymnus lividus*.
1870. BELLIER de la Chavignerie (Ann. Fr. x. Bull. p. 26) describes *Cocc. Ghiliani* [= *C. lyncea*], *Calvia eburnea* [immat.].
- KIRSCH (B. E. Z. XIV. p. 394—96) describes *Pharus basalis*, *Scymnus includens*, *isidis*, *varius* from Egypt.
- WOLLASTON (Ann. N. H. v. p. 248) describes *Scymnus conjunctus* from S. Vincent (C. Verd).

COCCINELLIDÆ.

TARSI 3-articulate, 2nd joint bilobed; maxillary palpi with the last joint large, securiform (rarely subconical); antennæ short, with a 3-jointed club, 11-articulate (very rarely 8 or 10), inserted at the edge of clypeus; first ventral segment with an arcuate raised line on either side, varying with the degree of mobility of the femora.

Subfamily 1. COCCINELLIDÆ (Genuinæ).

Anterior coxal cavities closed.

Tribe 1. EPILACHNIDES.

Surface pubescent, punctuation uneven, claws nearly always bifid, mandibles multidentate, abdominal plates generally complete, thoracic epipleuræ hardly ever foveolate for the antennæ.

The species of this sub-family are phytophagous, and extremely variable in colouration. Their similarity in form and colouring to the Chrysomelidæ is very remarkable, and if these species are endowed with an unpleasant odour and taste, as are the typical *Coccinellæ*, a strong case for "mimicry" might be made out.

A. Species AMERICANÆ.

The American species of this genus sort themselves in certain groups distinguished by their appearance and by their local distribution. 1. Metallic species variously spotted with yellow. Typ. *E. Proteus*. Venezuela, N. Granada, Ecuador, Peru. 2. Rufous species with angular black marks. Venezuela, N. Granada, Ecuador. 3. An assemblage of minor groups, all from Mexico. 4. The only widely spread species and its allies. *E. Borealis*. 5. The convex fulvous species with an ochreous margin divisible into groups by the form of the abdominal plates. Principally from Brazil.

The species with dilated shoulders, here placed at the beginning, present extreme difficulties in their determination. Mulsant was by way of lumping them all under *E. Proteus*, but afterwards separated *E. patricia* and others. The truth appears to be that

there are a number of extremely closely allied species, with a similar system of colouration, and similar range of variation, hence only by an extended study in the original localities can the problem be worked out. In this respect they seem to be very like some of the *Heliconide* among butterflies. They are confined to Venezuela and the Andes.

Epilachna dives.

Epilachna dives, *Er. Arch. f. Nat.* XIII. p. 184 (1847). T.

Epilachna dorsigera, *Er. Arch. f. Nat.* XIII. p. 184 (1847). T.

Elytra with 2 spots, the basal one small, near the suture, the apical sub-transverse also nearer the suture than the margin; punctuation visibly unequal, close, the coarse punctures abundant; antennæ short; epipleuræ with a marked humeral dilatation, continuous. L. $4\frac{1}{4}$ lin. Peru (Berlin).

[These Erichsonian species are redescribed from the original types; the paucity of Peruvian species in collections has prevented my forming any opinion on their range of variation.]

Epilachna lepida.*

Epilachna lepida, *Er. Arch. f. Nat.* XIII. p. 184 (1847). T.

Elytra with the basal spot whitish touching the callus, nearer the margin than the suture, apical spot rounded, almost reaching the margin; punctuation finer, coarse punctures evident. L. 4 lin.

Epilachna fausta.*

Epilachna fausta, *Er. Arch. f. Nat.* XIII. p. 184 (1847). T.

Elytra with the basal spot orange, oblong-ovate, close to the suture, apical large, subtransverse, almost occupying the whole width of the elytra; punctuation very close and fine, coarse punctures obsolete; finely pubescent, epipleuræ continuous. L. 4 lin. Peru (Berlin).

Epilachna pruinosa.*

Epilachna pruinosa, *Er. Arch. f. Nat.* XIII. p. 184 (1847). T.

Elytra with the basal spot as in *E. fausta*, the apical elongate, oblique, near the external margin; colour dull green, opaque, interstices extremely thickly (almost subrugosely) punctate, very finely pubescent or pruinose.

Epilachna peltata.*

Epilachna peltata, *Er. Arch. f. Nat.* XIII. p. 183 (1847). T.

Peru (Berlin), Cuenca (Mus. Brit.).

Similar to *E. discoidea*, but punctuation more open, elytra with a produced margin, especially at the shoulders; the discoidal spot heart-shaped, not reaching the scutellum; coarse punctures more abundant, epipleuræ continuous.

Epilachna fenestrata.

Epilachna fenestrata, *Er. Arch. f. Nat.* XIII. p. 183 (1847). T.

Very like *E. 4-plagiata*, but the punctuation more irregular, almost rugulose, very coarse, thorax smaller, elytra less dilated at the margin, epipleuræ acuminate; shape more elongate. L. $2\frac{1}{2}$ lin. Peru (Berlin).

Epilachna discoidea.*

Epilachna discoidea, *Er. Arch. f. Nat.* XIII. p. 183 (1847). T.

Hemispherical, greenish-blue, elytra with a large common bright red discoidal spot just reaching the scutellum and extending to four-fifths; punctuation close, coarse punctures sparse, elytra not broadly margined, epipleuræ continuous. L. $2\frac{1}{2}$ lin. Peru (Berlin).

Epilachna viridilineata sp. n.

Oblong, greenish-black, elytra whitish-ochreous, evidently, not thickly punctate, narrowly bordered with greenish-blue, and divided into three unequal areolæ by a line starting from the callus and branching to right and left about the middle (like a reversed γ); the posterior areola is thus about double the size of either of the others, and is divided into two long triangles by a thin line joining the γ , but not apparently continuous with it. L. $3\frac{2}{3}$ lin. Peru (Fry), Ecuador (Buckley) abundantly.

Epilachna viridinitens sp. n.

Oval, shoulders hardly dilated; bright blue-green, closely but rather coarsely and nearly uniformly punctate; elytra with two ochreous fasciæ, one at one-third (the upper edge nearly straight, broader on the margin), one at two-thirds (rather oblique, of uniform width, making with its opposite a nearly straight common fascia); neither of them absolutely reach the margin. L. 4 lin. Peru (Fry). Abdominal plates complete, subangulate.

Epilachna variabilis sp. n.

Oblong, humeral angles dilated, punctuation close, large punctures not very apparent, colour of a purplish bronze, mesosternum slightly emarginate, plates obsolete; the pattern of the elytra varies extremely.

a. With two rather large spots, one at one-third close to the suture, one sub-triangular at three-fourths discoidal; the second is sometimes rounded.

β . With two fasciæ, the first straight, only sinuate for the callus, the second broader at the suture, converging forwards; neither of them touches the suture or margin.

γ . With the fasciæ split into two spots each.

δ . With the upper and lower pairs of spots united by narrow lines.

ε. With two longitudinal vittæ, joined at top or bottom.

η. With a large discoidal patch inclosing two bronzed dots transversely placed.

L. $3\frac{1}{2}$ —4 lin. Peru (Fry). This passes through variations which seem to include *E. patricia*.

Epilachna imperfecta sp. n.

Elytra with an ovate spot under the callus, and a very obsolete dash between it and the margin ochreous, also at three-fourths two sublinear approximated spots; the external ones are close to the margin. L. 4 lin. Peru (Reiche).

Very closely allied to *E. variabilis*, but I have seen no variety of that insect which approaches the present species.

Epilachna archidonæ sp. n.

Oblong, not narrowed behind, purplish-bronze, closely and coarsely punctate, elytra each with four small orange spots, two at one-fourth, and two at three-fourths; the anterior series slightly concave in front, the posterior series nearly straight.

L. 3 lin. Archidona (B.M.), Bolivia (Deyrolle). Epipleuræ acuminate.

This is a variation of a species of which I have not seen the type.

Epilachna persimilis sp. n.

Near *E. Archidonæ*, but smaller, outline more uniform, punctuation closer and more uniform, elytral spots whitish ochreous; the anterior series forms a straight line, the sutural ones being larger and more oval; the posterior series is concave behind. L. 3 lin. Peru (Fry).

Epilachna inconstans sp. n.

Oblong ovate, dilated at the shoulders, greenish-blue, shining, with a short pruinose pubescence; head rather strongly punctate, thorax more finely and closely so; elytra unequally almost subrugosely punctate, the coarse punctures not deeply impressed; epipleuræ reaching the apex, ventral process very sparingly punctate. L. $3\frac{1}{2}$ lin. Ecuador (Buckley). The females are more ovate and hardly dilated at the shoulder. This species has a parallel range of variations with *E. variabilis*, and is not impossibly identical with *E. dives*, but the type of that species does not accord precisely with any specimen before me out of about 150.

Epilachna patricia.*

Epilachna patricia, Muls. Spec. 717. 12.

Ins. St Cruz (Paris).

Epilachna octo-verrucata.*

Epilachna 8-verrucata, *Muls. Spec.* p. 718. 13 (T).
N. Granada (Buquet).

Epilachna bis-triguttata.

Epilachna bis-triguttata, *Muls. Spec.* p. 719. 14.
Yungas, Peru (Paris).

Epilachna convergens sp. n.

Oblong, rather narrow behind, coarsely and closely punctate; bluish-green, thickly pubescent, elytra with two creamy white fasciæ; the first starts from the humeral angle obliquely and is produced into a point slightly curved downwards at the suture a little before the middle; the second is straight across at three-fourths. L. 3 lin. Peru (Fry), Ecuador (Buckley).

Epilachna peruviana sp. n.

Ovate, not dilated at the shoulders, blue-green, punctuation fine, rather opaque; elytra with two ochreous spots, one at one-third (a little nearer the suture), one at three-fourths, large, orbicular, joined to the suture. L. $3\frac{1}{2}$ lin. Peru (Fry).

A variety occurs with two broad fasciæ, the first straight, parallel; the second enlarged at the suture, converging forwards; both of them cross the suture. This differs from my *E. inconstans* in being ovate in both sexes and by the posterior spot which is joined to the suture.

Epilachna Buckleyi sp. n.

Sub-triangular, the shoulders largely dilated, the elytra narrowed behind to a point, blue-black, finely pubescent; thorax rather long, sub-quadrate, finely punctate; elytra deeply and sparsely punctate, the small punctures altogether obsolete; each with a large discoidal patch, reaching from one-third to four-fifths, parallel and close to the suture, on the outside with a triangular dent at one-third its length; this patch bright red with a golden green gloss, producing a metallic effect; epipleuræ hardly acuminate. L. 2 lin. Ecuador (Buckley).

This, the most beautiful species of this now immense genus, I have much pleasure in dedicating to Mr Buckley, to whose unparalleled exertions we are indebted for so many novel forms.

Epilachna opacula sp. n.

Oval, not dilated at the shoulders, opaque, being without any visible punctuation; thorax black, finely punctate, elytra opaque green, with two small orange spots, one at one-fourth nearer the suture, and one near the margin at three-fourths. L. $3\frac{3}{4}$ lin. Ecuador (Buckley).

Epilachna consularis.

Epilachna consularis, Muls. Spec. p. 712. 8 (T).

N. Granada (Reiche). Thorax very small; punctuation of elytra close, fine, opaque, the coarse punctures but little visible; epipleuræ suddenly broader at the shoulders, acuminate before the apex, plates hardly marked.

Epilachna proteus.

Coccinella proteus, Guér. Icon. p. 312.

Epilachna proteus, Muls. Spec. p. 713. 9.

Venezuela, N. Granada. Mulsant has united practically all the four spotted species and their varieties under this name, in which I cannot think he is right; certainly if he is, *E. consularis*, *patricia*, *S-verrucata* will have to go too.

Epilachna V-pallidum.

Epilachna V-pallidum, Blanch. Voy. D'Orb. p. 214. Muls. Spec. p. 703. 2.

Peru, Bolivia; punctuation close, evident, unequal, epipleuræ continuous.

Var. (*vittigera*) similar to the type, except that the transverse line has disappeared.

Epilachna angustata.

Epilachna angustata, Muls. Spec. p. 720. 15.

Venezuela, N. Granada. Elongate, narrow, antennæ elongated, club large.

Epilachna Erichsoni* sp. n.

Dark metallic green, elytra each with two orange spots; margin flattened out, almost uniformly and rather strongly punctate; spots equal, one subtransverse at one-third, nearer the suture, one oblique close to the suture at two-thirds; epipleuræ acuminate, plates complete. Size of *E. angustata* but broader. Veragua (Berlin).

Epilachna quadriplagiata.

Coccinella 4-plagiata || Latr., Humboldt's Voy. p. 229.

Epilachna Bonplandi, Muls. Spec. p. 721. 16.

Epilachna Bourcieri, Muls. Spec. p. 725. 19.

N. Granada, Bogota, Ecuador, Archidona.

Antennæ long, club thick, as in *E. angustata*, punctuation very coarse and close, epipleuræ broad, rather inclined, continuous.

Epilachna approximata sp. n.

Very near *E. 4-plagiata*, sculpture a little less close, and more uniform, so that the surface is more shining; larger, the epipleuræ

acuminate a little before the apex; elytra each with two large red blotches occupying almost the whole space; leaving the margins, suture, and a medial transverse line of equal width, metallic green. L. $2\frac{1}{2}$. Ecuador (Buckley).

More ovate than *E. 4-plagiata* or even subacuminate.

Epilachna dubia sp. n.

Again similar to *E. 4-plagiata*, but smaller, with a punctuation more uniform, and resembling that of *E. approximata*; the elytra with the whole disc reddish-orange, only the margins and suture (very narrowly) metallic green. L. 2 lin. Quito (Fry).

Epilachna univittata sp. n.

Subhemispherical, pubescence short, suberect; head and thorax closely punctate; elytra very convex, coarsely and deeply punctate, the large punctures not being very visible amongst the others; reddish-brown, the margins, suture and a discoidal vitta (broader than the margin and not reaching the apex) black; plates complete semicircular. L. $2\frac{1}{4}$ lin. Ecuador (Buckley). Differs from the variety of *E. V-pallidum* by its convex hemispheric form, and the subquadrate thorax.

Epilachna Humboldtii.

Epilachna Humboldtii, *Muls. Spec.* p. 724. 18.

Bolivia.

Closely punctate, opaque, large punctures hardly visible. Form elongate, epipleuræ continuous, mesosternum sinuate.

Epilachna cruciata.

Epilachna cruciata, *Muls. Spec.* p. 708. 6.

Venezuela, N. Granada. On *Cucurbitaceæ* (Sallé).

Epipleuræ broad, acuminate before the apex, plates complete, coarse punctures sparse, evident.

Epilachna scapularis.

Epilachna scapularis, *Muls. Spec.* p. 705. 4.

N. Granada, Venezuela (Fry).

Punctuation coarse, almost uniform, epipleuræ acuminate, the inner portion of their base ochreous.

Epilachna stolata.

Epilachna stolata, *Muls. Spec.* p. 704. 3.

N. Granada, Venezuela (Fry). Closely allied to *E. scapularis*, differing only in the colouration.

Epilachna axillaris.

Epilachna axillaris, *Muls. Spec.* p. 707. 5.

N. Granada, Venezuela (Fry).

More convex, punctuation more open, so that the fine punctures are apparent, else precisely similar to *E. scapularis*.

Epilachna nigrovittata sp. n.

Ovate, almost rounded, shoulders not dilate, black, finely pubescent; head in front and the labrum yellow; thorax transverse rather sparingly punctate, sides concave, yellow; elytra yellow, rather coarsely and uniformly punctate, margins, suture, and two vittæ black; the external vitta (which is the broadest) reaches from the base (passing over the callus) to the suture, which it joins at five-sixths; the inner one is free at either end; epipleuræ with the inner half yellow; ventral segments 3—5 with the posterior edge yellow. L. $3\frac{1}{2}$ lin. Ecuador (Buckley).

Epilachna cinctipennis sp. n.

Closely allied to the three preceding species; the black colour of the elytra covers the basal third (enclosing a small orange spot on either side the scutellum), forms a transverse fascia just behind the middle (anterior edge straight, posterior oblique), and an oblique triangular apical spot. L. $4\frac{3}{4}$ lin. Venezuela.

Form more elongate-oval, punctuation nearly uniform, close, the fine punctures difficult to observe, the epipleuræ yellow at the base.

Epilachna radiata.

Coccinella radiata, *Guér. Icon.* p. 318.

Epilachna radiata, *Muls. Spec.* p. 701. 1.

N. Granada. Punctuation uniform, moderately strong and close, the small punctures crowded out, colour light whitish; the epipleuræ are broadly pale within.

Epilachna pictipennis sp. n.

Resembles *E. radiata*, but is more strongly punctured, as in *E. cinctipennis*. The black colour extends along the external margin of the elytra to the apex, and is dilated at the humeral angle, less so a little behind the middle, and again at the apex, where it extends one-fourth up the suture; it is further dilated behind the scutellum into a large common bilobed spot, and forms a large irregular discoidal spot in the posterior half of each elytron, thus leaving a yellow reticulation. L. $4\frac{3}{4}$ lin.

N. Grenada (Deyr.).

Epilachna mutabilis sp. n.

Regularly ovate, black, subopaque, finely pubescent, closely and thickly punctulate, the large punctures abundant, but not so

much larger than the others as to be conspicuous; head more sparsely punctate, the vertex smooth in the middle: thorax closely punctate; elytra varying from black to brownish-ochreous; the normal pattern is black with three brownish-ochreous marks; one elongate, humeral, one elongate-ovate, in the middle of the base, one irregular at two-thirds; these (especially the posterior one) vary in their extent; epipleuræ acuminate, ventral process sparingly punctate. L. 4 lin. Ecuador (Buckley).

***Epilachna bizonata* sp. n.**

Subovate, attenuate posteriorly, the shoulders dilated, black, opaque, finely pubescent; elytra closely and roughly punctate, appearing opaque, each with two narrow fasciæ, one at half and one at two-thirds, the anterior one broadest at the suture; they both cross the suture but do not reach the margins. L. 3 lin. Ecuador (Buckley).

The epipleuræ are acuminate, the plates short, semicircular. The only variety I have seen is one in which the posterior fascia is absent, and the anterior reduced to a narrow dash extending from the suture to the middle of the disc.

***Epilachna Fryii* sp. n.**

Ovate, very convex, rather ventricose, opaque, black, punctuation scarcely visible: head and thorax finely and closely punctate; elytra with three narrow reddish-orange fasciæ, one subbasal starting just below the scutellum, one medial, at three-fourths; the last two sometimes united into a broad fascia enclosing a central black spot, these fasciæ do not cross the suture; epipleuræ acuminate, ventral process closely punctate, abdominal plates obsolete. L. 4 lin. Ecuador (Buckley). I first saw this fine species in Mr Fry's collection, and it has been brought again by Mr Buckley, though still sparingly.

***Epilachna madida*.**

Epilachna madida, *Muls. Spec.* p. 710. 7.

Epilachna nigrofasciata, *Muls. Op.* III. p. 105 (1853).

N. Granada, Venezuela (Fry). Punctuation uniform, clear, rather deeply impressed, not very fine; epipleuræ acuminate, pale at the base.

***Epilachna mexicana*.**

Coccinella mexicana, *Guér. Icon.* p. 319.

Epilachna mexicana, *Muls. Spec.* p. 731. 24.

Mexico; abundant. Punctuation close, uniform, and fine.

***Epilachna defecta*.**

Epilachna defecta, *Muls. Spec.* p. 733. 25.

Epilachna fuscipes, *Muls. Spec.* p. 737. 26.

Mexico, Nicaragua, N. Granada. On the leaves of *Solanum nigrum* (Sallé). I have a variety entirely black; the variety *fuscipes* has the thorax sometimes bright ochreous; it differs from *E. mexicana* in the absence of the basal spot.

Epilachna patula.

Epilachna patula, *Muls. Spec.* p. 796. 71. (T).
Mexico (Chev.). Punctuation fine, uniform.

Epilachna olivacea.

Epilachna olivacea, *Muls. Spec.* p. 808. 82.

Epilachna plumbea, *Deyr. MSS.*

Epilachna obscurella, *Muls. Spec.* p. 809. 83 (T).

Epilachna proxima, *Deyr. MSS.*

Epilachna tenebricosa, *Muls. Spec.* p. 809. 84 (T).

Mexico; punctuation very fine, almost aciculate, epipleuræ acuminate at two-thirds, pubescence very short and close. Abdominal plates complete, covering half the segment. The anterior angles of the thorax, knees, tibiæ, tarsi, and antennæ are testaceous; some or all of them being occasionally aeneous.

Epilachna Aubæi.

E. Aubæi, *Muls. Spec.* p. 810. 85.

Punctuation as in *E. olivacea*, but stronger, abdominal plates more ogival.

In mature specimens the elytra have a dark transverse central fascia.

Epilachna amplexata.

E. amplexata, *Muls. Spec.* p. 856. 124 (T).

Mexico (Dupont). Very close to *E. Aubæi*, but differs by having the coarse punctures apparent.

Epilachna nigrocincta.

E. nigrocincta, *Muls. Spec.* p. 716. 10.

Mexico. Punctuation uniform, tolerably open. Plates complete, short.

Var. *a*. The basal tooth carried on in a curved line to the suture beyond the middle; a small tooth also springs from the external margin at five-sixths.

Epilachna varivestis.

Epilachna varivestis, *Muls. Spec.* p. 815. 91.

Epilachna varipes, *Muls. Spec.* p. 812. 87 (T).

Epilachna murina, *Muls. Spec.* p. 815. 89.

Epilachna corrupta, *Muls. Spec.* p. 815. 90 (T).

Mexico; again very variable; elytra pale ochreous with black spots, or dark brown, the spots ocellated with ochreous, or black,

the spots denuded. The last spot sometimes absent. Punctuation unequal, the large punctures lightly impressed.

***Epilachna simillima* sp. n.**

Very similar to *E. varivestis*, and possibly a local form.

Thorax with one lateral and two discoidal spots blackish, elytra similarly spotted, basal row less arcuate, sutural spot elongate, medial row convex in front, central spot much larger than the others, 1 subapical discoidal spot; the form also is more convex, and it is more shining. L. $2\frac{2}{3}$ lin. Bogota.

***Epilachna modesta*.**

Epilachna modesta, *Muls. Spec.* p. 817. 92.

Epilachna difficilis, *Muls. Spec.* p. 818. 93 (T).

Mexico. Differs from *E. varivestis* by its smaller size and by the sutural spot in the middle row being common. The punctuation is fine, large punctures but little marked; the form is more convex. *E. difficilis* is merely a specimen in which the pattern between the spots comes out dark, as in *E. reticulata*.

***Epilachna vincta* sp. n.**

Convex, yellowish ochreous, thorax with a black fascia parallel in the base not reaching the sides; elytra each with six spots and an angular black mark; this mark starts from the callus, forming an arc to the scutellum, and is then prolonged for one-third of the suture, gradually dilated towards the point, three small dots obliquely sloping outwards (the first parallel with the end of the basal mark), one dot near the suture at two-thirds, two close together parallel to the margin, subapical. L. 3 lin. Guatemala, Costa Rica. Coarse punctures sparse and very apparent.

***Epilachna polluta*.**

Epilachna polluta, *Muls. Spec.* p. 870. 141 (T).

Mexico (Reiche). Markings cloudy and uncertain, coarse punctures sparse, deeply impressed.

***Epilachna pænulata*.**

Coccinella pænulata, *Germ. Ins. Nov. Sp.* p. 618. 884 (1824).

Epilachna pænulata, *Muls. Spec.* p. 823. 96.

Brazil, Bahia, S. Paulo, Bolivia, Peru, Uruguay, Montevideo; Mendoza (Chili). Mr Fry has a specimen labelled "N. America." Punctuation very strong and coarse, the large punctures visible.

***Epilachna æquinoctialis*.**

Epilachna æquinoctialis, *Muls. Spec.* p. 824. 97.

Epilachna particollis, *Muls. Spec.* p. 810. 86.

Epilachna indiscreta, *Muls. Op.* III. p. 107 (1853) T.

Buenos Ayres, N. Granada. This seems to me certainly a

meridional form of *E. borealis*; Mulsant does not differentiate them at all. Varieties occur suffused with black, leaving only the shoulders pale.

Epilachna borealis.

Coccinella borealis, *Fabr. Syst. Ent.* p. 82. 22 (1775).

Epilachna borealis, *Muls. Spec.* p. 827. 98.

Epilachna maculiventris, *Bland. Pr. E. S. Phil.* III. 72 (1864).

North and Central America in profusion.

Punctuation fine, coarser punctures obsolete; varieties occur with immaculate thorax (*immaculicollis* Chev.) from Mexico, and others in which the rows of spots form transverse bands; a partial arrest of pigment also produces singular effects; but all these are readily referable to their type.

In this, as well as in the preceding species, the outer edge of the elytra is sometimes black.

This, the only N. American species, is the only one on the continent at all like the European and Asiatic group in colouration.

Epilachna marginella.

Coccinella marginella, *Fabr. Mant. Ins.* p. 53. 3 (1787).

Coccinella palliata, *Fabr. Ill. Mag.* II. p. 253 (1803).

Epilachna palliata, *Muls. Spec.* p. 844. 10.

N. Granada, Bolivia, Cayenne, Brazil (Muls.).

Plates complete, epipleuræ acuminate at five-sixths; punctuation close, large punctures visible.

Epilachna cacica.

Coccinella cacica, *Guér. Icon.* p. 319 (1844).

Epilachna cacica, *Muls. Spec.* p. 842. 109.

Epilachna precincta, *Er. Arch. f. Nat.* XIII. p. 183 (1847), T.

Epilachna serva, *Muls. Op.* VII. p. 135 (1856). T.

Ega, Santarem, Obydos (Bates), Minas Geraes, Bolivia (Mulsant). Peru, Quito.

Differs from *E. marginella* only by the black suture and juxta-marginal band; I have several intermediate forms with the suture normal, and consider that it is probably a variety of *E. marginella*.

Epilachna extrema sp. n.

Very like *E. marginella*, of which it may be an extreme variety.

It differs by the black thorax, of which only the anterior angles have a triangular ochreous patch; and by the elytra, of which the external margin is ochreous, the rest deep brownish-black, with an ovate discoidal rufous vitta in each.

Ecuador (Buckley). A tolerable number of precisely similar specimens occurred, one of them affording a lead in the direction of *E. marginella*.

Epilachna velutina.

Coccinella velutina, Oliv. Ent. vi. p. 1039. 77. pl. vi. 93.

Epilachna velutina, Muls. Spec. p. 845. 111.

Cayenne. Differs from *E. marginella* by having the elytra of a dark brown, the margin alone being ochreous. The thorax also is of a different shape.

Epilachna spreta.

Epilachna spreta, Muls. Spec. p. 845. 112.

Allied to *E. marginella*, but the fine punctures have to a great extent disappeared, leaving the coarse ones visible. It is extremely variable, the disc of the elytra being testaceous or brown.

Brazil.

Epilachna circumcincta.

Epilachna circumcincta, Muls. Spec. p. 847. 113.

Extremely close to *E. spreta*; but with the large punctures more sparsely distributed; scutellum black, epipleuræ entirely whitish and continuous, metasternum broader at the base.

Brazil.

Epilachna clandestina.

Epilachna clandestina, Muls. Spec. p. 848. 114.

Also very like *E. spreta*, but with a triangular scutellar mark black, edged externally by the ochreous sutural margin. The disc of the elytra is sometimes black, sometimes testaceous; the fine punctures are more visible here; the epipleuræ ochreous, acuminate.

Epilachna concolor.

Epilachna concolor, Muls. Spec. p. 849. 115 (T).

Brazil (Reiche). Thickly and evidently punctate, coarse punctures not very deeply impressed, sometimes obsolete.

[Form suborbicular, thorax truncate behind, abdominal laminae complete, semicircular, subterminal. *Dira*, Muls.]

Epilachna Clarkii, sp. n.

Colouration of *E. spreta*, but it differs by the short antennæ, very strong coarse punctuation, suborbicular form, subterminal plates, etc. L. $2\frac{3}{4}$ lin. Constancia, Minaes Geraes.

Epilachna obscurocincta.

Epilachna obscurocincta, Muls. Spec. p. 849. 116.

Epilachna placida, Muls. Spec. p. 850. 117.

Brazil, Montevideo, Bolivia.

The black submarginal band follows the base of the elytra and reaches the suture with its full breadth. The var. *placida* has the thorax red.

Epilachna gossypiata.

Epilachna gossypiata, *Muls. Spec.* p. 857. 125.

Bolivia; Reiche's specimen, cited by Mulsant, hardly differs from *E. obscurocincta*.

Epilachna subcincta.

Epilachna subcincta, *Muls. Spec.* p. 857. 126 (T).

N. Granada. Shining, rather sparingly punctured.

Epilachna tomentosa.

Epilachna tomentosa, *Muls. Spec.* p. 858. 127.

Rodolia pubivestis, *Muls. Op.* III. 131 (1858) T.

Brazil, Cayenne, Santarem (Bates). Shining, coarse punctures sparse.

Epilachna mitis.

Epilachna mitis, *Muls. Spec.* p. 853. 120.

Mexico.

The dark border is not continuous on the thorax, which has its central third greenish-black. Epipleuræ inclined, plates not terminal, semicircular, obsolete in the posterior third. Extremely like *E. zomula*.

Epilachna lineatopunctata.

Coccinella lineatopunctata, *Germ. Ins. Spec. Nov.* p. 618. 88.

Epilachna lineatopunctata, *Muls. Spec.* p. 831. 101.

Brazil, Bahia (Fry). The coarse punctures very apparent, but the fine punctuation is almost obsolete; abdominal laminae almost terminal; epipleuræ inclined. Mr Fry's series from Bahia are one and all totally devoid of pubescence. A variety in the Copenhagen Museum is devoid of lines, having only a dot on the callus.

[Suborbicular, abdominal plates v-shaped. *Mada*, *Muls.*]

Epilachna circumflua.

Epilachna circumflua, *Muls. Spec.* p. 852. 119.

Epilachna contempta, *Muls. Spec.* p. 851. 118.

Brazil, Buenos Ayres, Rio Janeiro, Bolivia.

Very like *E. obscurocincta*, but the black band remains parallel to the outer margin and does not follow the base of the elytra. Punctuation visible, coarse punctures deeply impressed. Abdomen with the fifth segment in the ♂ with a deep emargination fringed with golden hairs.

Epilachna circumducta.

Epilachna circumducta, *Muls. Spec.* p. 854. 122.

Brazil, S. Paulo, Rio Janeiro (Fry).

The external rather broad whitish margin is continuous round the thorax and elytra; inside this is a narrow metallic greenish-black band also continuous, just taking the base of the thorax and passing over the scutellum; the suture is also narrowly edged with black.

Epilachna zonula.

Epilachna zonula, *Muls. Spec.* p. 854. 121.

N. Granada? (Dupont), Brazil, Rio Janeiro (Fry), Ega, Santarem (Bates). Closely allied to *E. circumducta*, larger, the black border broader and the sutural border dilated into a common discoidal spot.

Epilachna Pertyi,* sp. n.

Epilachna nigrocincta, *Perty MSS.*

Thorax reddish, elytra testaceous-red, thickly punctured, large punctures faintly impressed, bordered all round with black, narrowest at the base and just before the apex; the sutural border dilated in the middle. L. 2 lin. Rio Negro (Munich).

The abdomen is unfortunately broken in the unique type.

Epilachna virgata.

Epilachna virgata, *Muls. Spec.* p. 855. 123.

The striped appearance, due to the arrangement of the pubescence, is very characteristic.

N. Granada, Venezuela; Andes 9000—14000 feet (Munich, Fry).

Epilachna fraterna.

Epilachna fraterna, *Muls. Spec.* p. 858. 128.

Rodolia Guinoni, *Muls. Op.* III. p. 131 (1853) T.

Rodolia carmelitana, *Muls. Op.* III. p. 131 (1853).

Cayenne (Reiche). Punctuation nearly uniform.

The epipleuræ are foveolate for the femora.

Epilachna rufoventris.

Epilachna rufoventris, *Muls. Spec.* p. 859. 129.

Epilachna Fairmairii, *Muls. Spec.* p. 859. 130.

Ega, S. Paulo, Minaes Geraes (Bates), Bahia, Rio Janeiro, Cayenne.

Epilachna glaucina.*

Epilachna glaucina, *Muls. Spec.* p. 860. 131.

Rio Janeiro (Stockholm, Germar.).

Epilachna Batesii, sp. n.

Rather similar to *E. velutina* in colouration; head, thorax, scutellum and body beneath pale red; elytra brown-black, edged externally with red; form subhemispherical, shining, sparsely punctate, coarser punctures lightly impressed. L. 3 lin. Ega (Bates). Epipleuræ concave, not inclined, plates incomplete, not v-shaped.

Var. *rufovittata*.

Elytra each with a broad discoidal red vitta reaching from the apex nearly to the middle. Ega (Bates).

B. Species AFRICANÆ.

a. Oval, shoulders not dilated, punctuation fine, almost uniform, coarse punctures very faintly impressed, pubescence short, thorax not concave at the sides, elytral epipleuræ narrow, horizontal, reaching the apex, plates ogival, plantule not dentate.

Epilachna canina.

Coccinella canina, *Fabr. Spec. Ins.* i. p. 107. 75 (1781).

Epilachna canina, *Muls. Spec.* p. 754. 42.

Coccinella 20-pustulata, *Thunb. N. I. Sp.* i. p. 24, f. 36 (1781).
Cape of Good Hope.

Epilachna Parryi.

Epilachna Parryi, *Muls. Spec.* p. 750. 38 (T).

S. Africa; the type in Hope's collection does not seem to me to differ from *E. canina*.

Epilachna vulpecula.

Epilachna vulpecula, *Muls. Spec.* p. 730. 23 (T).

Abyssinia (Reiche). Mulsant has misconceived the relations of this species, which is close to *E. canina*.

Epilachna Dregei.

Epilachna Dregei, *Muls. Spec.* p. 753. 41.

Cafraria, Natal. The specimens I have seen are somewhat larger and of a lighter colour than *E. canina*; the thorax is generally pale ochreous, but variable. Some specimens from Angola have the coarse punctures more visible, and the humeral spot entirely divided by the dash on the callus.

Epilachna nigratarsis.

Epilachna nigratarsis, *Muls. Spec.* p. 751. 39 (T).

Epilachna lupina, *Muls. Spec.* p. 751. 40.

Senegal (Chevrolat). Old Calabar (Murray). This does not sufficiently differ from *E. Dregei* judging from the single type I have seen. It seems to be decidedly rare on the West coast.

Epilachna Zetterstedtii.

Epilachna Zetterstedtii, *Muls. Spec.* p. 830. 100 (T).

Caffraria (Stockholm), Cape (Fry). This appears to me to be possibly a variety of one of the preceding, in which the reticulation has disappeared leaving black dots.

β. Ovate, thoracic epipleuræ foveolate for the antennæ, opaque.

Epilachna pavonia.

Coccinella pavonia, *Oliv. Ent.* vi. p. 1059. 112. T. vii. f. 117.

Epilachna pavonia, *Muls. Spec.* p. 811. 86.

Madagascar; abundant and very variable. The colouration is precisely that of the Mexican *E. varivestis*. Abdominal laminae complete, rather ogival, covering two-thirds of the segment, epipleuræ acuminate before the apex.

γ. Oblong ovate, dilated at the shoulders, unequally punctate, dark green with orange spots.

Epilachna duodecim-pustulosa.

Epilachna 12-pustulosa, *Muls. Spec.* p. 743. 33.

Caffraria.

Epipleuræ concave, subhorizontal, extending to about five-sixths, plates complete; spots 1 (basal), 2, 2, 1, and an apical dash.

Epilachna Schonherri.*

Epilachna Schonherri, *Muls. Spec.* p. 749. 37 (T).

Closely allied to *E. 12-pustulosa*, and by no means to *E. Parryi* as Mulsant appears to have thought. It is evidently a variety with a red thorax and incomplete design. Caffraria (Wählberg).

Epilachna hirta.

Coccinella hirta, *Thunb. Nov. Ins. Spec.* i. p. 23, f. 55 (1781).

Epilachna hirta, *Muls. Spec.* p. 756. 44.

Coccinella 12-verrucata, *Fabr. Syst. El.* i. p. 385. 151 (1801).

Coccinella guttato-fasciata, *Goldf. Enum. Ins. C. B. S.* p. 40, f. 3 (1805).

Epilachna discors, *Muls. Spec.* p. 819. 94.

Epilachna invalida, *Muls. Spec.* p. 821.

Epilachna Chenoni, *Muls. Spec.* p. 821. 95 (T).

This species is extremely abundant and very variable; I have evidence for the reunion of the forms quoted above, and possibly some others are hardly distinct; it occurs over the whole of Africa; Abyssinia, Madagascar, Natal, Caffraria, Guinea. Plates complete, epipleuræ horizontal.

Epilachna raptor, sp. n.

Head and thorax red, elytra with five red spots, two placed across at one-fifth, two across the middle, and one subapical; legs

red, knees black; body red, metasternum pitchy. L. 3 lin. Angola (Welwitsch).

Very close to *E. hirta*, but the red thorax and obsolete punctation seem to justify its separation. The basal mark is generally absent, sometimes however there is a small red dash over the callus.

Epilachna fulvosignata.

Epilachna fulvosignata, *Muls. Spec.* p. 755. 43 (T).

Epilachna rufosignata, *Reiche MSS.*

Abyssinia (Reiche).

Ovate, elytra with the coarse punctures much more evident, no deeper punctures near the margin which is concave; plates complete, epipleuræ acuminate at five-sixths, horizontal; spots placed 2, 2, 1. Allied to *E. hirta*.

Epilachna gibbosa,* sp. n.

Fulvous, elytra each with the margin narrowly, eleven spots, and the feet black; pubescence pale, short; spots 2, 3, 3, 2, 1. L. $3\frac{1}{2}$ lin. Angola (Welwitsch).

I have only seen one specimen, which is very distinct by its convex almost gibbous form, enlarged at the shoulders and subcordate; epipleuræ pale within; the spots run thus: two joined to the base, three in the first third, three in the middle, two before the apex, and one apical; the external spots all reach the margin.

Epilachna cribrata,* sp. n.

Ovate, depressed, very strongly and tolerably closely punctured, interstices very sparingly punctate; abdominal laminae complete, little marked; elytra fulvous with a narrow elongate spot at the base parallel to the suture and a large arcuate one touching the callus; three transversely just before the middle, two almost united, large, before the apex; one apical, not reaching the margin; thorax rectangularly emarginate in front. L. $2\frac{3}{4}$ lin. Angola (Welwitsch). Very like *Chnoot. similis* but claws bidentate.

Epilachna bis-septem-notata.*

Epilachna bis-7-notata, *Muls. Op.* III. p. 115.

“Ovalaire; d'un rouge testacé fauve, en dessus. Prothorax sans tache. Elytres ornées d'une bordure étroite, et chacune de 7 taches subarrondies, noires; 1, 3, 5, 7 voisines de la suture; 1 après l'écusson, 2 sur le callus, 3—4 voisines, en rangée transversale vers $\frac{3}{4}$; 5—6 en rangée semblable vers $\frac{2}{3}$ ou peu avant; 6 voisine du bord externe; 7 vers l'angle sutural.” L. $3\frac{1}{2}$ lin. Abyssinia (Saucerotte).

Epilachna deleta.

Epilachna deleta, *Muls. Spec.* p. 828. 99.

Sierra Leone (Stockholm, Mus. Brit.). Old Calabar (Murray).

In Mr Murray's collection is a specimen which I consider a variety of this species, in which the dark colour forms a reticulation, leaving seven pale spots on each elytron.

δ. Uniformly broadly ovate, orange with black marks.

Epilachna chrysomelina.

Coccinella chrysomelina, *Fabr. Syst. Ent.* p. 82. 21 (1775) T.

Epilachna chrysomelina, *Muls. Secur.* p. 795. 2.

Coccinella reticulata, *Oliv. Enc. Méth.* vi. p. 56. 37 (1789).

Epilachna reticulata, *Muls. Spec.* p. 794. 70.

Coccinella bifasciata, *Fabr. Spec. Ins.* i. 95. 15.

Epilachna bifasciata, *Muls. Spec.* p. 793. 69.

The type is found in S. Europe, Persia, Arabia, N. Africa, White Nile; the var. *reticulata* on the W. Coast: the var. *bifasciata* at the Cape. The markings differ slightly, but in all structural points they appear absolutely identical.

Epilachna capicola.

Epilachna capicola, *Muls. Spec.* p. 803. 77.

Caffraria (Stockholm). Elytra with a scutellar and each with four spots, black. Plates semicircular, epipleuræ horizontal, broad, slightly sinuate, coarse punctures very lightly impressed.

Epilachna Gyllenhali.*

Epilachna Gyllenhali, *Muls. Spec.* p. 804. 78 (T).

Caffraria (Stockholm). Very like the preceding, but larger, with no scutellar spot, punctuation more evident, pubescence more sparse.

ε. Short, convex, cordate, dark green with orange spots.

Epilachna margaritifera.

Epilachna margaritifera, *Muls. Spec.* p. 737. 28 (T).

Madagascar. Elytral spots 2, 3, 2, 1. Abdominal plates semicircular, the posterior third obliterated; epipleuræ horizontal, acuminate at three-fourths.

Epilachna Ellisi, sp. n.

Head, thorax, body, and legs red; elytra black, with a basal and apical ring, and two spots transversely placed in the centre, whitish (the inner reaching the suture), apex red. L. $3\frac{1}{2}$ lin. Madagascar (Fry).

Similar to *E. margaritifera*; abdominal laminae complete, ogival. Punctuation clear, interstices thickly punctate.

Epilachna obsoleta.

Coccinella obsoleta || Oliv. Ent. vi. p. 1058. pl. vii. f. 116 (1808).

Epilachna obsoleta, Muls. Spec. p. 759. 46.

Madagascar, India, Mozambique (Fry). Elytral epipleurae acuminate as in *E. margaritifera*; abdominal laminae complete, semicircular; pubescence very thick.

Epilachna Spinolæ.

Epilachna Spinolæ, Muls. Spec. p. 740. 30.

Madagascar.

Very like *E. margaritifera*; elytral epipleurae horizontal, continued to the apex. Spots 2, 1, 2, 2; punctures along the margin more deeply impressed, almost serial; abdominal plates complete, semicircular, the posterior third sinuously emarginate.

Epilachna meleagris.

Coccinella meleagris, Klug., Abh. Akad. Berl. (1834). p. 215.

Epilachna meleagris, Muls. Spec. p. 739. 29.

Madagascar; elytral spots 2, 3, 1, 2, 1; coarse punctures obsolete, form very cordate, convex, thorax truncate at the base; abdominal laminae well marked, complete; epipleurae continuous to apex; marginal punctures on the elytra numerous and deeply impressed, mesosternum entire.

Epilachna argiola.*

Epilachna argiola, Muls. Spec. p. 742. 32.

Madagascar (Melly, Paris).

Epilachna infirma.

Epilachna infirma, Muls. Spec. p. 745. 34.

Natal, Grahamstown. Elytra with six spots 1, 2, 2, 1; form cordate, punctuation of the interstices extremely fine and sparse, marginal punctures deeply impressed, epipleurae inclined.

Epilachna 14-signata.

Epilachna 14-signata, Muls. Spec. p. 741. 31 (T).

Abyssinia (Reiche), Grahamstown. Pubescence close and fine, punctuation fine, the coarse punctures not very apparent; margin with deeper punctures.

Epilachna luteoguttata.

Epilachna luteoguttata Muls. Spec. p. 746. 35.

Nubia, Sennaar; this is an immature form of some species allied to *E. infirma*.

Epilachna abyssinica*.

Epilachna ocellata|| Bertol. Nov. Comm. Bol. 1849. p. 433. 26. T. x. f. 6.

Subcordate, epipleuræ broad, inclined, plates complete, almost terminal; testaceous, pretty closely punctured; thorax with a transverse dark band, elytra with 5 bright yellow spots, 2, 2, 1, each ocellated with black; the second pair placed a little obliquely, converging, behind the middle their anterior edge straight. L. $3\frac{1}{2}$ lin. Abyssinia (Fry).

This very distinct species seems to agree with the short description of *E. ocellata*, but that name is in any case preoccupied.

F. Elytra hemispherical, emarginate at the base for the thorax, elytra ochreous with black spots. *Hyppsa* Muls.

Epilachna guineensis.

Epilachna guineensis, Muls. Spec. p. 860. 132.

Guinea (Chev.), Sierra Leone. The six elytral spots are in two longitudinal rows, the internal one arcuate, the external parallel to the margin; the spots are large, the margins of the elytra often deep red.

Epipleuræ inclined, plates complete, punctuation fine, coarse punctures sometimes obsolete.

Epilachna occidentalis, sp. n.

Hemispherical, allied to *Epil. guineensis*, finely punctured, coarse punctures obsolete, head thorax body and legs red; elytra black, each with 7 spots and the apex orange; external margin and suture narrowly reddish; the spots are, a lunule on the callus, one subsutural below the scutellum, three transversely about the middle (the inner one reaching the suture), two subapical, the inner large and oval; the apex narrowly orange. L. 3 lin. Sierra Leone. (Mus. Brit.).

Epilachna sedecim-verrucata.*

Epilachna 16-verrucata, Muls. Spec. p. 861. 133 (T).

Guinea (Westerm.). Elytra, each with eight spots; punctuation close apparent, coarse punctures evident, the black margin disappears before the apex; pubescence whitish, conspicuous. Similar to *E. Murrayi*, but more ovate, so that the external row of spots appears less approximated.

Epilachna nigrocincta.

Epilachna nigrocincta, Thoms. Arch. Ent. II. p. (1858).

Hemispherical, rich fulvous, elytra with the external margin broadly, and each with 6 spots black. L. $2\frac{1}{2}$ lin. Fernando Po (Deyr.).

Punctuation fine, large punctures very obsolete scarcely visible. Elytral spots arranged thus; one in the middle of the base, three across at one-third in a line convex behind (the inner one common), two obliquely at two-thirds, one apical. The external spots just reach the margin. Tibiæ and tarsi black, femora testaceous, epipleuræ testaceous in their inner margin.

Epilachna Murrayi, sp. n.

Hemispherical, elytra each with eight black spots. L. $2\frac{3}{4}$ lin. Old Calabar (Deyr.)

Closely allied to *E. nigrocincta*, punctuation more evident; the elytral spots form two longitudinal series; one external of four commencing on the callus (the last apical, touching the margin), one internal also of four parallel to the suture; the external margin brownish (probably black in the mature specimen), legs reddish, knees, tibiæ, tarsi and posterior femora black.

Epilachna africana, sp. n.

Subhemispherical, testaceous red, closely punctate; elytra black, inner edge of epipleuræ and six spots orange; three of equal size, submarginal; three sutural, more closely approximated; the last marginal might also be considered as a fourth sutural. L. 3 lin. Gold Coast (Higgins). Old Calabar (Murray). Allied to *E. Murrayi*, of which it may be an extreme variety, but I have seen no intermediate specimens.

Epilachna Macquarti.*

Epilachna Macquarti, *Muls. Spec.* p. 862. 134.

Madagascar (Paris). Elytra each with 5 black spots 2, 2, 1.

Epilachna Geoffroyi.*

Epilachna Geoffroyi, *Muls. Spec.* p. 863. 135.

Madagascar (Paris). Very close to the preceding.

Epilachna Lacordairii.

Epilachna Lacordairii, *Muls. Spec.* p. 864. 136.

Madagascar (Paris, Deyr.). Elytra with seven black spots, 2, 2, 2, 1.

Coarse punctuation very deep and evident, pubescence pruinose.

Epilachna Pierreti.

Epilachna Pierreti, *Muls. Spec.* p. 865. 137.

Madagascar, (Paris, Deyr.). Very like the preceding, elytra with four spots only, 2, 1, 1.

G. The remaining species have the elytra convex, ogival behind, and form the subgenus *Cleta*, Mulsant.

Epilachna undulata.

Coccinella undulata, Thunb. *Nov. Ins. Sp.* i. 18, f. 27 (1781).

Epilachna undulata, Muls. *Spec.* p. 867. 139.

Cape of Good Hope (Chev. Hope, Mus. Brit.).

Epilachna Eckloni.

Epilachna Eckloni, Muls. *Spec.* p. 866. 138 (T).

Cape of Good Hope (Copenhagen). Abundant in collections from the Cape, but generally confused with the preceding, which is much rarer. Punctuation close, uniform, coarse punctures obsolete.

Epilachna Smithii.

Epilachna Smithii, Muls. *Spec.* p. 868. 140 (T).

Cape of Good Hope (Hope). The specimen cited from the British Museum seems to have disappeared. The very pruinose nature of the pubescence and the intricate angular markings render it very distinct.

Epilachna distincta.

Coccinella distincta, Thunb. *Nov. Ins. Spec.* i. p. 17, f. 23 (1781).

Epilachna distincta, Muls. *Spec.* p. 871. 142.

Cape of Good Hope, Caffraria; epipleuræ of the elytra continuous to the apex.

Epilachna Sahlbergi.

Epilachna Sahlbergi, Muls. *Spec.* p. 872. 143 (T).

Caffraria (Stockholm). The type (?) sent by M. Stål differs a good deal from Mulsant's description. It is like *E. distincta* but smaller, the elytral spots arranged thus; a basal band from suture to callus (probably = two spots coalesced), two spots transversely placed before the middle (one marginal, one near the suture), one medial discoidal, two transversely behind the middle (forming a rude letter x with the others), and a deformed apical patch.

Epilachna Bomparti.*

Epilachna Bomparti, Muls. *Spec.* p. 873. 144 (T).

Senegal (Buquet). Elytra with nine black spots, 2, 3, 1, 2, 1; the spots are rather large, and the elytra thickly clothed with yellowish pubescence.

Epilachna Nylanderi.

Epilachna Nylanderi, Muls. *Spec.* p. 874. 145 (T).

Caffraria (Stockholm). The markings on the elytra are irregular and variable; the pubescence is coarse and very thick, so as to obscure the pattern.

Epilachna punctipennis.

Epilachna punctipennis, *Muls. Spec.* p. 875. 146.

Guinea (Germar), Angola (Welwitsch), Abyssinia (Munich).

The Abyssinian specimens are more oval, and the Angola ones appear always to have lost the third spot, but I do not detect any other differences.

Epilachna viginti-punctata.*

Epilachna 20-punctata, *Muls. Spec.* p. 876. 147.

Caffraria (Stockholm). Elytra dark red, with a very evident light gray pubescence.

Epilachna Linnaei.*

Epilachna Linnaei, *Muls. Spec.* p. 878. 149 (T).

Caffraria (Stockholm). Elytra with nine pale areolæ, pubescence pruinose.

Epilachna adjuncta,* sp. n.

Grayish-testaceous, thorax reddish, elytra thickly clothed with a gray pubescence, a black line runs from the base to about two-thirds, ending on the suture, it is produced inwards at half its length, forming at the left elytron the letter E; another line runs from the callus to the apex, where it is bifurcate; these are joined at the base, and a little beyond the middle, the outer one at this point of union has an external process reaching the margin; thus, each elytron is divided into five (or nearly six) areolæ. L. $2\frac{1}{2}$ lin. Angola (Welwitsch).

Epilachna Dahlbomi.*

Epilachna Dahlbomi, *Muls. Spec.* p. 880. 150 (T).

Caffraria (Stockholm). Elytra with two common and each with seven black spots, 2, 3, 2.

G. Small ovate, epipleuræ narrow, horizontal, pubescent, allied to *E. marginicollis*.

Epilachna Godarti.

Epilachna Godarti, *Muls. Spec.* p. 881. 152.

Caffraria (Stockholm), Natal (Deyr.).

This species suggests an affinity to the Indian group of *E. marginicollis*. Epipleuræ narrow, pubescent, acuminate before the apex.

H. Epipleuræ narrow horizontal, scabrous, foveolated for the femora, continuous to the apex.

Epilachna Dufourii.*

Epilachna Dufourii, *Muls. Spec.* p. 877. 148. (T).

Guinea (Copenhagen). Punctuation close, the coarse punctures evident; mesosternum emarginate. This is labelled "ignava" in the Copenhagen Museum.

I. Plates terminal incomplete.

Epilachna zuluensis,* sp. n.

Resembles *E. infirma*, but abundantly distinct from all by the terminal incomplete abdominal plates: epipleuræ broad, concave; beneath black, sides of ventral segments red; head red; thorax varied with black and red; elytra thickly pubescent, margins deeply punctate, black, disc reddish brown, with four orange spots, two at one-third, and two placed very obliquely directed forwards at three-fourths. L. 3 lin. Zulu (Fry).

Epilachna Paykullii.

Epilachna Paykullii, *Muls. Spec.* p. 833. 103.

Caffraria, Natal, Madagascar (Deyrolle); elytra with nine spots, 3, 4, 2; punctuation very slight and fine, coarse punctures faintly impressed. This resembles the Indian Group in coloration; epipleuræ concave, broad, inclined, plates terminal incomplete.

K. Plates obsolete, claws unequally bifid (*Chnootriba*, *Muls.*).

Epilachna similis.

Coccinella similis, *Thunb. N. I. Sp.* t. p. 15, f. 19 (1781).

Chnootriba similis, *Muls. Spec.* p. 697. 1.

Abyssinia, Natal, Caffraria, Cape. Abundant. The abdominal plates are obsolete equally in *E. Proteus*, and moreover vestiges remain in many specimens.

Epilachna assimilis.

Chnootriba assimilis, *Muls. Spec.* p. 699. 2.

Sierra Leone. Sent home by Foxcroft abundantly; it appears to me distinct by the much stronger punctuation, etc.

C. Species Indo-Malayanæ.

Epilachna guttato-pustulata.

Coccinella guttato-pustulata, *Fabr. Syst. Ent.* p. 87. 51 (1775) T.

Epilachna guttato-pustulata, *Muls. Spec.* p. 716. 11.

Coccinella tricineta, *Montrouz. Ann. Lyon.* VII. p. 78 (1857).

Epilachna pandora, *Muls. Op.* III. p. 109 (1853) T.

Australia (C. York, Queensland, Tasmania, etc.). Woodlark I.

In the var. *tricincta* the black pigment is reduced, so that the two anterior spots coalesce, and the posterior one is much enlarged, leaving a very small apical spot. Thorax and legs red.

Var. *tasmanica*. The yellow marginal spot is replaced by red, the black pigment is diminished, the posterior fascia deeply angulate, the apical spot enlarged. Tasmania (Deyrolle).

Punctuation fine, subrugulose, large punctures evident and tolerably abundant; elytral epipleuræ reaching the apex, axal foveæ semicircular, complete; antennæ short, plantule bidentate.

Epilachna suffusa, sp. n.

Reddish brown, cordate, shortly ovate; thorax with the sides pale yellowish, elytra nearly black, each with four ill-defined transparent reddish spots; one basal sloping away from the scutellum, and generally joined to the second, which is near the margin below the callus, one sutural in the middle, one large subapical. L. $3\frac{1}{2}$ lin. Australia (Deyrolle).

Antennæ with the club dentate within. Punctuation close and fine, large punctures obsolete; coxal foveæ incomplete, mesosternum sinuate, metasternum bituberculate at the base; plantule bidentate.

Epilachna Deyrollii, sp. n.

Brownish red, body beneath black, legs red, femora more or less black; elytra with a basal fascia dilated along the suture, a medial fascia dilated at the margin and at the suture, and a short subapical fascia black; the suture and margin narrowly black; except the extreme apex; basal third of the epipleuræ red, the rest black. L. $4\frac{1}{2}$ lin. India (Deyrolle). Darjeeling (Moore).

Cordate, subacuminate, epipleuræ dilate and deeply grooved towards the apex, epipleuræ dilated at the shoulder, continuous to apex, where they are broad, deeply grooved, and thickened on the external edge. Plates complete, angular.

Epilachna Moorii,* sp. n.

Cordate, dark red, elytra with the base broadly black, a common medial transverse fascia widest on the outer margins and bent obliquely to the suture at one-third the width of the elytra, and a large apical patch only reaching the outer margin, also black. L. $4\frac{1}{2}$ lin. Darjeeling (Moore). Punctuation unequal, the coarse punctures numerous and deeply marked, pubescence long, evident, the medial fascia visible on the epipleuræ beneath, which are broad and foveolate at the base. Body beneath black, legs red,

closely allied to the preceding, but with a different pattern, and less cordate.

Epilachna hæmatomelas.

Coccinella hæmatomelas, *Boisd. Voy. de l'Astrol.* p. 598. 15. pl. VIII. 19 (1832).

Epilachna hæmatomelas, *Muls. Spec.* p. 726. 20.

Waigiou, Dorey, Salwatty (Wallace).

This and the four following species agree in having a very fine sparse punctuation, the large punctures conspicuous, the coxal foveæ complete covering half the segment, epipleuræ almost continuous to the apex.

Epilachna hæmorrhœa.

Coccinella hæmorrhœa, *Boisd. Voy. d'Astrol.* p. 599. 17. pl. 8, f. 22 (1832).

Epilachna hæmorrhœa, *Muls. Spec.* p. 727. 21.

Dorey (Wallace).

Epilachna papuensis, sp. n.

Brick red, head and sides of thorax paler, elytra black with a rounded subapical large orange spot, nearest the outer margin. L. $2\frac{3}{4}$ lin. Dorey, Salwatty, New Guinea (Wallace).

In one specimen from Dorey the spot reaches the outer margin.

Epilachna aruensis, sp. n.

Ovate, yellowish red, thorax with the central third black, elytra each with two round yellow spots, one basal and one subapical, neither reaching the margin. L. $2\frac{3}{4}$ lin. Aru (Wallace).

The reflexed margin to the elytra is very apparent, and is bounded by a row of impressed punctures.

Epilachna persimilis, sp. n.

Almost exactly like *E. aruensis* in coloration, but hemispherical, more pubescent, and with the apical spot much smaller. L. $2\frac{3}{4}$ lin. Salwatty (Wallace).

Epilachna Delesserti.

Epilachna Delesserti, *Guer. Rev. Zool.* (1840), p. 42 (T).

„ „ *Muls. Spec.* p. 747. 36.

India, Ceylon.

Ovate, elytra with the margins reflexed, epipleuræ almost reaching the apex, coxal laminae complete, subangulate, externally, antennæ short, thorax with the margin concave.

Epilachna marginicollis.

Coccinella marginicollis, Hope. Zool. Misc. p. 31 (1831) T.

Epilachna marginicollis, Muls. Spec. p. 728. 22.

Darjeeling, Nepaul. Elytral spots, 2, 2, 2, 1, ochreous on dark ground; epipleuræ black.

This and the following three species agree in certain structural characters; their dark ground colour with pale spots; and with the ten subsequent Indian species in their long antennæ and horizontal narrow epipleuræ.

Epilachna Pembertonii,* sp. n.

Black, head and legs red; thorax with the anterior angles and under surface red; elytra each with six fulvous spots, one basal, not touching the scutellum, two at one-third (one submarginal, one larger juxta-sutural, both free), two at two-thirds (the outer oblique, both free), one subtriangular, apical, and extending up the suture. L. 3 lin. Bhootan (Ind. Mus.) collected by Capt. Pemberton.

Epilachna gibbera, sp. n.

Epilachna gibbera, Deyr. MSS.

Oval, slightly cordate, black; head, legs, (except the base of the posterior femora), last ventral segment, and the sides of the thorax broadly red; elytra with the epipleuræ red and each with seven red spots, 1, 3, 2, 1; one oblique near the scutellum, one close to the margin at one-third, two joined in a sort of circumflex, medial, two placed obliquely at three-fourths, one apical. L. 3 lin. India (Deyrolle).

Much more convex than the preceding, the spots also are red, and differently shaped.

Epilachna parvula, sp. n.

Oval, black; head, sides and base of thorax, legs, and last ventral segment yellowish red; elytra each with the epipleuræ and five spots yellowish, 2, 2, 1; the spots rounded, not large, two transversely placed at one-third, two at two-thirds, and one larger subapical. L. 2 lin. India (Deyrolle).

Epilachna fasciolata, sp. n.

Oval, convex, black; head, sides of thorax, legs, and three last segments reddish yellow; elytra with the external margin, epipleuræ, and each with five spots yellowish red; one basal, one narrow, transverse, before the middle, one similar beyond the middle, the marginal band dilated at the apex. L. 2½ lin. India (Deyrolle).

The large punctures on the elytra are more evident in this species.

Epilachna mystica.

Epilachna mystica, *Muls. Spec.* p. 841. 108 (T).

Short, very gibbous, elytra produced at the apex into a point; antennæ very long, abdominal plates complete, angulate, epipleuræ flat, closely fitting the body.

This species has a very curious aspect, and should form a new genus.

Java (Deyrolle, Hope).

Epilachna macularis.

Epilachna macularis, *Muls. Spec.* p. 797. 72 (T).

Assam (Reiche). Antennæ long, club lax, dentate within.

Epilachna admirabilis, sp. n.

This resembles *E. macularis* almost exactly in markings, the first is more rounded, and the third, fourth, and fifth are connected so as to form an arch; the punctuation is much coarser, the large punctures very well marked, the thorax is black, coarsely and deeply punctate with a narrow yellow margin in front, and on the sides; the mesosternum is sinuate, and the metasternum covered with deep scabrous punctures. China (Deyrolle), King Hing, Japan (Mniszech).

Epilachna undecim-spilota.

Coccinella 11-spilota, *Hope, Zool. Misc.* p. 31 (1831) T.

Epilachna Stephensii, *Muls. Spec.* p. 879. 150 (T).

Oval, black, head and legs red, sides of thorax yellow; elytra dull red, each with six black spots of which two are common; one humeral; one quadrate, common, behind the scutellum, one marginal about the middle, one discoidal before the middle, one sutural common just beyond the middle, one curved (perhaps composed of two spots) subapical; the extreme apex yellowish. L. $2\frac{1}{4}$ lin. India (Deyrolle, B. M.). Darjeeling (Moore).

The punctiform spot at the apex is generally wanting.

Mulsant quotes for *E. 11-spilota* a specimen sent him by Hope; but the type in the British Museum = *E. Stephensii*, Muls.

Epilachna elvina.

Epilachna elvina, *Muls. Op.* III. p. 122 (T).

Oval, ochraceous, thorax with three black dots (one discoidal, two lateral); elytra each with five black spots (one common); one at the base of the suture, oval, one humeral, two medial (one close to the margin, one larger near the suture), one subtransverse large subapical. L. $2\frac{1}{2}$ lin. India (Deyrolle). Punctuation sparse, larger punctures deep and evident.

Epilachna sanscrita, sp. n.

Very closely allied to *E. Stephensii*; thorax with a discoidal transverse spot black, elytra each with five black spots, 2, 2, 1; two basal, one on the callus, (one near the suture), two medial (one submarginal, one larger near the suture), one subapical. L. 2 lin. India (Deyrolle).

Epilachna maculivestis.

Epilachna maculivestis, *Muls. Op.* III. p. 123 (T).

Oval, testaceous-red, thickly clothed with a gray pubescence; antennæ elongate, thorax with a discoidal black spot (and sometimes a small lateral one); elytra each with five black spots; one round, near the suture at the base, one slightly oblique, emarginate by the callus, one large, round, medial, near the suture, one submarginal, a little beyond the third, one discoidal at about three-fourths. L. $2\frac{1}{2}$ —3 lin. N. China, Thibet (Copenhagen, Mus. Brit.).

Coxal laminæ complete, semicircular, metasternum deeply and roughly punctured, epipleuræ of the thorax deeply punctate, with a longitudinal groove.

Epilachna flavicollis.

Coccinella flavicollis, *Thunb. Nov. Ins. Spec.* I. p. 18, f. 26 (1781).

Epilachna flavicollis, *Muls. Spec.* p. 800. 74.

Sarawak, Tonda, Gelebes, Java, Ceylon (Wallace, Deyrolle).

Punctuation fine and sparse, coarse punctures obsolete; epipleuræ grooved, antennæ elongate.

Epilachna incauta.

Epilachna incauta, *Muls. Spec.* p. 803, 76.

Java (Chevrolat). In some varieties the spots are united, forming a basal and medial fascia.

This is very close to *E. flavicollis*, differing in fact only by the greater amount of black, so that the sutural and external spots are joined to the margins.

Epilachna Dumerili.

Epilachna Dumerili, *Muls. Spec.* p. 801. 75.

Epilachna 11-spilota †, *Muls. Spec.* p. 799. 73.

Metasternum rather coarsely punctured. This species differs from the preceding almost only in the more evident coarse punctuation, and is confined to Continental India and China. Sylhet, Cabar, Burmah, Siam, Tenasscrim, N. Bengal, Hongkong.

Var. β . black, with a gray pubescence.

Epilachna zeylanica, sp. n.

Hemispherical, red, thorax a little paler, elytra each with six black spots (two common), one round on the suture at the base, one humeral, two medial slightly oblique towards the scutellum, one on the suture at three-fourths, one subapical near the margin. L. $1\frac{1}{3}$ lin. Ceylon.

Punctuation fine, the coarser punctures only apparent at the sides. This species has the coloration of *E. Stephensi*, but is very unlike in shape.

Epilachna Mandjersternæ.*

Epilachna Mandjersternæ, *Muls. Op.* III. p. 128 (1853).

“Ovale, pubescente, d'un rouge testacé ou d'un roux testacé, en dessus. Elytres ornées chacune de 6 points noirs assez gros; deux, en rangée transversale subbasilaire (1 externe couvrant le calus); deux, en rangée transversale à $\frac{2}{3}$; 1 juxta-sutural, vers $\frac{1}{2}$; 1 discal vers $\frac{3}{4}$.” L. $1\frac{1}{2}$ lin. Asia (Motsch.).

Epilachna læsicollis.*

Epilachna læsicollis, *Muls. Spec.* p. 735. 27 (T).

Himalaya, Darjeeling (Copenhagen).

This has the appearance of *E. canina* Fab. Form cordate, elytra narrowly reflexed, punctuation fine, larger punctures tolerably evident, antennæ elongate, epipleuræ flat, grooved, prolonged to the apex of the elytra.

Epilachna alternans.

Epilachna alternans, *Muls. Spec.* p. 767. 51.

Apparently confined to Java, and very variable in coloration; the thoracic epipleuræ are almost foveolate, antennæ long, punctuation fine, surface opaque, form ovate-elongate.

Epilachna Grayi.*

Epilachna Grayi, *Muls. Spec.* p. 774. 55 (T).

N. India (Hope, B. M.). Near *E. decipiens*, but smaller, more ovate, metasternum less strongly punctured, mesosternum not sinuate, prosternum less carinate, epipleuræ not foveolate, abdominal plates well marked, second sutural spot round, touching the suture, antennæ not elongate.

Epilachna decipiens, sp. n.

Dark red, metasternum black, thickly clothed with yellowish pubescence; thorax with a discoidal triangular black spot; elytra with six large black spots; one irregular, near the suture, below

the scutellum, one on the callus (forming a series concave forwards), one discoidal medial, one marginal a little behind the middle, one oblique sutural (not forming a straight line with the second and third), one large subapical. L. $3\frac{1}{2}$ —4 lin.

Java (Horsfield). Punctuation close, obscured by the pubescence. Coxal laminae incomplete, terminal, parallel to the edge of the segment; epipleurae of the elytra foveolate, metasternum roughly and deeply punctate; mesosternum sinuate, prosternum large, elevated, margined, epipleurae deeply punctate.

This species bears a most embarrassing resemblance to *E. Grayi*, from which however it differs considerably in structure.

[The remaining Indo-Malayan species of this genus have all of them a similar pattern, consisting of six spots on each elytron, arranged in pairs (as in *E. argus*). Their variations are extreme, and at present I have been quite unable to discover specific distinctions of any value. Possibly local observations might help us here. They were brought abundantly by Wallace from the following islands: Sumatra, Java, Borneo, Sarawak, Celebes, Menado, Macassar, Mysol, Salwatty, Amboina, Bali, Tonda, Batchian, Ternate, Gilolo, Ceram, Kai; the specimens from N. Guinea, Dorey, Waigiou agree in having the spots largely united, which I have not noticed elsewhere except in Malabar.]

Epilachna enneasticta.

Epilachna enneasticta, Muls. Spec. p. 769. 52.

Epilachna stulta, Muls. Op. III. p. 117 (1853) T.

Java; distinct by the arcuate sixth spot, the very coarse sparse punctuation, (the fine punctures almost obsolete,) the abdominal plates subterminal sharply angulate or v-shaped.

*Epilachna compilata.**

Epilachna compilata, Muls. Spec. p. 771. 53.

Java (Buquet).

*Epilachna tæniata.**

Epilachna tæniata, Muls. Spec. p. 771. 54.

Java (Melly).

Intermediate varieties of these two species are indicated under the names *phyllophaga*, *lyncula*, and *sodalis*.

Epilachna indica.

Epilachna indica, Muls. Spec. p. 776. 56 (T).

India (Reiche). More orbicular than the preceding.

Epilachna pytho.

Epilachna pytho, *Muls. Spec.* p. 777. 57 (T).

Java (Reiche, Buquet); Sumatra (Copenhagen). Form of *E. indica*, but thorax spotless, etc.

Epilachna yamuna.*

Epilachna yamuna, *Muls. Op.* III. p. 118.

"Subhémisphérique, pubescente; d'un rouge roux, en dessus. Prothorax marqué d'une tache ponctiforme noire, sur le milieu de la ligne médiane. Elytres arrondies à la base, à partir seulement du côté externe du calus, ornées chacune de six taches ponctiformes noires; 1 et 5 isolées de la suture, 1 postérieure à l'extrémité de l'écusson; 4 subarrondie, liée ou à peu près au bord externe, un peu postérieure à 3, un peu antérieure à 5; 5 et 3 dirigées vers $\frac{1}{4}$ du bord externe." L. $3\frac{1}{2}$ lin. Java (Rosenhauer).

Said to be allied to *E. pytho*.

Epilachna socialis.*

Epilachna socialis, *Muls. Spec.* p. 779. 58.

"Indes orientales." Mulsant lays some stress on the 4-spotted thorax.

Epilachna undecim-variolata.

Coccinella 11-variolata, *Boisd. Voy. de l'Astrol.* p. 590. 3 (1835).

Epilachna 11-variolata, *Muls. Spec.* p. 780. 59.

Allied to *E. socialis*. N. Guinea (Doué, Dupont), Tasmania (Guérin), Triton Bay (Paris), Java (Dejean).

Subordinate varieties are indicated under the names *E. Diardi* and *E. stigmula*.

Epilachna diffinis.

Coccinella diffinis, *Eydoux, Rev. Zool.* II. 267 (1839) T.

Epilachna diffinis, *Muls. Spec.* p. 783. 60.

Philippine Islands. A variety from Java (*E. stolidus*) is described by Mulsant (p. 791).

Epilachna argus.

Coccinella argus, *Fourc. Ent. Par.*..... p. 151.

Epilachna argus, *Muls. Spec.* p. 192. 1.

Europe, Algeria.

Epilachna pusillanima.

Epilachna pusillanima, *Muls. Spec.* p. 784. 62.

Java. An incomplete variety is described as *E. languens*.

Epilachna territa.

Epilachna territa, *Muls. Spec.* p. 787. 64.

Java, Ternate. Three slight varieties are named by Mulsant, *E. indocilis*, *E. fatalis*, *E. lusoria*.

Epilachna infausta.

Epilachna infausta, *Muls. Spec.* p. 786. 63.

Java (Buquet, Hope). This, Mulsant admits, may be only a variety of the preceding.

Epilachna dodecostigma.

Epilachna dodecostigma, *Muls. Spec.* p. 789. 65.

Bengal. A subordinate variety is indicated as *E. bengalensis* and another as *E. congressa*. It is very closely allied to *E. territa*.

Epilachna gradaria.

Epilachna gradaria, *Muls. Spec.* p. 789. 66.

India. This species is smaller and more hemispherical than the others; Mulsant distinguishes as varieties *E. addita*, *vieta*, and *socors*.

Epilachna doryca.

Coccinella doryca, *Boisd. Voy. de l'Astrol.* p. 597. 14. pl. VIII., f. 21 (1832).

Epilachna doryca, *Muls. Spec.* p. 762. 47.

Dorey, N. Guinea, Waigiou, Aru (Wallace).

Epilachna consputa.

Epilachna consputa, *Muls. Spec.* p. 763. 48.

? (Paris).

Epilachna signatipennis.

Coccinella signatipennis, *Boisd. Voy. de l'Astrol.* p. 593. 8 (1835).

Epilachna signatipennis, *Muls. Spec.* p. 764. 49.

N. Guinea, Waigiou.

Epilachna Boisduvalii.*

Epilachna Boisduvalii, *Muls. Spec.* p. 765. 50.

Australia?. This and the three preceding species appear to me to be varieties of one specific type, certainly out of fifteen specimens brought by Mr. Wallace, no two are precisely similar.

Epilachna Wissmanni.

Epilachna Wissmanni, *Muls. Spec.* p. 832. 102 (T).

Celebes (Westermann), Macassar (Wallace). Readily recognizable by its very broad convex cordate form.

Epilachna ocellata.

Epilachna ocellata, Redt. H \ddot{u} gel, *Reise in Kaschm.* p. 563.

Epilachna ocullea, Muls. *Spec.* p. 791. 67 (T).

Himalayas, Nepal. Mulsant's species is I think certainly the same as Redtenbacher's. In the four specimens I have seen there is considerable range of variation, and Mulsant has signalled one form as var. *retexta*.

Epilachna vigintiocto-punctata.

Coccinella 28-punctata, Fabr. *Syst. Ent.* p. 34, 54 (1775).

Epilachna 28-punctata, Muls. *Spec.* p. 836. 104.

India, Japan, China, Manilla, Java, N. Guinea, Australia, Sumatra, Flores, Aru, Morty (Wallace).

This species varies almost to infinity and gradually runs into the common 6-spotted type, so that I cannot give any structural differences.

E. implicata, Muls. *Spec.* p. 837, 105, is a mere variety: several others are noted by Mulsant under the names *egens*, *sparsa*, *multi-punctata*, *recta*, and *lacertosa*.

Epilachna pardalis.*

Coccinella pardalis, Boisd. *Voy. de l'Astrol.* p. 596. 11, pl. viii. f. 26 (1832).

Epilachna pardalis, Muls. *Spec.* p. 840. 107.

Vanikoro I. (Paris). This probably is a variety of *E. 26-punctata*.

Epilachna vigintisex-punctata.

Coccinella 26-punctata, Boisd. *Voy. de l'Astrol.* p. 589. 2 (1835).

Epilachna, 26-punctata, Muls. *Spec.* p. 838. 106.

Australia, N. Guinea.

Much rarer than the preceding, and often very difficult to distinguish from it. The common elytral spot below the scutellum has a well-marked quadrangular form, and the basal series consists of four spots only.

Epilachna Buqueti.

Coccinella Buqueti, Montrouz. *Ann. Fr.* (4) i. p. 305. 294 (1861).

Narrow, pale, ochreous yellow, shining, ovate, thinly pubescent, body and legs pale testaceous, pectus black; thorax transverse with the discal third black, not very sharply defined; elytra sparsely punctate, the coarse punctures deep and evident,

pale yellow; the suture black for about one-third, a mark resembling the letter L on the left elytron, starting from the callus and extending nearly to the suture at the middle, black; the outer margin from the middle to the apex and a discoidal spot at about two-thirds, also black. L. $2\frac{3}{4}$ lin. Art, New Caledonia. On leaves of *Solanum*. Epipleuræ with the apical half black, antennæ short, first joint large.

Epilachna Blanchardi.*

Epilachna Blanchardi, *Fauv. Bull. Norm.* VII. p. 175. 50, pl. x.* f. 83.

“Subhémisphérique, convexe, d'un rouge sanguin orangé; à pubescence grisâtre moins épaisse, mais bien plus longue et plus visible. Corselet à côtés jaunâtres, ponctuation fine et serrée; sur le milieu une tache noire subtriangulaire, atteignant le bord antérieur. Ecusson noir. Elytres déprimées et marginées latéralement, angle humeral arrondi; ponctuation visible, serrée paraissant rugueuse; chacune avec 3 taches et une bande transversale médiane noires; 1 à la base sur le calus, subtriangulaire, grande; 2 sur le bord externe, au milieu, repliée en dessous, en forme de trait allongé, dilaté en angle très-obtus avant son milieu; 3 au dernier tiers, médiane, subtriangulaire, la plus petite; bande commune en forme d'accent circonflexe bien marqué, renversé. Poitrine noire, cuisses rembrunies au milieu.” L. $8\frac{1}{2}$ mm. New Caledonia.

Epilachna Urvillei.*

Epilachna Urvillei, *Montr. Ann. Fr.* (4) I. 305. 295 (1861).

“Ovale, presque hémisphérique, convexe; tête, antennes et palpes roux-testacés. Corselet transversal, très-finement pointillé, muni d'un petit sillon visible seulement à la loupe et d'une dépression plus sensible de chaque côté; jaune pale sur les bords, orné sur le milieu et un peu en arrière d'une tache noire en hémicycle, qui n'atteint pas la base. L'écusson est noir triangulaire. Elytres beaucoup plus larges à la base que le corselet convexes, un peu gibbeuses aux épaules, rebordées, à la base une large bande transverse, n'atteignant pas le bord externe, noire; un peu après $\frac{1}{3}$ près de la suture, une tache légèrement transverse de chaque côté; en arrière et contigue au bord externe une seconde tache; une troisième près de la suture, aux deux tiers du limbe et une quatrième près du bord externe vers l'extrémité. Le dessous du corps est d'un noir brillant, couvert de quelques poils courts et rares blanchâtres. Pattes rouge-ferrugineuses.” L. $7\frac{1}{2}$ mm. Lifu.

Rappelle *E. tricincta*, sauf la distribution des couleurs.

This appears to me to be *Epil. Montrouzieri* with the basal spots united to form a band; *E. Moultoni* may also be a variety with the inner spot of the second pair wanting.

Epilachna Moultoni, sp. n.

Thorax pale testaceous, elytra ochreous each with 4 black spots, one large basal (formed from the union of two), produced downwards at its internal angle; one marginal in the middle, subquadrate, one sutural at two-thirds (not quite touching the suture); one discoidal, subapical. New Caledonia (Deyrolle).

Epilachna Montrouzieri.

Epilachna Montrouzieri, *Fauv. Bull. Norm.* VII. p. 174. 49, pl. x.* f. 82 (1862).

Subhemispherical, shining, thinly pubescent, rich ochreous; thorax subtransverse, rounded behind, finely and closely punctate, the discal third more or less black; elytra sparsely and finely punctate, the coarse punctures deeply impressed but scattered; each with six black spots, two basal small (one subscutellar, one on the callus, larger), two united in form of a band about the middle, sloping forwards (starting from the margin, but not reaching the suture); two very obliquely placed in the apical third, one subquadrate close to the suture, and one similar, subapical. L. 3 lin. New Caledonia (Mniszech). Body beneath and apical half of femora black.

Var. fijiensis.

Subovate, bright ochreous, shining, covered with golden pubescence, punctuation sparse, coarse punctures deep, well marked; thorax very finely and obsoletely punctulate, sides concave; elytra each with six black spots, arranged as in *E. chrysomelina*, 2, 2, 2, but all subtriangular, or wedge-shaped. L. 3 lin. Fiji I. (Deyrolle, B. M.).

This differs from all the Asiatic species by having the inner spots of the central pair close to the suture, in this respect resembling the African forms. Antennæ rather short.

Epilachna bis-quadri-punctata.

Coccinella bis-4-punctata, *Schön. Syn. Ins.* II. p. 186. 102 (1808).

Epilachna herbigrada, *Muls. Spec.* p. 805. 79 (T).

Pondicherry, Hongkong (B. M.), India (Deyrolle, Saunders).

Gyllenhal's description leaves no doubt that he referred to this insect. Mulsant does not quote it at all. Abdominal plates complete, subangulate, punctuation close, large punctures rather obsolete on the disc, antennæ rather short, form hemispherical.

Species dubiæ.

Epilachna 6-notata, *Muls. Spec.* p. 807. 81 (T).

Bengal (Hope). The type is in bad condition, but appears to me not to be a true *Epilachna*.

Epilachna unicolor, *Montr. Ann. Fr.* (4) I. p. 306. 296.

"Petite, ovale, rouge; corselet très-court; les élytres ne couvrent pas tout l'abdomen." Lifu.

[Evidently not an *Epilachna*].

Epilachna ferruginea, *Montr. Ann. Fr.* (4) I. 306. 297.

"Très-petite, tête et corselet ferrugineux, rembrunis sur le milieu; écusson rouge; élytres rouges avec une bande d'un brun obscur, faisant la tour du limbe sans toucher à la bordure; épaules obtusement tuberculeuses, dessous et pattes rouge-ferrugineux." Art.

[Near *Exoplectra*, according to Doué.]

Epilachna pulchella, *Montr. Ann. Fr.* (4) I. p. 306. 298.

"Forme des *chrysomèles*, tête, corselet, pattes et dessous du corps rouge-ferrugineux; élytres d'un bronzé brillant." Art.

[Probably not *Coccinellide*].

Subcoccinella.

Huber. Mem. Soc. Phys. Gen. IX. p. 376 (1841). *typ.* 24-punctata.

[*Lasia*], *Hope* (1840), *Mulsant* (1846).]

Hope's name was already preoccupied, besides that he gave no characters, and that it was a synonym of *Cycnegetis*, Chevr.

Subcoccinella 24-punctata.

Coccinella 24-punctata, *Linn. S. N.* p. 366. 17 (1758).

Coccinella globosa, *Schneid. Mag. f. Ent.* II. n. 14 (1792).

Lasia globosa, *Muls. Sécur.* p. 197 (1846).

Coccinella meridionalis, *Mots. Mém. Mosc.* v. 420, pl. 16. K.

Lasia meridionalis, *Muls. Spec.* p. 882. 1.

Coccinella colchica, *Mots. Bull. Mosc.* XII. p. 51, pl. 1. E. (1839).

Lasia colchica, *Muls. Spec.* p. 883. 3.

Europe, Algeria, Caucasus, Persia.

Cycnegetis.

Chevr. Dej. Cat. (*typ.* impunctata).

Claws with a basal dent only. Redtenbacher (1840) first pointed out the type of this genus.

Cycnegetis impunctata.

Coccinella impunctata, *Linn. Syst. Nat.* p. 579. 4 (1767).

Cycnegetis impunctata, *Muls. Sécur.* p. 208.

Germany.

Ballida.

Muls. Spec. p. 1042 (*typ.* *Brahamæ*).

Claws without any tooth.

Ballida Brahamæ.*

Ballida Brahamæ, *Muls. Spec.* p. 1042.

“Ovale, pubescente; thorax et élytres noires; les secondes ornées chacune de deux grosses taches d’un rouge jaunâtre couvrant à peu près toute la longueur de chaque étui; la première, sub-basilaire; la deuxième après les $\frac{2}{3}$.” China (Hope).

Tribe 2. COCCINELLIDES.

Surface glabrous, punctuation generally uniform, eyes never bordered by the genæ, epipleuræ continuous to the apex or to at least two-thirds. It has proved impracticable to construct a table of genera, but an analysis will be given at the end of the subfamily

Eumegilla.

Crotch, Cat. Cocc. p. 1 (*typ.* *conterminata*).

Thorax longer than broad, narrowed before and behind the middle, with a reflexed margin at the base; legs extremely long; elytra with a humeral plica in the ♂, six ventral segments, claws simple.

Eumegilla conterminata.

Megilla conterminata, *Muls. Mon.* p. 17. 2 (1866) T.

Black, elongate, attenuate in front, very shining, faintly punctate; prosternum pale ochreous; thorax with the anterior angles rectangles, hardly emarginate for the head, posterior angles obtuse, black with a red spot at the anterior angle; elytra elongate, acuminate at the apex, humeral plica salient, reaching two-thirds their length, margins reflexed not thickened; orange red with a black pattern like *M. maculata*; the callus, the suture, and two fasciæ (one before the middle, and one at two-thirds) reaching the margins, black; this colour does not quite reach the apex. L. $4\frac{1}{2}$ lin. S. Paulo (Bates, Fry).

Eumegilla variolosa.

Megilla variolosa, *Muls. Mon.* p. 19. 5 (1866) T.

Very near *E. conterminata*, if really distinct; the thorax seems a little shorter and consequently broader; elytra less acuminate posteriorly, the red colour paler, and the black more developed, the spot on the callus is enlarged joining the suture and the first fascia, the sutural colour also is dilated behind the second fascia. L. $4\frac{1}{4}$ lin. S. America (Deyrolle).

Megilla.

Muls. Spec. p. 24 (*typ. maculata*).

Claws dentate at the base; the thorax not longer than broad; punctuation faint, superficial. Elytra with a humeral plica in the ♂. America.

Megilla maculata.

Coccinella maculata, *De Geer. Mém.* v. 392. 1, pl. 16. 22 (1775).

Megilla maculata, *Muls. Spec.* p. 28. 4.

Coccinella limensis, *Philippi Stett. E. Z.* xxv. p. 402 (1864).

Naemia fuscilabris, *Muls. Mon.* p. 22. 2 (1866).

America, from Canada to Chili. This is one of the most variable of the *Coccinellidæ*. In the north it is generally small ($2\frac{1}{2}$ —3 lin.) clearly and distinctly spotted, opaque and very obsoletely punctured; in the South and especially in the rich Amazonian regions it apparently becomes much larger (4 lin.), is shining and faintly punctured, loses the humeral spot and by coalescence acquires two fasciæ behind the middle.

Megilla quadrifasciata.

Coccinella 4-fasciata, *Schön. Syn. Ins.* II. 178. 69 (1808).

Megilla 4-fasciata, *Muls. Spec.* p. 25. 2.

Var. Megilla 18-pustulata, *Muls. Spec.* p. 26. 3.

Brazil, Buenos Ayres, Chili. These two species differ just as do the varieties of *M. maculata* mentioned above; *M. 18-pustulata* is the opaque smaller form, differing from *M. 4-fasciata* by having the black fasciæ connected with each other by a longitudinal line, thus dividing each elytron into nine orange spots. *M. 4-fasciata* is larger, and shining.

Megilla innotata.

Megilla innotata, *Muls. Spec.* p. 24. 1.

W. Indies. Porto Rico (B. M.). At once distinct by the black prosternum.

Naemia.

Muls. Spec. p. 30 (*typ. seriata*).

Distinguished by the simple claws, and the shorter thorax, the base of which is markedly sinuate.

Naemia seriata.

Coccinella seriata, *Melsh. Proc. Phil.* III. p. 177 (1847).

Naemia litigiosa, *Muls. Spec.* p. 31. 1.

United States, Mexico, Columbia. Distinct from *Megilla maculata* by the scutellar spot which is elongate-oval.

Naemia vittigera.

Hippodamia vittigera, *Mannh. Bull. Mosc.* xvi. p. 312. 297 (1843).

Naemia vittigera, *Muls. Spec.* p. 33. 2.

California, Mexico, Hudson's Bay (B. M.). Opaque, obsolete punctured. In coloration it exactly resembles a common Californian *Galeruca*.

Naemia episcopalis.

Coccinella episcopalis, *Kirby, Fauna Bor. Amer.* p. 228. 309, pl. 5. 4 (1838).

Naemia episcopalis, *Muls. Spec.* p. 34. 3.

Hudson's Bay. From examination of the type I had concluded it was merely a variety of the preceding, but Dr Leconte assures me that he has other specimens in his collection, and that it is in reality distinct; however, typical *vittigera* occurs in the British Museum labelled Hudson's Bay.

Anisosticta.

Chevr. Dej. Cat. (*typ.* 19-punctata).

Claws simple, thorax transverse, not margined at base, sinuate behind the posterior angles, sides reflexed; elytra with a close strong punctuation, not alutaceous.

Anisosticta 19-punctata.

Coccinella 19-punctata, *Linn. Syst. Nat.* p. 366. 15 (1758).

Anisosticta 19-punctata, *Muls. Sécur.* p. 36. 1.

Europe, Siberia.

Anisosticta strigata.

Coccinella strigata, *Thunb. Ins. Succ.* ix. p. 113 (1794).

Adonia? strigata, *Muls. Spec.* p. 46.

Anisosticta Dohrniana, *Muls. Op.* vii. 136 (1856).

France, Hungary, Lapland, Hudson's Bay, Vancouver's Island, Irkutsk.

Eriopis.

Muls. Spec. p. 6 (*typ.* connexa).

Claws bifid, thorax quadrangular, sides rounded, base margined, except just in front of the scutellum, where it is sinuate; elytra with a reflexed slightly thickened margin.

Eriopis opposita.

Hippodamia opposita, Guér. Icon. R. A. p. 321 (1846) T.

Eriopis opposita, Muls. Spec. p. 6. 1.

Chili, Juan Fernandez (Deyrolle). Readily known from any variety of *E. connexa* by its much larger size, opaque surface, and the orange tint of the spots.

Eriopis connexa.

Coccinella connexa, Germar, Ins. Sp. Nov. p. 621. 889 (1824).

Eriopis connexa, Muls. Spec. p. 7. 2.

Var. *Eriopis Eschscholtzii*, Muls. Spec. p. 1009.

Var. *Eriopis heliophila*, Muls. Op. III. p. 9.

Var. *Coccinella magellanica*, Philipp. Stett. E. Z. xxv. p. 402 (1864).

Magellan, Chili, Montevideo, Peru, Brazil, Ecuador, Columbia, California, Vancouver's Island (B. M.). This species has nearly as wide a range as *Megilla maculata*, and is at least as variable. The spots run together in fasciæ, or are reduced to mere points on a black ground; the most remarkable (*heliophila*) has the first two sutural spots longitudinally united.

Hippodamia.

Chevr. Dej. Cat. (typ. 13-punctata).

Claws bifid, thorax subtransverse, slightly emarginate in front, base rounded, sinuate inside the posterior angles, not margined; elytra alutaceous, with an obsolete punctuation, abdominal plates entirely absent, incomplete externally, or (exceptionally) complete. *Adonia* (Muls. Sécur. p. 39) I have united to this genus following the example of Leconte; as I am quite unable to draw any line between the two, and Mulsant himself seems to find some difficulty. *Hemisphærica* Hope (Col. Man. p. 157) is another (sufficiently inappropriate) name for this genus.

Hippodamia 13-punctata.

Coccinella 13-punctata, Linn. Syst. Nat. p. 336. 12 (1758).

Coccinella tibialis, Say, Journ. Phil. iv. 94 (1824).

Hippodamia 13-punctata, Muls. Sécur. p. 31. 1 (1846).

Var. *Hippodamia xanthoptera*, Muls. Spec. p. 10. 2.

Europe, Siberia, N. America, W. Indies. Generally recognisable by the tolerably broad white sides to the thorax, containing a black dot; in the others this is narrow.

Hippodamia septem-maculata.

Coccinella 7-maculata, De Geer, Mém. v. 373. 5 (1775).

Coccinella segetalis, *Naez. Vet. Akad. Handl.* p. 170, pl. VII. 1—2 (1792).

Hippodamia 7-maculata, *Muls. Spec.* p. 15. 4.

Germany, Sweden (not however in England, as Mulsant says).

Hippodamia quinquesignata.

Coccinella 5-signata, *Kirby, Fawn. Bor. Amer.* p. 230. 512. pl. 7, f. 7 (1838) T.

Hippodamia 5-signata, *Muls. Spec.* p. 15. 5.

N. America (B. M.).

Mulsant separates this species as having the anterior angles of the thorax alone white; but the specimens in the British Museum shew that this extends downwards as in the other species, hence I am disposed to unite with it the other shining species added by Mulsant, and which agree in having a coarser punctuation, with the alutaceous surface less visible.

Var. extensa, *Muls. Spec.* p. 17. 6.

Thorax with the anterior angles yellowish red. Elytra with a fascia near the base, following the suture for one-fifth, and transversely extending to the bottom of the callus. California.

Var. Lecontei, *Muls. Spec.* p. 1010.

Thorax with a lateral border narrowed in the middle; elytra with a transverse fascia, abbreviated externally, and three dots, black; the band joined to the scutellum. United States. Bogota (Leconte).

Var. Mulsanti, *Lec. Proc. Phil.* p. 131. 2 (1852).

Thorax with the lateral and apical margins white; elytra with a basal fascia, a large oblique spot behind the middle, and another towards the apex. Lake Superior (Leconte).

Var. leporina, *Muls. Op.* VII. p. 135 (1856) T.

Thorax with a border almost interrupted in the middle; elytra with a fascia from one callus to the other and two spots black; the two spots united at their edges. California (B. M.).

Hippodamia glacialis.

Coccinella glacialis, *Fabr. Syst. Ent.* p. 80. 12 (1775) T.

Hippodamia glacialis, *Muls. Spec.* p. 18. 7.

N. America; surface opaque, punctuation very obsolete. The three posterior spots are well marked and large (two being generally united) the anterior ones often absent.

Hippodamia 15-maculata.

Hippodamia 15-maculata, *Muls. Spec.* p. 20. 8.

United States; obsoletely punctulate, but more shining than

H. glacialis; the six spots all generally marked, the scutellar spot linear or absent; the second spot largely developed.

Hippodamia convergens.

Hippodamia convergens, Guér. *Icon. R. A.* p. 321 (1846) T.
 " " *Muls. Spec.* p. 22. 9.

United States, California, Mexico. Punctuation obsolete, Elytra opaque; the six spots all present but small: elytra sometimes spotless.

Hippodamia ambigua.*

Hippodamia ambigua, Leconte *Proc. Phil.* p. 131. 3 (1852).

"Black, thorax punctulate, lateral and anterior margin, and two dorsal marks more or less white, elytra red, strongly punctulate, base whitish, suture with the base black." L. 2—27.

California and Oregon. Very close to *H. convergens*, but distinct by the strongly punctulate elytra, which are usually spotless. The thorax varies in the development of white, the anterior margin and the discal marks sometimes disappear.

Hippodamia punctulata.*

Hippodamia punctulata, Leconte *Proc. Phil.* p. 131. 4 (1852).

"Black, thorax strongly punctulate, with two dorsal marks, anterior angles, and the apical margin (produced in the middle) white; elytra punctulate, red, pale at the base, suture black at the base." L. 27. S. Francisco. Very near *H. ambigua*, thorax more strongly punctured, the white of the sides extends only half way to the base, and the dorsal spots sometimes wanting, the posterior angles sometimes white.

Hippodamia sinuata.

Hippodamia sinuata, *Muls. Spec.* p. 1011.

Adonia interrogans, *Muls. Op.* VII. 139 (1856) T.

California. My specimen, which agrees precisely with Mulsant's description, is much more opaque than any other species, especially on the elytra. Mulsant's *interrogans* is supposed to come from China, which appears to me unlikely.

Hippodamia spuria.*

Hippodamia spuria, Leconte *Proc. Phil.* p. 358. 108 (1867).

"Ovalis, longiuscula, thorace nigro, limbo omni angusto lineisque 2 discoidalibus albis, elytris pallide fulvis, macula communi scutellari elongata, altera humerali, tribusque utrinque pone medium 2, 1, positis nigris, saepe deficientibus, his nonnunquam varie

confluentibus, angulo suturali rotundata, subtus nigra epimeris mediis et posticis pallidis." L. .20 unc. Oregon. The spots vary considerably. It is probable that *H. sinuata* Muls. is an extreme form of this species.

Hippodamia mœsta.

Hippodamia mœsta, Lec. Proc. Phil. VII. 16 (1854).

Rufescente-nigra, dense subtiliter punctulata, macula frontali rhomboidea, thoracis margine laterali antice posticeque latiore, linea ante medium guttisque dorsalibus 2 albis, elytris thorace latioribus, macula laterali triangulari ad quadrantem posticum alba ornatis. L. 3 lin. Oregon (Prairie Paso).

Var. thorace angulis anticis solis triangulariter flavis. Vancouver's Island.

Hippodamia parenthesis.

Coccinella parenthesis, Say, Journ. Phil. IV. 93. 3 (1824).

Adonia parenthesis, Muls. Spec. p. 41. 3.

Coccinella tridens, Kirby, Faun. bor. Am. p. 229. 311 (1838) T.

Hippodamia lunatomaculata, Mots. Bull. Mosc. (1845), p. 382.

Canada, United States, California. The thorax is broadly sinuate behind the posterior angles.

Hippodamia amœna.

Coccinella amœna, Fald. Mém. Pét. (Sav. Etr.) II. 453. 96 (1835).

Adonia amœna, Muls. Spec. p. 43. 4.

Hippodamia scalaris, Gebler, Bull. Pét. I. p. 39 (1843).

Eastern Siberia. Apparently the Asiatic representative of *H. parenthesis*, from which it only differs in the increased amount of black in the design of the elytra.

Hippodamia arctica.

Coccinella arctica, Schneid. Mag. f. Ent. 148. 13 (1792).

Adonia arctica, Muls. Spec. p. 44. 6.

Lapland. Differs by the black epimera, the stronger punctuation, and more shining surface.

Hippodamia constellata.

Coccinella constellata, Laich. Ins. Tyrol. I. 121. 6 (1781).

Coccinella mutabilis, Scriba, J. f. Ent. I. 183. 141 (1790).

Adonia mutabilis, Muls. Sécur. p. 39. 1.

Adonia Doubledayi, Muls. Spec. p. 38. 1. (T.)

Hippodamia ripicola, Muls. Mon. p. 13. 10 (1866) T.

Adonia corsica, Reiche, *Ann. Fr.* II. 299 (1862).

Adonia bifurcata, Muls. *Mon.* p. 28. 3.

Adonia Kriechbaumii, Muls. *Mon.* p. 30. 4.

Europe, N. Africa, Madeira, Abyssinia, Siberia, Central Asia, India. Generally recognizable by the pattern of the thorax, which is margined at the sides and in front with white, the anterior margin emitting a sharp tooth in the middle, and two small discal dots, one on either side, also white. The variety in which the anterior two-thirds of the elytra is occupied by a design like a reversed gamma with a small dot on either side of it, is particularly confusing.

Mulsant, though he devotes some pages to an elucidation of the varieties of this species, does not seem to have recognized it when coming from unexpected countries. The two latter synonyms are based on description only, as the types do not appear to exist at Munich, where Dr Gemminger has most obligingly made every search for them.

Semiadalia.

g. n. (*typ.* *inquinata*).

Allied to *Hippodamia*, of which it has the coloration, punctuation, form of the thorax, and general outline; it differs by the complete abdominal plates and the dentate claws; the thorax is faintly margined behind.

Semiadalia inquinata.

Idalia inquinata, Muls. *Sécur.* p. 67. 6 (1846).

E. France, Switzerland, Styria, Hungary. This species is very recognizable by the fovea inside the posterior angle of the thorax, which has several large punctures impressed in it.

Semiadalia 11-notata.

Coccinelle à neuf points noirs, Geoff. *Hist. Ins.* I. 322. 4 (1762).

Coccinella 11-notata, Schneid. *Mag. f. Ent.* 379. 54 (1792).

Idalia 11-notata, Muls. *Sécur.* p. 63. 5 (1846).

Coccinella fulvimana, Mots. *N. Mém. Mosc.* v. 423, pl. 16 q. (1837).

Coccinella saliana, Fald. *N. Mém. Mosc.* v. 399. 573 (1837).

France, Germany, Austria, Dalmatia.

Closely allied to the preceding, but without the fovea on the thorax, or with very faint indications of it.

Hysia.

Muls. Spec. p. 47 (*typ.* *endomycina*).

Thorax gently emarginate in front, punctuation sparse and

rather obsolete, very shining, form more convex and subcylindrical; looking unlike a *Coccinella*; prosternum compressed, like *Ballia*, abdominal plates very short and small, legs long, tarsi long.

Hysia endomycina.

Coccinella endomycina, *Boisd. Voy. de l'Astrol.* p. 603. 22 (1835) T.

Hysia endomycina, *Muls. Spec.* p. 47. 1.

N. Guinea, Celebes. This species does not appear to have been found by Mr Wallace; I have examined the type from Dupont's collection (now in Cte. Mniszech's possession).

Xanthadalia.

g. n. (*typ. rufescens*).

The two species comprised in this genus were placed by Mulsant in *Harmonia*; the abdominal plates however only cover half the segment and are often complete, though occasionally obliterated externally; the thorax is subtransverse, bisinuate at the base, the mesosternum slightly emarginate, compressed. Africa.

Xanthadalia Sommieri.

Harmonia Sommieri, *Muls. Spec.* p. 75. 1.

Brazil (Reiche), Mozambique (Dejean). If these two localities are correct I can only suppose it has been imported accidentally. Unfortunately I have seen only Reiche's old specimen. Punctuation coarse, almost unequal.

Xanthadalia rufescens.

Harmonia rufescens, *Muls. Spec.* p. 76. 2.

Senegal, Gold Coast. This is closely allied to the last, but larger and more faintly punctate. The dark varieties of this are rare and have two spots on each of the elytra, one at one-third and one at two-thirds; both are ill defined and irregular in shape; one specimen I have seen in which they join at the suture producing two fasciæ.

Adalia.

Muls. Spec. p. 49 (*typ. bipunctata*).

[*Idalia*||, *Muls. olim.*]

Abdominal plates complete. This genus consists of numerous species of rather a heterogeneous nature.

Adalia obliterata.

Coccinella obliterata, *Linn. Syst. Nat.* p. 367. 27 (1758).

Adalia obliterata, *Muls. Spec.* p. 49. 1.

Coccinella livida, *De Geer, Mém. v.* p. 383. 18 (1775).

Adalia livida, Muls. *Sécur.* p. 44. 1 (1846).

Europe, more common in the North. The thorax margined behind, punctuation of elytra coarse and close, resembling *Anisosticta*, form oblong.

Adalia M-fuscum.

Adalia M-fuscum, Muls. *Mon.* p. 35. 2 (T).

Founded on an immature and unsatisfactory specimen. Oval, short, brownish-yellow; punctuation sparse, tolerably fine. Thorax with the letter M in dark brown. Elytra clouded, but without distinct markings. L. $1\frac{1}{2}$ lin. Ceylon (Deyrolle).

Mulsant says (l. c. p. 36) that by its form it has analogies with *Harm. venusta*!

Adalia Ludovicæ.*

Adalia Ludovicæ, Muls. *Mon.* p. 36. 3.

“Brièvement ovalaire. Tête et prothorax d’un blanc flave, la première ornée d’un bandeau postérieur; le second paré de 5 taches ponctiformes noires. Elytres d’un roux orangé, ornées chacune d’un gros point noir, couvrant au moins le cinquième médiaire de la largeur, avant le milieu de la longueur. L. $1\frac{1}{2}$ lin. Amérique du Nord (Felix). Dessous noir sur la poitrine, avec l’antepectus bordé de flave, épimères noires; ventre d’un roux testacé, avec la majeure partie médiaire des 3 premiers arceaux, noire. Pieds d’un roux orangé.”

Adalia bothnica.

Coccinella botnica, Payk. *Faun. Suec.* II. p. 34. 34 (1799).

Adalia bothnica, Muls. *Sécur.* p. 48. 2 (1846).

Coccinella Faldermanni, Humm. *Ess. Ent.* v. p. 38 (1826).

N. of France, Sweden, Switzerland, Siberia.

Punctuation tolerably close, distinct.

Adalia testudinea.

Coccinella testudinea, Woll. *Ins. Mad.* p. 463. 455 (1854) T.

Madeira, not rare on *Hibiscus*, etc. Closely resembling *A. bothnica*; but distinctly larger, and more shining. The punctuation appears to vary, as in some cases it is faint and obsolete, in others similar to that of *A. bothnica*. It is of course impossible to unite this with *A. bothnica*, but the differences are extremely minute and all comparative, leaving the possible inference that this is a better-nourished form of the northern species.

Adalia frigida.

Coccinella frigida (Payk.), Schn. *Mag. f. Ent.* p. 172. 29 (1792).

Coccinella hyperborca, Payk. *Faun. Suec.* II. 39. 38 (1799).

Adalia hyperborea, *Muls. Spec.* p. 53. 5.

Lapland, Siberia (Maack), N. California (Mulsant).

Punctuation of the elytra close, distinct, of the thorax fine and sparse; the fasciæ on the elytra sometimes broken up into small ocellated spots, sometimes altogether absent.

Adalia ophthalmica.*

Adalia ophthalmica, *Muls. Spec.* p. 56. 6 (1850).

N. America (B. M.). Very closely allied to *A. hyperborea*, of which it might be a variety; the type is apparently lost.

Adalia Revelieri.*

Adalia Revelierii, *Muls. Mon.* p. 40. 8.

“Ovale. Prothorax tantôt flave, avec une M et un point de chaque côté, noirs; tantôt noir avec une bordure étroite sur les côtés et sur le quart médiaire de la base, flave. Elytres d'un flave roussâtre de rougeâtre; ornées chacune d'un trait près de l'écusson, et de 7 taches unies en partie ou en totalité, disposées sur trois rangées transverses; deux pour la première (l'une, sur le calus, un peu plus grosse et un peu plus postérieure, entre celle-ci et le trait); trois pour la deuxième rangée; l'intermédiaire, la plus grosse, unie à l'interne, parfois à celle du calus, et quelquefois à l'externe; deux pour la rangée postérieure, ordinairement isolées. Dessous du corps et pieds, noirs.” L. 2 lin. Corse. [Very near *fasciato-punctata*.]

Adalia fasciato-punctata.

Coccinella fasciato-punctata, *Fald. Mém. Pét. (Sav. Etr.)* II. 455. 98 (1835).

Adalia fasciato-punctata, *Muls. Spec.* p. 51. 4.

Adalia stictica, *Muls. Spec.* p. 50. 3.

E. Siberia, rare; *A. stictica* differs only by the pale thorax and less complete markings; Trebizond (Chevr.).

Adalia tetraspilota.

Coccinella tetraspilota, *Hope, Zool. Misc.* p. 31 (1831).

Adalia Hopii, *Muls. Spec.* p. 57. 7 (1850).

Nepaul (B. M.), India (Deyrolle, Saunders). Punctuation close and distinct as in the preceding species. Hope certainly gave two species the same name, but why Mulsant should in that case change the older of the two is not clear.

Adalia indica, sp. n.

Oval, black, but little convex, legs pale; head pale ochreous, thorax with the sides broadly ochreous, the inner edge of the

colour irregular, anterior margin very narrowly pale; scutellum black; elytra pale ochreous, distinctly punctate. L. $1\frac{1}{2}$ lin. India (Saunders).

Adalia bipunctata.

Coccinella bipunctata, Linn. *Syst. Nat.* p. 364. 2 (1758).

Idalia bipunctata, Muls. *Sécur.* p. 61. 3 (1846).

Coccinella dispar, Schneid. *Mag. f. Ent.* p. 172. 32 (1792).

Coccinella bioculata, Say, *J. Acad. Phil.* iv. 94. 5 (1824).

Coccinella humeralis||, Say, l. c. p. 95. 8 (1824).

Throughout Europe, extending also to N. America (Nova Scotia, New York, etc.).

Adalia rufocincta.

Adalia rufocincta, Muls. *Spec.* p. 59. 9.

Monte Rosa, Apennines, Pyrenees (Bonvouloir).

Opaque, closely alutaceous, punctuation visible; the ventral segments thickly punctate. This species has all the appearance of a *Hyperaspis*.

Adalia alpina.

Coccinella alpina, Villa. *Col. Eur.* p. 50. 70.

Idalia alpina, Muls. *Sécur.* p. 62. 4.

French and Swiss Alps, Styria, Carniola. Found on nettles, etc. Punctuation distinct; elytra with a very fine margin, thorax with the reflexed margin rather evident at the posterior angles.

Adalia maritima.*

Coccinella maritima, Ménét. *Voy. au Cauc.* p. 240. 1145.

Adalia maritima, Muls. *Spec.* p. 1014.

Island Sara (St Petersburg).

Adalia deficiens.

Adalia deficiens, Muls. *Spec.* p. 62. 14.

Chili, Montevideo, Guatemala (Melly). Very variable; the small yellow spots on each side the scutellum appear to be constant, but the black markings are most inconstant; punctuation fine and sparse.

Adalia angulifera.

Adalia angulifera, Muls. *Spec.* p. 50.

Chili, I. Juan Fernandez. Near *A. deficiens*, but with two white marks on the disc of the thorax (as in *Hippodamia*).

Adalia gratiosa.*

Adalia gratiosa, Muls. Mon. p. 50. 23 (1866).

"Brièvement ovale. Prothorax noir, paré aux angles de devant d'une tache flave, presque quadrangulaire. Elytres noires ornées chacune de 5 grosses taches jaunes; 2 près de la suture; (la 1re tronquée en devant; la 2e arrondie;) 3 liées au bord externe." L. $1\frac{3}{4}$ lin. Caracas (Sallé). "Tête noire, écusson noir, dessous du corps noir, avec le dernier arceau et le bord des deux précédents fauves. Cuisses noires, tibias et tarses d'un jaune roussâtre."

Lioadalia.

g. n. (*typ. flavomaculata*).

Differs from *Adalia* by the extremely fine obsolete punctuation.

Lioadalia flavomaculata.

Coccinella flavomaculata, De Geer, *Mém.* VII. 665. 71 (1778).

Adalia flavomaculata, Muls. *Spec.* 60. 11.

Cape of Good Hope; abundant. The other localities given by Mulsant (Abyssinia, E. Indies, Australia) appear to me very doubtful, though supported apparently by the collection he cites.

Lioadalia signifera.

Micraspis signifera, Reiche, *Voy. en Abyss.* pl. 26, f. 4 (1850) T.

Adalia signifera, Muls. *Spec.* p. 1012.

Abyssinia (Reiche, Munich). More visibly punctured than *A. flavomaculata*, but still faintly and sparsely. The appearance and the obsolete punctuation are very suggestive of *Micraspis bidentata*, etc.

Lioadalia intermedia, sp. n.

Like *L. signifera*, punctuation similar; subhemispherical, black, head ochreous; thorax black, the anterior angles and more than half the sides ochreous, this colour produced obliquely from the angle on to the disc, in the centre of which is an ochreous line, dilated at its anterior extremity, but not absolutely reaching the margin; elytra black, each with eight ochreous marks; a humeral lunule prolonged for one-third along the margin, a quadrangular basal spot, close to the suture, two spots before the middle (one round discal, one as if halved, sutural), one round submarginal at one-half, one transversely elongate (composed of two) in an oblique line with the last, one submarginal at three-fourths, one subapical, discoidal; none of these reach either suture or margin. L. $2\frac{1}{2}$ lin. Abyssinia (Deyrolle).

Lioadalia luteopicta.

Adalia luteopicta, *Muls. Mon.* p. 45. 17 (1866) T.

Ovate, subdepressed, black, very shining (as if varnished) and extremely obsolete punctulate; head with two white spots; thorax with a quadrate white spot at the anterior angles; elytra black, margin reflexed, concave, the external margin from the scutellum to the apex ochreous, to this are joined five spots (one basal, one below the callus, one medial, one subapical, one apical), the suture from half to five-sixths; a transversely oval spot before the middle near the suture, a small discoidal spot at two-thirds, also ochreous, epipleuræ ochreous, epimera white. L. 3 lin. E. Indies (Deyrollé), China (Bowring).

Lioadalia Gemmingeri.*

Adalia Gemmingeri, *Muls. Mon.* p. 48. 21.

“Brièvement ovale. Prothorax noir, étroitement bordé de blanc flave, en devant, sur les côtés et sur ceux de sa base. Elytres d’un flave jaune, ornées d’une bordure suturale noire, étendue en devant jusqu’au calus, obtriangulairement rétrécie jusqu’à la moitié de leur largeur, puis étroitement obtriangulaire, et enfin dilatée en une bande transversale subapicale; ornées chacune d’une tache semi-circulaire blanche, voisine de l’écusson, et de deux taches ponctiformes, noires; l’une sur le disque, l’autre, un peu plus postérieure, près du bord interne.” L. 2 lin.

? (Gemminger). He describes it as being smooth and shining, hardly punctulate, legs black. Dr Gemminger is unable to find any such species in his collection.

Isora.

Muls. Spec. p. 341 (*typ. anceps*).

Abdominal plates complete; form hemispherical, epipleuræ inclined, punctuation invisible. This genus, placed by Mulsant in his second division, must evidently come here, and thus remove the anomaly of a species with complete abdominal plates in that section.

Isora anceps.

Isora anceps, *Muls. Spec.* p. 341. 1.

Cape of Good Hope, Caffraria. Punctuation of the thorax very fine and sparse, elytra impunctate, margins thickened.

Nesis.

Muls. Spec. p. 68 (*typ. sycophanta*).

Abdominal plates as in *Adalia*, epipleuræ of the elytra concave, inclined; punctuation very unequal, the larger punctures sparse.

Nesis sycophanta.*

Nesis sycophanta, *Muls. Spec.* p. 68. 1 (T).

? (Dupont). The type kindly communicated to me by Count Mniszech is without locality, and is labelled "varicolor" in Mulsant's handwriting, but agrees with the description.

Bulæa.

Muls. Spec. p. 62 (*typ.* Lichatschovii).

Claws simple, abdominal plates entire, sometimes irregular. Mesosternum entire.

Bulæa Lichatschovii.

Coccinella Lichatschovii, *Humm. Ess. Ent.* VI. 43 (1827).

Coccinella 12-notata, *Gebh. Ledeb. Reise.* II. 225. 14 (1830).

Bulæa 12-notata, *Muls. Spec.* p. 71. 1.

Bulæa pallida, *Muls. Spec.* p. 73. 3.

Bulæa flavidula, *Muls. Mon.* p. 54 (T).

Bulæi Bocandei, *Muls. Spec.* p. 71. 2.

Sandy and desert places from Senegal through Egypt and Arabia to central Asia and Persia. *B. Bocandei* is more convex, less strongly punctured, and shorter, but considerable variation exists in the ordinary *B. Lichatschovii*.

The normal punctuation is close, uniform, and very distinct. The pale specimens are undoubtedly mere varieties (cf. Kraatz. *Berl. Ent. Zeit.*.....) and *B. flavidula*, said to be from Sumatra, is probably a mere error of locality.

Bulæa lividula.

Bulæa lividula, *Muls. Spec.* p. 1016.

Andalusia, Carthage. This seems to be distinct by its much smaller size and different outline. I have seen numerous specimens of it.

Coccinella.

Linn. Syst. Nat. ed. I. 1735 (*typ.* 7-punctata).

This genus remains after all attempts to subdivide it sufficiently large. Mulsant's *Harmonia* based on the emarginate mesosternum shades indefinitely into the others.

Coccinella picta.

Coccinella picta, *Randall, Bost. Journ.* II. 51. 30 (1838).

Coccinella concinnata, *Melsh. Proc. Phil.* III. 177 (1847).

Harmonia contexta, *Muls. Spec.* p. 87. 9 (1850).

United States, Vancouver's Island, Mexico. Thorax trans-

verse, sinuate, and faintly impressed behind the posterior angles; plates subterminal, incomplete; mesosternum not emarginate. This is very like *Cleis mirifica* in design.

Coccinella quinque-lineata.

Harmonia 5-lineata, *Muls. Spec.* p. 89. 11 (T).
Mexico (Chevrolat), closely allied to *C. picta*.

Coccinella melanopleura.*

Coccinella melanopleura, *Leconte Proc. Phil.* p. 286 (1860).

“Ovalis modice convexa capite thoraceque haud dense punctulatis, illo maculis 2 albis, hoc limbo antico, lateribus late (macula nigra inclusa) lineola apicali, maculisque 2 basalibus albis, scutello nigro, elytris ferrugineis, confertim subtiliter punctatis; subtus nigra tibiis tarsisque fuscotestaceis.” L. 21. Table Mountain (Leconte). Closely resembles *C. picta*, but the body entirely black beneath, and the elytra more finely punctured.

Coccinella areata.

Coccinella areata, *Muls. Spec.* p. 99. 7.

Coccinella boliviana, *Muls. Mon.* p. 75. 4 (T).

Oval, not very convex, black, alutaceous, opaque; thorax sparingly punctate, elytra almost impunctate; head yellow in front (♂) or with two yellow spots (♀); thorax (which is subtransverse and slightly sinuate behind the posterior angles) with a narrow yellow margin in front and at the sides; elytra with the suture and margin narrowly reddish ochreous, each with five white spots (one basal, by the scutellum, one linear outside the callus, two in transverse line about the middle, one discoidal in the apical fourth), the reddish margin is slightly dilated before the apex. Body and legs beneath black. L. $1\frac{3}{4}$ lin. Bolivia (Deyrolle). Chuquisaca (Paris). The first ventral segment smooth, impunctate. Mesosternum simple.

Coccinella Germainii, sp. n.

Allied to *C. areata*, but hardly (if at all) alutaceous, shining, extremely faintly and obsoletely punctulate; head and thorax similar to *C. boliviana*; elytra with the margins more markedly orange red, the humeral line merged in the marginal colour, the outside third spot turned into an elongate dash, the subapical spot nearer the margin and running into the red colour. L. $1\frac{1}{2}$ lin. Chili (Germain). Sent home somewhat abundantly; it is often labelled “*Adalia picta*” in collections.

Coccinella ancoralis.

Coccinella ancoralis, *Germ. Sp. Ins. Nov.* p. 620. 887 (1824).

” ” *Muls. Spec.* p. 94. 3.

Chili, Buenos Ayres, Montevideo, Brazil. Also allied to *C. arcata*, but shining, punctuation extremely obsolete; the two pale dots by the scutellum obviously represent the yellow spots of *C. arcata*.

Coccinella arcula.

Coccinella arcula, *Er. Arch. f. Nat.* XII. 182 (1847) T.

Coccinella Petitii, *Muls. Spec.* p. 98. 6.

Again allied to *C. arcata*. Shining, scarcely punctulate, thorax black, with a fine yellow margin in front and on the sides, two yellow dots on the disc; elytra yellow with two black marks on each, which taken together form two fasciæ curved forwards (concave), one before the middle enclosing two basal patches, one subapical, prolonged along the suture to the apex. L. $1\frac{1}{2}$ lin. Peru (Berlin). *C. Petitii* differs by the greater extension of the basal spot, and the presence of a small branch from the first fasciæ reaching the margin, which is faintly indicated in *C. arcula*.

Coccinella Lucasii.*

Coccinella Lucasii, *Muls. Spec.* p. 96. 4.

Cordilleras (Paris). This species evidently belongs here.

Coccinella eryngii.

Coccinella eryngii, *Muls. Spec.* p. 100. 8.

Chili. The thorax has no discoidal marks. Punctuation barely visible. Mesosternum entire, form rounded subhemispherical.

Coccinella munda.

Coccinella munda, *Say, Bost. Journ.* i. 202. 1.

Daulis munda, *Muls. Spec.* p. 324. 21.

United States. The discoidal points of the thorax appear as prolongations from the border in front; the legs are pale red (femora black in the ♂). Allied to *C. eryngii*.

Coccinella emarginata.

Coccinella emarginata, *Muls. Spec.* p. 97. 5.

Mexico, Guatemala. Very near *C. munda* but with black legs (anterior tibiæ pale in the ♂). The discoidal spots on the thorax not connected with the border.

Coccinella fulvipennis.

Coccinella fulvipennis, *Muls. Spec.* p. 101. 9.

Chili, Montevideo. Thorax with a yellow border in front, connected with the discoidal spot in the ♂. Legs black. These three species, confused with each other and with *Cycloneda sanguinea* by Dejean, appear to be very closely allied. They all have a similar punctuation and differ only in the details of the thorax and colouring of the legs. They seem to inhabit North, Central, and South America respectively, and are perhaps geographical races.

Coccinella pulchella.

Coccinella pulchella, *Muls. Spec.* p. 102. 10.

Brazil; abundant. This embarrassing species might almost equally well go with *C. sanguinea*, but it is perhaps best here. Punctuation faint and sparse.

Coccinella venusta.

Coccinella venusta, *Melsh. Proc. Phil.* III. 178 (1847).

Harmonia notulata, *Muls. Spec.* p. 83. 6.

United States, Yucatan (Dupont). Surface finely alutaceous. Punctuation coarse sparse, prosternum compressed, mesosternum entire, plates v-shaped.

Coccinella ampla.

Harmonia ampla, *Muls. Spec.* p. 81. 4.

Mexico (Chevrolat). Allied to *C. venusta*; alutaceous, punctuation rather close.

Coccinella cyanoptera.

Harmonia cyanoptera, *Muls. Spec.* p. 82. 5 (T).

Harmonia viridipennis, *Muls. Mon.* p. 60. 8.

Mexico (Chevrolat, Sallé).

C. viridipennis appears to differ only by the head being bluish-green, and the elytral spot does not seem to reach the margin, but these differences are probably sexual. Probably in any case they are both extreme forms of *C. ampla*.

Coccinella ocelligera, sp. n.

Oval, ochreous yellow; thorax shining, evidently punctate with a small lateral dot and a well-marked discoidal M, not quite reaching the anterior margin; elytra sparingly and finely punctate,

each with six yellowish-red irregular spots, bounded by very narrow brown lines, one between the callus and the margin, one on a line with it, smaller, nearer the scutellum, one about the middle (extending to the margin, and downwards to the fifth), one smaller nearer the suture, one on the margin (joined to the one above it), small, and one larger nearer the suture; a dark brown dash at right angles to the suture close to the apex. L. 3 lin. Brazil (Saunders).

Coccinella Soularyi.*

Harmonia Soularyi, *Muls. Mon.* p. 63. 13.

“Ovale, thorax flave, marqué de deux bandes longitudinales noires, presque égales chacune au quart de sa largeur, ordinairement séparées par la ligne médiane. Elytres flaves ou d'un flave blanchâtre, ornées chacune de 6 points et une bande plus postérieure, noirs; deux points près de la base (l'extérieur sur le calus; 4 en rangée transversale vers le tiers (le voisin de la suture, et le submarginal, allongés parfois nuls); la bande transversale, située aux deux tiers ou après, paraissant formé de deux taches unies. L..... Playa Vicente (Sallé). Finement ponctuée, dessous du corps et pieds d'un flave rouge.”

Coccinella V-nigrum.*

Harmonia V-nigrum, *Muls. Mon.* p. 64. 14 (1866).

“Largement ovalaire, thorax et élytres d'un flave testacé; le premier orné d'un v et de 4 points noirs; les secondes parées chacune de 7 points noirs; 4 en rangée transversale près de la base, deux aux $\frac{3}{7}$, l'un près du bord externe, l'autre moins rapproché de la suture, le septième un peu après les $\frac{3}{7}$ rapproché du bord externe. L. $2\frac{1}{2}$ lin. Oaxaca (Sallé).

Presque lisse, luisant; dessous du corps et pieds d'un blanc roussâtre.”

Coccinella luteipennis.*

Harmonia luteipennis, *Muls. Mon.* p. 67. 17.

“Ovale, tête et thorax d'un blanc flave; le second paré d'une bordure basilaire et de 2 lignes longitudinales anguleuses en dedans, noires. Elytres fauves, avec une étroite bordure suturale et les $\frac{2}{5}$ postérieurs du rebord marginal, noirs. Dessous du corps noir, épimères du médipectus blanches; pieds noirs, tarsi testacés.” L. $2\frac{1}{2}$ lin. Oaxaca (Sallé), Cuenca (Boucard).

A specimen agreeing with this description has been communicated to me by M. Boucard. The surface is alutaceous but shining, punctuation sparse and distinct. The coloration is exactly that of *Cycloneda simulans*.

Coccinella æthiops.*

Coccinella æthiops, Bland. Proc. Ent. Soc. Phil. III. p. (1864).

Colorado (Bland).

Coccinella duodecim-maculata.

Coccinella 12-maculata||, Gebler. Mém. Mosc. II. 76. 3 (1832).

Harmonia 12-maculata, Muls. Spec. p. 86. 8.

E. Siberia, Japan, N. America.

Form convex compact, punctuation open, distinct; elytra with the margins very little reflexed; abdominal plates normal, mesosternum triangularly emarginate, prosternum with the process raised, carinate, abruptly obsolete before the anterior margin; metasternum sparingly punctate, first ventral segment deeply punctate.

Coccinella Julizæ.

Harmonia Julizæ Muls. Mon. p. 56. 3 (T).

Oval, black, head with 2 ochreous spots; thorax with the sides broadly ochreous, leaving the central third black, sparsely punctulate; elytra brownish ochreous, coarsely and closely punctate; body and legs black, tibiæ pale on the inside. L. $2\frac{1}{2}$ lin. E. Indies (Deyrolle).

Mesosternum gently emarginate, plates v-shaped.

Coccinella signatella.

Harmonia signatella, Muls. Mon. p. 58. 5 (T).

Oval, black, head ochreous, vertex black; thorax ochreous with seven equal-sized black dots, one basal in front of the scutellum, the others forming a W; elytra reddish ochreous, punctuation rather coarse, sparse, a few larger punctures near the margins; legs entirely pale; epipleuræ of the thorax pale ochreous concave; prosternum bicarinate, mesosternum sinuate. L. $2\frac{1}{4}$ lin. N. India (Deyrolle), Himalayas.

Coccinella arcuata.

Coccinella arcuata, Fabr. Mant. I. 55. 21 (1787).

Harmonia arcuata, Muls. Spec. p. 77. 3.

Coccinella rejiciens, Walk. Ann. N. II. IV. 219 (1860) T.

China, Philippines, Singapore, Java (Horsfield), Cape York (Janson), N. Caledonia, Cape of Good Hope. A very variable species, the subapical band is the last thing to disappear; sometimes it is an entirely unicolourous reddish ochreous. Apparently widely spread, the African locality is at least doubtful.

Plates v-shaped, punctuation distinct, mesosternum entire.

Coccinella quadripunctata.

Coccinella 4-punctata, Pont. Dansk. Atl. II. pl. XVI. 7 (1763).

Coccinella marginepunctata, Schall. Act. Hal. I. p. 260 (1783).

Harmonia marginepunctata, Muls. Secur. p. 108. 1.

Europe generally, on pines (except England). Punctuation tolerably close and distinct; abdominal plates never reaching the margin, ogival, mesosternum very faintly emarginate.

Coccinella octodecim-punctata.

Coccinella 18-punctata, Scop. Ent. Carn. p. 77. 241 (1763).

Coccinella impustulata, Linn. Syst. Nat. p. 584. 40 (1767).

Harmonia impustulata, Muls. Secur. p. 112. 2 (1846).

Coccinella rosea, De Geer. Mém. v. p. 378. 11 (1775).

Harmonia rosea, Costa Faun. Nap. p. 33 (1849).

Coccinella specularis, Bonelli Mem. Soc. Agr. Tor. XI. 182 (1812).

Harmonia buphthalmus, Muls. Spec. p. 90. 13.

Coccinella contaminata, Ménet. Mém. Pét. VI. 273, pl. 5. 16.

Coccinella caucasica, Mots. N. Mém. Mosc. v. 423. 41 (1837).

Coccinella viridula, Hampe. Stett. E. Z. XI. 356. 22 (1850).

Europe generally (except England), Syria, Taschkend.

C. contaminata, according to a specimen received by me from Central Asia and agreeing with the figure, is certainly a variety of this species; it differs only in colour. Punctuation strong, coarse, and rather close; mesosternum gently emarginate, abdominal plates v-shaped. The entirely black varieties which have not infrequently a greenish tint are very puzzling at first, but the narrow white border of the thorax always partially encloses a dot. The process of the first ventral segment deeply punctate at its apex. Epipleuræ continuous nearly to the apex.

Coccinella Doublieri.

Harmonia Doublieri, Muls. Secur. p. 118. 3.

S. France, Italy, Spain, Algeria, Canaries. Abundant on the Tamarisk bushes. Extremely close to *C. 18-punctata* and with similar structural details.

Coccinella lyncea.

Coccinella lyncea, Oliv. Ent. VI. 1056. 106, pl. 7. 115 (1808).

Coccinella 12-pustulata †, Fabr. Suppl. p. 80 (1798).

Harmonia 12-pustulata, Muls. Secur. p. 121. 4 (1846).

Coccinella agnata, Rosenh. Beit. Ins. Eur. p. 64 (1847).

Southern Europe.

Form short, compact, punctuation strong, close, uniform; plates v-shaped, mesosternum emarginate, process of first ventral segment smooth, epipleuræ of elytra inclined, continuous almost to the apex, slightly foveolate for the femora.

Coccinella quatuordecim-pustulata.

Coccinella 14-pustulata, *Linn. Syst. Nat.* p. 368. 32 (1758).

Muls. Sécur. p. 93. 6.

Coccinella sinuatomarginata, *Fald. N. Mém. Mosc.* v. 404.
576, pl. 15. 4.

Muls. Spec. p. 1018.

Harmonia Billieti, *Muls. Op.* III. p. 16 (1853) T.

Coccinella Ghilianii *Bell. Ann. Fr.* (4) x. p. xxvii. (1870).

Europe generally (except England), Siberia, N. India (Deyrolle). Punctuation close, uniform, tolerably strong, that of the thorax much finer. Epipleuræ horizontal, ending at two-thirds, plates terminal, incomplete, mesosternum sometimes sinuate. The varieties cited differ by having certain of the marginal spots united, and slight variations of the pattern of the thorax (in *C. Billieti* it is black with the sides broadly white).

*Coccinella Marmottani.**

Coccinella Marmottani, *Fairm. Ann. Fr.* VIII. p. 501 (1868).

"Subhemisphærica, lævis, nigra, labro, thoracis lateribus, macula elytrorum basali cum macula marginali confluenta, macula discoidali, maculaque apicali flavis; pedibus flavis femoribus basi infuscatis." L. $2\frac{1}{4}$ mm. Maroc. Resembles *C. 14-pustulata*, but is much smaller, and with the spots confluent; the external margin of the thorax is straight, and the shoulders are not produced.

[Probably a variety of *C. 14-pustulata*.]

Coccinella miranda.

Coccinella miranda, *Woll. Cat. Can. Col.* p. 422 (1864).

Rotundato-ovalis; capite prothoraceque nigris, illo maculis duabus frontalibus pallido-flavis ornato, hoc brevi lato transverso, antice et ad latera (grosse marginata) anguste sed ad angulos anticos profunde et quadrate pallido flavo; elytris vel flavis, vel pallido-flavis, grosse marginatis, ad humeros obtuse rotundatis, linea suturali hastiformi (a scutello nigro fere ad apicem ducta, sed gradatim angustiore) et singulis plagis duabus elongatis arcuatis (una sc. in disco antico, longitudinali, et alterâ brevior subtransversa pone discum posticum) nigris; antennis pallido-testaceis; pedibus nigris, tarsis dilutioribus.

Variat elytrorum plagis plus minus latioribus, plaga antica elongata vel antice vel postice in lineam suturalem continuata necnon interdum macula parva media sublaterali aucta.

"Var. β (an species distincta?). Elytra magis rufescentia, linea suturali ad scutellum vix sed in medio sensim latiore necnon usque ad apicem ipsissimum ducta, plaga longitudinali antica in maculas parvas late fracta et altera laterali subrotundata (nec sublaterali elongata) aucta, plaga transversa postica fere evanescente, i. e. in maculas minutas 3 vel 4 fracta." Long. corp. lin. $1\frac{3}{4}$ — $2\frac{1}{5}$.

Habitat Canariam, Teneriffam, Gomeram et Palmam, in intermediis et elevatis degens, usque ad 9000' s. m. ascendens.

Plates not v-shaped, ventral process sparingly punctate, form more rounded.

Coccinella genistæ.

Coccinella genistæ, Woll. *Ins. Mail.* p. 464, t. 10, f. 5 (1854).

"Nigra, fortius punctata, capitis maculis 2, et prothoracis lateribus margineque antico (postice in medio integro, sed utrinque longissime et oblique producto) diluto-flavis, elytris diluto-flavis, sutura, macula subbasali communi, et lineis 2 longitudinalibus in singulo positis nigris ornatis tarsorum basi fusco-ferruginea." L. $1\frac{2}{3}$ — $1\frac{3}{4}$ lin. In montibus Maderæ (6000'), rarissima; supra plantas *Genistæ Scopariæ*.

I have only seen one specimen of this species, which I cannot assign with certainty to its proper place; in coloration it resembles *Chilomenes*.

Coccinella decem-punctata.

Coccinella 10-punctata, Linn. *Syst. Nat.* p. 365. 10 (1758).

Coccinella 10-pustulata, Linn. *Syst. Nat.* p. 368. 31 (1758).

Coccinella bimaculata, Pont. *Dansk. Atlas.* II. pl. 16 (1763).

Coccinella variabilis, Fab. *Gen. Ins. Mant.* p. 218 (1777).

" " *Muls. Sécur.* p. 93. 7. (1846).

Coccinella obliquata, Reiche *Ann. Fr.* II. p. 300. 12 (1862).

Coccinella biscutellata, Muls. *Mon.* p. 76. 5 (T).

Coccinella clathrata, Schauf. *Sitzb. Gesell. Isis.* 1861, p. 52.

Coccinella inconstans, Schauf. *Sitzb. Gesell. Isis.* 1861, p. 52.

Throughout Europe and Algeria. The most variable of the *Coccinellidæ*; but three forms are most commonly found, (A) elytra yellow with ten to thirteen black dots, (B) elytra black with ten luteous spots, (C) black with a humeral lunule. It is to this last that the name *variabilis* applies, hence I have restored the Linnæan name which at least indicated the normal type. It is to be distinguished generally by the subapical fold on the elytra, but this is absent in the specimens from Andalusia described by Schaufuss, and in all the English specimens that I have seen. *C. biscutellata* is a normal specimen with a false locality. The punctuation of the thorax is very fine, that of the elytra sparse and distinct, the mesosternum is entire or slightly sinuate, the

process of the first ventral segment impunctate, the epipleuræ acuminate at two-thirds.

Coccinella transgressa.

Coccinella transgressa, *Muls. Op.* III. p. 17 (1853) T.

Oval, rather narrow, black, finely and rather obsoletely punctate; thorax with the sides broadly, front margin narrowly, ochreous; elytra ochreous with a narrow sutural line and an undulate fascia at two-thirds blackish; underside and legs black. L. $1\frac{1}{4}$ lin. N. India (Deyrolle).

The type is in bad condition and evidently immature, but it seems to belong somewhere in this genus.

Coccinella undecim-punctata.

Coccinella 11-punctata, *Linn. Syst. Nat.* p. 366. 11 (1758).

” ” *Muls. Sécur.* p. 71. 1 (1846).

Coccinella Menetriesii, *Muls. Spec.* p. 104. 11 (1850).

Coccinella aegyptiaca, *Muls. Mon.* p. 86. 21 (1866) T.

Coccinella tripunctata†, *Mots. N. Mém. Mosc.* v. 424. 44, pl. 16 (1837) T.

Europe, N. Africa, Egypt, Syria, Siberia, N. California (St Petersburg); in sandy places near the sea. *C. Menetriesii* differs only by having the triangular spot at the anterior angles of the thorax produced in a narrow border to the posterior angles, which certainly does not seem to make a specific distinction.

Ventral process sparingly punctured, plates V-shaped; mesosternum entire. Punctuation of elytra uniform, tolerably close, distinct.

Coccinella quinque-punctata.

Coccinella 5-punctata, *Linn. Syst. Nat.* p. 365. 5 (1758).

” ” *Muls. Sécur.* p. 76. 2 (1846).

Europe generally; punctuation close and rather coarse.

Coccinella hieroglyphica.

Coccinella hieroglyphica, *Linn. Syst. Nat.* p. 365. 7 (1758).

” ” *Muls. Sécur.* p. 87. 5 (1846).

Northern Europe. Entirely black varieties are not uncommon, but they may be readily known from *C. 18-punctata* var. by their dull appearance, and the slightly margined elytra. Punctuation of the thorax close, rather fine; that of the elytra distinct; plates V-shaped, ventral process punctate.

Coccinella nivicola.

Coccinella Whitii, *Muls. Spec.* p. 108. 16 (1850).

Coccinella nivicola, *Muls. Spec.* p. 109. 17 (1850).

R. Amur, Baikal (Maack), Kamchatka, Sitka (St Petersburg). Broadly ovate, not convex, alutaceous, subopaque, finely not deeply punctured; epipleuræ horizontal; the elytra broadly impressed behind the shoulders (this is variable), plates V-shaped. The type of *Whitii* is not now in the British Museum, but I have specimens from Siberia agreeing with the description; it is generally larger, the punctuation more obsolete, the posterior spot smaller and transverse.

Coccinella monticola.

Coccinella monticola, *Muls. Spec.* p. 115. 24.

Coccinella lacustris, *Leconte, Proc. Phil.* p. 131. 3 (1852).

United States; Lake Superior, Chicago, Rocky Mountains, Vancouver's Island. I cannot see that *C. lacustris* differs appreciably, the depression behind the shoulder, on which Leconte lays stress, is certainly variable. It is very near *C. monticola*, having the same depressed form, obsolete punctuation, etc., and is in fact the American representative of that species.

Coccinella Mannerheimii.

Coccinella Mannerheimii, *Muls. Spec.* p. 106. 14.

Coccinella tricuspis||, *Kirby, Faun. Bor. Amer.* p. 231. 314 (1838) T.

Coccinella tricuspis, *Muls. Spec.* p. 107. 15.

Coccinella Kirbii, *Crotch, Cat. Cocc.* p. 3 (1871).

E. Siberia. Sent abundantly by Dr Maack from Irkutsk. Hudson's Bay (Kirby). Alutaceous, convex, elytra hardly margined, plates V-shaped, ventral process more thickly punctate. The American specimens cannot be separated specifically from the Asiatic ones.

Coccinella trifasciata.

Coccinella trifasciata, *Linn. Syst. Nat.* p. 365. 6 (1758).

” ” *Muls. Spec.* p. 119. 27.

Coccinella cimbicifugæ, *Pallas Iter.* III. p. 30. 73 (1773).

Coccinella juliana, *Muls. Op.* VII. p. 135 (1856) T.

Coccinella barda, *Leconte, Proc. Phil.* p. 286 (1860).

Lapland, Siberia, Hudson's Bay, California, Columbia? (Deyrolle).

Mulsant has separated the American form under the provisional name "*perplexa*." The variety *juliana* has only the basal band left, both the posterior ones being obliterated. Punctuation close and rather coarse.

*Coccinella Eugenii.**

Coccinella Eugenii, *Muls. Mon.* p. 95. 35 (1866).

"Subhémisphérique, thorax noir, paré en devant d'une bordure

d'un blanc flave, tiré à ses extrémités à une tache quadrangulaire de même couleur, couvrant les $\frac{2}{3}$. Elytres d'un roux jaune, ornées d'une tache scutellaire et chacune d'un point sur le calus et de deux bandes un peu obliquement transverses et raccourcies à leurs extrémités noires." L. $2\frac{1}{4}$ lin. California (Felix).

[This appears to be *C. trifasciata*, with the basal band divided.]

Coccinella transversoguttata.

Coccinella transversoguttata, Fald. Mém. Pet. (Sav. Etr.) II. 454. 97 (1835).

Coccinella transversoguttata, Muls. Spec. p. 117. 26.

Coccinella 5-notata, Kirby, Faun. Bor. Amer. IV. 230. 313 (1838) T.

Coccinella ephippiata, Zett. Ins. Lapp. p. 235. 9 (1840).

} *Coccinella transversalis*||, Muls. Spec. p. 117. 25.

} *Coccinella nugatoria*, Muls. Spec. p. 1021.

Coccinella Sedakovii, Muls. Spec. p. 1020.

Coccinella 9-stigma, Muls. Spec. p. 121. 28.

Coccinella californica, Mannh. Bull. Mosc. XVI. 312. 298 (1843).

" " Muls. Spec. p. 110. 18.

E. Siberia, Japan, Greenland, Hudson's Bay, California, United States, Mexico. I can see no appreciable differences in the specimens before me except those of colour. The black spots vary remarkably in their extent. The thorax has very rarely the anterior margin yellow, and then very narrowly, so that it cannot be confused with *C. 9-notata*, which is much more convex and more obsoletely punctured. In the original Siberian species the scutellar spot and the spot on the callus are connected forming a transverse band; in the variety *Sedakovii* the spots are much larger, especially the discoidal one, and the scutellar spot is rounded.

The American form *nugatoria* is exactly like the type, but with the humeral spot disconnected. The extreme variety *californica* has the elytra entirely pale.

Coccinella subversa.*

Coccinella subversa, Leconte, Proc. Phil. VII. p. 19 (1854).

Hemisphærica, nigra, capite ante oculos albo (ore clypeoque feminae nigris) thorace subtiliter punctulato, lateribus rotundatis, macula antica ad angulos quadrata, apiceque albis; elytris distincte at subtiliter punctulatis, scutello nigro, et præcipue macula obliqua ad medium nigra notatis. L. .2. Oregon (Leconte).

Very like *C. californica*, but smaller and more distinctly punctured.

[If Dr Leconte has taken pale vars. of *C. 9-notata* for *C. californica* then this may be a variety of *transverso-guttata*.]

Coccinella Saucerottii.*

Coccinella Saucerottii, *Muls. Spec.* p. 111. 20.

Kiakhta (St Petersburg). This must be allied to *C. transversoguttata*, but I know of nothing answering to the description given by Mulsant, in which I am almost disposed to imagine there must be some error.

Coccinella septem-punctata.

Coccinella 7-punctata, *Linn. Syst. Nat.* p. 365. 8 (1758).

Muls. Sécur. p. 79. 3 (1846).

Coccinella divaricata, *Oliv. Ent.* vi. p. 1001. 21, pl. v. 67 (1808).

Coccinella divaricata, *Muls. Spec.* p. 112. 21 (1850).

Europe, N. Africa, Madeira, Angola, Siberia, India. The Indian variety *divaricata* differs only by the tendency of the spots to unite irregularly, and similar varieties have occurred (though very rarely) in Europe (Greece).

Coccinella distincta.

Coccinella distincta, *Redt. Tentamen*, p. 24. 13 (1842).

Coccinella labilis, *Muls. Sécur.* p. 84. 4 (1846).

England, France, Germany. This species is very near the preceding, but appears to differ in the shape of the thorax and the colour of the meta-epimera.

Coccinella Bruckii.

Coccinella Bruckii, *Muls. Mon.* p. 90. 27 (1866) T.

Extremely like *C. 7-punctata*, but rather larger, more hemispherical, less closely punctured; the colour of a darker red, the black spots all larger and rounder, especially the scutellar and discoidal ones; the subapical spot subtransverse; meso-epimera white. L. $3\frac{1}{2}$ lin. Japan (Janson, v. Bruck).

[Additional specimens from Japan, sent by Mr Lewis, seem to afford passages to *C. 7-punctata*.]

Coccinella novem-notata.

Coccinella 9-notata, *Herbst, Käfer*, v. 269. 8, pl. 55. 8 (1793).

Muls. Spec. p. 123. 29.

Coccinella franciscana, *Muls. Op.* III. p. 19 (1853).

United States, Mexico, Guatemala. Distinct at once by the punctuation of the elytra which is hardly visible even with a lens, and the white anterior margin of the thorax. Entirely pale varieties occur.

Coccinella repanda.

Coccinella repanda, *Thunb. Nov. Sp. Ins.* i. p. 18, f. 25 (1781).

Muls. Spec. p. 124. 30 (1850).

China, India, Java, Bali, Flores, Singapore (Wallace), Triton Bay, Australia (Queensland, Sydney), Tasmania, N. Caledonia.

Distinctly alutaceous, punctuation faint and sparse; colour pale ochreous. Mulsant (l. c. p. 1022) proposed to restore the Fabrician name "*transversalis*" to this species; but has not done so in his later works.

Coccinella leonina.

Coccinella leonina, *Fabr. Syst. Ent.* p. 87. 54 (1775) T.

Coccinella leonina, *Muls. Spec.* p. 128. 31.

New Zealand; apparently not rare. This species has the appearance of being an extreme form of *C. repanda*, but I have never seen any leads that would justify their reunion.

Coccinella conformis.

Coccinella conformis, *Boisd. Voy. de l'Astrol.* p. 604. 24 (1835).

Leis conformis, *Muls. Spec.* p. 261. 13.

Australia, Queensland, Tasmania, Swan River.

Surface alutaceous, punctuation distinct. Epipleræ inclined, but acuminate some distance before the apex, abdominal plates V-shaped.

Coccinella antipodum.*

Coccinella Antipodum, *White Ann. N. H.* (2) I. p. 66 (1849) T.

Muls. Spec. p. 1019.

N. Zealand (B.M.), Sydney (Stockholm). A variable species.

Stictoleis.

g. n. (*typ. coryphæa*).

Differs from *Leis* by its ovate, very convex form, the elytra not flattened out at the sides, the scutellum not sinuate before the tip. The species are at present confined to Africa and are variable.

Stictoleis coryphæa.

Coccinella coryphæa, *Guérin. Icon. R. A.* p. 320 (1844).

Leis coryphæa, *Muls. Spec.* p. 249. 7.

Madagascar. The real distinction of this species is its obsolete punctuation which is scarcely visible with a lens.

Stictoleis Thonningii.*

Leis Thonningii, *Muls. Spec.* p. 257. 11 (T).

Guinea (Copenhagen). Here the thorax has only two spots, basal; the elytra has four in each of the central rows (instead of three); the punctuation is fine and obsolete, as it is in *L. coryphæa*, but a little more evident.

Stictoleis vigintiduo-maculata.

Coccinella 22-maculata, Fabr. *Ent. Syst.* I. 281. 70 (1792).

Leis 22-maculata, Muls. *Spec.* p. 252. 8.

Leis 22-signata, Muls. *Spec.* p. 255. 10.

Leis clathrata, Muls. *Spec.* p. 253. 9 (T).

Coccinella 28-maculata], Thoms. *Arch. Ent.* II. p. 237 (1858).

Guinea. Notwithstanding Mulsant's long description I can discover no character to separate these species. The red scutellum is always from defective pigment, not natural as in *L. coryphæa*; again the colour in this and in *L. instabilis* is ochreous yellow, not ochreous red as in *L. coryphæa* and *L. Thonningii*.

Stictoleis instabilis.

Leis instabilis, Muls. *Spec.* p. 259. 12 (T).

Cape of Good Hope. In this the black spots sometimes run together and form a lattice-work, leaving eight yellow spots. It differs from the Guinea species by having generally only four spots on the thorax, and of these the two basal ones more approximated.

Leis.

Muls. Spec. p. 241 (*typ. dimidiata*).

The abdominal plates are terminal, or nearly so, and continued externally, forming a sort of V; and the inner margin of the elytral epipleuræ is effaced at about three-fourths: this is characteristic of the genus. The punctuation is evident, the elytra finely margined. The scutellum with a few coarse punctures and sinuate before the apex which is acute.

Of the other species added by Mulsant, *L. inflata* is congeneric with *Caria regalis*, forming the new genus *Cyrtocaria*; *L. javana* is simply *Caria Duvaucelii*, *L. Rougeti* = *Synia melanaria*, *L. gibbipennis* = *Cyrtocaria regalis*; on the other hand he has described one species of this genus as *Caria*. The ovate species at the end of the genus come better near *Coccinella*.

Leis dimidiata.

Coccinella dimidiata, Fabr. *Spec. Ins.* I. p. 94. 5 (1781).

Leis dimidiata, Muls. *Spec.* p. 242. 1.

Coccinella basalis, Redt. *Hügel's Caschm. Reise*, IV. 563. 1.

Coccinella dimidia, Hope, *Zool. Misc.* p. 31 (T).

Coccinella bicolor, Hope, *l. c.* (T).

Mulsant himself (p. 244) suspected the identity of these species. They differ only by the presence of a humeral spot and the greater or less extension of the black on the thorax and elytra. The punctuation is sparse and not strong. India, Nepaul.

Leis manillana.

Caria manillana, *Muls. Mon.* p. 170. 7 (T).

Leis atrocincta, *Muls. Mon.* p. 175. 4 (T).

Philippine Isl. (Deyrolle, B.M., Berlin). A very variable species, if the forms that I have thrown together are really referable to one specific type, as I cannot but suppose from their precise structural similarity.

Var. *a. manillana*.

Reddish-orange, head and thorax paler; scutellum black; elytra margined all round with a very narrow black margin, an obovate spot on the sutural edge of the callus, and irregular indications of a fascia just before the middle and at two-thirds, black; epipleuræ with the outer edge and apical third black. L. 4 lin. Manilla (Deyrolle).

Var. *β. atrocincta*.

Hemispherical, orange-red, head and thorax paler; base of thorax very narrowly and irregularly black; scutellum black; elytra with a broad black margin from the humeral angle to the apex, this border narrowest at the base, broader just below the callus, and markedly broader at two-thirds, continuing equal till it reaches the suture; the external edge of the epipleuræ and their apical one-third black. L. 4 lin. Manilla (Berlin, B. M.).

Var. *γ. Mniszechii*.

Thorax with the central third black, narrowing towards the front elytra with a black spot on the callus, another discoidal near the suture before the middle; the scutellum and margins broadly black, extending over the apical third in a straight line to the suture. Mindanao (Mniszech).

Var. *δ. incompleta*.

Ochreous, thorax black, sides broadly ochreous, scutellum black, elytra with three subtriangular black spots (one basal reaching the callus, one a little before the middle, one beyond the middle markedly triangular), the second and third spots hardly visible on the epipleuræ. L. 4 lin. Philippines (London).

Leis Paulinæ.

Neda Paulinæ, *Muls. Mon.* p. 203. 17.

Scarcely separable from *Docimocaria Cumingii*, except by the generic characters. Reddish-orange, hemispherical; scutellum and a small dot on the base of the thorax opposite it, black; elytra each with three subquadrate black dots, two marginal (one before the middle, one at two-thirds, the second visible on the epipleuræ), one discoidal near the suture, in a line with the first marginal; these two might probably form a fascia. L. 4 lin. Manilla (Deyrolle, Mniszech).

I have not seen the type of this, but the description is exact.

Leis Dunlopi, sp. n.

Reddish-testaceous, thorax paler, with a basal spot (variable in size) in front of the scutellum, which is black; elytra with five black spots, placed 1, 2, 1, 1; one on the callus, two transversely placed before the middle (one near the margin, one near the suture); one near the margin at three-fourths, one sublinear, close to the suture, subapical (not touching the apex); body beneath and legs testaceous. L. $3\frac{1}{2}$ lin. India (Dublin, B.M.).

In some specimens an additional spot is present near the suture.

Leis cerasicolor, sp. n.

Hemispherical, rich carmine-red, head, body, and legs dirty orange; thorax black, anterior angles orange; scutellum black, elytra carmine-red, the suture very narrowly edged with black, and with two black fasciæ; one just before the middle, narrowest at the margin, and irregular along both edges; the other arcuate, concave posteriorly at three-fourths, thus inclosing an apical spot; the two fasciæ faintly indicated on the epipleuræ, the metasternum and base of the first ventral segment black. L. 4 lin. Bourou (Wallace).

Leis aterrima, sp. n.

Similar to *L. cerasicolor* but entirely black, except the labrum, the anterior edge of the clypeus, the anterior margin of the thorax from the angle to the bottom of the emargination, the inner basal angle of the elytral epipleuræ, which are orange; punctuation extremely fine and obsolete. L. 4 lin. Ceram (Wallace).

Leis papuensis, sp. n.

Again very similar to *L. cerasicolor* in form, but with the punctuation clearer and more evident; the colour is reddish orange, or even ochreous yellow; thorax black, the anterior angles margined tolerably broadly with ochreous from the middle of the sides to the bottom of the emargination; the elytra everywhere narrowly margined with black, and with two black fasciæ; the first is slightly oblique from the suture to the margin; the second is broader and more angulated than in *L. cerasicolor*. L. 4 lin. New Guinea (Wallace).

The metasternum at the sides and the exterior margin of the epipleuræ black.

Var. *suffusa*.

The black colour has extended down the elytra, leaving a quadrate spot at the humeral angle and a rounded subapical spot orange; a very small orange dash in the broad black fascia shews that it is composite. L. 4 lin. N. Guinea. I had at first re-

garded all these three species as one, but the punctuation and the shape of the thorax present some slight differences. Further material can alone decide the question.

Leis Deyrollii, sp. n.

The only specimen I have seen is unfortunately imperfect; elytra black, rather closely and evidently punctate, a humeral subquadrate spot and an apical rounded spot carmine-red, both reaching the margin; body and legs beneath orange. L. 3 lin. ?

Leis quindecim-maculata.

Coccinella 15-maculata, Hope, *Zool. Misc.* p. 30 (1831) T.

Leis 15-maculata, Muls. *Spec.* p. 246. 5.

Coccinella 15-spilota, Hope, *Zool. Misc.* p. 30 (1831) T.

Leis 15-spilota, Muls. *Spec.* p. 248. 6.

India, China (Foochow); not rare; on thistles. Why Mulsant placed these two forms (which only differ in a slight excess of pigment) in two sections, I am unable to see.

Leis crucigera.*

Coccinella crucigera, Schön. *Syn. Ins.* II. p. 182. 87. pl. IV. 4 (1806).

"Subrotunda, gibbosa, saturate rubra nitida, elytrorum limbo, sutura fascia media, maculisque 4 atris. Ind. or." (Kymell).

"Magna, elegans, statura *C. versicoloris* sed dimidio fere minor, nitida, subtilissime obsolete punctulata. Caput parvum, rubrum, immaculatum. Thorax parvus, postice et lateribus rotundatis, antice late emarginatus, angulis parum productis obtusis, limbo postico inæqualiter atro. Scutellum breve, triangulare, acutum, nigropiceum. Elytra magna rotundata valde convexa, gibbosa, nitida, limbo toto, bascos angustius, atro; sutura tota late atra; paulo ante medium fascia atra transversa, limbum marginis non attingens; ante fasciam in medio macula solitaria rotundata atra, et pone fasciam alia major obconica, obliqua margini connexa. Alæ obscure fuscæ apice pallidiores. Corpus subtus dilutius rufum pectore abdominisque basi media nigris. Pedes pallidi rufi." (Gyllenhal.)

Leis La Peyrousii.*

Coccinella La Peyrousii (Boisd.) *Voy. de l'Astrol.* T. VIII. f. 20.

This species obtained from N. Guinea seems to come best in this genus.

Ptychanatis.

g. n. (*typ. axyridis*).

The species of this genus, hitherto ranked in *Leis*, are extremely

variable. Mulsant has placed them in *Coccinella* and in *Anatis*; the antennæ are very much those of *Anatis*, the plates are V-shaped as in *Coccinella*, the elytra have not unfrequently an apical plica; the epipleuræ are inclined, but acuminate before the apex.

Ptychanatis axyridis.

Coccinella axyridis, *Pall. Iter.* III. p. 29. 71 (1773).

Leis axyridis, *Muls. Spec.* p. 266. 15 (1850).

Coccinella russica, *Herbst, Arch.* v. 49. 34, pl. 22, f. 26 (1784).

Coccinella bissex-notata, *Herbst, Käfer*, v. 303, pl. 56, f. 14 (1793).

Coccinella 19-signata, *Fald. Mém. Pét. (Sav. Etr.)* II. p. 456. 99 (1835).

Leis 19-signata, *Muls. Spec.* p. 264. 14 (1850).

Coccinella 18-spilota, *Hope, Tr. Ent. Soc.* IV. p. 13 (1845) T.

Coccinella succinea, *Hope, Tr. Ent. Soc.* IV. p. 13 (1845) T.

Anatis mobilis, *Muls. Spec.* p. 1025 (1850).

Leis frigida, *Muls. Op.* III. p. 33 (1853).

Anatis circe, *Muls. Op.* VII. p. 142 (1856) T.

Coccinella multiplicata, *Muls. Mon.* p. 78. 6 (1866) T.

Coccinella aulica, *Fald. Mém. Pét. (Sav. Etr.)* II. 451. 94, pl. v. 11 (1835).

Leis aulica, *Muls. Spec.* p. 1027.

Coccinella Besseri, *Fald. l. c.* p. 449. 92, pl. v. 10 (♀).

Leis Besseri, *Muls. Spec.* p. 1029.

Coccinella spectabilis, *Fald. l. c.* p. 450. 93.

Leis spectabilis, *Muls. Spec.* p. 1031.

Coccinella conspicua, *Fald. l. c.* p. 448. 91.

Leis spectabilis, *Muls. Spec.* p. 1030.

Daulis Henoni, *Muls. Spec.* p. 321. 18 (T).

Lemnia Henricæ, *Muls. Mon.* p. 253. 8 (T).

Lemnia insidiosa, *Muls. Mon.* p. 254 (T).

E. Siberia, N. China, Manchuria, Japan; sometimes abundant. The fine series brought by Mr Lewis from Japan and China shews conclusively that all the above forms are colour-varieties of a single species. It will be seen that the range of variation is exactly that of *Coccinella 10-punctata*, and the resemblance is enhanced by the presence (in the majority of cases) of an apical plica. In the present species the extreme black form is not so constant as in *C. 10 punctata*, where only a humeral lunule is left orange, while here there are one or more spots, or an irregular ring red.

Ptychanatis bissex-notata.

Leis bis-6-notata, *Muls. Spec.* p. 269. 16 (T).

Dauria (Dejean). Amur (Maack). This species resembles *Propylea* in coloration.

Anatis.

Muls. Sécur. p. 123 (*typ. ocellata*).

Antennæ longer than in *Coccinella*; plates terminal, incomplete, meso-sternum deeply emarginate, epipleuræ of the thorax impressed, of the elytra acuminate (but reaching the apex); ventral segments with the sides closely punctured and impressed. Claws with a broad basal tooth; prosternum compressed. The additional species given by Mulsant (1866) have nothing to do with the genus.

Anatis ocellata.

Coccinella ocellata, Linn. *Syst. Nat.* (1758).

Anatis ocellata, *Muls. Sécur.* p. 133. 1 (1846).

Coccinella hebræa, Linn. *Syst. Nat.* (1758).

Europe, Siberia. The variety *hebræa* is commoner in Siberia than elsewhere, but I have seen it from France and England. The sutural patch of pubescence is a good character for this species. The punctuation is close, evident, and somewhat unequal.

Anatis quindecim-punctata.

Coccinella 15-punctata, Oliv. *Ent.* vi. p. 1027. 57, pl. vi. 83 (1808).

Anatis 15-punctata, *Muls. Spec.* p. 133. 1.

Coccinella mali, Say, *J. Acad. Phil.* iv. 93. 2 (1824).

United States, St Domingo (Olivier). This is one of those representative American forms that it is very difficult to distinguish from the European; the elytra are more ventricose, but the punctuation is identical; the sutural patch of pubescence is sometimes present (var. *signaticollis*, Muls.) and sometimes not, but no other difference exists between them. I have never seen any variety like our *hebræa*.

Anatis Rathvoni.

Mysia Rathvoni, Leconte, *Proc. Phil.* p. 132. 1 (1852).

"Lata ovata, utrinque fortius angustata, thorace lateribus rectis, maculis duabus baseos lateribusque late albis, his puncto nigro notatis, elytris picco-rufis, lateribus usque ad medium explanatis." L. 4.

Sacramento, California.

Broadly oval, very convex, strongly narrowed before and behind, so as to be almost angulated at the middle on the sides. Head black with an obscure rufous spot in each side. Thorax twice as wide as long, strongly narrowed in front, sides nearly straight broadly margined; black with two basal spots and a very broad lateral margin white; the sides have a marginal black spot

near the posterior angles. Elytra piceo-rufous, with some very indistinct black dots, of which the posterior series, consisting as in *M. 15-punctata* of six spots, is most distinct; the lateral margin from the base to the point of greatest breadth is strongly flattened and concave, and is blackish towards the middle. Beneath black.

Mysia.

Muls. Sécur. p. 128 (*typ. oblongo-guttata*).

Claws long, punctuation fine and sparse, surface alutaceous; thorax and elytra with the edges broadly reflexed but not (or hardly) thickened. Mesosternum sinuate.

Mysia oblongo-guttata.

Coccinella oblongo-guttata, *Linn. Syst. Nat.* p. 367. 26 (1758).

Mysia oblongo-guttata, *Muls. Sécur.* p. 129. 1.

Mysia Mulsanti, *Schauf. Sitz. Ber. Isis*, p. 52 (1861).

Mysia Vogeli, *Schauf. Sitz. Ber. Isis*, p. 50 (1861).

Mysia lignicolor, *Muls. Mon.* p. 109. 4 (1866) T.

Coccinella camtschatcensis, *Gmel. Syst. Nat.* i. 1658. 124 (1789).

Coccinella ramosa||, *Mannh. Bull. Mosc.* vi. 71, pl. III. 7.

Mysia ramosa, *Muls. Spec.* p. 139. 3.

Europe, Siberia. The variety *ramosa* is analogous to *Anatis hebræa*. The Spanish varieties are more rounded and subhemispherical, but do not substantially differ. It is generally common on pine-trees.

M. lignicolor from Brazil is probably a false locality.

Mysia pullata.*

Coccinella pullata, *Say, J. Acad. Phil.* v. 301. 1 (1825).

Coccinella notans, *Rand. Bost. J. N. H.* II. 49. 26 (1838).

Mysia notans, *Muls. Spec.* p. 137. 1.

United States.

Mysia subvittata.

Mysia subvittata, *Muls. Spec.* p. 138. 2 (T).

Western States (Reiche). The dilated elytra seem to indicate a new genus, to which both *M. pullata* and *M. Gerstäckeri* may be referred. The margins of the elytra are less reflexed, and visibly thickened; the punctuation is very fine.

Mysia Gerstäckeri.*

Pelina Gerstäckeri, *Muls. Mon.* p. 194. 11 (1866) T.

Rounded, rather convex, very finely punctulate; yellowish ochreous varied with red-brown bands; thorax ochreous with four

reddish spots arranged in the letter M at the base (or spotless); elytra ochreous, each with the margin and suture narrowly, three longitudinal vittæ, and a short basal streak between the first and second, red-brown; the vittæ are all free, and the first and second join before the apex; the margins are largely flattened out and dilated behind the shoulder. L. 4 lin. Brazil? (Berlin), Mexico (Boucard).

Pelina.

Muls. Spec. p. 271 (*typ.* Lebasii).

Distinguished by the long antennæ which have the club dentate within. Scutellum with a central fold, apparently impunctate; elytra dilated before the middle, the humeral margin recurved.

Pelina Lebasii.

Pelina Lebasii, *Muls. Spec.* p. 271. 1 (T).

Columbia. Apparently rare.

Pelina Borrei, sp. n.

Black, thorax with a large irregular quadrate yellow spot at the anterior angles; elytra rufo-testaceous, with a common scutellar spot, and each with six others, black; one basal on the callus, three in a transverse row arcuate posteriorly, two behind the middle placed a little obliquely; exterior margin very narrowly (near the spots more evidently) margined with black. L. 4 lin. Brazil (Brussels).

Palla.

Muls. Spec. p. 273 (*typ.* hydropica).

Scutellum strongly punctured.

Palla hydropica.

Pelina hydropica, *Muls. Spec.* p. 273. 2.

Mexico (Bouchard); apparently not rare, and at once distinguished by the strongly dilated elytra.

Ballia.

Muls. Op. III. p. 35 (*typ.* Christophori).

Allied to *Pelina*; form ovate, antennæ long, prosternum compressed. [*B. Gerstäckeri*, *Muls.* is a *Mysia*.] Elytra margined; thorax with an impressed line following the anterior margin, sometimes obsolete in the middle.

Ballia Christophori.

Ballia Christophori, *Muls. Op. Ent.* III. p. 35. 1 (T).

Black; a spot on the front, and two fasciæ on the elytra pale yellowish; the first basal, extending to the margin, but leaving

the suture narrowly black, in width about one-fifth; the second just before the apex; rather broader than the first; or yellow with the apex and a fascia before the middle black. L. $3\frac{3}{4}$ lin. India.

Var. *a.* Elytra suffused with black, so as to almost obliterate the posterior fascia.

Ballia Mayeti.

Pelina Mayeti, *Muls. Mon.* p. 189. 4 (T).

Pale yellowish-ochreous, thorax with the central third black; elytra with the suture narrowly, a narrow uniform fascia reaching the margin before the middle, a dot on the callus and one discoidal before the apex, black; breast underneath black. L. 4 lin. India.

Var. *β.* *montivaga*, *Muls. Op.* III. p. 39 (T).

Elytra unicolorous, ochreous, legs and body beneath black.

Var. *γ.* *eucharis*, *Muls. Op.* III. p. 39 (T).

Elytra ochreous yellow, with three dots representing the full markings; body black, legs pale yellow.

Var. *δ.* *testacea*, *Muls. Op.* III. p. 41 (T).

Uniformly ochreous above and below.

I have felt justified in uniting the above species, though I have seen very few specimens, but of these scarcely any two were alike, and a further series would shew probably all the passages.

Ballia Bayaderæ.

Neda Bayaderæ, *Muls. Mon.* p. 200. 11.

Head black, with two small yellow dots; thorax black, sides broadly white (as in *B. Mayeti*); elytra reddish brown, external margin black; body beneath black, legs and abdomen brownish. L. $3\frac{1}{2}$ lin. India (Deyrolle). Of this I have only seen one specimen, and it is probably a form of some unknown species.

Ballia Dianæ.

Ballia Dianæ, *Muls. Op.* III. p. 167 (T).

Ballia Brahmæ, *Muls. Op.* III. p. 36.

Red-brown, head whitish; thorax with the sides broadly whitish (not so broad as in *B. Mayeti*, and the inner edges of the white colour converge forwards); elytra with seven white spots, ringed with dark brown, two basal (one marginal and one by the scutellum), three medial (one marginal, two close together near the suture), two subapical (one marginal, the other united to it by one corner); body and legs dark brown. L. $4\frac{1}{2}$ lin. India (Deyrolle).

Var. *β.* *Saundersii* var. *nov.*

Similar to the type, but with the legs pale, the disc of the thorax black, with a central reddish-brown line; the elytra besides

the seven white spots have ten black ones intercalated; two basal (one humeral, encroaching on the similar white one, one on the callus, and one common), three before the middle, three behind the middle (one marginal, one discoidal, one common, elongate), one subapical, leaving the apex free; these alternate with the rows of white spots. India (Saunders).

Var. γ . *perplexa*, var. nov.

Here the central line of the thorax has disappeared, the white spots are all present, but only the second series of black ones, which unite to form a fascia. India (Fry).

Var. δ . *Zephirineæ*, *Muls. Mon.* p. 190. 6 (T).

The thorax is now uniformly ochreous with two converging black vittæ on either side the middle, and a small ill-defined brown dot in the anterior angle; the elytra are paler in colour and have the ten black dots alone present, the white ones being entirely absent. India (Deyrolle).

Var. ϵ . *Gustavii*, *Muls. Mon.* p. 190. 7 (T).

The typical specimen is larger, and the ten spots reduced to a yellowish brown on a light ochre ground colour, otherwise it precisely resembles var. δ . India (Deyrolle).

I have only seen about 8 or 9 specimens in all of this species, and probably a series would conclusively prove the justness of the above union.

Sospita.

Muls. Séc. p. 136 (*typ. tigrina*).

Mesosternum entire, punctuation coarse, evident, elytra with the margin thickened, hardly reflexed. This is much nearer *Coccinella*, and differs only by the antennæ and epipleuræ. *S. flavolineata* added by Mulsant is a *Verania*.

Sospita tigrina.

Coccinella tigrina, *Linn. Syst. Nat.* p. 368. 36 (1758).

Sospita tigrina, *Muls. Séc. p.* 137.

Europe generally; on alders. Not found in England.

Sospita chinensis.

Sospita chinensis, *Muls. Spec.* p. 142. 2.

China; Hongkong (Boucard), Foochow (Lewis). Differs from *S. tigrina* by its less convex, more elongate form; the punctuation is finer, especially on the thorax which is alutaceous; the epipleuræ of the elytra end at five-sixths.

Myrrha.

Muls. Sécur. p. 125 (*typ.* 18-guttata).

Antennæ with the club elongate; abdominal plates covering about half the segment only, irregular externally, epipleuræ acuminate before the apex, mesosternum entire; thorax bisinuate at the base. This would come near *Adalia* were it not for the antennæ.

Myrrha octodecim-guttata.

Coccinella 18-guttata, *Linn. Syst. Nat.* p. 367. 24 (1758).

Myrrha 18-guttata, *Muls. Sécur.* p. 125. 1 (1846).

Myrrha formosa, *Costa, Faun. Nap.* fasc. 65, pl. i. f. 4 (1849).

Coccinella Andersoni, *Woll. Ann. N. H.* (3), x. 227 (1862).

Europe (England, Sweden, France, Germany, Spain, Italy), Madeira.

Punctuation rather coarse and close. On pine trees.

Clynis.

Muls. Spec. p. 1023 (*typ.* humilis).

[*Cleis*||, *Muls. Spec.* p. 136.]

Antennæ tolerably long, joints of club elongate, mesosternum sinuate, claws short, plates terminal incomplete, punctuation faint and very sparse.

Clynis humilis.

Cleis humilis, *Muls. Spec.* p. 136. 1 (T).

St Vincent (Hope), Trinidad (Fry). A very curious little species rather unlike the rest of the group.

Neocalvia.

Crotch, Cat. Cocc. p. 4 (*typ.* cayennensis).

Punctuation faint, sparse, surface alutaceous, thorax faintly emarginate in front, mesosternum not deeply emarginate.

Neocalvia duodecim-guttata.

Coccinella 12-guttata||, *Fabr. Mant.* II. p. 379 (1787).

Coccinella cayennensis, *Gmel. Syst. Nat.* I. 1660. 156.

Calvia cayennensis, *Muls. Spec.* p. 148. 6.

Cayenne. Punctuation very faint and sparse, elytra with the margins evidently reflexed.

Neocalvia fulgurata.

Calvia fulgurata, *Muls. Spec.* p. 150. 7 (T).

Cayenne (Reiche, Buquet). A little more evidently punctured than in *C. cayennensis*; and differing by the white oblique streaks on the thorax.

Neocalvia Guerinii, sp. n.

Very like *N. fulgurata*, with which it was confounded in Guérin's collection. Thorax similarly coloured, elytra with a scutellar common spot, and each with a dental fascia at one-third (not reaching the suture), another at two-thirds (prolonged along the suture to the apex), a third apical, joined by a narrow line to the second. L. $2\frac{1}{2}$ lin. Brazil.

Neocalvia anastomozans.

"*Calvia anastomozans*," *Deyr. MSS.*

Closely resembling *N. fulgurata* but more evidently punctured; the thorax is exactly similar, the elytra have each 7 irregular brown spots on a whitish ground; three parallel to the margin (being a vitta divided at one-fourth and at three-fifths), three again parallel to these (the first longest, the second small and the third larger triangular, filling up the apex of the elytra), one elongate narrow parallel to the suture for half its length; suture narrowly brown. L. $2\frac{1}{2}$ lin. Brazil (Deyrolle).

Neocalvia Mniszechii.

Hemispherical, legs and body testaceous; head, sides of thorax narrowly, margin of elytra, two narrow transverse lines, and epipleuræ ochreous; alutaceous, sparsely but pretty distinctly punctate; elytra with the base, the external margin, a transverse line at one-third, another at two-thirds (sloping forwards), a line parallel (and close) to the suture, connecting the base and the first fascia, also the second fascia and the apex, all ochreous. L. $2\frac{3}{4}$ lin. Cayenne (Mniszech).

Neocalvia Blanchardi.*

Calvia Blanchardi, *Muls. Spec.* p. 147. 5.

Valle Grande (Paris). This I have not seen.

Egleis.

Muls. Spec. p. 151 (*typ. adjuncta*).

This genus is to me of doubtful value; mesosternum hardly sinuate. Epipleuræ broad, concave, sub-inclined.

Egleis Fischeri.*

Egleis Fischeri, *Muls. Spec.* p. 152. 1.

Brazil (St Petersburg). I have not seen this.

Egleis constellata.*

Egleis constellata, *Muls. Spec.* p. 155. 3.

Matto Grosso, Brazil (Paris). This I have not seen.

Egleis adjuncta.

Egleis adjuncta, *Muls. Spec.* p. 156. 4.

Columbia, Bogota, Mexico. Alutaceous, punctuation apparent, sparse, thorax decidedly sinuate behind the posterior angles.

Egleis perfida.

Psyllobora perfida, *Muls. Mon.* p. 130. 9 (T).

Subhemispherical, short, rounded, punctuation similar to that of *E. adjuncta*; thorax less decidedly sinuate at the base, reddish ochreous with two small distant basal spots; elytra whitish yellow with a reddish margin, and each with seven black spots; one on the callus, 3 (rather confused) transversely at one-third, one near the margin at two-thirds, two very small parallel to the suture making a triangle with the fifth: under surface and legs pale red, pectus blackish. L. $2\frac{1}{4}$ lin. N. Granada (Deyrolle).

Egleis varicolor.

Egleis varicolor, *Muls. Spec.* p. 154. 2 (T).

Sydney (Reiche), Rockhampton (B. M.). Punctuation of the elytra very coarse and close, that of the thorax very fine and sparse.

Egleis Edwardsii.

Egleis Edwardsii, *Muls. Spec.* p. 158. 5.

Australia, Queensland. Punctuation rather coarse and evident, thorax slightly emarginate in front, sides rounded, suggesting an affinity to *Psyllobora*.

E. Pascoei, sp. n.

Extremely near *E. Edwardsii*, but differing in pattern. Thorax whitish yellow with three lines starting from the base (one central and two oblique), these three connected by a transverse sinuous discoidal line (broader than the vertical ones); on the bright yellow elytra are four narrow vittæ (instead of three), the outer one is interrupted in the middle, and joins the second at the base; the second and third are joined as in *E. Edwardsii* but the transverse branch given off at the base is directed obliquely towards the suture; the fourth extends parallel to the suture from the base and joins the second behind. L. $2\frac{1}{2}$ lin. Australia (Pascoe).

Halyzia.

Muls. Sécur. p. 148 (*typ.* 16-guttata).

Resembles the preceding in most respects; the mesosternum is however slightly emarginate; the epipleuræ of the elytra are very curious, being inclined, very broad, and parallel to about five-sixths when an almost obsolete fold appears to indicate their termination.

Halyzia sedecim-guttata.

Coccinella 16-guttata, Linn. *Syst. Nat.* p. 367. 23 (1758).

Halyzia 16-guttata, Muls. *Sécur.* p. 148.

Europe, Siberia (Maack). Common on ash-trees.

Thorax finely and sparsely punctured, elytra very coarsely punctate, not alutaceous.

Halyzia sanscrita.

Halyzia sanscrita, Muls. *Op.* III. p. 24 (1853) T.

Similar to *H. 16-guttata* in colour and structure, but smaller. Thorax with five white spots, one in the centre of the base, and two on each side; elytra each with ten marks and the suture narrowly, creamy white; 4 ovate, sub-marginal spots about equidistant, the first humeral, the last apical; a narrow vitta extending parallel to the first three marginal spots, another vitta curved towards the suture, dilated at its base (on the callus) and apex; two spots (sometimes connected) between this and the suture, and two more, making with the apical spot a line of three parallel to the suture. L. $2\frac{1}{2}$ lin. W. India (Deyrolle). [Omitted by Mulsant in 1866.]

Halyzia straminea.*

Coccinella straminea, Hope, *Zool. Misc.* p. 31 (1831) T.

Halyzia straminea, Muls. *Spec.* p. 165. 2.

Nepaul (Hope, B. M., India Mus.). Punctuation of the elytra evident, but sparse; almost obsolete on the reflexed margins; epipleuræ broad and concave.

Halyzia funerea, sp. n.

Sub-orbiculate, rather convex, rich orange; pectus and elytra (with three orange spots) black; thorax with two approximated badly defined black triangles on the base; elytra rather sparsely and very distinctly punctured, a subtransverse oval orange spot by the scutellum on the base, another at the humeral angle, another ovate subapical, reaching the margin just before the apex. L. $3\frac{1}{4}$ lin. Dorey (Wallace).

Halyzia Pallasii.*

Halyzia Pallasii, Muls. *Spec.* p. 1025.

Marianne Isl. (St Petersburg). I have not seen this.

Cleobora.

Muls. Spec. p. 1025 (*typ. Mellyi*).

[*Cleodora*], *Muls. Spec.* p. 180.]

Antennæ with the club elongate, mesosternum emarginate, thorax hardly emarginate in front, elytra hardly thickened at the

margin which is produced but not reflexed, eyes rather deeply emarginate.

Cleobora Mellyi.

Cleodora Mellyi, *Muls. Spec.* p. 160.

Australia, Tasmania, Queensland. Punctuation coarse, subrugulose.

Neohalyzia.

Crotch, Cat. Cocc. p. 4 (*typ.* Perrondi).

Antennæ very long, thorax bisinuate at the base, and sinuate for the head in front, sides broadly concave, elytra coarsely punctured, alutaceous; legs long, claw-joint as long as the other two, or longer; mesosternum entire, compressed, subcarinate. S. America.

Neohalyzia Perroudi.

Halyzia Perroudi, *Muls. Spec.* p. 163. 1.

N. Granada (Reiche), Mexico (Boucard). The spots are sometimes very faint, sometimes large and well-marked.

Microneda.

Crotch, Cat. Cocc. p. 6 (*typ.* Ferrisi).

Antennæ elongate with a lax three-jointed club. The appearance is very much that of certain *Cassididae*. Elytra margined; punctuation very coarse and rather close, interstices alutaceous, thorax gently emarginate in front, sides broadly reflexed and diaphanous.

Microneda Perrisi.

Neda Perrisii, *Muls. Spec.* p. 283. 9.

Columbia (Deyrolle).

Microneda Sichelii.

Neda Sichelii, *Muls. Mon.* p. 204 (T).

Pale yellow, thorax slightly brownish, meso- and meta-sternum black; elytra each with two black spots, one pear-shaped on the callus, the second triangular on the margin at one-third. L. 3 lin. Venezuela (Deyrolle).

Thea.

Muls. Sécur. p. 158 (*typ.* 22-punctata).

Mulsant appears to have based this genus on the slightly deeper emargination of the thorax in front; I consider it certainly identical with *Vibidia* (and probably with *Psyllobora*) of which it is the Old World representative.

Thea vigintiduo-punctata.

Coccinella 22-punctata, Linn. *Syst. Nat.* p. 366. 16 (1758).

Thea 22-punctata, Muls. *Sécur.* p. 159. 1 (1846).

Thea 27-punctata, Mots. *Bull. Mosc.* xxii. 154. 243 (1849).

Thea flaviventris, Schauf. *S. B. Gesell. Isis.* p. 50 (1861).

Sweden, England, Germany, France, Spain, Italy, Algeria, Arabia, Crimea, Syria.

Thea Chapuisi, sp. n.

Ovate, ochreous, metasternum black; head, thorax and elytra bright luteous, the latter with three very fine longitudinal lines and the sutural margin black; the lines are equidistant, the first reaching about two-thirds, the second from the callus nearly to the apex; the third parallel to the margin, abbreviated punctuation clear and strong. L. $2\frac{1}{2}$ lin. Java (Chapuis).

Thea variegata.

Coccinella variegata, Fabr. *Spec. Ins.* i. 99. 33 (1781).

Thea variegata, Muls. *Spec.* p. 206. 1 (1850).

Coccinella nassata, Erichs. *Arch. f. Nat.* ix. p. 266 (1843).

Psyllobora 18-signata, Muls. *Mon.* p. 130. 10 (T).

St Helena, Angola, Cape of Good Hope, Australia (Olivier). This last locality seems to me doubtful. Varieties occur with four marginal and one basal spot, the rest being obliterated.

Thea quadripunctata.*

Thea 4-punctata, Muls. *Op.* iii. p. 27 (1853).

“Brièvement ovale, d'un blanc flavescent en dessus: élytres ornées chacune de quatre points noirs disposés en carré; le 2° sur le calus, le 1° entre celui-ci et la suture; les 3° et 4° constituant avec leurs pareilles une rangée transversale, arquée en devant; le 3° aux $\frac{4}{7}$, le 4° aux $\frac{3}{5}$.” L. $1\frac{2}{5}$ lin. Asia (Motschulsky).

Thea bis-octo-notata.

Vibidia bis-8-notata, Muls. *Spec.* p. 204. 2 (1850).

Coccinella artemisiæ, Woll. *Col. Hesp.* p. 158 (1867) T.

Cape Verd Isl., Arabia, Egypt. This pretty little species recalls the markings of *Psyllobora*.

Thea duodecim-guttata.

Coccinella 12-guttata, Poda. *Ins. Græc.* p. 25. 6 (1762).

Vibidia 12-guttata, Muls. *Sécur.* p. 150. 1.

England, France, Spain, Italy, Germany, Japan.

On various trees. Some specimens, as pointed out in 1849 by Costa, have an apical plica.

Thea galbula.

Psyllobora galbula, *Muls. Spec.* p. 166. 1.

Australia (Janson). Very sparsely but coarsely punctate.

Thea cincta.

Coccinella cincta, *Fabr. Suppl. E. S.* p. 77 (1798).

Psyllobora cincta, *Muls. Spec.* p. 167. 2 (1850).

Hongkong, India, Java, Japan.

Punctuation coarse but tolerably close.

Thea bistigmosa.

Psyllobora bistigmosa, *Muls. Spec.* p. 168. 3 (T).

Psyllobora simplex, *Muls. Mon.* p. 128. 4 (T).

Penang (Hope), Borneo. Differs from *T. cincta* by the rounded outline and the approximated spots on the thorax.

Thea margine-notata.

Psyllobora margine-notata, *Muls. Spec.* p. 172. 7.

Madagascar (Deyrolle, Guérin).

Psyllobora.

Chevr. Dej. Cat. (*typ.* 20-maculata).

Mesosternum entire, thorax faintly sinuate in front, punctuation of elytra distinct and coarse. Purely American in its distribution; it contains two or three very different types of coloration.

A. L. $1\frac{1}{2}$ —2 lin., hemispherical or subovate, yellowish white with a system of black or brown spots on the elytra; these take four types, *P. dissimilis*, spots black, small; *P. confluens*, spots brown, quadrangular; *P. rufosignata*, spots triangular, elongate; *P. hybrida*, spots triangular occupying the whole surface separated by fine white lines. I have regarded *P. dissimilis* as the type, and numbered the spots from the suture (two basal, three medial); the upper apical spot is called sixth, then the sutural and external, and lastly the lower really subapical spot.

Psyllobora dissimilis.

Psyllobora dissimilis, *Muls. Spec.* p. 171. 6.

Columbia (Deyrolle), Bogota (Kirsch). Punctuation of the elytra extremely deep and coarse; that of the thorax obsolete.

Psyllobora lata.*

Psyllobora lata, *Muls. Spec.* p. 170. 5.

Columbia (Perroud). Apparently near *P. dissimilis*, of which

I am inclined to consider it a variety in which spots 2 and 6—8 are wanting.

Psyllobora configurans.

Psyllobora configurans, *Muls. Mon.* p. 129. 8 (T).

Very like *P. dissimilis* but smaller, more ovate, less strongly punctured (though still coarsely), elytra alutaceous; the thorax is similar to that of *P. dissimilis*, as also are the elytra; 1 and 2 are more approximated, 3—5 more irregular, hardly reaching the margin; 6—8 are arranged in a row of three, with 9 under them, not in a square. L. $1\frac{7}{8}$. Bolivia (Deyrolle).

Psyllobora decipiens.

Psyllobora decipiens, *Muls. Spec.* p. 177. 10.

Brazil, Santarem (Bates), Columbia (Dejean). Spots 6—9 vary in size, generally 6 is joined by one corner to 5.

Psyllobora confluens.

Coccinella confluens||, *Fab. Syst. El.* i. p. 373. 95 (1801).

Psyllobora confluens, *Muls. Spec.* p. 174. 9.

Psyllobora varians, *Crotch, Cat. Cocc.* p. 4 (1871).

Brazil, Columbia, Cayenne.

In this species spots 2 and 4 are joined, 4 also being joined to 6; 3—5 are oblique, and a supplementary spot appears in the centre of the apical group.

Psyllobora Bowringii, sp. n.

Closely allied to *P. confluens*, from which it differs by its more ovate form, so that the anterior spots come almost before the middle, and the apical group is extended and not crushed together. L. $1\frac{2}{3}$ lin. Cayenne (B. M.).

Psyllobora subsimilis.

Psyllobora subsimilis, *Muls. Mon.* p. 132. 15 (T).

This seems to me very doubtfully distinct. 2 and 4 are united into a vitta, the apical group consists of four only; also 5 is linear. Brazil (Deyrolle).

Psyllobora distinguenda, sp. n.

Again allied to *P. confluens*, 2 and 4 forming a uniform vitta, also 5 and 8 form a vitta parallel to the margin. Brazil (Saunders).

Psyllobora conspurcata.

Psyllobora conspurcata, *Bohem. Eug. Resa.* p. 203 (1859) T.

Psyllobora conglutinans, *Muls. Mon.* p. 134. 18 (1866) T.

Also allied to *P. confluens*, but with nearly all the spots united amongst each other. 1 and 3 are united (thus destroying the white disc of *P. confluens*), 2 and 4 also, and 2 is moreover united by a fine line from its humeral corner to 5, which in its turn is produced to the margin; the apical spots appear to be five, of which the upper one is merged in the medial range. Brazil? (Deyrolle), California (Boheman). Mulsant appends no locality or collection, but I find a mutilated specimen with this name in Deyrolle's collection.

Psyllobora meticulosa.

Psyllobora meticulosa, *Muls. Mon.* p. 135. 20 (T).

Allied to *P. confluens* but more ovate, and more strongly punctured. 5 is produced to the margin, and the apical cross of 5 is much distorted; apparently also a small submarginal dash is added at about five-sixths. S. Paulo (Deyrolle).

Psyllobora Costæ.*

Psyllobora Costæ, *Muls. Op.* III. p. 25.

"Ovale, convexe, d'un blanc sale ou flavescent. Thorax marqué de 5 points noirs. Elytres ornées de 11—12 taches noires, ou brunâtres; 2 subbasilaires, presque en carré long; la 2^e limitée à son côté interne par le calus; 4 en rangée transversale vers le $\frac{2}{3}$; les 3 internes presque en carré long, la 6^e petite liée au bord extérieur; la 7^e en ovale, transverse; liée par ses extrémités aux angles postérieurs de la 4^e qui est échancrée; 4 étroites en rangée transversale vers le $\frac{2}{3}$, la 8^e dépassant à peine la moitié postérieure de la 9^e; celle-ci paraissant composée de deux taches." L. 2 lin. S. America (Motschulsky).

Psyllobora consita.

Psyllobora consita, *Muls. Mon.* p. 132. 14 (T).

Allied to *P. confluens* in markings, but larger, more convex, subovate. Thorax with four brown spots. Elytra with the usual spots, all free and not united with each other; 1 obtriangular, 3 large, triangular, 4 and 5 oblong, the four spots of the cross large, not crowded together, 6 and 9 triangular. L. 2 $\frac{2}{3}$ lin. Ega (Bates).

Psyllobora Kirschi.*

Psyllobora Kirschi, *Muls. Mon.* p. 140. 28.

"Ovale, convexe, d'un blanc flavescent, en dessus. Thorax marqué de 5 points noirs. Elytres ornées chacune de 9 points

noirs, dont plusieurs sont suballongés; 2 subbasilaires, 3 en rangée transversale arquée en arrière vers le $\frac{1}{3}$; 3 en rangée transversale arquée en devant, des $\frac{2}{3}$ de la suture aux $\frac{2}{3}$ du bord externe; le 9° discal aux $\frac{5}{6}$." L. $1\frac{1}{2}$ lin. Bogota (Kirsch).

Psyllobora rufosignata.

Psyllobora rufosignata, *Muls. Spec.* p. 189. 17.

Psyllobora Cosnardi, *Muls. Spec.* p. 169. 4 (T).

Brazil, Sta Catharina. The white reticulation is here tolerably evident, the markings are clear; 1 is small, oblique, 2 elongate, narrowed in the middle, joined at its apex to 6, which in turn is joined to 7; 3 is an elongate triangle, pointing to the scutellum; 5 small, oblong; 6—9 equal-sized. *P. Cosnardi* is founded on a very immature specimen of this species.

Psyllobora picturata.

Psyllobora picturata, *Muls. Mon.* p. 141. 30 (T).

Closely allied to *P. rufosignata*, but with a different pattern; 1 is more elongate, reaching to one-third; 2 is more narrowed in the middle, still joined to 6; 3 is joined (parallel to the suture) to 7; 8 is on a level with 6 and not below it, as in the preceding. L. $1\frac{3}{4}$ lin. Pernambuco (Deyrolle).

Psyllobora lacteola,* sp. n.

Again allied to *P. rufosignata*, but a little more elongate, ground of a pearly white. The markings are as follows: 1 is a very elongate triangle joined at base and apex with 3, which is a similar triangle pointing upwards; 2 is simple, on the callus; 4 is an elongate triangle, joined by a line to 6; 5 is oblong; 7 is elongate parallel to the suture, 8 and 9 submarginal irregular. L. 2 lin. Rio Janeiro (Fry).

Psyllobora lutescens,* sp. n.

Allied to *P. rufosignata*, with the ground colour pale yellow; the markings are: 1 elongate, 2 ovate, simple; 3 elongate, sutural, recurved outwards at an acute angle at its base; 4 oblong united by a line to 6; 5 oblong; 6—9 subequal, disposed in a cross. L. 2 lin. Guatemala (B. M.).

Psyllobora approximata, sp. n.

Allied to *P. rufosignata*. The markings are: 1 and 3 form very elongate triangles, united at base and apex, 2 (united with 4 into a long vitta) is joined to 6 which is united to 7, and follows the suture for some distance; 5 is elongate, 8—9 smaller and free. L. 2 lin. ? Brazil.

Psyllobora hybrida.

Psyllobora hybrida, *Muls. Spec.* p. 198. 21.

Ovate convex, the brown markings separated by fine white lines; the intersection of these leaves a white common discoidal spot at two-thirds; the markings are: 1 and 3 are elongate triangles, mutually reversed and joined at top and bottom, enclosing a fine line; 2 and 4 united into a vitta, and again joined by a line to 6 (which is large and triangular), 5 is united to 8; 7 is elongate parallel to the suture, 8 triangular almost joined to 7. Brazil. S. Paulo, Sta Catharina.

Psyllobora foliacea.

Psyllobora foliacea, *Muls. Mon.* p. 144. 36.

Allied to *P. hybrida*. The markings however differ a good deal; 1 and 3 are united as in *P. hybrida*; 2 and 4 form a long vitta, united by a line to 6 and 7 (which coalesce forming a lunule); 5 (which is large and triangular) is joined to 8; 9 is ovate in a line with 5 and 8. L. 2 lin. Brazil (Deyrolle).

Psyllobora graphica.

Psyllobora graphica, *Muls. Spec.* p. 195. 20 (T).

Brazil (Reiche). This is allied to *P. hybrida*, but smaller; 1 and 3 form elongate triangles, unconnected; 2 (united with 4 in a vitta) is joined to 6; 5 is oblong, joined to 8 which is similar to it, 7 is somewhat elongate, 9 between it and 8.

Psyllobora Mocquerysii.*

Psyllobora Mocquerysii, *Muls. Spec.* p. 201. 22.

Bahia (Mocquerys). Closely allied to *hybrida*; but apparently (from the description) distinct; 1 and 3 are confounded together, as also are 6 and 7; 9 is nearer the margin, so as to be below 8.

Psyllobora intricata.*

Psyllobora intricata, *Muls. Spec.* p. 194. 19 (T).

Columbia (Buquet). The type is in bad condition, and immature; it is probably *P. hybrida*.

Psyllobora divisa.

Coccinella divisa, *Fabr. Syst. El.* I. p. 382. 138 (1801).

Psyllobora divisa, *Muls. Spec.* p. 191. 18 (1850).

Brazil, Surinam (Hope). Mulsant quotes a number of varieties which I have not seen, and some of which I think are distinct;

evidently his *P. Bakewellii* would come under them; my specimen of *P. divisa* is a smaller insect, which I will briefly describe.

1 and 3 united into an elongate parallelogram, 2 oval in the callus, 4 and 5 united into a quadrate figure (showing signs of division); 6 and 7 united into a rectangular figure, 8 and 9 sub-marginal, small. L. $1\frac{1}{2}$ lin. Brazil (Deyrolle).

In this, as in the following species, the pale line between the anterior and posterior spots is well marked.

Psyllobora Bakewellii.

Psyllobora Bakewellii, *Muls. Mon.* p. 132. 13 (T).

Allied to *P. divisa*, but larger. Spots 1 and 3 united into an elongate mark, 2 free on the callus, 4 and 5 united into a triangular mark; 8, 6, and 7 united, forming a lunule in front of 9, which is round and small. L. $2\frac{2}{5}$ lin. Santarem (Bates).

Psyllobora Egæ, sp. n.

Closely allied to *P. divisa* and *P. Bakewellii*, but sufficiently different. Spots 1 and 3 form an ovate elongate mark, 2 is obliterated, 4 and 5 are united; 7 and 9 are united along the suture. L. $2\frac{1}{2}$ lin. Ega (Bates).

Psyllobora Germari.

Psyllobora Germari, *Muls. Spec.* p. 202. 23.

Brazil, Rio Janeiro (Fry). In this species I suppose that spots 1—5 have coalesced on the one hand, while 6—9 do so on the other. It is also of a more hemispherical form than the others.

Psyllobora Marshalli, sp. n.

Ovate, or rather elongate-ovate, less strongly punctured; thorax with two triangles on the base nearly reaching the anterior margin, and separated by a narrow line; the elytra each with two large brown spots connected by their external corner; these spots are irregular, formed from 1—5 and 6—9 respectively; a common quadrangular whitish yellow spot on the disc at two-thirds. L. $1\frac{3}{4}$ lin. Cayenne (Deyrolle).

B. Small species, one to one and a quarter lin. in length, with small black spots of which three pair are close to the suture (one basal, one at one-third, one at three-fourths), four (or three) along the margin, and a discoidal double angulated mark.

Psyllobora lenta.

Psyllobora lenta, *Muls. Spec.* p. 178. 11.

Columbia. Subhemispherical, spots brown; punctuation evident, coarse, four marginal dots, a supplementary linear subapical mark.

Psyllobora luctuosa.

Psyllobora luctuosa, *Muls. Spec.* p. 179. 12.

Psyllobora tardigrada, *Muls. Mon.* p. 19 (T).

L. $1\frac{1}{4}$ lin. Bogota (Deyrolle, Buquet, v. Bruck).

The intermediate row of spots forms a straight well-marked longitudinal range.

Psyllobora liliputiana.

Psyllobora liliputiana, *Muls. Mon.* p. 139. 26 (T).

Very like *P. tardigrada* but less strongly punctured; only three marginal dots, the discoidal spots united, no supplementary apical spot. L. $1\frac{2}{3}$ lin. Bogota (Deyrolle).

Psyllobora viginti-maculata.

Coccinella 20-maculata, *Say, J. Acad. Phil.* iv. 96. 9 (1824).

Psyllobora 20-maculata, *Muls. Spec.* p. 183. 14 (1850).

Psyllobora taedata, *Leconte, Rep. Explor.* ix. (1857).

Psyllobora 20-signata, *Bohem. Eugen. Resa.* p. 203 (1859) T.

Psyllobora interspersa, *Bohem. Eugen. Resa.* p. 203 (1859) T.

United States, California, Mexico. Mulsant gives "Columbia" which belongs to *P. liliputiana*. Boheman gives "Taiti" and "Sydney" for his new ones, but very little reliance can be placed on their localities.

Punctuation close and evident, four marginal, no supplementary spots, the discoidal often united to the second and third marginal and third sutural. Variable.

Psyllobora bicongregata.

Psyllobora bicongregata, *Bohem. Eug. Resa.* p. 203 (1859) T.

An obscure species, allied to *P. 20-maculata*, the markings are very obscure and confused; four marginal spots (a supplementary one outside the second), the discoidal spot, large, entire, quadrate, united with the third sutural. L. 1 lin. Buenos Ayres (Boheman).

Psyllobora nana.

Psyllobora nana, *Muls. Spec.* p. 181. 13.

Cuba, Jamaica (Saunders). More ovate, clear pearly white; suture very narrowly black, sutural spots common; four marginal spots, first united to the second basal; three (large) to the discoidal spot. Punctuation evident.

Psyllobora lineola.

Coccinella lineola||, *Fabr. Ent. Syst.* i. 283. 77 (1792).

Psyllobora lineola, *Muls. Spec.* p. 185. 15.

Psyllobora Fabricii, *Crotch, Cat. Cocc.* p. 4 (1871).

W. Indies (Dejean), Martinique, Guadeloupe (Chevrolat).

Psyllobora feralis.

Psyllobora feralis, *Muls. Mon.* p. 138. 25 (T).

Similar to *P. nana* in shape, but very smooth and obsoletely punctulate; the spots rather confused, the sutural pairs common, four marginal spots, the first united to the second basal; second marginal produced to the margin; a supplementary linear sub-apical spot. L. 1 lin. Chili (Germain).

Psyllobora punctella.

Psyllobora punctella, *Muls. Spec.* p. 173. 8 (T).

Trinidad (Fry), St Vincent (Hope). Easily recognized by the yellowish white elytra which have only two basal dots black.

Psyllobora nigro-vittata, sp. n.

Pearly white, evidently punctate, thorax with five black spots, elytra each with 2 vittæ and the suture black, the external vitta interrupted from the callus to the middle, the second broken before the apex. L. 1 lin. Jamaica (Saunders).

This pretty little species recalls *Micraspis phalerata*.

Psyllobora Roei.*

Psyllobora Roei, *Muls. Spec.* p. 187. 16 (T).

Mexico (Hope). Distinct from any other species by the oval discoidal ring.

Cleis.

Muls. Spec. p. 208 (*typ. mirifica*).

This genus differs a little in aspect from *Psyllobora*, being more elongate and more depressed; the punctuation is coarse, the thorax a little more emarginate in front. Mexico. The Chinese species added by Mulsant is *Verania discolor*.

Cleis lynx.

Cleis lynx, *Muls. Spec.* p. 210. 2 (T).

Cleis mirifica, *Muls. Spec.* p. 209. 1 (T).

Mexico (Dupont, Berlin, Deyrolle). *C. mirifica* seems to be a variety in which the brown is well developed and the white spots of the elytra have lost the brown centres. A specimen in Deyrolle's collection shews the brown markings even more broken up than in *C. lynx*.

Cleis concolor, sp. n.

Orange yellow, pectus black, head with two black dots on the vertex, thorax paler with a discoidal Y (of which the branches do

not join the stem) and a basal triangle on either side black; elytra uniformly orange, punctuation evident. L. $1\frac{1}{2}$ lin. Mexico (Deyrolle).

Calvia.

Muls. Sécur. p. 140. 1 (*typ.* 10-guttata).

Mesosternum emarginate, antennæ tolerably long; elytra with a thickened margin which is hardly reflexed. Punctuation uniform.

Calvia decem-guttata.

Coccinella 10-guttata, *Linn. Syst. Nat.* p. 583. 33 (1767).

Calvia 10-guttata, *Muls. Sécur.* p. 143 (1846).

Europe; on alders and willows.

Calvia hololeuca.

Calvia hololeuca, *Muls. Spec.* p. 1024.

Caucasus (Mulsant), R. Amur (Maack).

This species is somewhat doubtful; I have seen a series of eight or ten specimens, but think it may possibly be a pale form of *C. 10-guttata*.

Bothrocalvia.

g. n. (*typ.* albolineata).

Distinct from *Calvia* by the hemispherical shape, faint punctuation and deep well-marked fovea on the thoracic epipleuræ. The mesosternum is emarginate.

Bothrocalvia albolineata.

Coccinella albolineata, *Schön. Syn. Ins.* II. 158. 30 (1808).

Calvia albolineata, *Muls. Spec.* p. 146. 4.

China, apparently rare.

Bothrocalvia Lewisii, sp. n.

Closely allied to *B. alboguttata*, but paler; thorax with the sides broadly whitish, with a vague M-like mark in the middle; elytra pale whitish ochreous, each with three yellowish brown narrow vittæ reaching the base, the first parallel and close to the suture, the second again rather close, thickened at the apex emitting two branches externally sloping forwards, the third nearer the margin, which it reaches before the apex, at the base it joins the upper branch of the second vitta. L. $2\frac{3}{4}$ lin. Foochow (Lewis).

Anisocalvia.

Crotch, Cat. Cocc. p. 4 (*typ.* 14-guttata).

Differs from *Calvia* by the unequal punctuation and the fovea

on the thoracic epipleuræ. It is chiefly Indian, and the species seem very variable; probably several of those described will have to be sunk when more is known about them. Mulsant arranged them in *Harmonia*, *Calvia*, *Propylea*, *Verania*, and *Ænopia*.

Anisocalvia quatuordecim-guttata.

Coccinella 14-guttata, *Linn. Syst. Nat.* p. 367. 22 (1758).

Calvia 14-guttata, *Muls. Sécur.* p. 140.

Europe, Siberia, Japan, Vermont U. S. (B. M.). The black Siberian varieties are very curious; the two American specimens in the British Museum both belong to this variety. Specimens from Japan are larger and finer, with the external spot of the posterior pair much larger (var. *japonica*).

Anisocalvia quindecim-guttata.

Coccinelle à points et bordure blanche, *Geoff. Hist.* i. 327. 14 (1762).

Coccinella 15-guttata, *Fabr. Gen. Ins.* p. 217 (1777).

Coccinella albomarginata, *Goeze, Ent. Beyt.* i. p. 420 (1778).

Coccinella bis-7-guttata, *Schall. Act. Hal.* i. 265 (1783).

Calvia bis-7-guttata, *Muls. Sécur.* p. 144 (1846).

Calvia septenaria, *Muls. Mon.* p. 116. 3 (1866) T.

Europe, Imeritia, Shanghai; rare on oaks.

The var. *septenaria* is larger and broader and the punctuation is distinctly unequal, but otherwise they are identical. Mulsant records a specimen from Cayenne (!) under the name *guttipennis*, probably in error.

Anisocalvia punctata.

Harmonia punctata, *Muls. Op.* III. p. 15 (1853) T.

Oval, tolerably convex, body, legs, head, antennæ and sides of thorax reddish yellow, the rest shining black; punctuation of the elytra extremely unequal, the large punctures deeply impressed. L. $2\frac{1}{3}$ lin. N. India (Deyrolle). This is apparently the only one of the unequally punctate species that struck Mulsant as being so.

Anisocalvia obverse-punctata.

Propylea obverse-punctata, *Muls. Mon.* p. 151. 3 (1866) T.

Oval, entirely of a yellowish ochreous, punctuation extremely unequal; thorax with two black dots on the disc; elytra each with two black dots (one near the suture at one-fifth and one near the margin beyond the middle). L. $2\frac{1}{2}$ lin. N. India (Deyrolle, Parry). Mulsant talks of another spot on the callus which is not visible in the type.

Anisocalvia vulnerata.*

Coccinella vulnerata, Hope, *Zool. Misc.* p. 31 (1831) T.

Ovate, pale testaceous yellow, sides of thorax broadly whitish; elytra orange with six unequal white spots, arranged as in the preceding; the second and fourth are confluent, the third elongate, oval, the common spot large, obovate. L. 2 lin. Nepaul (B.M.). This Mulsant must have seen, but has passed over unnoticed.

Anisocalvia uniramosa.*

Coccinella uniramosa, Hope, *Zool. Misc.* p. 31 (1831) T.

Verania uniramosa, Muls. *Spec.* p. 368. 7.

Nepaul (B. M.). I have seen no other specimens.

Anisocalvia dorsonotata.

Oenopia dorsonotata, Muls. *Spec.* p. 424. 3 (T).

Bengal (Hope).

This species is very curious, and difficult to place. I have only seen the original type. Punctuation very strong, unequal, thoracic epipleuræ, with a very deep fovea along the whole length, mesosternum deeply emarginate; first ventral segment deeply punctured, mesosternum strigose; head strongly punctured. Bengal (Hope).

Anisocalvia Vishnu,* sp. n.

Ovate, testaceous yellow; elytra straw yellow, each with five black spots, and a large obovate common black spot at two-thirds; the spots are, one pear-shaped by the scutellum, one oval at the humeral angle outside the callus, one discoidal, oval, at about one-third, one rounded marginal at two-thirds, one apical (not reaching the margin). L. 2 lin. N. India (Fry).

Anisocalvia Krishna,* sp. n.

Ovate, testaceous yellow, thorax with the sides broadly white; elytra testaceous, orange, each with six white spots narrowly bordered with dark brown; these spots placed similarly to the black ones in *A. Vishnu*, but the apical spot reaches the margin and the common spot is reduced to the size of the basal one, being also divided into two. L. 2 lin. N. India (Fry).

Anisocalvia Buddha,* sp. n.

Ovate, testaceous yellow, thorax a little paler at the sides, elytra orange, or rich ochreous, each with six small equal black spots, occupying the same relative positions as in the two preceding species. L. 2. lin. N. India (Fry).

Anisocalvia flaccida.

Calvia flaccida, *Muls. Op.* III. p. 23 (1853) T.

Immature and difficult to determine with accuracy, but evidently a variety of one of the preceding pale-coloured species. N. India (Deyrolle).

Anisocalvia Sykesii, sp. n.

Ovate convex, almost gibbous, pale reddish ochreous; thorax alutaceous, closely punctate, sides broadly whitish, disc with an irregular M in brownish red, the outside strokes being the borders of the white marks; elytra greenish ochreous tinged with red along the suture, punctuation distinct, very unequal, each with three very small black dots (one near the margin at one-third, one nearer the suture in a transverse line with the first, one also near the margin at two-thirds). L. 3 lin. Dukhun (India Mus.). This is more convex than the other species, but has the long antennæ, emarginate mesosternum, unequal punctuation, etc.

Sphæroneda.

Crotch, Cat. Cocc. p. 6 (*typ.* Sinopæ).

Antennæ long, club lax, three-jointed, dentate within. Mesosternum emarginate, elytra margined.

Sphæroneda Sinopæ.

Daulis Sinopæ, *Muls. Spec.* p. 213. 8.

Sub-hemispherical, tolerably closely punctate, thickly alutaceous, orange red; thorax with the sides broadly ochreous, this colour bordered on the inside with blackish; elytra with a spot on the callus, and a cross reticulation black, consisting of a fascia before the middle and one at two-thirds connected by a short longitudinal line, leaving three round orange spots; the anterior fascia is dilated on the suture. L. $2\frac{3}{4}$ lin. Celebes (Deyrolle), Macassar (Wallace).

Anisolemnia.

gen. nov. (*typ.* complicata).

Metasternum slightly, mesosternum deeply emarginate, elevated, strigosely punctate; elytra margined, epipleuræ foveolate. Malay Archipelago.

The punctuation of the elytra is more or less unequal.

Anisolemnia complicata, sp. n.

Ochreous yellow, elytra with a sinuous narrow branched black line, apparently the remains of a reticulate pattern. It starts from the callus, giving off a short branch at right angles to the

margin almost immediately, at one-third it sends off a branch inwards obliquely directed towards the scutellum, at about two-thirds it ends giving off rudimentary branches towards the margin and the suture; a small spot towards the apex may represent a continuation of this line; the elytra are thus divided into 5 incomplete areolæ. The punctuation of the thorax is close and visible, that of the elytra very unequal, the large punctures being deep and sparse. L. 3 lin. Ternate (Wallace).

Anisolemnia ceramensis, sp. n.

Colour of a uniform pale ochre; thorax visibly punctured, elytra with the suture very narrowly edged with black, punctuation close unequal, the larger punctures close, not very apparent, near the humeral margin are several deeply impressed punctures; L. $2\frac{1}{2}$ lin. Ceram (Wallace). Var. ? dark red-brown, more opaque and the punctuation fainter.

Anisolemnia anomala, sp. n.

Colour uniform red brown, shining; thorax visibly punctured; elytra very unequally punctate; the large punctures deeply impressed and very conspicuous, the epipleuræ deeply foveate, the humeral angle without any deeper punctures; metasternum sparsely but deeply punctate. L. 3 lin. Amboina (Wallace).

Anisolemnia distaura.

Caria distaura, *Muls. Mon.* p. 173. 13 (T).

Head red, thorax black with the sides broadly pale red; elytra red, margin, suture and 2 fasciæ black, the first before the middle (triangularly dilate at the suture), the second at the apical third, abruptly angulate, a short black spur from the base over the callus; body beneath pale red, breast black; punctuation close, visible, unequal; the large punctures abundant. L. 2 lin. Celebes (Deyrolle).

Anisolemnia obliterata, sp. n.

Head and thorax pale yellowish red; elytra red, a triangular basal spot on the callus, an ill-defined spot near the margin beyond the middle, and the suture black; the latter triangularly dilated at one-third and two-thirds of its length. L. $2\frac{1}{2}$ lin. Macassar (Wallace).

This is an imperfect form of some species not yet known; the punctuation is similar to that of *A. distaura*.

Anisolemnia Faivrii.

Caria Faivrii, *Muls. Mon.* p. 173. 14. (T.)

Punctuation unequal, the large punctures at the margin but

slightly marked; head reddish yellow; thorax with the anterior margin narrowly and the sides very broadly (as in *Lemnia*) yellowish red; elytra brick-red, scutellum and external margin black. L. $2\frac{1}{2}$ lin. Celebes (Deyrolle, v. Meyer).

Anisolemnia alutacea.

Punctuation obsolete, hardly unequal, with the marginal punctures deeply impressed, the whole surface closely alutaceous; coloration exactly that of *A. distaura*, but all the black markings narrower, and the basal dent reaching the first fascia; thorax pale yellowish, base narrowly black, emitting 2 small triangular points forwards; body beneath and legs pale reddish. L. $2\frac{2}{3}$ lin. Massassar (Wallace).

Cyphocaria.

Crotch, Cat. Cocc. p. 6. (*typ.* *Duvaucelii*).

Form very convex, oval; punctuation of the elytra coarse, unequal, mesosternum rather deeply (metasternum slightly) emarginate; antennæ not very long, thoracic foveæ evident; elytral epipleuræ deeply concave; sides of thorax sinuate before the apex; elytra margined, scutellum flat, impunctate, the apex elevated.

Cyphocaria Duvaucelii.

Caria Duvaucelii, Muls. Spec. p. 233. 2 (T).

Leis javana, Muls. Spec. p. 245. 4 (T).

Coelophora placens, Muls. Op. III. p. 54 (T).

Hongkong, Shanghai, Java. Mulsant appears not to have recognised this sharply characterized species under different aspects. The specimens from Java have the spots smaller, more transverse, and the form more hemispherical.

Coelophora.

Muls. Spec. p. 390 (*typ.* *inæqualis*).

To this I have united *Lemnia* and *Artemis* of Mulsant, as they hardly differ in any points of importance; the metasternum is truncate in *Lemnia*, but generally emarginate in the rest of the genus; it is confined to the Old World, the only American species being separated as *Procula*.

Coelophora saucia.

Lemnia saucia, Muls. Spec. p. 380. 3.

Sides of thorax entirely pale, the inner edge of the pale spot convex; the red spot on the elytra narrow, oblique, resembling a short fascia; punctuation sparse but very visible; epimera and inner edge of epipleuræ pale. L. $2\frac{1}{2}$ lin. ♂ Head and legs pale yellow, posterior femora darker. India, Nepaul.

Coelophora Mouhoti, sp. n.

Thorax as in *C. saucia*; elytral spot very large, ovate, occupying the central third, punctuation fainter than in *C. saucia*. L. $2\frac{3}{4}$ lin. Laos (Saunders). I have only seen the ♀ kindly presented to me by Mr Saunders.

Coelophora Swinhoei, sp. n.

Again resembling *C. saucia*, but the white margins of the thorax are not continued across the front; the elytral spot is large, almost circular. L. $2\frac{1}{2}$ lin. Formosa (Swinhoe). ♂ Head and legs pale yellow, posterior femora blackish.

Coelophora calypso.

Leis calypso, *Muls. Mon.* p. 186. 25 (T).

Lemnia oculata,† *Muls. (nec Fab.) Spec.* p. 385. 6.

Also allied to *L. saucia*; the elytral spot is small, round, rather more posterior; form more oval. Mandchuria (Adams), Bengal, Manilla (Mulsant). I have only seen the ♀.

Coelophora biplagiata.

Coccinella biplagiata, *Schön. Syn.* II. p. 196. 129 (1808).

Lemnia biplagiata, *Muls. Spec.* p. 383. 5.

The thorax has a quadrangular yellowish spot at the anterior angles only, the elytral spot is transverse, irregular at the edge, and looks as if it would form a fascia. ♂ Head pale. China, Mandchuria.

Coelophora nepalensis, sp. n.

Very like *C. biplagiata*, but markedly oval in form; the elytral spot is placed obliquely, so that the two together converge posteriorly. L. $2\frac{3}{4}$ lin. Nepaul (Deyrolle).

Coelophora moesta.*

Lemnia moesta, *Muls. Spec.* p. 386. 7.

Java (Melly). I have not seen this species.

Coelophora cincta.

Coccinella cincta,|| *Hope, Zool. Misc.* p. 31 (1831).

Lemnia circumvelata, *Muls. Spec.* p. 388 (T).

Nepaul (Brit. Mus.).

Coelophora desolata.*

Lemnia desolata, *Muls. Spec.* p. 387. 8 (T).

Australia (Hope). This is a suffused form of some species I have not seen.

Mulsant also describes two other species, *L. melanota* and *L. fraudulentata*; both are immature specimens of one or other of the previously described species. This state is not rare, and is at first very embarrassing; but the colours are always shaded and not distinct.

Coelophora pulchra, sp. n.

Black, head rufescent; thorax thickly punctulate, interstices alutaceous, the anterior angles broadly and the margins very narrowly red; elytra red, suture, margins, and two transverse fasciæ black; the anterior fascia at one-third (acutely dentate towards the callus), the posterior at two-thirds (also slightly dentate), the first is broadest near the suture, the second near the external margin; the legs and two spots on the inner edge of the epipleuræ pale red; punctuation well marked, uniform. L. $4\frac{1}{2}$ lin.

Malasia (Ceram, Waigiou, Aru, M....) Wallace.

Coelophora aruensis, sp. n.

This differs principally in coloration. Head pale red; thorax red with the sides narrowly margined with black, and the base with two semicircular black spots (one on either side the scutellum, which is black), elytra margined with black, the suture very narrowly edged with black at the base and apex, then suddenly dilated, leaving a large square common black spot, a little beyond one-third. L. $4\frac{1}{2}$ lin. Ins. Aru (Wallace).

Coelophora formosa, sp. n.

Head red, thorax black, anterior margin narrowly reddish yellow; elytra red, margin and base black, a broad fascia at one-third, and the apical fourth black (these two markings connected by a black line along the suture); legs, abdomen, and the epipleuræ for the most part reddish-yellow. L. 4 lin. Ins. Menado (Wallace). These three species are at once distinct by their large size, and are closely related to each other. The colouring is almost exactly that of the species of *Leis* from the same locality.

Coelophora circumusta.

Artemis circumusta, *Muls. Spec.* p. 389. 1.

Artemis rufula, *Muls. Spec.* p. 389. 2.

Artemis mandarina, *Muls. Spec.* p. 390. 3.

These three forms differ, as Mulsant supposed, only in colour. It seems generally rare. Hongkong (B.M., Stockholm, Hope).

Coelophora Westermanni.

Coelophora Westermanni, *Muls. Spec.* p. 391. 1.
Bengal (Copenhagen). Foochow, China (Lewis).

Coelophora reniplagiata.

Coelophora reniplagiata, *Muls. Spec.* p. 392. 2 (T).
Java (Dejean), Flores (Wallace).

Punctuation sparse, surface alutaceous, metasternum visibly emarginate.

Coelophora vidua.

Coelophora vidua, *Muls. Spec.* p. 393. 4 (T).
Java, Dorey, Timor (Wallace), N. India (Deyrolle).
This differs only in the absence of any red spot.

Coelophora congener.

Coccinella congener, *Schön. Syn. Ins.* II. p. 197. 134 (1808).
Coelophora congener, *Muls. Spec.* p. 392. 9.
China (Dejean), Foochow (Lewis). In the female the sides of the thorax are broadly whitish.

Coelophora caliginosa.

Coelophora caliginosa, *Muls. Spec.* p. 414. 20.
Coelophora Dumortieri, *Muls. Mon.* p. 260. 6 (T).
India (Bakewell), Sarawak (Wallace), Pondicherry (Paris).
Shining black, body beneath, legs and a narrow border on the anterior margin and sides of the thorax yellowish; punctuation rather coarse, sparse; surface shining. L. $2\frac{1}{2}$ lin.

Coelophora Dupasquieri.

Coelophora Dupasquieri, *Muls. Mon.* p. 261. 8 (T).
Suborbicular, ochreous yellow; thorax black, the sides very broadly, the anterior margin narrowly yellow; elytra shining black; punctuation coarse and sparse. L. $1\frac{2}{3}$ lin. ? (Bakewell).
This is I think allied to *C. Dumortieri*, it has the colouring of *Verania afflicta*, but differs by the sparse punctuation and larger scutellum.

Coelophora versipellis.

Coelophora versipellis, *Muls. Spec.* p. 394. 5.
Java, N. India (Deyrolle).
The punctuation is coarse, but rather close; the Australian

specimens are darker, and have the pectus, femora and posterior tibiae black.

Coelophora Mulsanti.

Daulis Mulsanti, Montrouz. *Ann. Fr.* i. p. 304 (1861).

” ” *Muls. Mon.* p. 211. 5.

Coelophora ochracea, *Muls. Mon.* p. 262. 11 (T).

Uniform dirty-ochreous, very shining, punctuation uniform, tolerably close but clear; thorax truncate before the scutellum which is broader than long; elytra with the suture and margin narrowly edged with black, two black lines also start from the base (one from the callus, one half-way between that and the suture), and are represented in the posterior half by one or more black dots. L. $2\frac{1}{2}$ lin. Ins. Woodlark, Art. Prosternum bicarinate, the emargination of the thorax in front is bisinuate.

C. ochracea differs by being unicolorous with five black dots; the margins and suture are concolorous, and the two basal streaks are reduced to dots. Australia (Berlin).

Coelophora Minkii.*

Daulis Minkii, *Muls. Mon.* p. 211. 3 (T).

Suborbiculate, pale brownish ochreous, punctuation rather strong, unequal, antennæ fine, long; mesosternum emarginate; elytra each with six very small black dots (1, 2, 2, 1), viz. one on the callus, two in line before the middle, two a little oblique at two-thirds, one subapical; the outer four are in line, parallel to the margin, the inner two near the suture; scutellum black; thorax with the sides broadly paler. L. 3 lin. Java (v. Bruck, Berlin).

Coelophora Newporti.

Coelophora Newporti, *Muls. Spec.* p. 396. 7.

Philippines. The type is no longer extant in the British Museum.

Coelophora Bowringii, sp. n.

Rich ochreous, elytra each with four black spots ringed with pale whitish (three transversely in the middle and one subapical). L. $2\frac{1}{3}$ lin. Burmah (Bowring).

This is like *C. Newporti* without the basal spot.

Coelophora deficiens, sp. n.

Closely allied to *C. Newporti*, but the thorax is spotless, and the inner spot of the central elytral fascia is wanting, thus leaving four ocellated spots, arranged, 1, 2, 1. L. $2\frac{1}{2}$ lin. Penang (Bowring).

Coelophora pupillata.

Coccinella pupillata, Schön. *Syn. Ins.* II. p. 184. 90 (1808).

Coelophora pupillata, Muls. *Spec.* p. 397. 8.

China, Java (Deyrolle). Punctuation of the elytra coarse and deeply impressed.

Coelophora approximans,* sp. n.

Closely resembling *C. pupillata*; elytra each with two ocellated spots, one basal and one central at about two-thirds. L. $2\frac{1}{4}$ lin. China (Bowring).

Coelophora bissellata.

Coelophora bissellata, Muls. *Spec.* p. 400. 10.

Java (Deyrolle), Singapore, Nitophir (Wallace), Bengal (Westermann). Surface shining, punctuation sparse, rather faint.

Coelophora inæqualis.

Coccinella inæqualis, Fab. *Syst. Ent.* p. 80. 8 (1775) T.

Coelophora inæqualis, Muls. *Spec.* p. 404. 12.

Coccinella 9-punctata||, Fab. *Syst. Ent.* p. 81. 15 (1775) T.

Coccinella 9-maculata, Fab. *Spec. Ins.* I. 97. 26 (1781).

Coelophora 9-maculata, Muls. *Spec.* p. 398. 9.

Coccinella iridea, Thunb. *N. I. Sp.* p. 14, f. 17 (1781).

Coccinella psi, Thunb. *N. I. Sp.* p. 13, f. 16 (1781).

Coelophora psi, Muls. *Spec.* p. 402. 11.

Coelophora symbolica, Muls. *Op.* VII. p. 146 (1856) T.

Coelophora mendica, Muls. *Spec.* p. 407.

Coelophora partita, Muls. *Spec.* p. 395. 6.

Coelophora Flachati, Muls. *Mon.* p. 274. 32 (T).

Japan (Paris), Philippines, Malasia (Malacca, Java, Ceram, Batchian, Flores, Timor, Waigiou, Kai), Queensland, N. Caledonia. The Cape is also given as a locality, but I have never seen any thence.

This species, one of the most variable among the Coccinellidæ, was brought home in some numbers by Mr Wallace, and it is on these specimens that I have ventured to unite the above six species; all have a similar rather faint sparse punctuation and finely alutaceous surface; the Australian form is lighter in colour, less visibly punctured and smaller, but can hardly be separated specifically. The spots which are typically 1, 2, 1 and 1 common subapical, run together and deform in almost every possible way.

C. partita is the extreme, in which pale areolæ are left; but a variety (*caledonica*) from N. Caledonia is also very constant; in this the upper and lower spots, rather deformed, are left, as also

the external one reduced in size, joined to the black margin; the black suture shows a dilatation in the place of the common posterior spot.

Coelophora funebris,* sp. n.

Ochreous, thorax with the base margined with black, dilated on either side, elytra black, the margin a little paler and translucent. L. $2\frac{1}{4}$ lin. Bangalore (Bowring).

Antennæ short, the coarse marginal punctures not very apparent.

Coelophora javanica,* sp. n.

Rich ochreous, metasternum and the first ventral segment in the centre black; thorax with the sides ochreous, disc with two converging black marks, internal margin angulate; scutellum black, elytra with the margins and suture narrowly black, legs pale. L. $2\frac{1}{2}$ lin. Java (Bowring).

The elytra are flattened at the margins, which are studded with coarse punctures.

Coelophora octo-signata.

Coelophora 8-signata, *Muls. Spec.* p. 407. 13.

Java (Westermann, Deyrolle).

The large punctures on the margin rather evident.

Coelophora Perroteti.

Coelophora Perroteti, *Muls. Spec.* p. 409. 14.

Pondicherry (Chevrolat), Coromandel (Deyrolle).

Punctuation sparse, very distinct, thickened margin of the elytra very slightly marked.

Coelophora læta.*

Coelophora læta, *Muls. Spec.* p. 413. 18.

Java (Westermann). This I have not seen.

Coelophora unicolor.

Coccinella unicolor, *Fabr. Ent. Syst.* i. 267. 5.

Coelophora unicolor, *Muls. Spec.* p. 413. 19.

India (Deyrolle), Pondicherry (Guérin).

Punctuation very sparse, tolerably coarse; surface very shining.

Coelophora Petrequini.

Coelophora Petrequini, *Muls. Mon.* p. 276. 37 (T).

Reddish-ochreous, suborbicular; elytra black, the margin irregularly ochreous, forming three triangular spots; one humeral

prolonged towards the base, one triangular in the middle, one apical; punctuation strong, rather close. L. 2 lin. N. India (Deyrolle).

Coelophora varicolor, sp. n.

Suborbicular, punctuation coarse and sparse, orange-red, with the pectus black; thorax with the central third of the base narrowly black, this colour prolonged into a discoidal line reaching half way to the margin; elytra black, the humeral and apical angle orange-red; epipleuræ black in the middle, epimera pale red. L. 2 lin. Batchian (Wallace).

This is very like *C. patruelis* in colouring.

Coelophora patruelis.

Coccinella patruelis, *Boisd. Voy. de l'Astrol.* p. 600. 18, pl. VIII. 23 (1832).

Coelophora patruelis, *Muls. Spec.* p. 415. 21.

Vanikoro (Boisduval), New Ireland, Australia, Batchian (Wallace).

Coelophora gratiosa.

Coelophora gratiosa, *Muls. Op.* III. p. 59 (1853) T.

Resembles *C. patruelis*, but the metasternum is not emarginate, punctuation rather coarse and close; ground colour bright yellow, elytra with the margin narrowly and a large irregular discoidal band, black. L. 2 lin. Australia (Deyrolle).

Mulsant (Mon. p. 276) has united this to *C. patruelis*.

Coelophora vivida,* sp. n.

Bright red, breast beneath and central part of the ventral segments black; elytra each with two fasciæ and an apical spot black; the first basal (reaching the margin but not the suture), the second medial (slightly convex in front, dilated at the suture, which it also does not quite reach), the apical spot large, discoidal; legs red, base of femora black. L. 2 lin. Australia (Fry).

Punctuation sparse, surface very shining, thoracic epipleuræ with a shallow fovea running their whole length; prosternum deeply sulcate in the middle.

Coelophora Jansoni, sp. n.

Entirely of a dull red; elytra black, with an apical spot dull red; punctuation coarse, almost unequal, mesosternum depressed and deeply emarginate. L. $2\frac{3}{4}$ lin. Cape York.

Coelophora Wallacii, sp. n.

Suborbicular, rich orange, opaque; thorax broad, slightly sinuate before the anterior angles; scutellum rather small, elytra sparsely and lightly punctured, surface alutaceous, with the sutural margin and a discoidal vitta reaching from the callus to near the apex, black; the sutural border narrowing to a point before and behind, the vitta subparallel, or strangled in the middle. L. 3 lin. Kai, Batchian (Wallace).

Thorax at the sides and anterior angles with an impressed line.

Coelophora Ripponi, sp. n.

Subovate, black, head, tibiæ, tarsi, epipleuræ of the thorax and elytra and sides of abdomen ochreous yellow, surface shining, punctuation faint and sparse; thorax ochreous yellow, with a basal 4-dentate border and two obtriangular spots on either side the disc near the anterior margin, black; the elytra also ochreous-yellow, the margins and suture narrowly black, also a black vitta starting from the base, passing over the callus and nearly reaching the apex; its broadest part is at about one-third; abdominal plates not quite terminal, continued to the outer edge of the segment. L. $2\frac{3}{4}$ lin. Australia (Rippon).

Coelophora simulans, sp. n.

Black, legs yellow, head pale yellow; thorax yellow with a basal border extending to the angles, and a large discoidal triangle connected by its apex with the base, black; elytra rich orange, suture narrowly, margins more broadly, black; punctuation sparse and clear. L. 2 lin. Madagascar (Deyrolle). The extraordinary resemblance of this species to *Cheil. triangulifera*, also from Madagascar, is worthy of notice.

Coelophora elegans,* sp. n.

Coccinella elegans, Géhin MSS.

Black, head, thorax, elytra (striped with black), tibiæ, and abdomen at the sides canary-yellow; thorax with the base margined with black, and bisinuate, the disc with a black mark representing the letter I transversely placed; elytra with the margins, the suture narrowly, three longitudinal bands, and a subapical spot, black; the two external bands connected at the base. L. 3 lin. Gaboon (B. M.).

Coelophora luteopustulata.

Onoplia luteopustulata, Muls. Spec. p. 421. 1 (T).

Coelophora Mariae, Muls. Op. III. p. 56 (T).

Anatis thibetina, *Muls. Op.* III. p. 46 (T).

Assam (Hope); Thibet (Chevrolat). Not rare in N. India and very variable; it is evidently closely allied to *Propylea dissecta*.

Coelophora sexareata.

Coelophora sexareata, *Muls. Op.* III. p. 53 (T).

Subovate, black, head pale ochreous, thorax with the sides broadly pale ochreous, the black colour forming a narrow line up to the posterior angles; elytra narrowly margined with black, and with a narrow black pattern, dividing each into three subequal ochreous areolæ; this line comes from the base to just beyond the middle, and then goes at a right angle to the margin and suture; the two basal areolæ are oblong, the apical triangular. L. $2\frac{1}{3}$ lin. N. India (Deyrolle), W. Yunnan (Moore).

Coelophora pedicata.

Coelophora pedicata, *Muls. Op.* III. 52 (T).

Subovate, meso- and metasterna black, ventral segments black, the first ochreous at the margin, posterior legs black, tarsi pale; head, four anterior legs and prosternum ochreous; thorax black, anterior angles with a quadrate whitish spot, an equilateral whitish triangle extending from the emargination to about half the breadth of the thorax; elytra ochreous yellow, margins very narrowly, and a thin branched line black, leaving four irregular areolæ, of which the first extending along the suture to two-thirds is twice the size of any of the others. L. $2\frac{1}{4}$ lin. Java (Deyrolle).

Coelophora victoriae.

Coelophora victoriae, *Muls. Spec.* p. 269. 23 (T).

Subovate, black, tarsi and anterior tibiæ pale reddish; head ochreous, a black triangular spot on the clypeus; thorax black, anterior angles with an irregular quadrangular ochreous spot; elytra orange, with a scarcely visible sutural margin and each with five dots, black; 1 on the callus, 2 and 3 in a transverse line at one-third (one close to the margin, one by the suture), 4 and 5 approximated at two-thirds; punctuation not very visible, surface slightly alutaceous. L. $2\frac{1}{2}$ lin. N. India (Deyrolle).

Propylea.

Muls. Sécur. p. 152 (*typ. conglobata* L.).

This genus appears to me better placed here than near *Halysia*. Mulsant's subgenus *Vola*, placed by him under *Lemnia*, certainly belongs here.

Propylea conglobata.

Coccinella conglobata, *Linn. Syst. Nat.* p. 366. 19 (1758).

Coccinella 14-punctata, *Linn. Syst. Nat.* p. 366. 13 (1758).

- Propylea 14-punctata*, Muls. *Sécur.* p. 157 (1846).
Coccinella tessulata, Scop. *Ent. Carn.* p. 78. 243 (1763).
Propylea conglobata, Muls. *Op.* VII. p. 146 (1856) T.
Harmonia dionea, Muls. *Op.* VII. 140 (1856) T.
Harmonia ambitiosa, Muls. *Mon.* p. 72. 27 (1866) T.
 Europe, Siberia, China, Japan.

The extreme varieties look very unlike the type; having the elytra of a clear ochreous yellow, with one or two spots only; but the form of the thoracic border will generally distinguish it. I have seen some examples with the elytra entirely black.

Propylea dissecta.

- Lemnia dissecta*, Muls. *Spec.* p. 377. 1 (T).
Lemnia mystacea, Muls. *Op.* III. p. 50 (1853) T.
Harmonia Felicie, Muls. *Mon.* p. 57. 4 (1866) T.
 India, Shanghai.

Very similar to *Coel. Mariae* in colouring; really only differing in size from *P. conglobata*, of which it may be a tropical form.

Var. *mystacea*.

Like *P. dissecta*, but with only the first basal yellow spot remaining, enclosed with a black border, the rest of the elytra of a uniform reddish brown. N. India (Deyrolle).

Var. *Felicie*.

In this the basal spot has also disappeared. N. India (Deyrolle).

Propylea Kehamæ, sp. n.

Oval, black, front of the head and legs pale ochreous; thorax with a narrow anterior margin, and the sides pretty broadly ochreous; elytra ochreous with three dentate interrupted black fasciæ, leaving six pale areolæ. L. 2 lin. India (Fry).

It differs at once from *P. mystacea* by the last areola being really apical.

Oenopia.

Muls. Spec. p. 420 (*typ. addicta*).

Closely allied to *Propylea*, but the epipleuræ are more inclined, and the thoracic fovea more marked; the antennæ are short.

Oenopia addicta.

Oenopia addicta, Muls. *Spec.* p. 422. 2.

Egypt (Deyrolle). Probably a variable species.

Oenopia Sauzeti.

Oenopia Sauzeti, Muls. *Mon.* p. 281. 3 (T).

Oval, black, knees, tibiæ and tarsi pale; thorax black, anterior

angles with a quadrangular whitish spot, the inner angle produced to a point on the disc, outer portion prolonged to the posterior angle of the thorax; elytra light ochreous, shining, rather more thickly punctate, with an extremely narrow sutural margin dilated into a large round spot just beyond the middle, and into a smaller one immediately before the apex, black; each also with two large black spots, one quadrangular discoidal, just touching the callus; one round near the margin at two-thirds. L. 2 lin. India (Deyrolle).

This has the colouring of a *Cleothera*.

Oenopia Kirbyi.

Oenopia Kirbyi, *Muls. Spec.* p. 425. 4 (T).

India (Hope, Deyrolle).

Oenopia cinctella.

Oenopia cinctella, *Muls. Spec.* p. 426. 5.

Cape of Good Hope (Hope, Bakewell); Timor (Paris). [This locality is, I presume, a mistake.] The punctuation is pretty close, but not deep; the form oval, the elytra not flattened out at the edge, the thorax without epipleural foveæ, the scutellum small, the abdominal plates V-shaped as in *Leis*.

Dysis.

Muls. Spec. p. 418 (*typ. bis-4-guttata*).

Differs from *Coelophora* by the short fusiform antennæ, and must include the other African species of that genus.

Dysis bis-quatuor-guttata.

Dysis bis-quatuor-guttata, *Muls. Spec.* p. 418. 1.

Mauritius (Deyrolle), Australia (Paris).

Dysis coronata.

Coelophora coronata, *Muls. Spec.* p. 411. 16 (T).

Subhemispherical, reddish testaceous, thorax with the sides margined, punctuation uniform, not coarse; elytra pitchy red, each with three large yellow spots, one oblong near the scutellum, one round near the margin at one-third, one larger round, sub-apical; the external margin testaceous-red. L. $2\frac{1}{4}$ lin. Senegal, Senegambia.

Dysis Desjardini.

Coelophora Desjardini, *Muls. Mon.* p. 258. 2 (T).

Subhemispherical, orange-red, punctuation tolerably strong and rather close; thorax orange-red, anterior margin and sides narrowly

yellow; elytra black, with a common basal triangle orange; scutellum orange, rather transverse; body and legs orange red. L. $2\frac{1}{2}$ lin. Senegal (Deyrolle).

Dysis sanguinosa.*

Coelophora sanguinosa, *Muls. Spec.* p. 410. 15.

? (Dupont). This is apparently an African species allied to *C. Desjardini*.

Dysis coccea.

Coelophora coccea, *Muls. Mon.* p. 275. 35.

Subhemispherical; entirely reddish-orange. L. 2 lin. Guinea (Deyrolle).

Punctuation rather fine, thorax apparently margined with yellowish. This is an immature state of some other species.

Dysis decora.*

Coelophora decora, *Muls. Spec.* p. 412. 17.

Senegal (Buquet).

Dysis Romani.

Coelophora Romani, *Muls. Mon.* p. 273. 31 (T).

Subhemispherical, rather coarsely punctate; thorax reddish-brown, the anterior angles with a quadrangular pale spot; elytra dark pitchy brown, each with two large orange-red spots, a humeral dash and a small dot connected with the second spot of a darker red. L. $2\frac{1}{3}$ lin. N. India (Deyrolle).

Dysis Saundersii, sp. n.

Very like *D. Romani*, but less convex, larger, the spots smaller, of a light yellow, and further apart; the thorax uniformly reddish. Hab. ? (Saunders).

Dysis excellens,* sp. n.

Black, knees, tibiae and tarsi reddish, thorax with the sides broadly whitish, the black portion nearly reaching the posterior angles; elytra each with two large orange spots, the first (transversely oval) just before the middle, the second (also oval) subapical. L. $1\frac{1}{4}$ lin. Cochin China (Fry). Punctuation sparse and rather evident.

Procula.

Muls. Spec. p. 416 (*typ.* Douci).

Punctuation very sparse, tolerably coarse. This is the only American species of this section of the *Coccinellides*.

Procula Douei.

Procula Douei, *Muls. Spec.* p. 417. 1 (T).

Coccinella bacchata, *Muls. Mon.* p. 83. 17 (T).

Jamaica (Buquet, Deyrolle). Why Mulsant placed this in *Coccinella* I can hardly see.

Callineda.

Crotch, Cat. Cocc. p. 6 (*typ. decussata*).

This genus is principally characterized by the antennæ, which are rather short, with a three-jointed club, the last joint being very large and set on obliquely so as to appear securiform. The elytra are margined, and the whole form is that of *Cycloneda*. Mesosternum hardly sinuate, plates V-shaped, epipleuræ continuous nearly to apex of elytra.

Callineda decussata, sp. n.

Oval, convex, reddish-ochreous or ochreous; punctuation moderate, sparse, surface alutaceous; thorax with sides broadly whitish-yellow, this colour edged with black, leaving the disc reddish; the elytra with a reticulating pattern, dividing each (when complete) into five subequal areolæ, 2, 2, 1; it starts from the callus and goes down to about two-thirds, where it branches to right and left, the branches being oblique; previously at one-third it had emitted two similar branches at right angles; sutural margin very narrowly black. L. $2\frac{3}{4}$ lin. Ceram, Amboina, Macassar, Kai, Bouru, Bat-chian, Gilolo (Wallace).

Callineda testudinaria.

Daulis testudinaria, *Muls. Spec.* p. 300. 4.

Australia (Deyrolle, Bakewell).

Very like the preceding, but the external margins of the elytra and the suture always edged with black; the reticulation varies in intensity and is often incomplete posteriorly; the two lines on the thorax are angulated inwards, with the points towards each other.

Callineda sedecim-notata.

Coccinella 16-notata||, *Fabr. Syst. El.* i. 370. 83 (1801).

Daulis 16-notata, *Muls. Spec.* p. 296, 1.

Callineda multipunctata, *Crotch, Cat. Cocc.* p. 6.

Sarawak (Wallace), Amboina, Java. Punctuation rather closer.

Callineda duplicata, sp. n.

Bright ochreous, thorax ochreous, the base with two black spots, disc with the letter V brown; elytra with the margin, suture

narrowly, and six spots black, (two basal, one near the suture, one on the callus; two medial approximate, near the margin; two subapical, approximate). L. 3 lin. N. Australia (B. M.).

The punctuation is tolerably strong, the elytra hardly margined.

Callineda Boulardi.*

Daulis Boulardi, *Muls. Spec.* p. 315. 13.
Guam Isl. (Paris). I have not seen this.

Heteroneda.

Crotch, Cat. Cocc. p. 6 (*typ. reticulata*).

Antennæ moderately long; mesosternum with a triangular emargination; form oval, elytra hardly margined, thickly alutaceous, punctuation obsolete, claws very short.

Heteroneda reticulata.

Coccinella reticulata ||, *Fabr. Syst. El.* i. 362. 36 (1801).

Daulis reticulata, *Muls. Spec.* p. 301. 5.

Heteroneda Billardieri, *Crotch, Cat. Cocc.* p. 6 (1871).

Luzon (Deyrolle). Thorax with a single line down the centre; elytra divided into five areolæ.

Cycloneda.

Crotch, Cat. Cocc. p. 6 (*typ. sanguinea*).

[|| *Daulis*, *Muls. Spec.* p. 295 (nec Er.)].

This genus is an unsatisfactory assemblage of species having but little in common, but no characters have been found to separate it into groups. They are all American.

Cycloneda separata.

Daulis separata, *Muls. Spec.* p. 298. 2 (T).

Columbia, Venezuela, Bogota. Varieties occur with the spots reduced to mere points. Punctuation rather coarse and close; thorax finely punctured, alutaceous. Plates V-shaped.

Cycloneda amabilis.*

Daulis amabilis, *Muls. Spec.* p. 304. 7.

Columbia (Sallé). I have not seen this, but it seems to be a mere variety of the preceding.

Cycloneda vigintiduo-notata.

Daulis 22-notata, *Muls. Spec.* p. 307. 9 (1850).

Leis 22-notata, *Muls. Mon.* p. 180. 13 (1866).

Brazil, Cayenne, New Granada. Punctuation fine and sparse; thorax and elytra alutaceous; plates V-shaped.

Cycloneda dilychnis.*

Daulis dilychnis, *Muls. Spec.* p. 306. 8 (T).

Cayenne (Buquet). The type, now in the British Museum, is in bad condition; it appears to be allied to *C. 22-notata*.

Cycloneda Sallaei.*

Daulis Sallaei, *Muls. Spec.* p. 303. 6.

Columbia (Sallé), West Indies (Brussels). Punctuation closer, rather fine; thorax and elytra alutaceous.

Cycloneda callispilota.

Coccinella callispilota, *Guérin, Icon. R. A.* p. 320 (1844).

Neda callispilota, *Muls. Spec.* p. 294.

Brazil, Mexico, New Granada. Mulsant has placed this in his genus *Neda*, but the oval form and elytra hardly flattened at the margin refer it here; plates V-shaped, never quite reaching the margin but continuous to the outer edge.

Cycloneda retrospiciens, sp. n.

Ovate, body and legs black; head pale ochreous; thorax with the sides very broadly pale ochreous, this colour edged with a black curved line, leaving the discal third reddish ochreous, base edged with black; elytra rich orange, alutaceous, sparsely and faintly punctured, epipleuræ broad, continuous; mesosternum entire. L. $2\frac{3}{4}$ lin. Mexico (Deyrolle). This species has the precise colouring of *Coccinella luteipennis*.

Cycloneda abdominalis.

Coccinella abdominalis||, *Say, J. Acad. Phil.* iv. 95. 7 (1824).

Daulis abdominalis, *Muls. Spec.* p. 316. 14.

Cycloneda Sayi, *Crotch, Cat. Cocc.* p. 6 (1871).

United States, Mexico. This species is very variable, the central band of spots often forms a fascia, mesosternum emarginate, plates V-shaped.

Cycloneda viridula.

Daulis viridula, *Muls. Spec.* p. 318. 15.

Daulis devastata, *Muls. Spec.* p. 299. 3 (T).

N. Granada, La Guayra (Sallé), Cartagena. Colour of a pale green when alive.

Cycloneda puncticollis.

Daulis puncticollis, *Muls. Spec.* p. 320. 17 (T).

Cayenne (Deyrolle). Punctuation coarse and rather close.

Cycloneda pallidula.

Daulis pallidula, *Muls. Spec.* p. 329. 23 (T).

Daulis deflorata, *Muls. Spec.* p. 330. 24 (T)

Daulis gutticollis, *Muls. Spec.* p. 332. 26.

Columbia, Venezuela. This species varies a good deal in appearance, being in life of a bright green, which fades to a dirty yellow. The thorax also varies in design. The species cited above are nearly all unique examples.

Cycloneda sanguinea.

Coccinella sanguinea, *Linn. Cent. Ins.* n. 11 (1763).

Daulis sanguinea, *Muls. Spec.* p. 326. 22.

Daulis Steini, *Muls. Mon.* p. 222. 23 (T). *Coquimbó, Chile.*

Widely spread from Mexico and California to Brazil and Peru; it varies extremely in size and in intensity of colour. It is apparently extremely abundant everywhere. Surface alutaceous, punctuation sparse and obsolete.

Cycloneda erythroptera.

Daulis erythroptera, *Muls. Spec.* p. 319. 16 (T).

Daulis Proserpine, *Muls. Mon.* p. 223. 24 (T).

Buenos Ayres (Chevrolat, Dejean, Berlin).

Near *C. sanguinea*, but more ovate.

Cycloneda ferruginea.

Coccinella ferruginea, *Oliv. Ent.* vi. p. 991. 3, pl. v. 56 (1808).

Daulis ferruginea, *Muls. Spec.* p. 223. 27.

Haiti. The elytra have the irregular marginal punctures unusually well marked, alutaceous, the punctuation extremely sparse and obsolete, the epipleuræ horizontal, concave, acuminate at two-thirds.

Cycloneda metallica, sp. n.

Very like *C. ferruginea*, but more ovate, less hemispherical, punctuation more evident, interstices alutaceous; thorax brownish-red, elytra metallic-green, body beneath and legs reddish. L. $2\frac{1}{2}$ lin. R. Amazon.

This unusually coloured species was kindly ceded me by Mr N. W. Saunders.

Cycloneda melanocera.*

Daulis melanocera, *Muls. Spec.* p. 333. 27 (T).

Columbia (Dupont). Allied to *C. ferruginea*, but with more evident punctuation; the surface is alutaceous, the elytra and thorax with pale margins, the former with a faint metallic lustre, probably more evident in some specimens.

Cycloneda rubida.

Daulis rubida, *Muls. Spec.* p. 340. 31 (T).

Daulis vigilans, *Muls. Spec.* p. 340. 32 (T).

Columbia, Cayenne, Ega (Bates). I have united these two species, which differ in the coloration of the thorax, on the strength of a fine series taken by Mr Bates at Ega; in extreme varieties the yellow margin of the thorax has a brown pupil (as in *C. conspiciolata*). The punctuation varies somewhat in intensity. The first ventral segment is very short, so that the abdominal plates appear small, this is also the case in *C. sanguinea*.

These seven species agree in their more evident punctuation, and in having a similarly coloured thorax, with an ocellated pupil on either side.

Cycloneda graphiptera.

Daulis graphiptera, *Muls. Spec.* p. 309. 10 (T).

N. Granada. The elytral markings are arranged, 1, 3, 2, 1.

Cycloneda tredecim-signata.

Daulis 13-signata, *Muls. Spec.* p. 311. 11 (T).

Brazil; elytral markings, 1, 3, 2.

Cycloneda Darestei.

Daulis Darestei, *Muls. Mon.* p. 228. 36 (T).

Hemispherical, thorax as in the preceding, elytra, each with eight brown irregular spots; 1 basal in form of a V (probably two united), 1 small just outside the callus, 3 transversely placed in the middle, the last one reaching the suture, and running up it to the scutellum, 2 across at two-thirds, the second large, like an inverted V; 1 subapical. L. 2 lin. Ega (Bates).

Cycloneda conjugata.

Daulis conjugata, *Muls. Spec.* p. 313. 12.

Brazil; elytral spots normally 2, 2, 2, but sometimes united.

Cycloneda antillensis, sp. n.

Ovate, elytra yellowish, with five brown spots; 2 equal, basal, 2 equal, medial, 1 irregular subapical, obsolete; punctuation evident and rather close. L. $2\frac{3}{4}$ lin. Trinidad (Fry).

Cycloneda maeander.

Daulis maeander, *Muls. Spec.* p. 335. 29.

Mexico, Cayenne, S. Paulo (Bates); sparsely and obsoletely punctured; design variable, sometimes confused.

Cycloneda lorata.

Daulis lorata, *Muls. Spec.* p. 338. 30.

S. Catharina, Bahia (Fry). The coloration is an almost exact reproduction of that of *Psyll. hybrida*. Punctuation tolerably close, surface alutaceous.

Cycloneda oculata.

Coccinella oculata||, *Fabr. Ent. Syst.* I. p. 287. 98 (1792).

Coccinella binotata, *Say, J. Acad. Phil.* IV. p. 302. 2 (1826).

Daulis binotata, *Muls. Spec.* p. 322. 19.

United States; this species is very variable, (I do not know its pale form). Mulsant suggests that it may have seven dark spots on a pale ground. Surface alutaceous; abdominal plates V-shaped.

Cycloneda ebenina.

Daulis ebenina, *Muls. Mon.* p. 222. 24 (T).

Short, circular, not very convex, punctuation coarse, evident, close; head and underside yellow; thorax black, with the sides very broadly and an obsolete medial line rich yellow; elytra black, epipleuræ pale on the inner margin. L. $3\frac{1}{4}$ lin. Peru (Deyrolle). The short circular form recalls the genus *Neda*, the mesosternum is emarginate and the abdominal plates V-shaped.

The coloration is that of *Synia melanopepla*.

Cycloneda Gilardini.*

Daulis Gilardini, *Muls. Mon.* p. 214. 9.

Hemispherical, black, thorax with the sides white; elytra each with ten large rounded yellow spots; 1 basal joined to the scutellum, 1 marginal below the shoulder, 1 discoidal, near the suture a little before the middle (sometimes united to the first), 2 placed across at four-fifths (the external reaching the margin), 1 subapical. L. $2\frac{1}{2}$ lin. Columbia (Sallé).

Cycloneda conspicillata.

Daulis conspicillata, *Muls. Spec.* p. 333. 28 (T).

Cayenne, Ega (Bates). Plates V-shaped, epipleuræ very concave, subapical. Peru (Deyrolle).

Cycloneda bis-tri-signata.

Daulis bis-tri-signata, *Muls. Spec.* p. 330. 25.

Brazil (Chevrolat, Brussels).

Cycloneda Fryii, sp. n.

Hemispherical, black, alutaceous, punctuation sparse, obsolete; head yellow, thorax with the anterior angles, the anterior margin very narrowly, an obsolete discoidal line, and 2 small dots on either side rich yellow; elytra yellow, the margin narrowly black, the posterior half black, in the form of a triangle extending obliquely from the scutellum to about two-thirds of the margin. L. $2\frac{1}{4}$ lin. Peru (Fry). Ecuador (Buckley). This very conspicuous species has been kindly presented to me by Mr Fry, to whom I have dedicated it. Varieties have the thorax entirely orange.

Neda.

Muls. Spec. p. 274 (*typ. Norrisii*).

The excessive variability of the colouring in some species of this genus renders it almost impossible to select specific characters; it seems peculiar to S. America and Mexico, for the species which Mulsant has added from the Old World are all referable to other genera. Elytra margined more or less visibly, mesosternum sinuate.

Neda Norrisii.

Coccinella Norrisii, *Guér. Icon. R. A.* p. 320 (1844) T.

Neda Norrisii, *Muls. Spec.* p. 288. 12.

Neda perfida, *Muls. Spec.* p. 291. 18 (T).

Neda Chevrolati, *Muls. Spec.* p. 291. 17 (T).

Neda subdola, *Muls. Spec.* p. 290. 16.

Neda finitima, *Muls. Spec.* p. 290. 14 (T).

Neda fasciolata, *Muls. Spec.* p. 290. 15 (T).

Neda Bremeri, *Muls. Spec.* p. 289. 13.

Neda aequatoriana, *Muls. Op.* III. p. 42 (1853).

Neda illuda, *Muls. Op.* III. p. 44 (1853).

Neda Amandi, *Muls. Spec.* p. 286. 11 (T).

Neda Emilice, *Muls. Mon.* p. 205. 20 (T).

N. Granada, Ecuador. I have been compelled to extend the list of varieties of this inconstant species from inspection of the fine series in Mr Fry's cabinet, and a short set brought from his

recent journey by Mr Buckley. These shew conclusively that the straw-yellow ground colour changes into testaceous and that the colour of the head is variable; the yellow colour on the sides of the thorax never reaches the posterior angles, but on the other hand sometimes almost effaced, or only covers the anterior angles. The elytra are visibly thickened at the margin, which is produced, covered with coarse punctures.

Neda Jourdani.*

Neda Jourdani, *Muls. Spec.* p. 293. 20 (T).

Columbia (Buquet, Dejean). This appears to be distinct, the white colour on the thorax reaches the base, and the form is shorter and more rounded, the elytra with the extreme apex black.

Neda ochracea.*

Neda ochracea, *Muls. Spec.* p. 279. 5.

Columbia (Paris). I have not seen this.

Neda cardinalis.*

Coccinella cardinalis, *Erchs. Arch. f. Nat.* XII. p. 182 (1847).

"Thorax black, sides yellow, the black colour dilated in a curved line at the base; elytra rounded, with a narrow margin, red or ochreous-red, with the suture, base and margin black. Body and legs black." L. 4 lin. Peru (Berlin).

The type is in bad condition, and was not sent to me; it may be a var. of *N. Norrisii*.

Neda ostrina.

Coccinella ostrina, *Erchs. Arch. f. Nat.* XII. p. 182 (1847) T.

Neda Orbignyi, *Muls. Spec.* p. 280. 6.

Neda peruviana, *Muls. Spec.* p. 281. 7.

Brazil, Mexico, Peru; punctuation close, fine, but visible; elytra hardly margined; colour variable, thorax with an abbreviated yellow medial line, the yellow base to the elytra sometimes absent, the black pigment extremely variable.

Neda patula.

Coccinella patula, *Erchs. Arch. f. Nat.* XII. p. 182. 1847 (T).

Neda andicola, *Muls. Spec.* p. 291. 19.

Peru, Chili; "common all the year round on trees covered with Aphides."

Neda marginalis.

Neda marginalis, *Muls. Spec.* p. 277. 3.

Neda flavens, *Muls. Op.* III. p. 41 (T).

Brazil (?), Mexico. Punctuation scarcely visible with a lens, elytra alutaceous, margined, epipleuræ acuminate; metasternum almost rounded. In some specimens the punctuation is more visible.

Mononeda.

gen. nov. (*typ. marginata*).

Distinct from *Neda* by the epipleuræ of the elytra which are not acuminate, and by the elytra not being thickened at the margin; the metasternum is truncate at the base.

Mononeda marginata.

Coccinella marginata, Linn. *Syst. Nat.* p. 579. 1 (1767).

Neda marginata, Muls. *Spec.* p. 274. 1.

Brazil; common. Punctuation very fine, obsolete, elytra visibly alutaceous.

Archaioneda.

gen. nov. (*typ. tricolor*).

Antennæ short; thoracic epipleuræ not foveolate, but impressed, punctate, pubescent; mesosternum large, triangularly emarginate, finely carinate; elytra immarginate, epipleuræ foveolate, finely punctate. Australia and Polynesia. Thorax with the sides finely margined, punctuation coarse and rather close.

Archaioneda tricolor.

Coccinella tricolor, Fabr. *Mant.* 1. p. 59. 69 (1787) T.

Neda tricolor, Muls. *Spec.* p. 282. 8.

Amsterdam I. (B. M.). A variety (*fijiensis*) from the Fiji Islands has the elytra unicolorous, except a narrow black sutural line.

Archaioneda princeps.

Neda princeps, Muls. *Spec.* p. 278. 4 (T).

Australia, Port Essington (Hope, B. M., Stockholm, Parry). Thorax with the anterior angles produced, the emargination bisinuate, the epipleuræ foveolate; elytra with the epipleuræ foveolate, punctuation distinct, the humeral angle with a thickened margin.

Callicaria.

Crotch, Cat. Cocc. p. 6 (*typ. superba*).

Thoracic epipleuræ deeply impressed along the whole length close to the margin, the sides almost straight, anterior angles acuminate; mesosternum triangularly emarginate, metasternum connate with it; elytra immarginate; scutellum transverse, deeply punctate.

Callicaria superba.

Caria superba, *Muls. Mon.* p. 167. 2 (T).

Bright brownish-red, legs pale yellow, body black, sides of abdomen yellowish; thorax with an oblong black spot on either side the scutellum, which is also black; elytra each with seven black spots, 1 on the callus, 3 transversely before the middle, the outer one reaching the margin, transverse, 3 at about two-thirds, forming a band concave towards the apex. L. 5 lin. India. This species is very distinct by the form of its thorax.

Megalocaria.

Crotch, Cat. Cocc. p. 6 (*typ.* Reichii).

Form of *Pelina*. Punctuation hardly visible with a lens, elytra minutely alutaceous, opaque; thoracic epipleuræ impressed, but without a defined fovea; mesosternum deeply semicircularly emarginate; prosternum without raised lines; elytral epipleuræ very broad and not attenuate at the apex; elytra immarginate. Scutellum with four or five deep punctures.

Megalocaria Reichii.

Neda Reichii, *Muls. Spec.* p. 285. 10 (T).

Caria miranda, *Muls. Mon.* p. 168. 4 (T).

Java. This fine species has been twice described by Mulsant.

Megalocaria infirmata.*

Caria infirmata, *Muls. Mon.* p. 167. 3 (T).

Closely resembling *M. Reichii*, but smaller, thorax with a quadrate spot at the anterior angles, and the anterior margins narrowly yellowish, more transverse, angles more rounded; elytra with a black margin, a short basal vitta on the callus, a transverse fascia at two-thirds, reaching the suture and running up to the scutellum, and another at two-thirds, bent at right angles. L. 5 lin. Java (Berlin).

Megalocaria Pearsoni, sp. n.

Hemispherical, elytra broadly flattened at the margins; black, sides of ventral segments testaceous, impunctate; head black, coarsely punctate; thorax with anterior angles acuminate, sides broadly ochreous, leaving a central triangle black (the apex of this is truncate, being the base of the anterior emargination); elytra orange, suture narrowly black, dilated into a rectangular tooth at one-third, each with five spots; 1 elongate-oval, small, from the base to the callus; 3 forming a transverse range (concave forwards)

at one-third; 2 obliquely placed, the outer at two-thirds, the other (discoïdal) between it and the sutural spot. L. 6 lin. Darjeeling (India Museum).

Synonymy.

Chev. Dej. Cat. p. 460 (*typ. grandis*).

Distinct by the bifid claws; punctuation fine, elytra not margined, scutellum impunctate.

Synonymy grandis.

Coccinella grandis, *Thunb. Nov. Sp. Ins.* p. 12, f. 13.

Synonymy grandis, *Muls. Spec.* p. 230. 1.

Occurs abundantly throughout the East; China, Manilla, Japan, Manchuria, Siam, Borneo, Malasia (Batchian, Bourou, Mak. . . ., Java, Amboyna, Sarawak). It is the largest species of the family.

Caria.

Muls. Spec. p. 231 (*typ. dilatata*).

Antennæ short, first joint broadly dilated, punctuation very fine, obsolete, elytra immarginate, alutaceous; scutellum nearly impunctate, margins elevated near the apex.

Caria dilatata.

Coccinella dilatata, *Fabr. Syst. Ent.* p. 82. 18.

Caria dilatata, *Muls. Spec.* p. 232. 1.

Manchuria, China, *Bengal*, Java, Sumatra.

Var. (*suffusa*):

Similar to the typical form, but with the black pigment largely developed; thorax black all along the base, the two sutural pairs of spots coalesce, and the exterior ones run into the margin, which is also broadly black. Flores (Wallace).

Caria Welwitschii,* sp. n.

Ochreous, thorax with the sides and base, scutellum with the sides, elytra with the margins and suture narrowly edged with black; thorax with two black spots towards the posterior angles; elytra with four black dots, 1 on the callus, 1 before the middle, close to the suture, 2 obsolete placed transversely towards the apex. L. 5 lin. Angola (Welwitsch, B. M.).

Punctuation fine, alutaceous, elytra with the humeral angle thickened out; plates V-shaped; thorax with the emargination bisinuate, mesosternum emarginate. This species is nearest *C. dilatata*, but will evidently need a new genus for its reception.

Docimocaria.

gen. nov. (*typ. insignis*).

Allied to *Caria*, but with long antennæ, first joint dilated, the others elongate, last joint longer than the first; mesosternum deeply triangularly emarginate, thoracic epipleuræ with a broad shallow fovea; punctuation fine but evident; elytra thickened at the base, with coarse punctures at the humeral angle.

Docimocaria insignis.

Rich reddish-orange, with two square black spots on the margin of the elytra, 1 at one-third, 1 a little beyond two-thirds; the first shews through the elytra on the epipleuræ, but not the second; punctuation fine but evident, thorax truncate at the base. L. 4 lin. Manilla.

Docimocaria Cumingii.

Caria Cumingii, *Muls. Spec.* p. 236. 4 (T).

Manilla (Hope).

Very like *C. insignis*, but the second marginal spot does not reach the margin, and it has an irregular black spot on either side of the suture, in a line with the first marginal spot. This species has the exact coloration of *Leis Paulineæ*. In the British Museum is a variety in which the medial spots form a fascia, the apical half being all more or less black.

Cyrtocaria.

gen. nov. (*typ. regalis*).

Thoracic epipleuræ with a small well-defined fovea just under the eyes, the posterior portion flat and deeply punctate; abdominal plates terminal, partially complete externally (approximating to *Leis*); mesosternum emarginate; elytra very convex, gibbous, punctuation fine, interstices very minutely and closely punctured, not margined, with numerous large punctures at the margin; antennæ short, club with the last joint broad, obliquely truncate. Scutellum depressed, coarsely punctate, margins elevated. Madagascar.

Cyrtocaria regalis.

Coccinella regalis, *Oliv. Ent.* vi. 1020. 48, pl. vi. 77 (1808).

Caria regalis, *Muls. Spec.* p. 238. 6.

Leis gibbipennis, *Muls. Mon.* p. 176. 6 (T).

Madagascar; India (Olivier), but this is an error.

Cyrtocaria inflata.*

Leis inflata, *Muls. Spec.* p. 244. 3.
Madagascar (Paris).

Micraspis.

Chevr. Dej. Cat. (typ. striata).

Mulsant has used this genus for *12-punctata*, but Hope (1840) expressly gives *Striata* as the type. Besides the small scutellum, it is characterized by its comparatively short antennæ and the elytra not being thickened at the margin. The abdominal plates are sometimes V-shaped, sometimes incomplete.

Micraspis litterata.

Oenopia litterata, *Muls. Spec.* p. 427. 6 (1850) T.
Alesia sybillina, *Muls. Op.* III. 46 (1853) T.
Abyssinia (Reiche).

Almost absolutely impunctate, elytra not bordered, the margins flattened out and inclined, the abdominal plates incomplete, terminal; thoracic epipleuræ with a very small fovea near the prosternum; scutellum small; surface alutaceous.

Micraspis bidentata.

Alesia bidentata, *Muls. Op.* III. p. 48 (T).

Subhemispherical, tolerably thickly and evidently punctate; thorax visibly alutaceous; black; knees, tibiæ, tarsi and epimera pale; head ochreous, with a longitudinal central band black; thorax black, anterior angles and margin pale, posterior portion with four rounded yellow marks; elytra rose-coloured, suture and margin narrowly black, a black discoidal narrow vitta starting from the middle of the base, and crossing the suture at five-sixths; this vitta has two large black triangular teeth on its inner edge, and is bordered with pale yellowish. L. $3\frac{1}{2}$ lin. Cape of Good Hope (Deyrolle).

Micraspis torquata.

Alesia torquata, *Muls. Spec.* p. 344. 1.
Alesia Gabilloti, *Muls. Mon.* p. 233. 2 (T).
Neda Hopfferi, *Muls. Mon.* p. 204. 19 (T).

Cape of Good Hope (Deyrolle). Punctuation not deeply impressed, surface alutaceous.

Micraspis Bohemani.

Alesia Bohemani, *Muls. Spec.* p. 346. 3 (T).
Caffraria (Stockholm), Natal (Janson). Punctuation very

sparse and extremely fine; surface alutaceous. My specimens are of a very pale yellow, the Stockholm ones are almost orange.

Micraspis annulata.

Alesia annulata, Muls. Spec. p. 348. 4 (T).

Abyssinia (Reiche). The punctuation is extremely fine and sparse; eyes deeply emarginate.

Micraspis inclusa.

Alesia inclusa, Muls. Spec. p. 348. 4 (T).

Cape of Good Hope (Reiche, Deyrolle). Mulsant cites California, which is absurd. The punctuation is very faint and sparse. The surface alutaceous.

Micraspis striata.

Coccinella striata, Fabr. Ent. Syst. i. 269. 17.

Alesia striata, Muls. Spec. p. 354. 7.

Alesia Olivieri, Gerst. Pet. Reise. v. p. 347.

Alesia larvalis, Muls. Spec. p. 356. 8.

Coccinella hamata, Schön. Syn. Ins. ii. 158. 29, pl. 4, f. 5 (1808).

Alesia hamata, Muls. Spec. p. 356. 8.

Alesia adunca, Muls. Mon. p. 237.

Guinea, Angola, Cape, Natal, Mozambique; these two forms are generally differentiated by the colour of the underside.

Micraspis Guerinii.

Alesia Guerinii, Muls. Spec. p. 345. 2 (T).

Neilgherries (Guérin).

Micraspis univittata.

Coccinella univittata, Hope, Zool. Misc. p. 31.

Alesia univittata, Muls. Spec. p. 357.

Alesia inconsiderata, Muls. Mon. p. 238. 12 (T).

India, Nepal. Sparsely and faintly punctate.

Micraspis pentas.

Coclophora pentas, Muls. Op. iii. p. 58 (1853).

Subhemispherical, not very convex, reddish-ochreous; scutellum black; thorax with five black basal dots, 1 in front of the scutellum, 1 on either side of the base, 1 round, towards the angles, free. L. $1\frac{1}{4}$ lin.

Ins. Anjonana (Chevrolat). Thorax alutaceous, elytra sparsely punctate, more strongly on the margin; apparently with several punctures along the suture and external margins.

Verania.

Muls. Spec. p. 358 (*typ. comma*).

This genus is more oval than *Micraspis*, with the margins of the elytra not produced, but rather reflexed, but I cannot see that it was necessary to separate it.

Verania comma.

Coccinella comma, *Thunb. N. I. Sp.* p. 20, f. 30.

Verania comma, *Muls. Spec.* p. 358. 1.

Cape, Natal, Caffraria; Java (*Mulsant*). [This is doubtful.]
Punctuation obsolete, surface alutaceous.

Verania trivittata.

Verania trivittata, *Muls. Spec.* p. 364. 4 (T).

Abyssinia (*Reiche*, Munich). Extremely close to *V. comma*, of which it might almost be only a suffused variety, but is on the average larger and more visibly punctate.

Verania crux.*

Coccinella crux, *Thunb. N. I. Sp.* p. 20, f. 29 (1781).

Verania crux, *Muls. Spec.* p. 373.

Cape of Good Hope (*Berlin*).

Again very close to *V. comma*, with similar punctuation, but the margins of the elytra are not black, the vitta is narrower and not hooked at the base, the sutural dilatation is much greater and reaches the vitta.

Verania furcifera.

Coccinella furcifera, *Guér. Voy. de la Coquille*, p. 152 (T).

Cisseis furcifera, *Muls. Spec.* p. 130. 1.

Sospita flavo-lineata, *Muls. Mon.* p. 113. 3 (T).

Verania Gauthardi, *Muls. Mon.* p. 241. 3 (T).

Australia (*Deyrolle*, *Bakewell*). *Mulsant* cites S. Africa, probably in error. This species agrees in all points with the other *Veraniae*, but *Mulsant* appears to have been in difficulties about it. The characters given for *Cisseis* of ten-jointed antennæ and simple claws are erroneous.

Verania frenata.

Coccinella frenata, *Erichs. Arch. f. Nat.* VIII. 239. 195. (184.)

Verania frenata, *Muls. Spec.* p. 362. 3.

Verania bicrucata, *Montrouz. Ann. Fr.* (4) I. p. 304. 292. (1861).

Australia, Queensland, Tasmania, N. Caledonia, Balade, Art.

Punctuation tolerably visible, surface alutaceous. Sometimes it is nearly suffused with black. Montrouzier's species is identified from a specimen sent by Fauvel, however Montrouzier speaks of a transverse line cutting the vitta in two, which is quite impossible in a *Verania*, otherwise his description agrees well enough. He says that he has found it *in copulâ* with *C. Mulsanti*.

Verania flavovittata, sp. n.

Black, head yellow, thorax yellow with the base black, four-lobed in front; elytra yellow, margin (narrowly), suture, and a curved hooked longitudinal mark black, the latter parallel to the margin and recurved sharply to the suture, which it reaches at about half its length; tarsi pale; punctuation strong, evident. L. $2\frac{1}{2}$ lin. Melbourne (B. M.).

Verania lineola.

Coccinella lineola, *Fabr. Syst. Ent.* p. 79. 5 (1775).

Coccinella striola, *Fabr. Ill. Mag.* II. p. 293 (1803).

Verania striola, *Muls. Spec.* p. 367. 6.

Coccinella strigula, *Boisd. Voy. Astrol.* p. 601. 19 (1835).

Verania strigula, *Muls. Spec.* p. 366. 5.

Australia (Deyrolle). A variety with the vitta interrupted is rarer; it differs from *V. lineata* by the more obsolete punctuation, and by the vitta being truncate at the base.

Verania lineata.

Coccinella lineata, *Thunb. N. I. Sp.* p. 21, f. 31 (1781).

Verania lineata, *Muls. Spec.* p. 360. 2.

Java (Mulsant), Waigiou, Batchian, Bali, Tidore (Wallace). Mulsant also cites Australia and the Cape, but I have never seen specimens from either locality. The suborbicular form and the produced margins to the elytra more resemble *Micraspis*.

Verania afflicta.

Verania afflicta, *Muls. Spec.* p. 372. 9.

Java (Wallace), Borneo, Sumatra (Copenhagen). Mulsant also quotes the Cape, but in error. It has precisely the colouring of *Coelophora caliginosa* and of *Exochemus auritus*.

Verania discolor.

Coccinella discolor, *Fabr. Suppl. Ent. Syst.* p. 77 (1798).

Verania discolor, *Muls. Spec.* p. 369. 8.

Cleis licia, *Muls. Op.* VII. p. 143 (1856), T.

Harmonia crocea, *Muls. Mon.* p. 58. 6 (1866), T.

Harmonia tabida, *Muls. Mon.* p. 59 (1866), T.

Harmonia nigrilabris, *Muls. Mon.* p. 73 (1866), T.

China, India, Philippines, Java, Batchian (Wallace).

This very variable species occurs throughout the east; and is recorded by Mulsant from Australia.

Verania Allardi.

Lemnia Allardi, *Muls. Mon.* p. 249. 2 (T).

Suborbicular, but little convex, light ochreous; thorax with 2 small black dots on the base; elytra each with two black marks, one oblique, narrow, just before the middle, one rounded in the posterior third. L. $1\frac{3}{4}$ lin. N. India (Deyrolle).

This is extremely close to *P. malaccensis*, but can hardly be a variety of it; the spots of the elytra do not hold the same relative position.

Verania malaccensis, sp. n.

Suborbicular, light ochreous yellow; punctuation obsolete and very sparse, thorax with two large black triangular marks, one on either side the base, nearly reaching the anterior margin, elytra with the sutural margin narrowly black, and each with two large black spots; one obtriangular before the middle, one suboval beyond it, separated by a narrow patch of ochreous. L. 2 lin. Gilolo (Wallace).

Antennæ extremely short.

Verania artensis.*

Verania artensis, *Montrouz. Ann. Fr.* (4) I. p. 305. 293.

Subhémisphérique. Tête, antennes et palpes jaunes. Yeux noirs. Prothorax marqué d'une tache basilaire quadrilobée en devant, avec la partie antérieure jaune, émettant en arrière cinq dents inégales, écusson noir. Elytres jaunes, parées d'une bordure suturale, d'une bordure marginale légère, et chacune d'une tache, noires; la bordure suturale élargie vers la base et à l'extrémité; la tache munie de trois pointes obtuses en devant, offrant en arrière une autre pointe atteignant la suture et le bord extérieur, et envoyant une dent obtuse sur le limbe. Poitrine noire. Ventre annelé de roux et de noir. Pieds noirs. L. $2\frac{1}{4}$ lin. Balade, Art (Montrouzier).

Synia.

Muls. Spec. p. 375 (*typ. melanaria*).

The semicircularly emarginate clypeus and the triangularly emarginate metasternum at once characterize this genus. The epipleuræ are very deeply foveolate for the femora.

Synia melanaria.

Synia melanaria, *Muls. Spec.* p. 375. 1.

Coccinella cassidoides, *Montr. Faune de l'île de Woodlark*, p. 77.

Synia melanopepla, *Muls. Spec.* p. 376. 2.

Leis Rougeti, *Muls. Mon.* p. 175. 3 (T).

India, Calcutta, Ceylon, Philippines, Art, N. Caledonia.

The thorax has the sides orange (*melanopepla*) or is entirely orange (*Rougeti*).

Palaeoneda.

Crotch, Cat. Cocc. p. 5. (*typ. auriculata*).

Clypeus semicircularly emarginate, thorax with the sides nearly straight; anterior angles extremely acuminate, above deeply impressed, prosternum compressed, mesosternum deeply emarginate, also compressed, together with the base of the metasternum, which is united to the preceding by an imperceptible suture; elytra not thickened at the margin, epipleuræ very broad, not foveolate, not acuminate at the apex; antennæ with the first joint triangularly dilated. Scutellum small. N. India.

Palaeoneda miniata.

Coccinella miniata||, *Hope, Zool. Misc.* p. 30 (1831) T.

Neda miniata, *Muls. Spec.* p. 276. 2.

Neda auriculata, *Muls. Mon.* p. 193. 1 (T).

India; very obsoletely and sparsely punctulate.

Aiolocaria.

Crotch, Cat. Cocc. p. 6. (*typ. 6-spilota*).

Form of *Neda*; clypeus almost semicircularly emarginate; thoracic epipleuræ hardly foveolate, deeply punctate; mesosternum slightly emarginate; elytra not margined, scutellum sparingly punctate, apex elevated.

Aiolccaria hexaspilota.

Coccinella 6-spilota, *Hope, Zool. Misc.* p. 31 (1831) T.

Caria 6-spilota, *Muls. Spec.* p. 235. 3.

Leis mirabilis, *Motsch. Schrenck. Reise*, II. p. 246.

Nepaul, China, Manchuria, Amur (Maack). Punctuation tolerably close, uniform on the thorax and elytra. Entirely black varieties occur.

Aiolocaria dodecaspilota.

Coccinella 12-spilota, *Hope, Zool. Misc.* p. 31 (1831) T.

Caria 12-spilota, *Muls. Spec.* p. 236. 5.

Nepaul (Hope, London). This species has a facies very unlike the others; the metasternum is deeply emarginate. It is apparently rare, and I have not examined it with sufficient care to erect it into a new genus.

Chilomenes.

Chevr. Dej. Cat. p. 459. (*typ. lunata*).

[*Script. Cheilomenes.*]

Mulsant has adopted this name for *C. 6-maculata*, included in it by Chevrolat, but *C. lunata* is indicated as the type by Hope; hence *Cydonia* (*Muls. Spec.* p. 430) must be rejected. The clypeus is semicircularly emarginate, the antennæ short, the elytra not margined, the abdominal plates V-shaped.

The two Asiatic species are separated by Mulsant as having no thoracic fovea, but I find a gradual transition in this respect.

Chilomenes lunata.

Coccinella lunata, *Fabr. Syst. Ent.* p. 86. 48. (1775) T.

Cydonia lunata, *Muls. Spec.* p. 431. 2.

St Helena, Senegal, Angola, Cape, Caffraria, Upper Egypt, Madagascar, Bourbon, Mauritius, India, Java, Swan River.

This widely spread and variable insect is generally to be recognised by the extremely sparse, obsolete punctuation, and the variegated elytra.

Chilomenes dorsalis.

Coccinella dorsalis, *Oliv. Ent.* vi. 1020. 48, pl. v. 48 (1808) T.

Caria dorsalis, *Muls. Spec.* p. 239. 7.

Cydonia circumclusa, *Muls. Spec.* p. 431. 1 (T).

Guinea (Stockholm), Angola (Welwitsch), Benin (Chevrolat). Punctuation extremely fine, hardly visible. *C. circumclusa* is, as far as I can see, only a small specimen of *C. dorsalis*.

Chilomenes vittata.

Coccinella vittata, *Fabr. Ent. Syst.* i. p. 269. 16 (1792).

Cydonia vittata, *Muls. Spec.* p. 435. 3 (1850).

Alesia circumflua, *Muls. Mon.* p. 238. 13 (1866) T.

Guinea (Copenhagen), Senegal (Chevrolat). The variety *circumflua* seems to be only a darker form; the punctuation is clearer, the surface faintly alutaceous.

Chilomenes quadrilineata.

Cydonia 4-lineata, *Muls. Spec.* p. 439. 6 (T).

Cape, Caffraria, Natal. The punctuation is more evident than in the preceding.

Chilomenes propinqua.

Cydonia propinqua, *Muls. Spec.* p. 437. 4.

Cape of Good Hope (Higgins).

Chilomenes triangulifera.

Cydonia triangulifera, *Muls. Spec.* p. 438. 5 (T).

Madagascar (Deyrolle). Mulsant quotes "Malabar" for this species, but both Reiche's and Chevrolat's types were labelled "Madagascar".

Chilomenes inops.

Cydonia inops, *Muls. Mon.* p. 286.

Mulsant has ranked this doubtfully as a variety of *C. triangulifera*. It seems to me to differ by a visible punctuation, an oval outline and a generally lighter colour; the black external margin is absent, the thorax has 2 small black dots on the base and a black transverse mark across the disc, which may be connected in other examples. L. $2\frac{3}{4}$. India (Deyrolle).

Chilomenes vicina.

Cydonia vicina, *Muls. Spec.* p. 440. 7.

Egypt, Nubia, C. Verde Isles, Senegal, Guinea, St Helena.

Chilomenes unicolor, sp. n.

Yellowish-testaceous, thorax with markings and suture of the elytra narrowly black. L. $1\frac{1}{2}$ —2 lin. Algeria, Egypt (Brussels).

Very close to *C. vicina*, but smaller, elytra unicolorous, thorax with the basal margin black, not reaching to the posterior angles.

Chilomenes cuppigera.

Cydonia cuppigera, *Muls. Spec.* p. 442. 8 (T).

Cydonia nilotica, *Muls. Spec.* p. 443. 9.

Chilomenes osiris, *Muls. Op.* VII. p. 63 (T).

Egypt (Deyrolle, Reiche). The extreme dark varieties look very unlike the type.

Chilomenes Isis, sp. n.

Black; legs, body beneath, and epipleuræ of the elytra testaceous; thorax with the anterior margin narrowly, the sides broadly yellow, disc with two converging lines. L. 2 lin. Egypt (Brussels).

Very near *C. cuppigera*, and possibly a dark variety, but with the lines on the thorax more oblique, the basal margin not yellow, the sides more broadly yellow, and the elytra entirely black. Also near *C. osiris*, but differs by the elytra being entirely black.

Chilomenes sex-maculata.

Coccinella 6-maculata, *Fabr. Sp. Ins.* I. 96. 20 (1781) T.

Cheilomenes 6-maculata, *Muls. Spec.* p. 444. 1.

India, Java, Borneo, Manilla, Prince of Wales Isl.; Bali, Bouru, Flores, Kai, Malacca, Sumatra (Wallace); Cape of Good Hope (Mulsant).

Variable, the extreme form is black with a red dentate fascia.

Chilomenes quadriplagiata.

Coccinella 4-plagiata, Schön. *Syn. Ins.* II. p. 195. 128 (1808).

Cheilomenes 4-plagiata, Muls. *Spec.* p. 447. 2.

China, Manchuria, Japan, India, Celebes (Wallace), Swan River. Also variable.

Chilomenes polynesiaë, sp. n.

Ovate, not very convex, black; tarsi, inner half of epipleuræ and sides of ventral segments orange; thorax black, sides broadly ochreous, not quite reaching the posterior angles, anterior margin narrowly ochreous; elytra black, each with five reddish orange subequal spots, arranged 2, 2, 1; claws very short and weak. L. $1\frac{1}{2}$ — $2\frac{1}{4}$ lin. Fiji Isl. (Rippon), N. Caledonia (Fauvel), Norfolk Isl. (B. M.).

Varieties occur with the apical and third spots confluent, or almost entirely black with the humeral and apical spots visible.

Chilomenes rufipennis, sp. n.

Convex, hemispherical, dark red; thorax black, with the anterior angles ochreous; punctuation close but evident, stronger towards the margins. L. $1\frac{3}{4}$ lin. Madagascar (Deyrolle).

Elpis.

Muls. Spec. p. 449 (*typ. dolens*).

Elpis dolens.*

Elpis dolens, Muls. *Spec.* p. 450. 1.

Madagascar (Chevrolat). Very convex, the epipleuræ nearly perpendicular; punctuation none.

Subfamily 2. TYTTHASPIDES.

Tytthaspis.

[*Micraspis*†, Muls. *Sécur.* p. 162.]

(*typ. 16-punctata*).

This little genus seems to form a sub-family by its emarginate ligula, small scutellum, etc.; at any rate it cannot be placed conveniently with the *Coccinellides*.

Distinct by the very small scutellum, short antennæ, convex compact form (recalling *Hyperaspis*), emarginate ligula, etc.

Tytthaspis sedecim-punctata.

Coccinella 16-punctata, Linn. *Faun. Suec.* p. 156. 483 (1761).

Coccinella 12-punctata, Linn. *Syst. Nat.* p. 581. 19 (1767).

Micraspis 12-punctata, Muls. *Sécur.* p. 163 (1846).

Europe, Tangiers.

Punctuation very fine and sparse on the thorax, more evident on the elytra. In an immense series taken in England by Dr Power are some varieties with confluent spots, and three examples entirely black, a variety hitherto unrecorded.

Tytthaspis phalerata.

Micraspis phalerata, Costa, *Faun. Nap. fasc.* 65, p. 57, pl. VII. 6 (1849).

Micraspis phalerata, Muls. *Spec.* p. 213. 1.

Sicily and Algeria. This might almost be a meridional form of *M. 16-punctata*, in which the two rows of dots are replaced by lines.

Tytthaspis lineola.

Micraspis lineola, Gebler, *Bull. Pet.* I. p. 39 (1843).

Micraspis Gebleri, Muls. *Spec.* p. 1026.

Deserts of the Kirghis (Deyrolle). More convex than the preceding species, alutaceous, very obsoletely punctate.

Tytthaspis tetradyrna.

Micraspis tetradyrna, Fairm. *Ann. Fr.* VII. p. 416 (1867).

"Hemisphærica, subtus nigra, supra rubra, elytris, utrinque nigro bisignatis, sutura et margine basali externoque anguste nigris; laevis, nitida, elytris amplis, humeris prominentibus, rotundatis." Meroe (Fairmaire).

Subfamily 3. CHILCORIDES.

Hemisphærical, often compressed, clypeus produced, confused with the genæ, margining the eyes; thorax generally margined behind. Epipleuræ of the elytra inclined, more or less foveolate, but not deeply so. Punctuation simple (except *cladis* and *anisorcus*). Surface glabrous, (except *Brumus uropygialis*, *Platynaspis*, *Aspidimerus* etc.). Antennæ very short.

I have enlarged this subfamily by taking in the early portion of Mulsant's *Hyperaspides*, retaining that name exclusively to the

species with 7 abdominal segments in the male. Also seeing that almost all the *chilocori* shew a tendency to pubescence on the thorax, I have added *Platynaspis* from the *Scymnides*, and have brought together all the species in which the prosternum is produced so as to conceal the mentum, and in which also the femora are received into deep cavities. These genera were quite unlike the *Scymnides*, but are closely allied to *Cryptognatha* etc.

Chilocorus.

Leach. Edin. Ency. ix. p. 116 (*typ. cacti*).

Spread over the whole world. The sides of the thorax are nearly always pubescent, and in *C. Midas* the humeral angles of the elytra also.

A. Thorax black, elytra unicolorous black, or metallic, or spotted with red.

Chilocorus tristis.

Chilocorus tristis, *Fald. Mém. Ret. (Sav. Etr.)* ii. 452. 95.

—— — *Muls. Spec.* p. 452. 1.

Chilocorus rubidus, *Hope, Zool. Misc.* p. 31 (1831) T.

—— — *Muls. Spec.* p. 453.

Japan, N. China, Mongolia, Nepaul. Mulsant also cites "New Holland," but probably in error. Punctuation sparse and faint, form compressed. Thorax with the sides straight, pubescent; elytra with deep scattered punctures on the margin.

Chilocorus rufitarsis.

Chilocorus rufitarsis, *Mots. Et. Ent.* ii. p. 50.

Chilocorus monachus, *Muls. Op.* vii. p. 147 (T).

Closely allied to *C. tristis* by the shape of the thorax, but hemispherical, not compressed. Head, body and legs reddish orange, disc of elytra with a common ill defined red spot varying in extent. L. $2\frac{1}{4}$ lin. China, Shanghai (Deyrolle, Guérin, Chevrolat). Motschulsky's description is not exact, but will suit this species very well.

Chilocorus infernalis.

Chilocorus infernalis, *Muls. Op.* iii. p. 61 ... (1853) T.

Chilocorus bijugus, *Muls. Op.* iii. p. 61 ... (1853) T.

Very convex, compressed, black, shining thorax with the sides straight, punctuation fine, very sparse, elytra each with 2 orange dots, placed so as to form a transverse common series a little before the middle; ventral segments orange red. L. 2 lin. N. India (Deyrolle).

Mulsant has described this insect twice, but no doubt can exist that both descriptions refer to the same species, which is allied to *C. tristis*.

Chilocorus nigritus.

Coccinella nigrita, *Fabr. Suppl. Ent. Syst.* p. 79 (1798).

Chilocorus nigritus, *Muls. Spec.* p. 463. 14.

Orcus cerberus, *Muls. Op.* VII. p. 148 (1846) T.

India, Malabar (Fry), Cochin China, China, Japan (Lewis) Macassar (Wallace). The sides of the thorax are almost straight; the tibiæ are obsolete; elytra faintly punctulate, without deeper punctures at the margin; (sometimes visibly and rather coarsely punctulate).

Chilocorus Schiodtei.

Chilocorus Schiodtei, *Muls. Spec.* p. 456. 5. (T).

Sierra Leone, Guinea. I have also seen it marked "New Zealand," but obviously in error.

This species differs from its congeners by the thorax produced in front of the scutellum so that the posterior margin forms an obtuse V; the punctuation is very characteristic; each dot (very lightly impressed) being surrounded by a circle of extremely small points. The sides of the elytra are without a produced margin, epipleuræ extremely concave.

Chilocorus discoideus,* sp. n.

Hemispherical, black; head, body and legs testaceous; elytra red, largely bordered with black. L. 3 lin. Angola (Welwitsch), Gaboon (Fry).

Coloration of *Chilomenes dorsalis*. The clypeus is faintly emarginate, strongly punctate; the thorax with basal line very obsolete, sides rounded, sparsely punctate, anterior angles pubescent; elytra with stellate punctuation, more evident towards the margin; prosternum broad, margined, mesosternum sinuate, plicate, hardly separated from the metasternum, elytral epipleuræ parallel, foveolate.

Chilocorus distigma.

Coccinella distigma, *Klug, Erman's Reise*, p. 49. 197 (1835).

Chilocorus ruficeps, *Muls. Spec.* p. 457. 7.

Tropical Africa (Senegal, Angola, Cape, Caffraria, Pt. Natal, Abyssinia, Arabia). The size is very variable and to a certain extent the shape and punctuation. It is allied to *C. Schiodtei* by the stellate punctuation (which is sometimes almost merged into ordinary close punctures), but differs by not having the thorax produced behind; the discoidal spot varies extremely in size, and is altogether absent in an Angolan specimen belonging to M. Welwitsch.

Chilocorus cacti.

Coccinella cacti, *Linn. Syst. Nat.* p. 584. 41 (1767).

Chilocorus cacti, *Muls. Spec.* p. 459. 8.

California, Texas, Mexico, W. Indies, S. America.

Punctuation very fine and sparse, hardly coarser on the margins of the elytra.

Chilocorus renipustulatus.

Coccinella bipustulata†, *De G. Mém.* v. 387. 25. pl. 10. f. 25. (1775).

Coccinella renipustulata, *Scriba, Journ.* p. 276. 161 (1792).

Chilocorus renipustulatus, *Muls. Sécur.* p. 168. 1 (1846).

Europe; on various trees (*Fraxinus*, *Salix*, *Alnus*). Japan (Lewis). The Japan specimens (15) are exactly like *C. bivulnerus* in the round punctiform dot exhibiting no trace of any transverse tendency.

Chilocorus bivulnerus.

Chilocorus bivulnerus, *Muls. Spec.* p. 460. 10.

United States; very near *C. renipustulatus*, and sometimes hardly to be separated from it; Mulsant relies on the punctiform spot and the red epimera.

Chilocorus pleuralis.*

Chilocorus pleuralis, *Lec. Proc. Phil.* p. 90 (1859).

Hemisphæricus, niger, subtiliter punctulatus, elytris macula rubra, magna rotundata ante medium signatis, epipleuris ante medium late rufomarginatis, parapleuris rufis. L. 26. California.

Larger than *C. bivulnerus* and *C. fraternus*, differing by the red spot being placed before the middle, and the abdomen entirely black.

Chilocorus fraternus.*

Chilocorus fraternus, *Lec. Pacif. Expl. Surv.* ix. Ins. p. 70. (1857).

Chilocorus canariensis, sp. n.

Chilocorus renipustulatus†, *Woll. Cat. Can. Col.* p. 424 (1864).

The Canarian specimens from Teneriffe and Gomera that I have examined, seem to differ from the ordinary European *C. renipustulatus*, by their smaller size and very transverse discoidal spot; they approach *C. bipustulatus* in this, but I have not seen any specimens in which the spot looked as if it might be divided; and the black head would moreover distinguish it from that species. The first 3 ventral segments are clouded with black in the middle.

Chilocorus bipustulatus.

Coccinella bipustulata, *Linn. Syst. Nat.* p. 367. 28 (1758).

Chilocorus bipustulatus, *Muls. Sécur.* 170. 2.

Europe, N. Africa, Syria, Persia. Recognizable by its red head.

Chilocorus midas.

Coccinella midas, Klug, *Abh. Berl.* 1834. p. 214. 211.

Chilocorus midas, Muls. *Spec.* p. 461. 12.

Madagascar. The punctuation is fine but clear, near the margin of the elytra it becomes very coarse but uniform. The thorax, head and humeral angles of the elytra are clothed with silky yellow hairs.

Chilocorus Wahlbergii.

Chilocorus Wahlbergii, Muls. *Spec.* p. 462. 13 (T).

Cape of Good Hope (Deyrolle), Caffraria (Stockholm).

The punctuation is very fine and very obsoletely impressed; the margins of the elytra with very deep scattered punctures.

B. Thorax reddish orange.

Chilocorus Dohrnii.

Chilocorus Dohrnii, Muls. *Spec.* p. 457. 6.

Senegal, Guinea (Deyrolle). The punctuation is fine, rather faint and sparse; form ovate. The coloration very much that of *Coelophora Petrequini*. The elytra have a depressed line nearly parallel to the margin at about $\frac{1}{6}$ of their width, the margin itself produced, without any very evident larger punctures. The thorax is also faintly margined at the base.

Chilocorus angolensis,* sp. n.

Hemispherical, testaceous-yellow, elytra black, with an apical spot yellow, thorax with the disc obscure. L. 3 lin. Angola (Welwitsch).

Clypeus emarginate, thorax with the sides rounded, basal line fine but visible, epipleuræ simple; anterior tibiæ grooved the whole length, external edge with a broad leaf-like expansion; elytra apparently smooth, under a high power minutely and very closely punctured with larger punctures sparsely scattered over them.

Chilocorus circumdatus.

Coccinella circumdata, Schön. *Syn. Ins.* II. 152 (1808).

Chilocorus circumdatus, Muls. *Spec.* p. 454. 2.

Chilocorus nigromarginatus, Mots. *Et. Ent.* VIII. 170.

Ceylon (Schaum), Neilgherries (Guérin), Sumatra (Baly).

Evidently and rather closely punctulate. Thorax with the sides rounded and finely margined, the posterior fold visible.

Var. punctuation fainter and more obsolete, elytra less visibly margined.

Tondano (Wallace).

Chilocorus melanophthalmus.

Chilocorus melanophthalmus, Muls. *Spec.* p. 455. 3 (T).

Java, Singapore (Wallace), Penang, Macassar (Wallace), Philippines (Deyrolle). Punctuation evident, not very close. Coloration a little variable, precisely that of *Rodolia rufopilosa*, which it much resembles. Thorax and apex of elytra often suffused with yellow. Sides of thorax produced and rounded, finely margined.

Chilocorus politus.*

Chilocorus politus, *Muls. Spec.* p. 455. 4.

Nepaul (Hope).

Chilocorus Wallacii, sp. n.

Hemispherical, very convex, rich yellow; punctuation coarse, sparse, somewhat unequal, the large punctures at the margin of the elytra show a tendency to run in lines; thorax reddish yellow, broad, sides rounded not deflexed, or pilose; elytra with 2 black vittæ, one almost marginal, the other broader discoidal, nearly reaching the suture behind, the suture itself black (except the extreme apex); scutellum reddish yellow; legs and undersurface yellowish. L. $2\frac{1}{4}$ lin. Batchian, Ternate, Gilolo (Wallace). This has exactly the coloration of *Coelophora Wallacii*.

Chilocorus Malasiæ, sp. n.

Hemispherical, punctuation of the elytra coarse, sparse, very obsoletely impressed, colour brownish orange, underside paler; thorax not pubescent at the sides; elytra with a large common black patch reaching from the scutellum to $\frac{2}{3}$, and externally almost to the margin, the anterior edge of this cut obliquely. L. 2 lin. (N. ...) Wallace.

Var. with the black patch smaller, edges irregular. Aru, Mysol (Wallace).

Var. smaller, the black colour increased in amount, reaching the margin. S...The coloration is closely imitated from *Coelophora Petrequini*.

Chilocorus trimaculatus, sp. n.

Hemispherical, shining, orange; punctuation extremely obsolete, margins of the elytra with a few very coarse punctures, clypeus largely produced, thorax not hairy; elytra with 3 black spots, 1 on the disc of each nearer the external margin, and 1 common on the suture a little in advance of the other two. L. $1\frac{1}{2}$ lin. Ceram (Wallace).

Chilocorus sublineatus, sp. n.

Similar to *C. trimaculatus*; entirely reddish testaceous, slightly dull, punctuation rather obsolete but visible, near the margins of the elytra are 2 irregular incomplete lines of deep punctures; thorax not pilose. L. $1\frac{1}{2}$ lin. Ceram (Wallace).

Chilocorus platycephalus.

Egius platycephalus, *Muls. Spec.* p. 464. 1.

Cuba; surface opaque, finely alutaceous. This is a curious-looking insect, but differs only from *Chilocorus* in the shape of the thorax which is uniformly rounded behind, and the deeply emarginate clypeus.

Chilocorus transversus.*

Chilocorus transversus, *Mots. Bull. Mosc.* 39. 423 (1866).

"Voisin de *C. rufoplagiatus*, un peu plus large, tête rousse, et la tache rouge à la base des élytres transversale, n'atteignant pas la posticale."

Chilocorus sanguinosus.*

Chilocorus sanguinosus, *Mots. Bull. Mosc.* 39. 423 (1866).

"Tête et corselet d'un brun roussâtre, et sur les élytres la tache suturale est beaucoup plus allongée et à la base il y a une troisième tache noire au-dessus de la seconde, qui se trouve au milieu un peu en arrière." India (Motsch.).

Chilocorus rufoplagiatus.*

Chilocorus rufoplagiatus, *Mots. Bull. Mosc.* 39. 423 (1866).

"*C. bipustulato* octoduplo minor; orbicularis, valde convexus, nitidus, niger, elytris rufescente marginatis, utrinque vitta lata basali punctoque postico pedibusque rufis." L. $1\frac{1}{2}$ lin. Nura Ellia, Ceylon (Motsch.).

Chilocorus sanguinolentus.*

Chilocorus sanguinolentus, *Mots. Bull. Mosc.* t. 39. p. 422 (1866).

"*C. bipustulato* quadruplo minor; orbiculatus convexus, marginatus, nitidus, antennis pedibusque rufis, elytris rubris, his marginis, maculis 3 in medio ($1\frac{1}{2}$ utrinque) transversim dispositis nigris." Nura Ellia, Ceylon (Motsch.).

Orcus.

Muls. Spec. p. 467 (*typ. janthinus*).

This is divided into several subgenera by Mulsant: *Prius* (*Australasie*), *Halmus* (*chalybeus*), and 2 from America which I have made distinct. The line along the base of the thorax seems to be of importance, though it is much reduced in *O. chalybeus*.

Orcus artensis, sp. n.

Ovate, almost hemispherical, not very convex; alutaceous, sparsely and pretty strongly punctate; metallic greenish-black, labrum and emargination of clypeus rufous; thorax with the anterior margin very narrowly rufous, sides strongly narrowed,

with a slight easily removed pubescence, the fold at the posterior angles well marked; scutellum very small, black; elytra rufous with the margin, suture (narrowly) and 2 vittæ greenish-black; the 1st vitta reaches from the callus nearly to the apex, the 2nd (just before the middle) between the first and the suture, is extremely abbreviated; inner edge of epipleuræ rufous. L. $1\frac{1}{2}$ lin. Art (Deyrolle).

Orcus janthinus.

Orcus janthinus, *Muls. Spec.* p. 466. 1 (T).

Java (Reiche), the sides of the thorax reticulate or deeply punctate.

Orcus cyanocephalus.

Orcus cyanocephalus, *Muls. Spec.* p. 467. 2.

Port Essington (Hope). Closely allied to *O. janthinus*.

Orcus Lafertei.

Orcus Lafertei, *Muls. Op.* III. p. 63 (1853) T.

Hemispherical, punctuation fine and sparse, but visible; colour metallic purple changing to golden, the margin of the elytra and the thorax golden green; sides of thorax rugosely punctate. L. 2 lin. Moreton Bay (Deyrolle, Janson). W. Australia (Fry). Closely allied to *O. janthinus*.

Orcus bilunulatus.

Coccinella bilunulata, *Boisd. Voy. de l'Astrol.* p. 594. 9 (1835).

Orcus bilunulatus, *Muls. Spec.* p. 467. 3.

N. Australia. Form subovate, rather opaque, very obsoletely punctate, elytra not thickened at the margin, thorax with the sides uniformly punctate.

Orcus Australasiæ.

Coccinella Australasiæ, *Boisd. Voy. de l'Astrol.* p. 593. 7 (1835).

Orcus Australasiæ, *Muls. Spec.* p. 468. 4.

Coccinella nummularis, *Boisd. l.c.* p. 594. 10 (1835).

Orcus nummularis, *Muls. Spec.* p. 470. 5.

Queensland, Victoria, Tasmania. *O. nummularis* is a rare variety, in which the posterior spot is divided; I have a variety in which all three spots are united.

Orcus chalybeus.

Coccinella chalybea, *Boisd. l.c.* p. 595. 11 (1835).

Orcus chalybeus, *Muls. Spec.* p. 471. 6.

Australia, Queensland, N. ... (Wallace). The punctuation is fine, evident, and moderately close; the line at the base of the thorax here is at the edge.

Curinus.

Muls. Spec. p. 472 (*typ.* *coeruleus*).

With this subgenus I have united *Harpasus* (*typ.* *pallidilabris*), distinguished by the fovea on the thoracic epipleuræ, but this character seems to be of somewhat doubtful value in the *Chilocorides*; it differs from *Orcus* by the thorax, of which the sides are not deflexed, and the fold starting from the posterior angle is absent.

Curinus cœruleus.

Orcus cœruleus, *Muls. Spec.* p. 472. 7.

Mexico, Chili, Brazil (Rio Janeiro, Bahia, Petropolis).

The surface is opaque, the punctuation obsolete; the sides of the thorax are nearly straight.

Curinus pallidilabris.

Orcus pallidilabris, *Muls. Spec.* p. 473. 8 (T).

Bahia (Deyrolle, Fry). Also opaque and with a very obsolete punctuation.

Curinus peleus.

Orcus peleus, *Muls. Op.* III. p. 63 (1853) T.

Hemispherical, greenish-blue elytra each with a large discoidal yellow spot, epipleuræ yellow along their inner margin; body beneath black, edges of segments paler. L. $1\frac{2}{5}$ lin. Cuba (Chevrolat). The type is somewhat immature, but appears to be entirely impunctate.

Curinus Eversmanni.

Orcus Eversmanni, *Muls. Spec.* p. 474. 9.

Brazil (Paris). Lagoa Santo (Copenhagen).

Very obsoletely and sparsely punctulate; distinctly alutaceous.

Curinus zonatus.

Orcus zonatus, *Muls. Spec.* p. 475. 10.

Brazil (Deyrolle), Rio Janeiro (Fry).

Punctuation apparent. I do not see the basal line of the thorax noticed by Mulsant.

Anisorcus.

n. gen. (*typ.* Fryi).

This genus, formed for the reception of two species from the Fiji Islands, differs from *Exochomus* by having the abdominal plates incomplete; the thorax is not margined, except at the sides which are rounded; the punctuation is coarse, sparse and extremely unequal.

Anisorcus Fryi, sp. nov.

Hemispherical, reddish yellow, elytra black; the head is thickly clothed with yellow pubescence, the epipleuræ are yellow within and foveolate. L. $1\frac{1}{4}$ lin. Fiji Isl. (Fry).

Anisorcus affinis, sp. nov.

Smaller than the preceding, which it greatly resembles; punctuation less obviously unequal; elytra pitchy brown, margins more or less broadly reddish-orange. L. 1 lin. Fiji Isl. (Fry).

Anisorcus malayanus, sp. n.

Hemispherical, yellowish red, punctuation sparse, rather unequal; thorax with the sides rounded, base ogival, finely margined; elytra dark purplish-black, with a narrow orange external margin; legs and underside yellowish-red. L. $1\frac{1}{8}$ lin. Mindanao? Ternate, Mysol (Wallace).

Axion.

Muls. Spec. p. 477 (*typ.* tripustulatus).

Differs from *Exochomus* by the thoracic fovea, and the obsolete punctuation.

Axion plagiatus.

Coccinella plagiata, Oliv. Ent. vi. p. 1044. pl. 7. 102 (1808).

Exochomus plagiatus, Muls. Spec. p. 477. 1.

Mexico (Reiche, Fry). The elytra are not thickened at the margin, their surface is opaque and almost impunctate.

Axion Pilatii.

Exochomus Pilatii, Muls. Spec. p. 478.

Differs from *A. plagiatus* by the much smaller spot, and by the ventral segments being black in the middle. Texas (Pilate).

Axion texanus.*

Exochomus texanus, Lec. Proc. Phil. p. 88 (1858).

Rotundatus valde convexus fere compressus, niger nitidus, capite obscure rufo, thorace prope angulos anticos ad marginem rufescente, elytris subtiliter punctulatis, macula rotundata ante medium utrinque ornatis, pectoris segmentique abdominis primi lateralibus rufis; pedibus rufis, tarsi, tibiis posterioribus, femorumque posticorum margine nigris. L. 23. Texas. Size and form of *A. tripustulatus*.

Axion tripustulatus.

Coccinella tripustulata, De G. Mém. v. 395. pl. 16. 23 (1775).

Exochomus tripustulatus, Muls. Spec. p. 478. 2.

Chilocorus verrucatus, Melsh. Proc. Phil. p. 180 (1847).

Pennsylvania, Georgia; the elytra are just visibly punctulate, the margin is distinctly thickened.

Cladis.

Muls. Spec. p. 1033 (*typ. uva*).

[= *Clanis*!], *Muls.* p. 479.]

Differs from *Exochomus* by the unequal punctuation.

Cladis nitidula.

Coccinella nitidula, *Fab. Ent. Syst.* i. 286. 93 (T).

Exochomus uva, *Muls. Spec.* p. 479. 3.

Cuba, Guadeloupe, Martinique. Punctuation unequal, fine, with a few scattered deep punctures.

Cladis botrus.

Exochomus botrus, *Muls. Spec.* p. 480. 4 (T).

Buenos Ayres. Near *C. nitidula*, but with the unequal punctuation much less marked, the large punctures only visible near the margin.

Exochomus.

Muls. Spec. p. 476 (*typ. nigromaculatus*).

Distinct by the abdominal plates being complete.

A. Elytra black, or black and red. Old world species.

Exochomus nigromaculatus.

Coccinelle noire à points rouges au corselet. *Geoffr. Hist.* i. p. 334.

Coccinella nigromaculata, *Goeze, Ent. Beyt.* i. p. 248 (1778).

Coccinella flavipes, *Thunb. N. I. Sp.* p. 21 (1781).

Coccinella aurita, *Scriba. Brit.* ii. 105. 26 (1791).

Exochomus auritus, *Muls. Sécur.* p. 176.

Coccinella nigriceps, *Wied. Germ. Mag.* iv. 183. 99 (1824).

Exochomus Troberti, *Muls. Spec.* p. 482. 6.

{ *Chilocorus nigripennis*, *Er. Arch. f. Nat.* ix. 267. 123 (1843).

{ *Exochomus rusicollis*, *Muls. Spec.* p. 1033.

{ *Exochomus xanthoderus*, *Fairm. Ann. Fr.* iii. p. 648 (1864).

Europe generally, Siberia, Persia, Arabia; Africa throughout the country, Madagascar, C. Verd Islands; Sumatra (Baly), Australia (Fry). The variety *nigripennis* at first seems distinct but will be found to shade off imperceptibly into the others; I have seen one specimen of it from Greece.

Exochomus quadri-pustulatus.

Coccinella 4-pustulata, *Linn. Syst. Nat.* p. 367. 22 (1758).

Exochomus 4-pustulatus, *Muls. Sécur.* p. 172.

Coccinella distincta, *Brull. Exp. Morée*, p. 273. 552. pl. 4. f. 11.

Exochomus distinctus, *Muls. Spec.* p. 485.

Exochomus floralis, Mots. N. Mém. Mosc. v. p. 423. pl. 16 P.
 ———— *Muls. Spec.* p. 1035.

Coccinella iberica, Mots. N. Mém. Mosc. p. 422. 59 pl. 16 O.

Exochomus ibericus, *Muls. Spec.* p. 1034.

Europe, Algeria, Syria, Siberia (Maack). *E. distincta* is a curious variety with the red markings increased in size; *E. floralis* is a unicolorous pale form.

E. ibericus is a variety in which the red has extended over the front of the elytra, leaving the suture and a common fascia black; *E. ericae* (chev. MSS.) has fulvous elytra, with the margins, 2 discoidal spots, and 2 common sutural spots, black, thorax pale, base black. This and other intermediate forms come from Algeria.

Exochomus versutus.

Exochomus versutus, *Muls. Spec.* p. 484. 8.

Cape (Deyrolle, Chevrolat).

B. Elytra ochreous, alutaceous, obsoletely punctulate, with black markings. America.

Exochomus bimaculosus.

Exochomus bimaculosus, *Muls. Spec.* p. 489. 12.

Exochomus cinctipennis, *Muls. Spec.* p. 490. 13.

Exochomus Gaubili, *Muls. Spec.* p. 491. 15.

Brazil, Bahia, Buenos Ayres, Cayenne. Variable in size and in the extent of black colour.

Exochomus contristatus.

Exochomus contristatus, *Muls. Spec.* p. 492. 16 (T).

Mexico (Chevrolat). This may be a pale specimen of *E. Childreni*.

Exochomus Childreni.

Exochomus Childreni, *Muls. Spec.* p. 1037 (T).

Exochomus Guexi, Leconte. *Proc. Phil.* p. 132. 1 (1852).

Exochomus, *La saussayei*, Deyr., MSS.

United States, Louisiana, Florida, Campeachy (Deyrolle).

♂. head and sides of thorax broadly yellow. Punctuation obsolete as in *E. marginipennis*.

Exochomus marginipennis.

Coccinella marginipennis, Lec. *Ann. Lyc. N. H.* i. 1. 73.

Exochomus marginipennis, *Muls. Spec.* p. 486. 10.

Exochomus pretextatus, Melsh. *Proc. Phil.* III. 178 (1847).

N. America.

Exochomus decoloratus.

Exochomus decoloratus, *Muls. Op.* III. p. 68 (1853) T.

Hemispherical, light ochreous, or reddish ochreous; opaque. L. $1\frac{1}{4}$ lin. S. Paulo. Probably a pale variety of some other species.

C. elytra ochreous with black marks, punctuation coarse and sparse. S. America.

Exochomus Jordani.

Exochomus Jordani, *Muls. Op.* III. p. 67 (1853) T.

Somewhat hemispherical, tolerably convex, ochreous yellow, elytra coarsely but rather sparsely punctate; head black, clypeus ochreous; thorax reddish-ochreous, the base broadly black (the black colour tridentate in front); elytra ochreous-yellow each with 2 large black spots and 1 common quadrangular spot on the suture before the middle; the 1st spot is just below the callus, on a line with the sutural one; the 2nd discoidal, subapical, large. L. $1\frac{1}{2}$ lin. Brazil, S. Paulo (Chevrolat, Bates).

Exochomus Dallasi, sp. n.

Exochomus Dallasi, *Muls.* MSS.

Closely allied to *E. Jordani* in form and colour; the punctuation is a little fainter, the head ochreous, the thorax with a narrow black basal border, abbreviated at each end; the elytra are variegated with black; a large irregular common black spot occupies the disc from the base to beyond the middle (enclosing a small ochreous dot near the scutellum on each side), and a smaller transverse common band at $\frac{2}{3}$, connected with the former along the suture and by a narrow piece at its external margin (thus enclosing another yellow dot). L. $1\frac{1}{4}$ lin. Ega (Bates).

Exochomus Adelæ, sp. n.

Exochomus Adelæ, *Deyr.* MSS.

Hemispherical, tolerably convex, ochreous-yellow; head and thorax reddish-yellow, the latter finely punctured, surface alutaceous, sides strongly rounded, the base with 4 equidistant black spots, the inner pair connected by a basal line, also black; elytra ochreous-yellow, sparsely and tolerably strongly punctate, margined, each with 8 black dots; 1 in the centre of the base (not reaching it), 3 in a transverse line at $\frac{1}{3}$ (the 2 outer ones united), 3 in a series convex in front at $\frac{2}{3}$ (the outer one largest), and 1 subapical, free; the suture narrowly edged with black; scutellum small, black; underside ochreous. L. $1\frac{1}{2}$ lin. Columbia (Deyrolle). Allied to *E. Jordani*.

Exochomus hypomelas, sp. n.

Hemispherical, metallic black with a slight shade of green, shining, alutaceous, very sparsely and finely punctulate; thorax

with the sides broadly orange, reaching to the bottom of the emargination in front, with a pretty well marked basal line; elytra finely margined. L. $1\frac{1}{2}$ lin. Madagascar (Deyrolle).

This is probably the type of a new genus, but I have only seen 1 specimen. It has somewhat the appearance of *Orcus cœruleus*.

Brumus.

Muls. Spec. p. 492 (*typ.* 8-signata).

I have brought three of Mulsant's species of *Exochomus* into this genus, which is defined with tolerable accuracy by the shape of the clypeus.

Brumus octosignatus.

Coccinella 8-signata, *Gebl. Ledeb. Reise*, II. 225. 18.

Coccinella desertorum, *Gebl. Bull. Pét.* VIII. n. 26.

Brumus desertorum, *Muls. Spec.* p. 493. 1.

Sicily, Syria, S. Russia, Mongolia, Siberia.

Brumus Olcesi, sp. n.

Very near *B. desertorum*, but smaller, the punctuation decidedly coarser and much closer, form and colour similar, elytra with the suture (narrowly) and 2 spots black; 1 on the callus, 1 in a line with it (somewhat larger) at $\frac{2}{3}$. Tangier (Olcés).

Brumus suturalis.

Coccinella suturalis||, *Fabr. Suppl. Ent. Syst.* p. 78 (1798).

Brumus suturalis, *Muls. Spec.* p. 494. 2.

India.

Brumus hexasticta, sp. n.

Ovate, reddish-yellow, alutaceous, rather finely punctured; thorax with a small dark cloud in front of the scutellum, and a wedge-shaped spot on each side (the points towards the middle); elytra light-yellow, each with 6 black dots; 1 on the callus, 1 a little below, outside it, 1 near the suture at $\frac{1}{3}$, 2 in a transverse line at $\frac{2}{3}$, 1 close to the suture before the apex; pectus and first 2 ventral segments blackish; legs yellow. L. $1\frac{1}{2}$ lin. Peru (Fry).

Brumus Foudrasi.

Exochomus Foudrasi, *Muls. Spec.* p. 487. 11 (T).

Senegal (Buquet, Deyrolle). Closely and visibly punctate.

This species appears to be certainly a *Brumus*, as distinguished by the form of the clypeus.

Brumus lugubrivestis.*

Exochomus lugubrivestis, *Muls. Op.* III. p. 66 (1853).

"Brièvement ovale. Tête et prothorax, pieds et 3 derniers

arceaux du ventre d'un roux jaune ; reste du dessous du corps et élytres, noirs ; celles-ci ornées d'une bordure externe d'un roux testacé couvrant le tiers externe de la base, bientôt après étroit ou réduite à la tranche dont le rebord reste noir, élargie à partir des deux tiers jusqu'à la suture dont elle couvre le septième postérieur. Répli d'un roux testacé." L. $1\frac{1}{8}$ lin. Egypt. Ecusson noir.

Brumus uropygialis.

Exochomus uropygialis, Muls. Op. III. p. 68 (1853) T.

Ovate, black, pubescence coarse, very close; elytra ochreous with the extreme apex black; scutellum very small, black. L. 2 lin. N. India.

N. India, Sylhet (Deyrolle). This species, described by Mulsant as an *Exochomus*, is evidently allied to *Brumus*, and should form another genus, characterized by its pubescent surface.

Platynaspis.

Redtenb., Tentamen, p. 11 (*typ. luteorubra*).

This genus appears to me better placed in the *Chilocorides* than in the *Scymnides*; the pubescent surface is not a character of a high order, and the European *P. luteorubra* is almost the only *Scymnus*-looking species. *P. pubescens*, ranked by Mulsant in *Exochomus* and *Platynaspis*, is certainly congeneric with *P. capicola*, *bella*, etc.

A. thorax rounded behind.

Platynaspis luteo-rubra.

Coccinella velue à points, Geoff. Hist. Nat. I. 322. 22 (1762).

Coccinella luteo-rubra, Goeze. Ent. Beyt. I. p. 247 (1778).

Coccinella villosa, Fourc. Ent. Par. I. 149. 22 (1785).

Platynaspis villosa, Muls. Sécur. p. 216. 1 (1846).

Scymnus spectabilis, Fald. Mém. Mosc. v. p. 410 (1837).

Europe, Algeria, Persia.

Elongate-ovate, subdepressed.

Platynaspis pubescens.

Exochomus pubescens, Küst. Kaf. Eur. XIII. 94.

Platynaspis flavilabris, Muls. Spec. p. 947. 5.

Subhemispherical, black, with a fine sparse silvery pubescence; thorax with the sides broadly orange; elytra rather closely but extremely minutely punctulate. L. 1 lin.

In the salt marshes behind Carthage, rare; also from Persia, where a variety occurs having the thorax and apex of the elytra orange.

Platynaspis bella.

Epilachna bella Woll. Cat. Cunar. Col. p. 425.

"E. Nitidissima, paulo distinctius (sed tamen minutissime)

punctulata necnon (saltem in prothorace elytrorumque limbo) subtilissime pubescens, nigra, prothoracis lateribus elytrorumque margine laterali ab humeris usque ad medium et maculis duabus magnis subconfluentibus in singulis positis, rufo testaceis; elytris sat grosse marginatis, rotundatioribus, ad humeros rotundatos prothorace parum latioribus." $1\frac{1}{2}$ lin.

"Habitat Canariam Grandem, in arenosis ad Maspalomas capta."

Platynaspis quadriplagiata.*

Epilachna 4-plagiata, Woll. *Cat. Can. Col.* p. 425.

"E. nitida oculo fortissime armato minutissime et parce punctulata necnon (saltem in prothorace elytrorumque limbo) subtilissime pubescens, rufo-testacea, capite, prothoracis disco (lineâ mediâ interdum exceptâ) elytrorumque marginibus angustissimis et maculis parvis duabus in singulis positis plus minus nigrescentioribus: elytris tenuiter marginatis, ad humeros rotundatos latis, prothorace multo latioribus. Long. corp. lin $1\frac{1}{3}$ — $1\frac{1}{2}$.

"Habitat in aridis arenosis Fuerteventuræ, rarissima."

Platynaspis capicola, sp. n.

Covered with a manifest gray pubescence, tolerably strongly punctate, black; thorax with the anterior angles, elytra with 2 spots, fulvous (1 dorsal, tolerably large, 1 smaller, subapical). L. 1 lin. Graham's Town.

Thorax truncate before the scutellum, but less so than in *P. Solieri*; the 2 spots are sometimes connected by a line.

Platynaspis Saundersii, sp. n.

Black, head fulvous, thorax with the anterior angles fulvous; elytra flavo-testaceous, suture black (the black colour largely dilated behind the scutellum), and with 4 black spots (1 in the callus, 1 linear, at the external margin, 1 rather large, close to the suture behind the middle, 1 a little before the apex). L. 1 lin. India (Saunders).

Thorax hardly bisinuate behind, punctuation not strong.

Platynaspis Higginsii, sp. n.

Nigro-piceous, head, thorax at the sides, elytra each with 4 spots, yellow; 2 in a transverse series a little before the middle (1 at the external margin, 1 close to the suture), 2 near the apex, placed obliquely, rather approximated. L. 1 lin. Gold Coast.

Platynaspis stictica, sp. n.

Black, clypeus red, disc black; thorax with the sides broadly

edged with yellow, reaching to about $\frac{1}{3}$; elytra each with 3 yellow spots (2 transversely placed in the middle, 1 larger, oval, subapical). L. $\frac{3}{4}$ lin. Singapore (Saunders).

B. Thorax truncate in front of the scutellum.

Platynaspis Solieri.*

Platynaspis Solieri, *Muls. Spec.* p. 947. 4 (T).

Africa (Dupont).

Subovate, depressed, punctuation not very strong.

Platynaspis mesomelas.

Coccinella mesomela, *Klug. Abh. Berl. Akad.* 1833. p. 127.

Platynaspis bisignata, *Muls. Spec.* p. 946. 3.

Madagascar (Paris, Deyrolle).

Platynaspis Kollari.*

Platynaspis Kollari, *Muls. Spec.* p. 945. 1 (T).

Senegal (Buquet). Old Calabar (Murray).

Platynaspis nigropectoralis.

Scymnus nigropectoralis, *Thoms. Arch Ent.* II. p. 238. 434. (1858).

“D’un rouge un peu testacé très brillant, avec le milieu de la poitrine et les genoux noirs; hémisphérique, finement et assez densément ponctué, couvert d’une pubescence d’un gris roussâtre assez serrée. Chaperon fortement échanuré.” Gaboon (Thomson).

Platynaspis Lewisii, sp. n.

Fulvous, spotted with black, suborbiculate; head fulvous, thorax in front very narrowly, anterior angles triangularly, fulvous; elytra fulvous-red, margined all round with black, and 2 sub-oblong dorsal black dots, 1 a little before, 1 a little behind the middle. L. $1\frac{1}{2}$ lin. Shanghai (Deyrolle).

Thorax bisinuate at the base, truncate before the scutellum, elytra coarsely and sparsely punctate.

Platynaspis Wallacii.

Allied to *P. Solieri*; thorax almost emarginate before the scutellum; black; thorax with the sides broadly, elytra with a small subapical point, fulvous. L. 1 lin. Flores.

Thorax deeply bisinuate at the base and produced in front of the scutellum.

Platynaspis variegata, sp. n.

Black, thorax with the sides, elytra with a large irregular discoidal patch, abdomen and legs fulvous. L. 1 lin. Cochin-China.

Thorax truncate in front of the scutellum, pubescence long and sub-erect, punctuation rather fine.

Platynaspis oculata.*

Platynaspis oculata, Motsch. *Etudes Ent.* 1858. p. 118.

“Une autre espèce indienne, qui a la taille et la forme de la *Pl. circumflexa* mais chez laquelle la couleur dominante est noire avec les parties de la bouche, les palpes, les antennes, les pattes, tout le front, les angles antérieurs du corselet, et une grande tache ronde sur le milieu de chaque élytre, testacés.”

Platynaspis circumflexa.*

Platynaspis circumflexa, Motsch. *Etudes Ent.* 1858, p. 118.

“Rotundata, convexa, punctatissima, breviter cinereopilosa, rufa, thoracis macula media, altera quadrata scutellari, tertia sub-sinuata, postice utrinque ad elytris oculisque nigris; corpore subtus plus minusve infuscato; fronte pallida; thorace transverso, basi arcuato, medio producto, truncato, utrinque ad scutellum sinuato, angulis anticis acutis, prominulis, posticis rectis, lateribus arcuatis marginatis; scutello triangulari, impunctato; elytris rotundatis, marginatis. Long. 1. l. Lat. $\frac{4}{5}$ l.” Ceylon.

“Plus courte et plus arrondie que le *Pl. villosa* et bien distincte par sa couleur dominante rougeâtre. La tache sinueuse postérieure de chaque côté des élytres se dilate quelquefois sur toute la largeur de ces dernières, et présente alors presque une bande semilunaire interrompue seulement le long de la suture.”

Pentilia.

Muls. Spec. p. 502 (*typ. egena*).

Abdominal plates regular, complete, not reaching the posterior margin; eyes margined by the genæ. Thorax finely margined at the base.

Pentilia egena.

Pentilia egena, *Muls. Spec.* p. 502. 1.

Brazil (Fry, Deyrolle). Rio Janeiro. Bahia (Fry).

Punctuation coarse, close, uniform, thorax obsoletely punctured, base ogival, faintly margined; sides rounded, rather deflexed as in *Chilocorus*.

Pentilia insidiosa.*

Pentilia insidiosa, *Muls. Spec.* p. 503. 2 (T).

Columbia (Dupont). The type is evidently immature.

Cayenne (Fry).

Pentilia castanea.

Pentilia castanea, *Muls. Spec.* p. 1036.

S. America (Copenhagen), Mexico (Deyrolle).

Lotis.

Muls. Spec. p. 503 (*typ. neglecta*).

Abdominal plates terminal, incomplete. Thorax finely margined.

Lotis neglecta.

Lotis neglecta, Muls. Spec. p. 504. 1 (T).

Cape of Good Hope. Caffraria. Punctuation fine, obsolete, stronger towards the margin of the elytra.

Lotis guttula.*

Lotis guttula, Muls. Spec. p. 504. 2 (T).

Caffraria (Stockholm, Fry). Punctuation extremely fine and obsolete. Varies in size; Mr Fry's example is nearly 1 line in length.

Lotis nigritula.*

Lotis nigritula, Boh. MSS.

Closely allied to *L. guttula* but entirely black, punctuation extremely obsolete; more convex. L. $\frac{1}{3}$ lin. Cape of Good Hope (Stockholm).

Sticholotis.

Gen. nov. (*typ. substriata*).

This genus (of which the only species known to Mulsant was placed in *Lotis*) appears to be most distinct. Form orbicular, glabrous, thorax margined at the base, epipleuræ foveolate for the antennæ, which reach almost to the base of the thorax. Clypeus produced beyond the level of the eyes, quadrate, gently emarginate in front. Maxillary palpi tolerably long, last joint conical rather than securiform; eyes coarsely granulated. Abdominal plates terminal, incomplete externally. Epipleuræ of the elytra impressed, not foveolate, continuous to the apex. Coxæ (especially the posterior pair) widely distant, metasternum foveolate. The coarsely granulated eyes and hardly foveolated epipleuræ indicate an affinity with *Rhizobius*, but the whole form is exactly that of the *Chilocorides*, and the 2 external striæ are often indicated in this family. The curious dorsal striæ found in two of the species occur also in *Cryptolæmus* and in several of the *Scymni*.

Sticholotis substriatus, sp. n.

Orbicular, hemispherical, coarsely and uniformly punctate throughout, glabrous, red variegated with black; thorax with the base black in the middle, narrowed in front, sides straight; elytra each with 2 dorsal rows of punctures curved outwards (the punctures in the 1st confluent), also with traces of a third row; the space between the 1st and the suture is impunctate; parallel to the strongly reflexed margin are indications of 2 other similar

striae; the underside is deeply punctate, the metasternum impressed, the fovea very deeply punctate; elytra black with the margin, apex, and an irregular pattern red; this figure consists of a vitta parallel to the suture and 2 external transverse branches dilated at their ends. L. $1\frac{1}{4}$ lin. Japan (Lewis).

Sticholotis Confucii.

Lotis Confucii, *Muls. Spec.* p. 1036. 1.

Canton (Hope), Sarawak (Wallace). This latter locality throws some doubt on the other; certainly Wallace's specimen (for which I am indebted to Mr Saunders) agrees accurately with Mulsant's description, but he has not noticed the 2 external striae; traces of 9 striae exist on the whole.

Sticholotis punctatus, sp. n.

Resembles *S. substriatus* in all respects, except that it is a little smaller, more coarsely and closely punctured, with no trace of the striae; the thorax and margins of the elytra pitchy black. Japan (Lewis), found with the preceding, under leaves at a height of 2000 ft.

Bura.

Muls. Spec. p. 419 (*typ. cuprea*).

Evidently allied to *Pentilia*, but with very coarse unequal punctuation; the maxillary palpi are only slightly securiform.

Bura cuprea.

Bura cuprea, *Muls. Spec.* p. 419. 1. (T).
Haiti (Reiche).

Stictobura.

gen. nov.

Coxal foveae incomplete; punctuation coarse, unequal, very sparse; elytral epipleurae foveolate, continuous to apex, elytra with an abrupt thickened margin; thorax finely punctured, base margined, epipleurae not foveolate; antennae tolerably long, club with the joints elongate, but closely fitting; the meso- and metasterna apparently connate, deeply punctured. Maxillary palpi slightly securiform. Allied to *Bura*, but anomalous, from the comparatively long antennae.

Stictobura pallidiguttata.

Calvia pallidiguttata, *Muls. Op.* III. (1853).

Testaceous; elytra olive-green, each with 4 yellowish-red spots, (2 oblique before and 2 behind the middle). L. 2 lin. Malabar.

Aspidimerus.

Muls. Spec. p. 944 (*typ.* *Spencii*).

Prosternum produced in front covering the mentum, labrum hidden by the clypeus, tibiæ entirely hidden by the femora, which are received into grooves in the 1st ventral segment; epipleuræ obsolete after the posterior femora, thorax margined at the base, punctuation uniform.

Aspidimerus Spencii.*

Aspidimerus Spencii, *Muls. Spec.* p. 945. 1 (T).

India (Hope).

Aspidimerus Mouhoti, sp. n.

Ovate, fulvous, spotted with black, closely and rather strongly punctate; head fulvous, thorax black, rufo-piceous in front, anterior angles with a fulvous subquadrate spot; elytra fulvous, suture broadly, external margin narrowly (interrupted behind) black, 3 tolerably large spots, 1 on the callus, 2 a little behind the middle transversely placed (touching the suture and the external margin), apex triangularly black; body beneath rufo-piceous. L. $2\frac{3}{4}$ lin. Laos (Mouhot). Kindly ceded to me by Mr E. Saunders.

Aspidimerus Ariasi.

Aspidimerus Ariasi, *Muls. Op.* III. p. 137 (1853) T.

Suborbiculate, head fulvous, thorax black, anterior margin (very narrowly) and the anterior angles fulvous; elytra fulvous with a large common discoidal spot, and each with 2 dots (1 discoidal about the middle, 1 a little before the apex) and the apical margin narrowly black. L. $1\frac{1}{4}$ lin. India (Deyrolle).

Aspidimerus fulvocinctus.*

Aspidimerus fulvocinctus, *Muls. Op.* III. p. 138 (1853).

“Brièvement ovale, pubescent. Thorax noir bordé de roux testacé aux angles de devant, élytres noires, ornées chacune d’un bordure externe d’un roux testacé couvrant les $\frac{2}{5}$ externes de la largeur et le tiers postérieur de la suture.” L. $1\frac{1}{4}$ lin. Asia (Motschulsky).

Var. *fulviventis*; élytres entièrement d’un roux testacé.

Aspidimerus stellaris.*

Aspidimerus? stellaris, *Muls. Op.* VII. p. 151 (1857).

Aspidimerus nigrovittatus, *Mots. Bull. Mosc.* XXXIX. p. 424.

Subovatus, convexus, nitidus, sparsim puberulus, pallide flavus, elytris utrinque vitta lata nigra, apice non attinguenda. L. 1 lin. (Nura Ellia) Ceylon.

Cryptogonus.

Muls. Spec. p. 945 (*typ. orbiculus*).

Prosternum and femora as in *Aspidimerus*, but the labrum visible. Punctuation uniform, sparse, thorax margined at the base.

Cryptogonus orbiculus.

Coccinella orbicula, Schön. *Syn. Ins.* II. 305. 177 (1808).

Cryptogonus orbiculus, *Muls. Spec.* p. 945. 1.

Japan (Lewis).

♀. Head black, with two orange spots at the base of the antennæ, thorax with the anterior angles yellow.

Cryptogonus Malasiæ, sp. n.

Subovate, convex, closely subrugosely punctulate, black; thorax produced in front of the scutellum and truncate; elytra with a large free discoidal orange spot behind the middle; ventral segments black, the 1st sparingly, the rest closely punctate. L. $1\frac{1}{4}$ lin. Mysol (Wallace).

Cryptogonus centroguttatus.*

Cryptogonus centroguttatus, *Bohem. Resa Eugen.* p. 206 (1859).

Ovate, subdepressed, closely punctate, clothed with suberect golden pubescence; sides of thorax with an irregular orange spot; elytra with a central round spot, nearer the suture than the margin; tibiæ and tarsi pale reddish-yellow. L. 1 lin. Malacca (Stockholm).

Cryptogonus flavotermiatus.*

Cryptogonus flavotermiatus, *Bohem. Resa Eugen.* p. 206 (1859).

Ovate, subconvex, closely punctulate, thickly covered with silvery pubescence, black; head yellow, thorax with the front and sides yellow; truncate in front of the scutellum; elytra with the apical $\frac{1}{4}$ orange, legs and ventral segments orange, posterior femora black at the base. L. $\frac{3}{4}$ lin. Java (Stockholm).

Cryptogonus sinensis, sp. n.

Closely resembling *C. orbiculus*, but larger; bright polished black, glabrous; finely punctulate, scutellum large, punctulate, elytral spot smaller and of a bright crimson. L. $1\frac{3}{8}$ lin. China (Bates).

Cryptogonus japonicus, sp. n.

Very close to *C. sinensis*, glabrous, shining, more strongly and evidently punctate, smaller, with a round bright yellow dot behind the middle. L. $1\frac{1}{2}$ lin. Japan (Lewis). It differs from *C. orbiculus* by the much smaller yellow dot and glabrous surface.

Cryptolæmus.

Muls. Op. III. p. 140. (*typ. Montrouzieri*).

Thorax margined at the base, epipleuræ with a fovea on their posterior portion; prosternum produced so as to cover up the mentum; elytral epipleuræ narrow, hardly foveolate, abdominal plates complete, 6 ventral segments, claws bifid; anterior femora received into a groove in the mesopectus.

Cryptolæmus Montrouzieri.

Cryptolæmus Montrouzieri, *Muls. Op.* III. p. 140 (T.).

Ovate, convex, clothed with a gray pubescence, punctuation uniform, not very strong; black; head, thorax, venter, elytra at the apex, anterior legs and all the tarsi reddish-yellow; thorax sparingly punctured, shining, very finely margined at the base. L. $2\frac{1}{3}$ lin. Queensland, Moreton Bay.

Cryptolæmus Wallacii, sp. n.

Closely resembling *C. Montrouzieri*, but more convex, thorax with the posterior angles well marked, base very finely margined, truncate before the scutellum, with a small black patch (the anterior edge indefinite) on the base in the middle, the punctuation is very fine and rather obsolete; the elytra have a similar apical patch, but the punctuation is unequal, the coarse punctures being large and deep, widely and irregularly scattered, but with traces of a linear arrangement near the suture. L. $2\frac{1}{4}$ lin. Gilolo (Wallace).

Cryptolæmus affinis, sp. n.

Exactly like *C. Wallacii*, but with the elytral punctuation tolerably close, unequal, the coarse punctures not very conspicuous, and confused with the others. The extent of colour varies a little. L. $2\frac{1}{2}$ lin.

a. Thorax with a black spot at the base hardly visible, apex of elytra broadly ochreous. Batchian (Wallace).

β. Thorax with a broad black spot, covering $\frac{1}{3}$ the base, but not extending forwards; elytra narrowly edged with ochreous at the apex. Dorey (Wallace).

Cryptolæmus subviolaceus, sp. n.

Rounded, subconvex, clothed with a fine very short gray pubescence, finely and closely punctulate, with a few larger punctures intermixed; black, elytra with a violet tinge; head, thorax with the anterior angles and front (narrowly), apex of elytra, tibiæ and tarsi testaceous; metasternum deeply and roughly punctate; prosternum truncate at the apex. L. $1\frac{1}{2}$ lin. Macassar (Wallace).

Coelopterus.

Muls. Op. II. p. 89 (*typ. salinus*).

Epipleuræ deeply foveolate, surface very sparingly pubescent, abdominal laminae incomplete, terminal.

Coelopterus salinus.

Coelopterus salinus, *Muls. Op.* II. p. 89 (1853).

Subhemisphericus, totus niger, parce pubescens. L. $\frac{2}{3}$ lin.
Hyères, in salt-marshes.

Bucolus.

Muls. Spec. p. 1000 (*typ.* Fourneti).

Orbicular, hardly convex, epipleuræ deeply foveolate for the femora, which are broad, concealing the flattened tibiae. This cannot, I think, be allied to *Scymnus*, as Mulsant indicates.

Bucolus Fourneti.

Bucolus Fourneti, *Muls. Spec.* p. 1000. 1 (T).

Queensland, Victoria. It has somewhat the appearance of a *Scirtes*.

Bucolus? sollicitus.*

Bucolus sollicitus, *Muls. Op.* III. p. 156. 2 (1853).

"Suborbiculaire, pubescent. Noir ou d'un noir légèrement bronzé en dessus; ventre d'un rouge fauve obscur." L. $1\frac{3}{4}$ lin.
Cayenne (Perroud).

I have not seen this insect, but do not believe it to be a *Bucolus*.

Palæoneis.

gen. nov. (*typ.* aurantiaca).

Allied to *Cryptognatha* by the produced prosternum; claws simple, thorax broad, not margined at base; punctuation sparse, unequal, the fine punctures obsolete, abdominal plates complete, legs free, not lodged in grooves, epipleuræ not foveolate; thoracic epipleuræ foveolate for the antennæ; eyes large, bordered by the genæ. This genus is extremely anomalous.

Palæoneis aurantiaca, sp. n.

Black, ovate, convex; thorax with the sides straight, not deflexed, margined, punctuation sparse, gently emarginate in front; scutellum small; elytra very unequally and sparsely punctate, bright orange with a black medial fascia, dilated a little at the margin and at the suture (which is margined with black throughout its length), apex also triangularly black. L. $2\frac{1}{4}$ lin. Malacca (Wallace).

Palæoneis coccinea, sp. n.

Very like the preceding, but smaller, head and anterior margin of thorax rufous, elytra more sparsely punctured, bright carmine with similar markings. L. $1\frac{1}{2}$ lin. Sarawak (Wallace).

Cryptognatha.

Muls. Spec. p. 497 (*typ. auriculata*).

S. America. Punctuation uniform, sparse, not very fine; thorax finely margined at base. *Aeneis Muls.* (*typ. nigrans*) differs only in the epipleuræ of the elytra being horizontal, a character which is not constant.

Cryptognatha auriculata.

Cryptognatha auriculata, *Muls. Spec.* p. 497. 1 (T).

Columbia (Chevr., Dupont), Cayenne (Deyrolle). My specimens are a little more convex than the type, but agree in every other respect.

Cryptognatha gemellata.

Cryptognatha gemellata, *Muls. Spec.* p. 498. 2.

Mexico? (Dupont), Cayenne (Deyrolle). Punctuation strong, deeply impressed. The anterior elytral spot is more decidedly divided in the type than in my specimens.

Cryptognatha pudibunda.*

Cryptognatha pudibunda, *Muls. Spec.* p. 499. 3.

Brazil? (Dejean). This I have not seen.

Cryptognatha Batesii, sp. n.

Hemispherical, shining, body reddish-brown, legs, thorax and head pale whitish ochreous, elytra metallic green strongly and deeply punctured. L. $1\frac{2}{5}$ lin. Ega (Bates). The head is markedly concave in this species, the anterior angles of the thorax produced, acute.

Cryptognatha Yolandi.

Cryptognatha Yolandi, *Muls. MSS.*

Allied to *C. Batesii*, but smaller and more finely and more sparsely punctate; body and legs reddish, head whitish ochreous, the clypeus only concave; thorax with the sides broadly whitish, the centre black; elytra piceous-black, sparsely punctate, the apex translucent; scutellum reddish-brown. Ega (Bates).

Cryptognatha æthiops.

Cryptognatha æthiops, *Boh. MSS.*

Hemispherical, black, shining, elytra closely and near the margin rather strongly punctured, head pale yellow, opaque, vertex black; thorax faintly punctate, a triangular spot at the sides pale yellow, reaching from the posterior angles to the bottom of the emargination; base margined; legs and ventral segments orange-red, 1st segment black in the middle. Columbia (Stockholm).

Cryptognatha Reedii, sp. n.

Black, hemispherical, sparsely but evidently punctate; head, thorax, under side, and legs entirely rufous, apex of elytra translucent. L. $\frac{2}{5}$ lin. Bahia (Fry).

Cryptognatha Clarkii*, sp. n.

Black, hemispherical, punctuation of the elytra very fine, obsolete and sparse; last 4 ventral segments and posterior femora orange. L. $\frac{2}{5}$ lin. Rio Janeiro (Fry).

Cryptognatha Fryii, sp. n.

Black, hemispherical, coarsely and more closely punctate, thorax finely punctate, venter, legs, and head orange-red; anterior tibiae dilated. L. $\frac{2}{5}$ lin. Rio Janeiro (Fry).

♀. Less strongly punctured, head black.

Cryptognatha flaviceps, sp. n.

Hemispherical, shining, black; head ochreous, thorax with the sides ochreous, base finely margined, rather closely punctulate; elytra black, sparsely and finely punctulate, more strongly so near the margin; legs whitish ochreous. L. $\frac{2}{5}$ — $\frac{3}{5}$ lin. S. Paulo (Deyrolle), Santarem (Bates), Yucatan.

♀. Head black.

Cryptognatha appropinquans, sp. n.

Closely resembling *C. flaviceps* but much more coarsely punctate; the yellow margins to the thorax shade more off into the dark colour. L. $\frac{2}{5}$ lin. Rio Janeiro (Fry).

Cryptognatha obscura.*

Æneis obscura, *Muls. Spec.* p. 500. 1.

Brazil (Germar). I have never seen any specimen at all pubescent, as this is described to be.

Cryptognatha nigrans.*

Æneis nigrans, *Muls. Spec.* p. 500. 2.

Brazil (Melly). Evidently a ♀ and somewhat near a specimen from Bolivia in Deyrolle's collection.

Cryptognatha pusilla.*

Æneis pusilla, *Lec. Proc. Phil.* p. 135. 2 (1852).

Breviter ovata, glabra, nigra, nitida, capite thoraceque lateribus flavis, hoc parce punctulato, elytris impunctatis, pedibus flavis. L. .06.

Georgia, and Missouri territory.

Very similar to *Æ. puncticollis*; but besides the differences in colour the thorax is less distinctly punctured, and the posterior

angles more rounded. A specimen from New York has the head and thorax entirely black, but the feet are yellow. It is probably the female of this species.

Cryptognatha puncticollis.*

Æneis puncticollis, *Lec. Pr. Ac. Phil.* p. 135. 1.

Breviter ovata, glabra, nigra, nitida, thorace parce punctato, lateribus subrotundatis, elytris impunctatis. L. .07.

Southern States.

Broadly oval, convex, shining black. Head sparsely punctured, black, with yellow palpi. Thorax very short, marked with a few distinct punctures, base rounded, finely margined, sides rounded, posterior angles slightly rounded. Feet black.

Cryptognatha flavescens.

Æneis [?] *flavescens*, *Mots. Bull. Mosc.* xxxix. p. 423 (1866).

Stat. *Agathidii*; rotundata globosa nitida, glabra, testacea, elytris paulo dilatioribus. L. $\frac{1}{2}$ lin. (Nuria Ellia) Ceylon.

Cryptognatha nigrifula.

Æ. nigrifula, *Mots. l. c.*

Stat. precedenti sed nigra, orbiculata convexa, subglobosa, nitida, glabra, nigra. L. $\frac{1}{2}$ lin. (Nuria Ellia) Ceylon.

Cryptognatha lateralis.

Æ. lateralis, *Mots. l. c.*

Stat. precedenti, sed magis convexa; orbiculata globosa, nigra, nitida glabra, thoracis lateribus pedibusque rufescentibus. L. $\frac{1}{2}$ lin. (Nuria Ellia) Ceylon.

Subfamily 4. HYPERASPIDES.

Antennæ short, epipleuræ deeply foveolate for the femora, 7 ventral segments apparent in the male.

Corystes.

Muls. Spec. p. 506 (*typ. hypocrita*).

Genæ produced, hiding the base of the antennæ; tibiæ dilated, punctuation fine obsolete, very close on the thorax, which is not margined at the base, scutellum large.

Corystes hypocrita.

Corystes hypocrita, *Muls. Spec.* p. 507. 1.

Cayenne (Dejean), Ega, Santarem, S. Paulo (Bates).

♂. Head deeply sulcate between the eyes, the sides of the clypeus being elevated; thorax with an ocellated spot at the sides, anterior tibiæ dilated into a triangular tooth, punctuation more visible, surface shining.

Menoscelis.

Dejean, Cat. p. 459 (*typ. saginata*).

Clypeus semicircularly emarginate, tibiæ dilated, abdominal plates terminal, incomplete, thorax margined at the base.

Menoscelis insignis.

Menoscelis insignis, Muls. Spec. p. 509. 2.

Menoscelis saginata, Muls. Spec. p. 508. 1.

Cayenne (Chevrolat, Reiche, Deyrolle). *M. saginata* appears to me a pale variety of *insignis*, the quadrate common spot is identical in both, and all details of structure and punctuation.

Thalassa.

Muls. Spec. p. 511 (*typ. pentaspilota*).

Central and S. America.

Clypeus gently emarginate; surface alutaceous, punctuation rather obsolete but close; abdominal plates terminal, incomplete. Elytra not margined; thorax very obsoletely margined at the base.

Thalassa Montezumæ.

Thalassa Montezumæ, Muls. Spec. p. 512. 1 (T).

Mexico (Chevrolat). N. Orleans (Pilate).

♂. Head and thorax with the anterior margin and angles yellow.

Thalassa pentaspilota.

Coccinella pentaspilota, Chev. Col. Mex. fasc. v. 124 (T).

Thalassa pentastigma, Muls. Spec. p. 512. 2.

Mexico (Chevrolat). Cuba (Deyrolle).

♂. Anterior margin of thorax yellow.

Thalassa flaviceps.

Thalassa flaviceps, Muls. Spec. p. 513. 3.

Thalassina prasina, Muls. Spec. p. 516. 6.

♂. Head and anterior margin of the thorax orange. Cuba (Chevrolat, Guérin, Deyrolle). *T. prasina* is evidently the female of this species, distinct from the others by its dark legs.

Thalassa similaris.

Thalassa similaris, Muls. Spec. p. 514. 4 (T).

N. Granada? (Guérin).

♂. Head orange, thorax with anterior margin orange.

Thalassa glauca.

Menoscelis glauca, Muls. Spec. p. 510. 3 (T).

Thalassa Reyi, Muls. Spec. p. 515. 5 (T).

Brazil (Buquet, Dupont), Stalatarina (Deyrolle). The type of

T. glauca in Count Mniszech's collection leaves no doubt of the necessity of this reunion. The blue colour of the ♂ is very possibly accidental.

Tiphysa.

Muls. Spec. p. 517 (*typ. plumbea*).

Tibiæ compressed; abdominal plates complete, subterminal. Clypeus arcuato-emarginate. Eyes emarginate, thorax not margined at the base.

Tiphysa plumbea.

Tiphysa plumbea, *Muls. Spec.* p. 517. 1.

Cayenne (Dejean, Deyrolle). Mulsant appears not to have known the ♂.

♂. Bright metallic green, shining, punctuation of head and thorax close; legs, body beneath, the anterior half of the clypeus, and the angles of the thorax (narrowly) orange.

Tiphysa Egæ, sp. n.

Sub-hemispherical, ventricose, brilliant, finely, uniformly, and tolerably closely punctate, thorax and elytra bright metallic green; venter orange. L. $2\frac{1}{2}$ lin. Egæ (Bates).

♂. Head (except the labrum), anterior margin and angles of the thorax, legs and venter orange.

♀. A triangular mark on the vertex and the anterior angles of the thorax narrowly orange.

Brachyacantha.

Chevr., Dej. Cat. p. 458 (*typ. dentipes*).

Clypeus truncate or slightly excavated; anterior tibiæ armed with a spine; thorax very faintly margined along the base.

Brachyacantha sellata.

Brachyacantha sellata, *Muls. Spec.* p. 522. 3.

Brazil; abundant. Very variable in size; this is the only S. American species recorded as yet.

Brachyacantha Buckleyi, sp. n.

Rounded, sub-depressed, punctuation coarse and rather close, pectus and ventral segments in the middle black, legs and upper surface ivory white; a large common discoidal orbicular patch black, just cutting the base of the thorax and extending to $\frac{2}{3}$ the length of the elytra. L. $1\frac{1}{2}$ lin. Ecuador (Buckley).

Brachyacantha lepida.

Brachyacantha lepida, *Muls. Spec.* p. 523. 4.

Mexico. Thorax hardly margined at the base.

Brachyacantha Westwoodii.*

Brachyacantha Westwoodii, *Muls. Spec.* p. 521. 1 (T).
Mexico (Westwood). Elytra entirely rufous.

Brachyacantha bipartita.

Brachyacantha bipartita, *Muls. Spec.* p. 521. 2 (T).
Mexico (Chevrolat).

Brachyacantha dentipes.

Coccinella dentipes, *Fabr. Syst. El.* I. 381. 134 (1801).
Brachyacantha dentipes, *Muls. Spec.* p. 325. 5.
United States, Mexico.

Brachyacantha quadrillum.*

Brachyacantha quadrillum, *Lec. Proc. Phil.* p. 89 (1858).
"Ovalis, valde convexa, nigra, nitida, dense punctulata, thorace macula magna laterali rotundata, elytris altera subreniformi subapicali flavo-rufis ornatis; antennis palpis pedibusque flavo-rufis, femoribus infuscatis." L. 2. Texas. Differs from *B. dentipes* by the black head and the absence of the anterior spot of the elytra.

Brachyacantha subfasciata.*

Brachyacantha subfasciata, *Muls. Spec.* p. 527. 6 (T).
Mexico (Dupont, Paris). Very like *B. dentipes* without the posterior fascia, but much smaller and the fascia of a slightly different shape.

Brachyacantha erythrura.

Brachyacantha erythrura, *Muls. Spec.* p. 530. 8 (T).
Mexico (Chevrolat, Deyrolle). Elytra black with the apex red.

Brachyacantha erythrocephala.

Coccinella erythrocephala, *Fabr. Mant.* p. 61. 88 (1787).
Coccinella bis-3-pustulata, *Fabr. Syst. El.* I. 383. 143. (1801).
Brachyacantha bis-3-pustulata, *Muls. Spec.* p. 528. 7.
United States, Mexico, Columbia.

Brachyacantha ursina.

Coccinella ursina, *Fabr. Mant.* I. 61. 98 (1787).
Brachyacantha ursina, *Muls. Spec.* p. 532. 10.
United States.

Brachyacantha decempustulata.

Hyperaspis 10-pustulata, *Mels. Proc. Phil.* III. 179.
United States. Leconte states that this differs from *B. ursina* in having the elytra much more strongly punctured.

Brachyacantha flavifrons.

Brachyacantha flavifrons, *Muls. Spec.* p. 531. 9.
N. America (Dejean). Very near *B. ursina*.

Brachyacantha basalis.

Hyperaspis basalis, *Mels. Proc. Phil.* III. p. 179.
Brachyacantha confusa, *Muls. Spec.* p. 537. 13.
United States.

Brachyacantha quadripunctata.*

Hyperaspis quadripunctata *Mels. Proc. Phil.* III. p. 178.
Brachyacantha diversa, *Muls. Spec.* p. 538. 14.
N. America.

Brachyacantha conjuncta.

Brachyacantha conjuncta, *Muls. Spec.* p. 536. 12 (T).
Mexico (Dupont, Deyrolle).

Brachyacantha tau.*

Brachyacantha tau, *Leconte. Smiths. Contr.* XI. p. 28.
Rotundato-ovalis, convexa, supra rufo-flava, nitida dense subtiliter punctulata, thorace basi subinfuscato, elytris fascia basali ad humerum abbreviata, sutura anguste, guttisque utrinque 2 paulo pone medium nigris, margine externo pone maculas, apicalique nigro, subtus nigra, antennis, palpis, pleuris pedibusque flavis. L. .19 unc. Port Riley, Kansas.

Brachyacantha pygidialis.*

Brachyacantha pygidialis, *Muls. Spec.* p. 534. 11 (T).
Mexico (Dupont).

Brachyacantha albifrons.*

Coccinella albifrons, *Say. J. Acad. Phil.* IV. p. 94. 6, ed. Leconte, II. 233.

Elytra yellow, suture and 2 spots on each black, head and anterior part of the thorax whitish. L. $\frac{1}{5}$ unc. Missouri.

Thorax black, anterior and lateral margins, and abbreviated line before, white; elytra with the suture, tip, outer edge and 2 spots black; spots placed, 1 near the humerus, and 1 behind the middle.

Brachyacantha octo-stigma.

Brachyacantha 8-stigma, *Muls. Spec.* p. 539. 15 (T).
Mexico (Chevrolat).

Hyperaspis.

Muls. Secur. p. 179 (*typ. reppensis*).

I have united *Cleothera Muls.* (*typ. Buquetii*) with this genus, as it offers no characters of importance; I am also unable to separate *Hinda*, the characters drawn from the elongate scutellum being insufficient and even illusory. The species with denticulate or dilated anterior tibiæ are placed first, followed by the species of Mulsant's section *Cyra*, peculiar to S. America: then come the typical *Hyperaspides* with a more or less visible basal margin to the thorax; these occur in Europe, Africa, and America, but appear to be absent from India and Australia.

A. Thorax not margined behind (*Cleothera, Muls.*).

a. Anterior tibiæ denticulate.

Hyperaspis Buquetii.

Cleothera Buquetii, Muls. Spec. p. 542. 1.

Brazil. Distinct by its large size and the denticulate tibiæ; punctuation clear, and rather coarse on the elytra, hardly less so on the thorax.

Hyperaspis designata.

Hinda designata, Muls. Spec. p. 518. 1 (T).

Bogota (Reiche). This cannot differ generically from *H. Buquetii*.

Hyperaspis ambigua.

Cleothera ambigua, Muls. Spec. p. 596. 34 (T).

Cayenne (Dejean, Reiche).

Head very closely but evidently, elytra rather closely, punctate. Anterior tibiæ denticulate, thorax finely margined at the base; elytra brown or black, each with 6 yellow spots (2, 1, 2, 1).

Hyperaspis decem-verrucata.

Cleothera 10-verrucata, Muls. Spec. p. 603. 38.

Brazil (Paris), Columbia (Chevrolat).

Anterior tibiæ denticulate, along the outer edge; punctuation not very strong, elytra black, each with 5 yellow spots. Mulsant notes a variety (*consanguis*) from Brazil.

b. Anterior tibiæ dilated into a leaf-like expansion.

Hyperaspis dilatata, sp. n.

Entirely testaceous-red; head strongly punctate, thorax a little more closely so, elytra sparsely but evidently punctate; anterior tibiæ dilated into a broad biangulate expansion on the outer edge. L. $1\frac{2}{3}$ lin. Ega (Bates), Cayenne (Deyrolle). Rather like *Corystes*

hypocrita; the male has the sides of the thorax broadly whitish, the female is unicolorous, darker red, and more strongly punctate.

Hyperaspis jucunda.

Cleothera jucunda, *Muls. Spec.* p. 608. 41 (T).

Columbia (Chevrolat, Dejean), Brazil (Deyrolle), Cayenne, Obydos (Bates). Anterior tibiæ dilated and biangulate.

Hyperaspis humerata.*

Cleothera humerata, *Muls. Spec.* p. 606. 39 (T).

Cayenne (Buquet).

Hyperaspis retigera.

Cleothera retigera, *Muls. Spec.* p. 582. 28 (T).

Brazil (Buquet).

c. Anterior tibiæ simple.

a. Suture with a common black spot before the middle.

Hyperaspis cognata.

Cleothera cognata, *Muls. Spec.* p. 545. 3.

Brazil (Paris).

Convex, bright orange, head and thorax distinctly, elytra rather obsoletely punctate.

Hyperaspis Galliardi.

Cleothera Galliardi, *Muls. Op.* III. p. 73 (1853).

Cleothera callosa, *Deyr. MSS.*

Short, oblong-ovate, clearly and sparsely punctate, light yellow; head variegated with brown; thorax with 2 brown (or black) triangles on the base, reaching the anterior margin, and separated by a narrow medial line; elytra with a large quadrate common spot at $\frac{1}{3}$, and each with 2 other spots, the suture and apical margin, black; 1 elongate oval on the callus reaching the base, 1 obliquely transverse, larger, occupying the apical half, but not reaching the margins. L. $1\frac{2}{3}$ lin. Brazil (Deyrolle).

Hyperaspis Silvani, sp. n.

Short, rounded, light yellow, elytra rather obsoletely, thorax more closely punctate; thorax black with the sides yellow, the dark colour running in a sharp tooth just above the posterior angle; elytra with a common quadrate spot before the middle, each with 3 others and a sutural border (dilated slightly at $\frac{2}{3}$) black; the first spot large suborbicular on the callus, the other two forming a transverse series in the posterior $\frac{1}{3}$, the outer one being

smallest; both are sub-elongate and irregular. L. $1\frac{1}{4}$ lin. Brazil (Deyrolle).

Near *H. Galliardi*, but with 2 sub-apical spots, and the sutural border dilated behind.

Hyperaspis Aliciæ, sp. n.

♂. Subovate, rather depressed, elytra strongly and coarsely punctate, thorax more faintly so, head closely punctate; head and thorax yellowish red, the latter with two distant basal dots, and vestiges of 2 discoidal obtriangular marks; scutellum black; elytra straw yellow, with a rather small obcordate common sutural spot just before the middle, black; also each with 4 oblong spots and the suture (dilated faintly at $\frac{4}{3}$) black; the first pair at $\frac{1}{3}$ (the outer largest, triangular, base dentate), the 2nd pair beyond the middle (the inner one much the largest, elongate-quadrate); the external margin very narrowly black. L. $1\frac{3}{4}$ lin. N. Friburg (Deyrolle).

Hyperaspis Emiliae, sp. n.

♂. Ovate, elytra shining, sparsely and coarsely punctate, thorax more closely punctate, alutaceous, colour light yellow; thorax with 2 very large black basal triangles (only their apices separated); elytra with a uniform black sutural border, beginning abruptly at $\frac{1}{5}$, and ending gradually at $\frac{3}{4}$; also each with a large discoidal sub-quadrate mark in the anterior half. L. $1\frac{1}{4}$ lin. Brazil (Deyrolle).

Hyperaspis triacantha.

Cleothera triacantha, *Muls. Spec.* p. 546. 4 (T).

Cayenne (Reiche, Buquet), Obydos, Ega (Bates).

Punctuation sparse on the elytra, closer on the thorax.

Hyperaspis quinquenotata.

Cleothera 5-notata, *Muls. Spec.* p. 548. 5.

Brazil, Obydos, Tejuca, Santarem (Bates), N. Friburg. I have also a specimen marked "Mexico." This differs from *H. triacantha* only in having one discoidal spot in the posterior third, instead of two smaller ones, of which one is marginal.

Hyperaspis Devillii.

Cleothera Devillii, *Muls. Spec.* p. 560. 14 (T).

Brazil (Paris, Chevr.). Elytra sparsely and faintly punctate, thorax very obsolete and sparsely so. The anterior sutural spot hardly visible; the posterior large.

Hyperaspis Emmæ, sp. n.

♀. Short, rounded, convex, elytra evidently punctate, thorax

finely punctulate; head black, thorax black, anterior angles yellow, front margin reddish; elytra ochreous with the suture narrowly black. L. $\frac{7}{8}$ lin. Brazil.

Hyperaspis spinalis.

Cleothera spinalis, Muls. Op. III. p. 74 (T).

Sub-hemispherical, convex, clear reddish yellow, strongly but sparsely punctate; elytra with the suture narrowly brown (dilated at $\frac{1}{3}$), also a small brown spot on the callus, seeming to be the commencement of a line parallel to the margin. L. $1\frac{1}{2}$ lin. Caracas (Deyrolle).

This, the only specimen in M. Deyrolle's collection, agrees fairly well with the description cited, but is smaller, and the localities given by Mulsant are Bolivia and Brazil; also he speaks of black marks on the thorax which are not present in the only type remaining. In any case it is a species which has not attained its full colouring.

Hyperaspis suturella.

Cleothera suturella, Muls. Op. III. p. 76 (1853) T.

Very near *H. spinalis*, form and punctuation similar. Head and thorax brownish red, elytra pale ochreous, the suture narrowly brown. L. $1\frac{1}{2}$ lin. Brazil (Deyrolle). An immature form of some other species.

Hyperaspis melanura.*

Cleothera melanura, Muls. Spec. p. 562. 15 (T).

Columbia (Buquet). The type is an immature example of one of the foregoing species.

β . Form convex, unicolorous.

Hyperaspis languida.

Cleothera languida, Muls. Spec. p. 563. 16 (T).

Columbia (Dupont).

Hyperaspis luteola.

Cleothera luteola, Muls. Spec. p. 563. 17.

Columbia, St Domingo (Muls.). Punctuation sparse on the elytra, closer on the thorax.

γ . Elytra with a large common discoidal spot only.

Hyperaspis scutifera.*

Cleothera scutifera, Muls. Spec. p. 565. 18.

Valencia, Venezuela (Germar).

Hyperaspis ustulata.

Cleothera ustulata, Muls. Spec. p. 566. 19 (T).

Cleothera dorsata, *Muls. Spec.* p. 1038.

Columbia (Dupont), Carthage (Dejean). Punctuation tolerably close on the elytra, more faint on the thorax.

Hyperaspis camelina, sp. n.

Cleothera camelina, *Muls. MSS.*

♂. Convex, subovate, coarsely and strongly punctate, thorax hardly less so, yellowish-white; thorax with a large basal triangle, truncate at the apex (which reaches beyond the middle); scutellum black; elytra with a large common black patch, of the same width as the mark on the thorax at the base, gradually dilating, and ending in a very obtuse angle at $\frac{2}{3}$; a small indefinite dash on the callus is connected with the outside of this mark. L. $\frac{7}{8}$ lin. Santarem (Bates).

γ. Oblong, sub-depressed, head and thorax alutaceous.

Hyperaspis loricata.

Cleothera loricata, *Muls. Spec.* p. 544. 2.

Form oblong, sub-depressed. Head and thorax alutaceous, faintly and rather sparsely punctulate, elytra clearly punctate. My specimen, which agrees with this description, appears to have the thorax margined, but very indistinctly. Brazil (Paris).

Hyperaspis hexastigma.

Cleothera hexastigma, *Muls. Spec.* p. 556. 10 (T).

Brazil (Reiche, Buquet), N. Fribourg.

This species has the depressed form and rather obsolete punctuation of *H. loricata*, which might be regarded as the extreme suffused form of it.

Hyperaspis crucifera.

Cleothera crucifera, *Muls. Spec.* p. 555. 9 (T).

Brazil (Chevr.). Allied to *H. hexastigma*.

Hyperaspis gracilis.

Cleothera gracilis, *Muls. Spec.* p. 558. 11.

Brazil (Germar, Deyrolle). Allied to *H. hexastigma*, but has only one subapical spot; it bears the same relation to it as *H. 5-notata* does to *H. triacantha*.

Hyperaspis Castelnaudi.

Cleothera Castelnaudi, *Muls. Spec.* p. 559. 12.

Matto Grosso, Brazil (Paris). Two specimens so named in M. Deyrolle's collection are allied to *H. hexastigma*, but have obviously an immature colouring.

*Elytra brown with white margins and intersecting lines, as in *Psyllobora*.

Hyperaspis tortuosa.

Cleothera tortuosa, *Muls. Spec.* p. 567. 20 (T).
Brazil (Buquet).

Hyperaspis psylloboroides.

Sub-hemispherical, whitish-yellow, with reddish-brown markings; head pale; thorax truncate before the scutellum, very sparingly punctured, yellowish-white, with 7 brown marks, (1 linear before the scutellum, 2 small external, 4 triangular, arranged round the first one); elytra sparsely but distinctly punctate, the external margin broadly whitish, the scutellum and suture (narrowly) brown; each with 4 red-brown vittæ closely approximated; the 1st confused with the sutural stripe near the base, the white line separating the 1st and 2nd suddenly dilated at $\frac{1}{3}$, the 4th emarginate externally. L. $\frac{1}{2}$ lin. N. Fribourg (Deyrolle).

Hyperaspis hybridula, sp. n.

Closely resembling *H. psylloboroides* in size and coloration, and differing principally by a somewhat closer punctuation and by the pattern of the elytra. These are whitish, each with 7 marks and the suture red-brown; a transverse sub-basal spot extending across the 2 first vittæ; an oblique triangular spot on the callus sloping towards the margin; three parallel vittæ, the 1st interrupted in the middle, and recurved outwards at the apex; the 2nd rounded at the apex, the 3rd shorter, acuminate; a small obtriangular dash at $\frac{2}{3}$ in the external white margin. L. $\frac{1}{2}$ lin. N. Fribourg (Deyrolle).

Hyperaspis Ceciliæ, sp. n.

Closely resembling *H. fuscomaculata*, similarly punctured, but paler; elytra with 4 long linear brown marks in the anterior part and 2 shorter triangular ones in the posterior $\frac{1}{3}$; the 2 outer linear marks connected on the callus, the inner very close to the suture (which is very narrowly brown), a line from its apex connects it with the second half of the suture where the brown colour is a little broader, (but ends at $\frac{5}{6}$). L. $1\frac{1}{2}$ lin. Brazil (Saunders).

Hyperaspis fuscomaculata.

Cleothera fuscomaculata, *Muls. Spec.* p. 569. 21 (T).
Brazil (Dejean, Paris).

**Elytra convex, each with 4 sub-quadrate spots in 2 pairs.

Hyperaspis Poortmanni.

Cleothera Poortmanni, *Muls. Spec.* p. 572. 22 (T).
Brazil (Dejean, Buquet). Cayenne.
Elytra very sparsely, thorax closely, punctate.

Hyperaspis trepida.

Cleothera trepida, *Muls. Spec.* p. 590. 31 (T).
S. America (Dupont).

Hyperaspis octupla.

Cleothera octupla, *Muls. Op.* III. p. 80 (1853) T.
Sta Catharina (Deyrolle). This differs from *H. trepida* only by the almost entirely black thorax.

Hyperaspis noticollis.

Cleothera noticollis, *Muls. Spec.* p. 588. 30.
Columbia (Buquet, Chevr.), Minas Geraes, Rio Janeiro, Bogota. Allied to *H. Poortmanni*, but distinct by the 1st spot, which forms a marked curve; this is sometimes united to the suture.

Hyperaspis uncinata.

Cleothera uncinata, *Muls. Op.* III. p. 78 (1853) T.
Sta. Catharina (Deyrolle). Again very near *H. Poortmanni*, but the elytra have each 5 spots, one small one being intercalated between the 2 pairs; the inner spot of the lower pair is arinate.

***Elytra each with 2 large black spots.

Hyperaspis graminicola.*

Cleothera graminicola, *Muls. Spec.* p. 592. 32.
Columbia (Trobart). Elytra each with 2 large spots in line, and one very small, joined to the margin at $\frac{2}{3}$; punctuation tolerably coarse and evident.

Hyperaspis Suzannæ, sp. n.

Cleothera Suzannæ, *Deyr. MSS.*
Closely allied to *H. graminicola*, having the same convex form; but with no trace of the external spot, the punctuation more faint, etc.; in the specimens before me the spots are of a clear black, the suture of a light red. Cumana (Deyrolle).

Hyperaspis Margaritæ, sp. n.

Again allied to *H. graminicola*, but smaller, less convex, punctuation stronger, rather close; thorax with the basal border tridentate, elytra with the 2 spots smaller, more distant, the sutural border black, more decidedly dilated at $\frac{1}{3}$, etc. Bogota (Deyrolle).

***Elytra each with 6-7 black spots.

Hyperaspis pallax.*

Cleothera pallax, *Muls. Spec.* p. 574. 23.
Caracas (Sallé). Elytra each with 6 spots.

Hyperaspis adhærens.*

Cleothera adhærens, *Muls. Spec.* p. 575. 24.
Caracas (Sallé). Elytra each with 6 spots.

Hyperaspis maculosa.*

Cleothera maculosa, *Muls. Spec.* p. 577. 25.
Columbia? (Paris). Elytra with 7 spots.

Hyperaspis tessulata.*

Cleothera tessulata, *Muls. Spec.* p. 578. 26. l. c. p. 1039.
Columbia (Dupont, Paris). Elytra with 7 spots.

Hyperaspis Mariæ, sp. n.

Rounded, not very convex, orange, closely punctate; thorax with 7 black dots; elytra also with 7 black dots, and the suture narrowly brown; the dots arranged in three oblique pairs, (1 sub-basal, 1 medial, 1 subapical); a small additional dot close to the suture at $\frac{1}{3}$, which probably unites with it sometimes. L. $1\frac{1}{4}$ lin. Columbia (Deyrolle).

Hyperaspis glyphica.

Cleothera glyphica, *Muls. Spec.* p. 585. 29.
Brazil (Germar, Paris).

Hyperaspis Carolinæ, sp. n.

Very close to *H. glyphica*, punctuation, form, and size, similar, as also is the pattern of the thorax; the elytra however have each only 6 spots; the sutural is more decidedly dilated at $\frac{1}{3}$; 2 basal, 2 sub-medial (the inner one beyond the middle), 1 punctiform discoidal, between the previous pair and the transverse linear subapical spot. Bahia (Fry), Santarem. (Bates).

Hyperaspis Schaufussi, sp. n.

Cleothera Schaufussi, *Vögel. MSS.*
Cleothera Mulsanti, *Deyr. MSS.*

*****Elytra with numerous pale areolæ.

Hyperaspis scenica.

Cleothera scenica, *Muls. Spec.* p. 580. 27 (T).
Columbia (Dejean, Paris).

Hyperaspis Millieri.

Cleothera Millieri, *Muls. Spec.* p. 597. 35.
Cayenne (Trobart).

Hyperaspis tredecim-guttata.

Cleothera 13-guttata, *Muls. Spec.* p. 599. 36 (T).
N. Granada (Reiche).

Hyperaspis turbata.

Cleothera turbata, *Muls. Spec.* p. 601. 37.
Brazil (Germar).

Hyperaspis decem-signata.*

Cleothera 10-signata, *Muls. Spec.* p. 607. 40.
Cayenne (Buquet, Dejean).

Hyperaspis bis-quinque-pustulata.

Coccinella bis-5-pustulata, *Fabr. Syst. El.* i. 384. 148.
Cleothera bis-5-pustulata, *Muls. Spec.* p. 610. 42.
S. America (Copenhagen).

Hyperaspis Gacognii.

Cleothera Gacognii, *Muls. Spec.* p. 611. 43 (T).
Brazil (Buquet, Chevrolat, Paris). Mulsant notes a variety
(*H. illegitima*).

Hyperaspis Levrati.

Cleothera Levrati, *Muls. Spec.* p. 613. 44.
Mexico (Dupont, Hope).

Hyperaspis Gaynoni.

Cleothera Gaynoni, *Muls. Spec.* p. 615. 45 (T).
Brazil (Buquet, Paris).

Hyperaspis Armandi.

Cleothera Armandi, *Muls. Spec.* p. 617. 46.
Brazil, Matto Grosso (Paris).

Hyperaspis Billoti.

Cleothera Billoti, *Muls. Spec.* p. 619. 47.
Brazil (Chevrolat, Copenhagen). Mulsant notes some varieties
(*Groendali*, *parva*, *Bourdinii*).

Hyperaspis Ormanceayi.

Cleothera Ormanceayi, *Muls. Spec.* p. 621. 48.
Columbia (Germar, Trobert).

Hyperaspis distinguenda.

Cleothera distinguenda, *Muls. Spec.* p. 622. 49 (T).
Columbia (Dejean, Reiche), Brazil (Chevrolat).

Hyperaspis fasciata.

- Coccinella fasciata* ||, *Fabr. Syst. El.* i. 382. 137.
Cleothera fasciata, *Muls. Spec.* p. 625. 50.
 S. America (Copenhagen).

Hyperaspis collaris.

- Cleothera collaris*, *Muls. Spec.* p. 627. 51.
 Columbia (Buquet, Melly).

Hyperaspis histrionica.*

- Cleothera histrionica*, *Muls. Spec.* p. 629. 52 (T).
 Carthagen (Dejean).

Hyperaspis jocosca.

- Cleothera jocosca*, *Muls. Spec.* p. 632. 54.
 Mexico (Chevrolat).

Hyperaspis serval.

- Cleothera serval*, *Muls. Spec.* p. 633. 55 (T).
 Cayenne (Reiche).

Hyperaspis bis-quatuor-pustulata.

- Cleothera bis-4-pustulata*, *Muls. Spec.* p. 634. 56 (T).
 N. Granada (Reiche).

Hyperaspis octo-pustulata.

- Coccinella 8-pustulata*, *Fabr. Syst. El.* i. 383. 145.
Cleothera 8-pustulata, *Muls. Spec.* p. 636. 57.
 S. America (Copenhagen), Cayenne (Buquet).

Hyperaspis Donzeli.

- Cleothera Donzeli*, *Muls. Spec.* p. 638. 58.
 Brazil (Paris).

Hyperaspis sex-verrucata.

- Coccinella 6-verrucata*, *Fabr. Syst. El.* i. 383. 144.
Cleothera 6-verrucata, *Muls. Spec.* p. 639. 59.
 Mexico (Dupont). S. America (Copenhagen).

Hyperaspis sex-guttata.

- Cleothera 6-guttata*, *Muls. Spec.* p. 642. 61.
 Brazil, Matto Grosso (Paris).

Hyperaspis quadrisignata.

- Cleothera 4 signata*, *Muls. Spec.* p. 643. 62 (T).
 Cayenne (Dejean, Chevrolat). Brazil (Paris).

Hyperaspis Victoriæ, sp. n.

"*Hyperaspis Victoriæ*," Deyrolle MSS.

Allied to *H. 4-signata* and with similar markings. Black, ovate, less rounded; head closely punctate; thorax distinctly truncate in front of the scutellum, very finely and sparsely punctate, sides with a brownish-yellow ill-defined spot, bounded by a line from the posterior angle to the bottom of the anterior sinus; elytra finely and sparsely punctate, with a large elongate-quadrangle orange spot occupying about two thirds, and a smaller transversely oval apical spot, not quite reaching the margins. L. $1\frac{1}{4}$ lin. Cayenne (Deyrolle). Santarem (Bates).

Hyperaspis petropolitana, sp. n.

♀. Ovate, convex, clearly punctate, black, with orange markings; thorax with a triangular orange patch at the anterior angles, not reaching the base; elytra each with 2 irregular orange spots; 1 large discoidal, extending across $\frac{4}{5}$ of the width, 1 small, subtransverse, subapical. L. 1 lin. Petropolis (Fry).

Hyperaspis ovato-notata.

Cleothera ovato-notata, Muls. Spec. p. 646. 65.

Brazil (Trobart). Rio Janeiro (Fry).

Hyperaspis Carolinæ, sp. n.

"*Hyperaspis Carolinæ*," Deyr. MSS.

♀. Subhemispherical, black, clearly but sparsely punctured; thorax at the sides with a triangular yellow mark, inner edge dentate, truncate before the scutellum (which is sparsely punctate); elytra with a moderate-sized yellow oval subapical spot, rather nearer the external margin than the suture. L. $1\frac{1}{4}$ lin. ? (Deyrolle).

Hyperaspis Egæ, sp. n.

♂. Subhemispherical, piceous; head yellow, closely punctate, thorax closely and tolerably finely punctate, truncate in front of the scutellum, sides broadly whitish, indented by the black pigment in the posterior portion; scutellum large, thickly punctate; elytra more sparsely punctate, pitchy brown, each with 2 small, hardly visible, orange dots at the base, (1 sub-scutellar, 1 over the callus), and a large discoidal irregular (sub-pentagonal) whitish-yellow spot, reaching from $\frac{1}{5}$ to $\frac{2}{3}$. L. 1 lin. Egæ (Bates).

Hyperaspis ingrata.

Cleothera ingrata, Muls. Spec. p. 644. 63 (T).

The male has the head, anterior margin (rather broadly), and sides of the thorax, and the humeral angles of the elytra whitish. Mr Fry's specimens are a little more strongly punctured than

the type and slightly more convex. Cayenne (Dejean). Bahia (Fry).

Hyperaspis flavocalceata.

Cleothera flavocalceata, *Muls. Spec.* p. 648. 66 (T).

Brazil (Chevrolat).

B. Thorax margined more or less visibly along the base.

(*Hyperaspis*, *Muls.*)

Hyperaspis C-nigrum.

Hyperaspis C-nigrum, *Muls. Spec.* p. 649. 1.

Brazil (Paris, Deyrolle).

Hyperaspis eupaleoides, sp. n.

Subhemispherical, tolerably convex, pale yellowish-white with reddish-brown markings; head alutaceous, with a brown frontal vitta; thorax sparingly punctate, faintly alutaceous, with 2 obtriangular brown marks close to the anterior margin (1 on each side of the middle), and a basal brown band, almost divided in front of the scutellum, covering about half the whole base; scutellum with the base brown, disc yellowish-white, elytra whitish-yellow, evidently punctate; suture (narrowly) and 4 irregular spots on each, reddish-brown; the sutural band does not quite reach the apex, and is dilated just before it into a rather large rounded spot; the 4 spots occupy the elytra, leaving the margins only pale, and are separated by fine lines: the 1st is largest and subquadrate; the 2nd reaches the base and the apex of the 3rd, its inner edge straight, its outer edge curved; the 3rd also large, rhomboidal; the 4th smaller, subelongate. L. $1\frac{1}{2}$ lin. Minas Geraes (Deyrolle).

The system of coloration recalls that of *Psyllobora hybrida* or *Eupalea Suffriani*.

Hyperaspis Oseryi.

Cleothera Oseryi, *Muls. Spec.* p. 559.13 (T).

Hyperaspis operaria.

Cleothera operaria, *Muls. Op.* III. p. 71 (1853) T.

Subhemispherical, yellowish-white, clearly punctured, interstices evidently alutaceous; a large discoidal black patch, reaching from the anterior $\frac{1}{3}$ of the thorax to a little beyond the middle of the elytra, rounded at the ends and contracted in the middle, just beyond the scutellum; the external margins of the elytra are also narrowly black, and there is a brown discoidal shade on each at $\frac{2}{3}$ of their length. L. $1\frac{1}{2}$ lin. Brazil (Deyrolle).

Hyperaspis micilla.

Cleothera micilla, *Muls. Op.* III. p. 76 (1853) T.

Subovate, yellowish-red, punctulate; elytra with a common ill-defined elongate quadrate brown spot, extending from the scutellum to $\frac{2}{3}$. L. $\frac{3}{4}$ lin. Caracas (Deyrolle). Evidently immature.

Hyperaspis pectoralis.

Cleothera pectoralis, *Deyr. MSS.*

Hemispherical, closely and evidently punctulate, entirely of an obscure reddish-yellow; suture and margins of the elytra very narrowly edged with brown. L. 1 lin. Brazil (Deyrolle). The convex rounded form will serve to distinguish this species.

Hyperaspis sagittata, sp. n.

Subhemispherical, whitish-yellow with reddish-brown markings, clearly and evidently punctulate; thorax with 5 brown triangular marks, 3 basal, and 2 reversed in front, not reaching the anterior margin; elytra with the suture and margins edged with brown, 2 spots united by their apices (but not reaching either margin) in the anterior $\frac{1}{3}$, also brown; a brown spot near the margin in the middle, and a discoidal elongate mark at $\frac{2}{3}$ connected by an oblique mark with the suture (this with the opposite one forms a lance-head directed forwards). L. 1 lin. Columbia (Deyrolle).

Hyperaspis incompleta, sp. n.

Subovate, clearly punctulate, thorax rather more closely so, colour orange-yellow with black markings not sharply defined; head yellow; thorax black with the sides orange, the orange colour not sharply bounded, but parallel to the margin; elytra orange, the suture black, suddenly dilated below the scutellum to $\frac{1}{4}$ of the width of the elytra, then narrowed, again dilated nearly to the margin at $\frac{2}{3}$, and then rapidly narrowed to the apex; an ill-defined brown spot is visible on the callus. L. 1 lin. Columbia (Deyrolle).

Hyperaspis limbigera.

Cleothera limbigera, *Muls. Op.* III. p. 77 (1853) T.

Suboval, convex, punctulate; thorax yellowish-red, with 2 large brown triangles on the base, almost reaching the anterior margin, and only separated from each other by a narrow discoidal line, outside these is a small brownish spot; elytra orange, the suture black, dilated to meet the dark brown spot in the anterior $\frac{1}{3}$, which is produced to the base, and downwards to the 2nd spot;

this again joins the suture, forming a common lunate fascia convex behind; external margin narrowly brown. L. $1\frac{1}{2}$ lin. Brazil (Deyrolle).

Hyperaspis insignis, sp. n.

Hemispherical, ochreous yellow, clearly punctulate, thorax alutaceous; thorax hardly truncate in front of the scutellum, the disc broadly black, this colour extends over half the base, but narrows towards the anterior margin which it just reaches; elytra with an obsolete brown spot on the callus, the suture rather broadly black for $\frac{1}{2}$ its length, which colour then rapidly narrows and is reduced to a narrow line at $\frac{2}{3}$. L. $1\frac{1}{2}$ lin. Brazil (Deyrolle).

Hyperaspis subsignata, sp. n.

Hyperaspis subsignata, Chev. MSS.

♂. Hemispherical, ochreous yellow clouded with reddish, clearly shining, punctulate; head yellow, thorax reddish, sides broadly and anterior margin ochreous, the latter produced posteriorly in the middle; elytra ochreous; the suture and a small spot on the callus reddish. L. $\frac{3}{4}$ —1 lin. Mexico, Campeachy, Texas (Deyrolle).

♀. Head with the vertex reddish, thorax with the sides only pale, size larger, punctuation fainter.

Hyperaspis matronata.

Cleothera matronata, Muls. Op. III. p. 71 (1853) T.

Subovate, bright yellow above, rather faintly and sparsely punctate; head yellow with a brown spot on the front; thorax black, sides and anterior angles yellow; elytra with a large common spot, attenuate posteriorly, reaching almost from base to apex, black; and each with 2 other spots and the apical margin narrowly black, 1 subtriangular (from the callus to the middle), 1 suborbicular, in the posterior half; pectus black, ventral segments, reddish testaceous, brown in the middle. L. $1\frac{2}{3}$ lin. Brazil (Deyrolle).

Hyperaspis Ecoffeti.

Hyperaspis Ecoffeti, Muls. Op. III. p. 99 (1853) T.

Hyperaspis quadrina, Muls. Op. III. p. 100 (1853) T.

♂. Ovate, rather closely punctulate, yellow with black markings; head yellow, thorax black, sides (not very broadly) and anterior margin (narrowly) yellow; elytra with a tolerably broad

sutural black band from $\frac{1}{6}$ to $\frac{5}{6}$, and each with 2 large discoidal spots, the anterior one subquadrate, the posterior rounded. L. $\frac{3}{4}$ —1 lin. Brazil, Bolivia (Deyrolle). I cannot separate the 2 species cited from Mulsant.

Hyperaspis notata.

Cleothera notata, *Muls. Spec.* p. 550. 6 (T).

Brazil (Chevrolat). Resembles the preceding, but the anterior elytral spot is double, and the sutural border suddenly dilated at $\frac{1}{3}$.

Hyperaspis trimaculata.

Chrysomela trimaculata, *Linn. Syst. Nat.* i. 592. 45 (1767).

Hyperaspis trimaculata, *Muls. Spec.* p. 668. 14.

Coccinella trilineata, *Schall. Act. Hal.* i. 262 (1783).

Mexico.

Hyperaspis lemniscata.*

Hyperaspis lemniscata, *Bohem. Eugen. Resa.* p. 205 (1859) T.

♂. Allied to *H. trimaculata*, ovate, subdepressed, finely and sparingly punctate; head, sides and front of thorax, yellowish-white, the lateral margins narrowly bordered, the white colour continued round the posterior angles for a quarter of the base; elytra whitish-yellow, base, suture, apex, longitudinal vitta, and external margin (very narrowly) black; the suture gradually dilated to about the middle, then narrowed to just before the apex, the vitta broad, joining the base, subangulate beyond the middle, connected with the apical spot by a narrow line. L. 1 lin. Montevideo (Boheman).

Hyperaspis trilineata.*

Hyperaspis trilineata, *Muls. Spec.* p. 668. 13.

Cayenne (Buquet). I have not been able to find the type in the British Museum.

Hyperaspis flavoguttata.

Hyperaspis flavoguttata, *Muls. Spec.* p. 651. 2.

Hyperaspis exclamationis, *Muls. Spec.* p. 654. 4.

Brazil, Monte Video (Paris, Melly), S. Paulo (Bates), Chili. The descriptions of these two species fully justify their reunion; Mulsant had not seen both sexes of either species; the base of the thorax is hardly margined; the form and coloration appear to have led Mulsant to regard them as *Hyperaspis*.

Hyperaspis Germainii, sp. n.

♀. Subovate, acuminate behind, pale lemon-yellow varied with deep black, finely and sparsely punctulate, thorax obsoletely so; head black, thorax black, the anterior angles with a yellow triangle, just reaching the base; elytra with a moderately broad basal margin, a narrower external margin (turning at $\frac{3}{4}$ and suddenly dilated), and a discoidal small spot beyond the middle lemon-yellow; the dilated end of the marginal band may sometimes form a free spot. L. $1\frac{1}{4}$ lin. Chili (Germain).

Hyperaspis mercabilis.

Cleothera mercabilis, *Muls. Op.* III. p. 93 (1853) T.

Cleothera scapulata, *Muls. Op.* III. p. 81 (1853) T.

♂. Ovate, not very convex, finely and sparsely punctulate, alutaceous, opaque, head yellow, thorax with the sides (narrowly) and anterior margin yellow, elytra yellow or orange, the suture and 2 common fasciæ black; the first does not reach the margin but is dilated over the callus, the 2nd does, and is sometimes united also to the first, and forms a sharp angle.

This coloration is a modification of the common 5-spotted type. L. 2 lin. Brazil (Deyrolle).

♀. Head black, thorax with the sides yellow.

Hyperaspis pavida.

Cleothera pavida, *Muls. Spec.* p. 641. 60 (T).

Hyperaspis recordata, *Muls. Spec.* p. 679. 25 (T).

Mexico (Dupont), Pernambuco (Chevr.). A variable species in which sometimes the ordinary 5 yellow spots are apparent, at others only 2 (1 subscutellar, 1 subapical); it is very convex, but ovate.

Hyperaspis Raynevalii.

Cleothera Raynevalii, *Muls. Op.* III. p. 85 (1853) T.

Subovate, rotundate, not very convex, closely and rather strongly punctate, black with orange-yellow spots; head yellow, thorax with the sides broadly yellow, the inner edge of the spot convex; elytra black, each with 5 spots in the usual positions; the 4th large, ovate, red; the others smaller, yellow; the outer three do not reach the margin; the subapical one larger, transversely ovate. L. $1\frac{1}{2}$ lin. Cayenne (Deyrolle), Ega (Bates). Very recognisable by the red spot.

Hyperaspis jocosa.*

Cleothera jocosa, *Muls. Spec.* p. 632. 54.

Mexico (Chevrolat).

Hyperaspis subapicalis, sp. n.

♂. Somewhat rounded, not very convex, elytra coarsely and rather closely, head and thorax finely, punctate; head, thorax with the sides and front, yellow; the lateral patch quadrangular; elytra with a subapical spot not reaching the margins, but distant from the suture. L. $1\frac{1}{2}$ lin. Rio Janeiro (Fry).

♀. Head and front of thorax black.

Allied to *H. peregrina*, but the apical spot does not reach the margin.

Hyperaspis albopunctata, sp. n.

♀. Rounded, slightly convex, strongly and sparsely, thorax more faintly punctate, black with yellowish-white markings; head black, clypeus and part of the front brownish-yellow; thorax with the sides broadly yellow, inner edge of colour convex; elytra black with a very small discoidal dot and the apex yellowish-white, the spot is before the middle and nearer the suture; the apical mark runs up the external margin nearly to the middle. L. $1\frac{1}{2}$ lin. Brazil (Deyrolle).

Hyperaspis cleida.

Hyperaspis cleida, *Muls. Spec.* p. 670. 15.

Brazil (Chevrolat).

Hyperaspis Deyrollii, sp. n.

♂. Subovate, slightly convex, rather closely and visibly punctate, black with pale yellow markings; head yellow, thorax with the sides (very broadly) and front yellow, the lateral patch angulated on its inner edge; elytra each with 2 moderately large pale yellow spots, 1 discoidal, subtransverse, at the middle, 1 sub-apical, free, nearer the external margin. L. $1-1\frac{1}{2}$ lin. Teapa, S. Paulo (Deyrolle).

♀. Head and front of thorax black.

Hyperaspis Guilloryi.

Cleothera Guilloryi, *Muls. Spec.* p. 1040 (T).

Elytral spot discoidal, central punctuation faint. Columbia (Chevrolat), Cayenne (Deyrolle).

Hyperaspis centralis.

Hyperaspis centralis, *Muls. Spec.* p. 685. 32 (T).

Elytral spot behind the middle, punctuation coarse. Mexico (Reiche).

Hyperaspis unipunctata, sp. n.

♀. Ovate, subconvex, coarsely and strongly punctate, black with orange spots; sides of thorax with a triangular yellow patch, the inner edge dentate; elytra each with a rounded yellow spot, of less than $\frac{1}{2}$ their width, placed a little before the middle. L. $\frac{3}{4}$ —1 lin. Santarem (Bates).

Hyperaspis peregrina.

Hyperaspis peregrina, *Muls. Spec.* p. 691. 40.

Brazil (Chevrolat). The type communicated to me by M. Chevrolat is a new species from Oran, but this individual is a ♂ and therefore cannot be the original type.

Hyperaspis festiva.

Hyperaspis festiva, *Muls. Spec.* p. 659. 8.

California (Stockholm), Columbia, Bogota, Brazil, Rio Janeiro, N. Friburg, Santarem, Minas Geraes, Bolivia, Chili. A very abundant and variable species. This and the following species have an ovate subdepressed form which renders them easily recognisable.

Hyperaspis cincticollis.

Cleothera cincticollis, *Muls. Spec.* p. 553. 8 (T).

Columbia (Dupont). This seems to be a variety of *H. festiva*.

Hyperaspis compedita.

Cleothera compedita, *Muls. Spec.* p. 631. 53 (T).

Mexico (Dupont).

Hyperaspis onerata.

Cleothera onerata, *Muls. Spec.* p. 552. 7 (T).

Columbia (Dupont).

Hyperaspis connectens.

Coccinella connectens, *Schön. Syn. Ins.* II. 157. 21.

Hyperaspis connectens, *Muls. Spec.* p. 662. 10.

W. Indies, Mexico.

Hyperaspis bicrucata.

Hyperaspis bicrucata, *Muls. Spec.* p. 664. 11 (T).

N. Granada (Reiche). This species may be a variety of the last, but I have not seen any form at all intermediate.

Hyperaspis sphæridioides.

Hyperaspis sphæridioides, *Muls. Spec.* p. 665. 12.
Chili (Dejean, Germain).

Hyperaspis quadrioculata.*

Exochomus 4-oculatus, *Mots. Bull. Mosc.* xviii. p. 383 (1845) (T).
California (Dejean). This seems to be allied to *H. connectens*.

Hyperaspis chilensis, sp. n.

Very close to *H. sphæridioides*, but without any trace of the posterior spot on the elytra, the anterior one in the ♀ is reduced to a narrow transverse mark, dilated in the disc, in the ♂ it is broader externally and runs up to the shoulder. The head, sides, and front of the thorax are yellow in the ♂. Chili (Germain).

Hyperaspis cincta.*

Hyperaspis cincta, *Leconte, Proc. Phil.* p. 89 (1858).

Rotundato-ovalis, nigra, nitida, capite thoraceque subtiliter punctatis, illo flavo, hoc margine laterali apicalique tenui flavis, elytris minus dense punctatis, margine lato flavo-rufo pone humeros emarginato, postice ambiente, sed suturam haud attingente ad apicem obtuse rotundato, margine laterali pone medium anguste nigro. L. 10. California (S. Isabel).

Hyperaspis militaris.

Hyperaspis militaris, *Lec. Pr. Ac. Phil.* 1852, p. 133. 1.

Ovalis, convexa, subtiliter punctulata, capite thoraceque nigris, hoc lateribus albis, elytris flavis, sutura maculaque humerali nigris; pedibus abdominisque lateribus testaceis. L. 11.

Rounded, slightly oval, very convex, and very finely punctulate. Head black, mouth and organs testaceous. Thorax with the base much rounded and very finely margined; black, sides whitish yellow. Elytra pale yellow with a broad sutural vitta and an oblong spot on the humeral callus black. Beneath piceous black; feet, sides and apex of the abdomen testaceous. Columbia, S. Carolina.

Hyperaspis vittigera.

H. vittigera, *Lec. Pr. Ac. Phil.* 1852, p. 133. 2.

Ovalis, modice convexa, thorace nigro lateribus flavis, elytris rugose punctulatis, albicantibus sutura vittaque lata postice adnexa nigris, pedibus testaceis. L. 108.

Oval, somewhat oblong, moderately convex. Head sparsely

and obsoletely punctulate, testaceous in the male, black with yellow mouth in the female. Thorax obsoletely punctulate, rounded and finely margined at the base; in the male yellow with a large basal black spot, anteriorly lobed and extending beyond the middle; in the female black with narrow yellow sides. Elytra finely punctulate and wrinkled; whitish with a broad black vitta commencing near the base, and extending nearly to the apex, where it curves inwards and joins the suture, which is also black; margin behind the middle and apex black. Beneath piceous, margin of the abdomen and feet obscure testaceous. Missouri.

Hyperaspis arcuata.

H. arcuata, Lec. Pr. Ac. Phil. 1852, p. 133. 3.

Ovalis, modice convexa, nigra, capite thoraceque lateribus maculaque apicali 3-dentata albis, elytris subtiliter punctatis, basi margineque usque ad medium tenuiter albis, pedibus testaceis. L. ·07.

Oval, slightly oblong, moderately convex. Head obsoletely punctured, base rounded, scarcely margined, black; sides yellowish-white; apex with a transverse yellow spot posteriorly 3-dentate, at the sides almost reaching the yellow margin. Elytra distinctly punctured, black with a narrow arcuated white line extending from near the scutellum, along the base of the outer margin as far as the middle. Beneath piceous, feet dark testaceous. One male found at the mouth of the Gila, California.

Hyperaspis annexa.

H. annexa, Lec. Pr. Ac. Phil. 1852, p. 133. 4.

Rotundata ovalis, convexa, nigra, thorace lateribus albis, elytris obsolete punctulatis, vitta suturali lata, alteraque postice abbreviata, ad basin extensa, margineque tenui nigris. L. ·10.

Rounded oval, less convex than *H. militaris*. Head scarcely punctulate, in the male yellow, in the female black. Thorax scarcely punctulate, black, lateral margin yellow. Elytra very indistinctly punctulate, yellow, with a sutural vitta broader in front, and another very broad vitta commencing at the base and extending to one-seventh of the apex deep black; outer margin and apex deep black; outer margin and apex with a very narrow black line. Beneath blackish piceous, tarsi paler. Anterior legs, tibiae and tarsi of the male testaceous. In the female the black vittae are much broader, so that the elytra appear black, with a narrow marginal vitta and another sub-oblique discoidal one united posteriorly to the marginal vitta. One pair. San Francisco.

Hyperaspis quadrivittata.

H. quadrivittata, Lec. Pr. Ac. Phil. 1852. p. 133. 5.

Rotundato-ovalis, modice convexa, nigra, valde punctulata, thorace lateribus flavis elytris margine externo et apicali, vittaque obliqua utrinque abbreviata flavis. L. 10.

Similar to the female of *H. annexa*, but is strongly punctulate, and the discoidal yellow vitta does not unite with the marginal one. The organs of the mouth and the feet are piceous. One specimen found near Lang's Peak.

Hyperaspis consimilis.

H. consimilis, Lec. Pr. Ac. Phil. 1852. p. 134. 6.

Hemisphærica, punctulata, nigra, thorace margine laterali pallido, elytris gutta subbasali, vitta abbreviata postica, margineque externo subundulato flavis, tibiis anticis testaceis. L. 10.

Very similar to *H. disconotata* (Muls.), but the anterior spot does not reach the base, the posterior spot is vittiform, extending from the middle to within one-seventh of the apex; the outer margin is much narrower and but slightly undulated, posteriorly it separates from the margin, leaving the apex black. The feet are black, the anterior tibiæ, and extremity of the middle tibiæ, yellow.

Lake Superior.

Hyperaspis elegans.

Hyperaspis elegans, Muls. Spec. p. 658. 7 (T).

Coccinella undulata||, Say, Journ. Ac. Phil. iv. 92.

? *Coccinella lugubris*, Rand. Bost. J. N. H. II. p. 52.

United States (Dejean, Leconte).

Hyperaspis fimbriolata.*

Hyperaspis fimbriolata, Melsh. Proc. Phil. III. 180.

Hyperaspis rufomarginata, Muls. Spec. p. 661. 9 (T).

N. America (Dejean).

Hyperaspis Lecontii.

Hyperaspis jucunda||, Leconte, Proc. Phil. p. 134. 9 (1852).

Hemisphærica, obsolete punctulata, capite thoraceque rufis, hoc basi medio nigro, lateribus flavis, elytris nigris maculis utrinque duabus. Margineque externo postice abbreviato flavis, corpore pedibusque rufis. L. 12.

Almost hemispherical, finely and almost obsoletely punctulate. Head yellowish rufous, thorax rufous, sides broadly yellow, base rounded. Very finely margined, black as far as the yellow

of the sides. Elytra black, with a large round yellow spot before the middle, and another slightly uniform one towards the apex; lateral margin yellow from the base for two-thirds the length, a little expanded behind. Pygidium rufous. Body beneath, and feet, rufous.

Illinois.

Hyperaspis tæniata.

H. tæniata, *Lec. Pr. Ac. Phil.* 1852. p. 134. 10.

Nigra, hemisphærica, nitidissima, subtiliter punctulata, elytris margine laterali antice, maculaque magna triangulari ad marginem extensa rubris. Long. .10.

Almost hemispherical, black, finely but not densely punctulate, very shining. Head and thorax entirely black, punctures of the latter very distinct. Elytra with a large triangular blotch at the middle, extending two-thirds the breadth of the elytra, to the margin, where it is expanded so as to reach the base; the posterior outline is a little emarginate towards its inner part, which is near about the centre of the elytron. Body beneath entirely black.

San Diego, California.

Hyperaspis pratensis.

H. pratensis, *Lec. Pr. Ac. Phil.* 1852. p. 134. 11.

Sub-hemisphærica, nigra, valde punctulata, thorace lateribus late albis, elytris utrinque trimaculatis, maculis duabus anticis transversim positis; tertia subapicali rufo flavis, pedibus flavis. L. .15.

The maculation of this species is very similar to that of some varieties of *Brachiacantha dentipes*. Almost hemispherical, black, very distinctly punctulate, mouth yellow; thorax with a large yellowish white spot occupying the whole of the side, base less rounded than usual, sub-truncate at the middle. Elytra with a large orange-coloured spot before the middle, closer to the suture than the side; another smaller marginal one opposite the posterior part of the discoidal spot, and a third towards the apex, equidistant between the sides and suture. Beneath shining black, legs yellow.

Missouri.

Hyperaspis leucopsis.*

Hyperaspis leucopsis, *Melsh. Proc. Phil.* III. 179. (1847).

Coccinella signata ||, *Oliv. Ent.* VI. 1047. 92. pl. VII. 107 (1808).

Hyperaspis signata, *Muls. Spec.* p. 683. 29.

United States (Leconte).

Hyperaspis bigeminata.

Coccinella bigeminata, *Rand. Bost. J. N. H.* II. 32.

Hyperaspis Guexi, *Muls. Spec.* p. 687. 36 (T).

N. America.

Hyperaspis disconotata.

Hyperaspis disconotata, *Muls. Spec.* p. 653. 3.
Lake Superior (Leconte).

Hyperaspis venustula.

Hyperaspis venustula, *Muls. Spec.* p. 671. 16 (T).
N. America (Dejean).

Hyperaspis proba.

Coccinella proba, *Say, J. Acad. Phil.* v. 503. 4 (1825).
Hyperaspis proba, *Muls. Spec.* p. 674. 20.
United States.

Hyperaspis inedita.*

Hyperaspis inedita, *Muls. Spec.* p. 684. 30 (T).
United States.

Hyperaspis lunulata.*

Hyperaspis lunulata, *Muls. Spec.* p. 680. 26 (T).
Mexico (Dupont).

Hyperaspis lateralis.*

Hyperaspis lateralis, *Muls. Spec.* p. 657. 6.
Mexico (Dupont).

Hyperaspis pumila.

Hyperaspis pumila, *Muls. Spec.* p. 655. 5 (T).
Senegal (Dejean). Egypt (Melly). Arabia (Fry).
Punctuation very fine and slight, form ovate, sub-depressed.

Hyperaspis quadrilla.

Hyperaspis quadrilla, *Muls. Spec.* p. 678. 24 (T).
Caffraria, Senegal (Reiche). Allied to *H. pumila*.

Hyperaspis Merckii.

Hyperaspis Merckii, *Muls. Spec.* p. 689. 39.
Senegal (Buquet).

Hyperaspis Girodoni.*

Hyperaspis Girodoni, *Muls. Spec.* p. 692. 41.
Africa (Dupont, Melly).

Hyperaspis algerica, sp. n.

♂. Ovate, sub-depressed, obsolete punctate, alutaceous; head, front and sides of the thorax, reddish-orange, the lateral patch shades off into the discal colour; elytra with a small subapical spot also reddish-orange. L. 1 lin. Algeria, Oran (Deyrolle).

♀. Head and front of thorax black.

This species has the coloration of *H. reppensis*, from which it differs by its small size, ovate shape and punctuation.

Hyperaspis senegalensis.

Cleothera senegalensis, *Muls. Spec.* p. 645. 64 (T).

Senegal (Dupont, Buquet, Dejean).

Punctuation sparse, evident, form rounded.

Hyperaspis hottentotta.

Hyperaspis hottentotta, *Muls. Spec.* p. 686. 35 (T).

Cape of Good Hope (Reiche). Caffraria (Stockholm). Coloration of *H. reppensis*, but more finely punctulate, interstices alutaceous, etc. The anterior tibiæ are dilated towards the apex, where they are cut obliquely and fringed with longer ciliæ.

Hyperaspis delicatula.*

Hyperaspis delicatula, *Muls. Spec.* p. 693. 43.

Caffraria (Stockholm). The type sent me by M. Stål is certainly *H. hottentotta* ♂.

Hyperaspis Felixi.*

Hyperaspis Felixi, *Muls. Spec.* p. 677. 21.

Cape of Good Hope (Westermann).

Hyperaspis caucasica.

Coccinella 6-pustulata||, *Mots. N. Mem. Mosc.* v. 421 pl. 16. 1. (1837).

Hyperaspis 6-pustulata, *Muls. Spec.* 673. 18.

Mongolia.

Hyperaspis Guilliardi.

Hyperaspis Guilliardi, *Muls. Op.* III. p. 102 (1853).

♀. Obtusément ovale; d'un noir brillant en dessus. Thorax paré de chaque côté d'une bordure d'un jaune pâle, étendue en devant à peu près jusqu'à la sinuosité postoculaire, subparallèlement prolongée jusqu'à la base ou presque jusqu'à celle-ci, dont elle couvre le septième externe. Elytres ornées chacune

de 3 gouttes d'un jaune pâle ; 1, du sixième au tiers de la longueur, brièvement ovale ou suborbiculaire, couvrant le quart médiaire de la largeur ; 2, semiorbiculaire, liée au rebord externe, couvrant le quart médiaire de l'espace compris entre l'angle huméral et la courbure postero-externe ; 3, ponctiforme, couvrant du quart aux $\frac{2}{3}$ de la largeur, près du bord postérieur, dont elle est aussi éloignée que de la suture.

Dauria (Motschulsky).

Hyperaspis sex-guttata.

Hyperaspis 6-guttata, C. Bris. Ann. Fr. vi. p. 425. 66 [1866].

Ovata, sat brevis, convexa, fere æqualiter antice et postice angustata ; nigra, nitida, glabra, tenuiter sat dense punctata ; margine thoracis laterali, macula rotundata ante medium elytrorum alteraque transversa ante apicem, flavo-livida ; antennis piceis ; tibiis anterioribus tarsisque testaceis. L. $3\frac{1}{2}$ m. m.

Forme de la *Reppensis*, mais ponctuation beaucoup plus fine. Espagne (Aranjuez).

Hyperaspis Kunzii.

Hyperaspis Kunzii, Muls. Spec. p. 672. 17.

? (Germar).

Hyperaspis Fabricii.*

Hyperaspis Fabricii, Muls. Séc. p. 182.

? (Germar). The country of this species is unknown ; the true Fabrician type = *Brachyacantha bis-tri-pustulata*.

Hyperaspis quadrimaculata.

Hyperaspis 4-maculata, Redt. Tent. p. 16. 3 (1843).

Hyperaspis 4-maculata, Muls. Séc. p. 185 (1846).

Austria, Hungary, Syria, Asia Minor.

Hyperaspis inaudax.*

Hyperaspis inaudax, Muls. Op. III. p. 103 (1853).

Obtusément ovale, d'un noir luisant en dessus. Thorax paré de chaque côté d'une bordure d'un jaune rouge, étendue en avant jusqu'à la sinuosité postoculaire, un peu arquée à son côté interne, couvrant le sixième externe de la base. Elytres ornées chacune de deux taches d'un jaune rouge ; 1 petite ponctiforme au tiers de la longueur, et du tiers aux $\frac{4}{7}$ de la largeur ; 2 en ovale transversal, du tiers interne presque jusqu'à la sinuosité postoculaire. L. $1\frac{2}{3}$ lin. Caucasus (Motschulsky).

Hyperaspis vittifera.*

Hyperaspis vittifera, *Muls. Spec.* p. 680. 27.

Hyperaspis vittata, *Gebl. Bull. Mosc.* xxxiii. p. 37. 34 (1860).
Kirghis Steppes (Motschulsky).

Hyperaspis femorata.*

Coccinella femorata, *Mots. N. Mém. Mosc.* v. 421. pt. 16. m.
(1837).

Hyperaspis femorata, *Muls. Spec.* p. 681. 28.

Caucasus, Kirghis Steppes (Motschulsky).

Hyperaspis mendica.

Hyperaspis inedita, ♂ *Muls. Op.* iii. p. 104 (1853) T.

Hyperaspis campestris.

Coccinella campestris, *Herbst. Arch.* iv. p. 48. 29. pl. 22. f.
24 (1784).

Hyperaspis campestris, *Muls. Sécur.* p. 186. 3 (1846).

Hyperaspis concolor, *Suffr. Stett. E. Z.* iv. 23 (1843).

Europe.

Hyperaspis pseudo-pustulata.*

Hyperaspis pseudo-pustulata, *Muls. Op.* iii. p. 104 (1853).

Obtusément ovale, d'un noir luisant en dessus. Thorax paré de chaque côté d'une bordure d'un jaune rouge, étendue en devant jusqu'à la sinuosité post-oculaire, sub-parallèlement prolongée jusqu'à la base dont elle couvre le huitième de la largeur. Elytres ornées chacune d'une tache jaune, subarrondie, étendue des $\frac{2}{3}$ internes presque jusqu'à l'angle postéro-externe, un peu plus rapprochée du bord postérieur que de la suture. L. $1\frac{2}{3}$ lin. Russia merid. orient. (Motschulsky).

♀. Tête et cuisses noires; jambes et tarses d'un flave testacé.

Hyperaspis reppensis.

Coccinella reppensis, *Herbst. Arch.* iv. 48. 28. pl. 22. f. 23
(1784).

Hyperaspis reppensis, *Muls. Sécur.* p. 183 (1846).

Europe, Algérie.

Hyperaspis Hoffmansseggii.

Hyperaspis Hoffmansseggii, *Muls. Sécur.* p. 179. 1 (1846).

S. France, Spain.

Hyperaspis illecebrosa.

Hyperaspis illecebrosa, *Muls. Sécur.* p. 181 (T).
Spain (Chevrolat). Escorial, Aranjuez.

Hyperaspis guttata.*

Hyperaspis, guttata, *Muls. Spec.* p. 692. 42.
Kirghis Steppes (Motschulsky).

Hyperaspis Motschulskyi.*

Hyperaspis Motschulskyi, *Muls. Spec.* p. 689. 37.

Coccinella Karpowke, *Hammel, Ess. Ent.* vi. p. 15 (1827).

Nigra capite flavo, thorace brevi, postice producto, antice margine anguste et angulis late flavis, elytris margine laterali, maculisque 3 disci flavis; pedibus anterioribus luteis, posticis piceis.

Fl. Karpowka, Russia.

? (Motschulsky.)

Coccinella bis 6-pustulata similis sed minor, et thorace diversa.

Oxynychus.

Leconte, Lake Sup. p. 238 (*typ. mœrens*).

Distinguished from *Hyperaspis* by the simple claws.

Oxynychus mœrens.*

Oxynychus mœrens, *Leconte, Lake Super.* p. 238 (1850).

Hyperaspis mœrens, *Muls. Spec.* p. 694. 44.

Lake Superior (Leconte).

Sub-family. 5. SCYMNIDES.

Scymnus.

Kugell Schneid. Mag. 10, (1794), *typ. frontalis*.

Antennæ very short, joints 1—2 equal-sized, soldered together.

A. *Species Palearcticæ.*

Scymnus rubidus.

Scymnus rubidus, *Mots. N. Mém. Mosc.* v. 418. pl. 16. F. (1837).

Scymnus rubidus, *Muls. Spec.* p. 957. 13.

Derbent (Motschulsky).

Scymnus pulchellus.

Scymnus pulchellus, *Hbst. Käf.* VII. 345, Tab. CXVI. fig. 10. K. (1797).

Coccinella 4-lunulatus, *Ill. Käf. Pr.* p. 416 (1798).

Scymnus 4-lunulatus, *Muls. Sécur.* p. 237.

Europe.

Scymnus Syriacus.

Scymnus (Nephus) Syriacus, *Mars., Abeille*, v. 216 (1868).
Syria, Beyrouth.

Scymnus incinctus.

Scymnus incinctus, *Muls. Spec.* p. 959. 17.

Asiatic Russia (Motschulsky).

Scymnus includens.

Scymnus (Nephus) includens, *Kirsch, Berl. Ent. Zeit.* XIV. 395 (1870).

Egypt. Ramleh.

Scymnus Redtenbacheri.

Scymnus Redtenbacheri, *Muls. Sécur.* p. 240.

Scymnus bisignatus, *Bohem. Act. Holm.* 1849, p. 237, *Thoms. Scand. Col.* VIII. p. 388 (1866).

Europe.

Scymnus bipunctatus.

Scymnus bipunctatus *Kug. Schn. Mag.* IV. p. 547 (1794).

Coccinella biverrucata, *Pz. Ent. Germ.* p. 149 (1795).

Scymnus biverrucatus, *Muls. Sécur.* p. 239.

Europe.

Scymnus bipustulatus.

Scymnus bipustulatus, *Mots, N. Mém. Mosc.* v. 417. 26. pl. 16 (1837).

Scymnus bipustulatus, *Muls. Spéc.* 961. 22.

Georgia (Motschulsky).

Scymnus castanopterus.

Scymnus castanopterus, *Muls. Spec.* p. 962. 24.

Bogdo (Motschulsky).

Scymnus Kiesenwetteri.

Scymnus Kiesenwetteri, *Muls. Spec.* p. 963, 25.

Scymnus binotatus, *Bris. Gren. Cat. Col. Fr.* I. 122.

Breviter ovatus, pubescens, capite thorace elytrorumque magna plaga triangulari, rufo-ferrugineis ; antennis pedibusque ferrugineo-testaceis ; elytris flavotestaceis discoidali macula parva transversali, pone medium notatis ; pectore abdominisque nigris. L. 1 $\frac{3}{4}$ mm. Laminæ abdominales incompletæ, leviter incurvæ, $\frac{2}{3}$ segmenti 1 attingentes.

D'une forme assez courte, assez densément couvert d'une pubescence pas très courte, d'un gris blanchâtre. Tête transversale, à ponctuation fine mais pas très serrée. Palpes et antennes d'un testacé ferrugineux. Corselet transversal, plus de deux fois plus large que long, rebordé sur les côtés, assez fortement rétréci en avant ; ponctuation fine et assez serrée. Ecusson triangulaire ferrugineux. Elytres, élargies sur les côtés, leur plus grande largeur avant le milieu, arrondies ensemble à l'extrémité ; le calus assez saillant ; à ponctuation fine et assez serrée, mêlée de quelques points plus forts ; après le milieu, à quelque distance de la suture on remarque une petite tache transversale, noir. Dessous ferrugineux, avec la poitrine et la base de l'abdomen noirâtres, couvert d'une ponctuation fine et serrée, et revêtu d'une pubescence grisâtre assez courte et assez serrée.

Béziers, sur le cyprès.

Scymnus Levallantii.

Scymnus Levallantii, Muls. Spec. p. 964. 26 (T).
Sicily (Westwood).

Scymnus nigrinus.

Scymnus nigrinus, Kug. Schn. Mag. v. p. 548 (1794).
Scymnus nigrinus, Muls. Sécur. p. 220. 1.
Europe.

Scymnus rubromaculatus.

Coccinelle velue à taches rouges au corselet, Geoff. Hist. i. p. 333 (1764).
Coccinella rubromaculata, Goeze, Ent. Beyt. i. p. 247 (1773).
Coccinella pygmaea, Fourc. Ent. Par. i. p. 150 (1785).
Scymnus pygmaeus, Muls. Sécur. p. 221. 2.
Europe.

Scymnus pallipes.

Scymnus pallipes, Muls. Spec. p. 966. 30.
Caucasus (Motschulsky).

Scymnus corpulentus.

Scymnus corpulentus, Muls. Spec. p. 967. 32.
Transcaucasia (Motschulsky).

Scymnus varius.

Scymnus varius, Kirsch, *Berl. Ent. Zeit.* xiv. p. 396 (1870).
Egypt, Ramleh.

Scymnus interruptus.

Coccinelle velue à bande interrompue, Geoff. *Hist.* i. p. 333 (1764).

Coccinella interrupta, Goeze, *Ent. Beyt.* i. p. 247 (1777).

Coccinella marginalis, Rossi *Mant. Ins.* ii. p. 87. 28 (1794).

Scymnus marginalis, Muls. *Sécur.* p. 224. 3.

S. Europe.

Scymnus Apetzii.

Scymnus Apetzii, Muls. *Sécur.* p. 228. 4.

Europe.

Scymnus frontalis.

Coccinella frontalis, Fab. *Mant.* p. 60. 86 (1787).

Scymnus frontalis, Muls. *Sécur.* p. 232. 5.

Europe.

Scymnus nderihensis.

Scymnus nderihensis, Muls. *Spec.* p. 971. 41.

L. Inderik, Turkestan (Motschulsky).

Scymnus abietis.

Coccinella abietis, Payk. *Faun. Suec.* ii. 10. 10 (1798).

Scymnus abietis, Muls. *Spec.* p. 975. 47.

Sweden, France; on pines and oaks.

Scymnus stigmatopterus.

Scymnus stigmatopterus, Fald. *Mém. Mosc.* V. 409. 580 (1837).

Breviter ovatus, gibbus, niger, pubescens, subnitidus, antennis tibiis tarsisque ferrugineis; clytris valde convexis, obsoletissime punctulatis, macula magna rotundata rufa pone humeros utrinque signatis. L. I lin. Armenia.

There is nothing salient in the tolerably long description accompanying this diagnosis.

Scymnus subvillosus.

Coccinelle velue à bandes, Geoff. *Hist.* i. p. 332 (1764).

Coccinella subvillosa, Goeze, *Ent. Beyt.* i. p. 247 (1777).

Coccinella fasciata, Fourc. *Ent. Par.* i. p. 149 (1785).

Scymnus fasciatus, Muls. *Spec.* p. 242.

Scymnus juniperi, Mots. *N. Mem. Mosc.* v. 419. 31 (1837).

Scymnus juniperi, Muls. *Spec.* p. 976. 50.

Scymnus durantæ.

Scymnus Durantæ, Woll. *Ins. Mad.* p. 465. 1 (1854).

Scymnus Durantæ, Woll. *Cat. Coleop. Ins. in Brit. Mus.*, p. 137, sp. 412 (1857).

Niger, elytro singulo maculis duabus plus minusve distinctis (priore magnâ obliquâ) rufescentibus ornato, capite, antennis, tibiis tarsisque rufo-ferrugineis. L. 1-1 $\frac{1}{4}$ lin. In hortis Maderæ, præsertim super folia *Durantæ Plumieri* (d.).

♂ Prothorace dilutiore plus minusve, pedibusque fere omnino, rufo-ferrugineis.

♀ Prothorace nigro.

Var. maculis confluentibus et per elytra diffusis.

Scymnus canariensis.

Scymnus canariensis, Woll. *Cat. Col. Can.* p. 426 (1864).

S. rotundato-ovalis, nitidus, minutissime punctulatus, cinereo-pubescentis, niger; elytris vel rufis vel rufo-testaceis, sed in parte magnâ triangulari basali, suturâ, maculâ centrali in disco postico singulorum positâ necnon in margine laterali ab humeris etiam ultra medium ductâ et dein in curvâ obscurâ (interdum obsoletâ) nebulosâ usque ad suturam, sed mox ante apicem ejus, oblique continuatâ, nigris; pedibus testaceis, plus minus infuscatis.

♂ Capite et prothoracis lateribus plus minus testaceis.

Var. β. Elytris singulis in disco immaculatis.

Var. γ. rufipennis [an species?]. Sensim distinctius punctulata, elytris in parte basali triangulari, suturâ et in medio marginis lateralis solum nigris. Long. corp. lin. 1-1 $\frac{1}{2}$. Hab. insulas omnes Canarienses, vulgaris.

Scymnus oblongior.*

Scymnus oblongior, Woll. *Cat. Col. Can.* p. 427 (1864).

S. præcedenti similis, sed paulo minor, oblongior, sensim minus convexus minusque crebre punctulatus, elytris pallidioribus (testaceis), singulis maculâ parvâ obscurâ secundâ (in disco antico positâ) ornatis. Long. corp. lin. 1.

Hab. in montibus excel-sis Teneriffæ, usque ad 9000' s.m. ascendens.

Scymnus cercyonides.

Scymnus cercyonides, Woll. *Cat. Col. Can.* p. 428 (1864).

S. species *S. canariensi* affinis, sed multo minor, paulo oblongior, paulo minus convexus, sensim brevius, pubescens densiusque punctulatus; prothorace antice subangustiore; elytris rufis, in parte basali triangulari (per suturam, usque ad medium, obscure suffusis), et interdum obsoletissime mox ante apicem, nigrescentibus.

♂ Prothorace ad latera paulo dilutiore; capite (nisi fallor), ut in sexu fœmineo, nigro. Long. corp. lin. $\frac{3}{4}$.
Hab. in Teneriffa, Gomera et Palma, passim.

Scymnus pallidulus.*

Scymnus pallidulus, Woll. Col. Hesp. p. 160 (1867).

S. ovalis, plus minus pallide rufo-ferrugineus, cinereo pubescens, levius (præsertim in prothorace) punctatus; antennis pedibusque concoloribus: subtus picescens et; præsertim in metasterno (concavo, transversim subrugoso), profunde punctatus. Long. corp. lin. $1\frac{1}{8}$ — $1\frac{1}{4}$.

Habitat S. Antão, et S. Vicente; in intermediis editioribusque hinc inde vulgaris.

Scymnus nigropictus.*

Scymnus nigropictus, Woll. Col. Hesp. p. 160 (1867).

S. breviter ovalis, cinereo pubescens, distincte punctatus (punctis sat magnis sed, præsertim in prothorace, levibus circularibus); capite in maribus testaceo, in fœminis subnigro; prothorace subnigro, ad latera in maribus late et clare, sed in fœminis angustius et obscurius testaceo; elytris rufo-ferrugineis aut testaceo-rufis, ad basin (præcipue in regione scutellari), per suturam (usque paulo ultra medium), ad marginem lateralem (præsertim in medio), necnon in maculâ discali (extus in marginem subsuffusâ), plus minus nigrescentioribus; antennis pedibusque testaceis. Long. corp. lin. $1\frac{1}{8}$ — $1\frac{1}{4}$.

Hab. S. Iago; ad flores foliaque plantarum in apricis inferioribus deprehensus.

Scymnus posticus.*

Scymnus posticus, Woll. Col. Hesp. p. 161 (1867).

S. præcedenti similis, sed paulo minor et vix rotundatior, punctis omnibus sensim minoribus; capite ut in illo (sc. masculo pallido, fœmineo obscuriore) et prothorace nigro, ad latera latissime in maribus, angustius in fœminis, testaceo; elytris latus rufo-testaceis (vel testaceo-rufis), in disco immaculatis, per suturam (sublate circa scutellum, sed haud in parte totâ basali), necnon in regione posticâ subarcuatâ (interdum fere semicirculari) subapicali, plus minus nigrescentibus; antennis pedibusque saturate testaceis.

Variat elytris fere immaculatis (sc. per suturam et postice subconcoloribus). Long. corp. lin. $1\frac{1}{8}$ —vix $1\frac{1}{4}$.

Hab. San. Antão, et Brava; hinc inde minus frequens.

Scymnus floricola.

Scymnus floricola, Woll. Col. Hesp. p. 162 (1867).

S. præcedente paululum oblongior; capite prothoraceque ut

in illo, sed prothorace vix subtilius punctulato necnon postice in medio vix minus sinuato; elytris fere ut in illo, sed postice (ante apicem) concoloribus (nec nigrescentibus), per suturam à basi usque ad ultra medium (plus minus latius circa scutellum), necnon interdum anguste in medio marginis lateralis, nigris vel nigrescentibus; antennis pedibusque saturate testaceis.

Variat elytris fere immaculatis, et (rarissime) prothorace toto pallido. Long. corp. lin. 1—1 $\frac{1}{4}$.

Hab. S. Iago, Fogo, et Brava; inter plantas ab orâ maritimâ usque ad locos editiores ascendens. (Etiam in Aegypto.)

Scymnus conjunctus.

Scymnus conjunctus, Woll. Ann. N. H. (4) v. 248 (1870).

Scymnus arcuatus.

Coccinella arcuata, Rossi Mant. II. 88. 30.

Scymnus arcuatus, Muls. Sécur. p. 245.

S. Europe, Madeira.

Scymnus flavopictus.

Scymnus flavopictus, Woll. Ins. Mad. p. 469. 360 t. 10 f. 2 (1854).

S. piceo-niger, capite prothoraceque (præsertim hoc) rufescentibus, elytris flavo-pictis, antennis pedibusque testaceis. L. $\frac{2}{3}$ — $\frac{3}{4}$ lin.

Hab. in hortis Maderæ, rarior; in ins. Desertæ Borealis tamen abundat.

Densely pubescent.

Scymnus maculosus.

Scymnus maculosus, Woll. Cat. Col. Can. p. 428 (1864).

S. rotundato-ovalis, minute punctulatus, cinereo pubescens, nitidus, piceo-niger; prothorace ad latera paulo dilutiore; elytris singulis ad apicem necnon in maculis sex (tribus sc. confluentibus in disco postico sitis, fasciam dentatam transversam efficientibus, unâ sublongitudinali intra discum anticum positâ, unâ subhumerali, et sextâ pone hanc sublaterali) rufo-testaceis ornatis; pedibus piceo-testaceis.

Variat elytrorum maculis plus minus confluentibus. Long. corp. lin. $\frac{2}{3}$ vix 1.

Hab. in Lanzarota, Fuerteventura, Canaria, Teneriffa et Palma, parum rarus.

Scymnus fractus.

Scymnus fractus, Woll. Col. Hesp. p. 163 (1867).

S. ovalis, niger (aut subpiceo-niger), nitidissimus, grosse, longe

et suberecte cinereo pubescens; prothorace subconcolori (aut ad latera vix dilutiore), minutissime et parce punctulato; elytris distinctius inæqualiter punctatis, singulis ad apicem, in maculâ subluniformi (in disco postico sitâ), in alterâ ovali longitudinali (intra discum positâ), et in tertiâ minore obliquâ (longe ante humerum terminatâ) rufo-testaceis, ornatis; femoribus piceis, tibiis tarsisque saturate testaceis: subtus minutissime et (præsertim in medio) parce punctulatus.

Long. corp. lin. 1.

Hab. S. Antao; inter quisquillas aridas in intermediis semel captus. *S. maculosum*, Canariensem, primâ facie simulans, et forsan ejus varietas geographica: differt præsertim corpore paululum majore (?), prothorace fere concolori, subnigro (nec ad latera late et conspicue dilutiore), basi in medio minus sinuato, elytrorumque singulorum maculâ sublaterali mediâ omnino obsoletâ, nullâ, necnon discali subhumeralique inter se fractis disjunctis (haud suffusis), illa subminore angustiore atque à margine basali magis remotâ.

Scymnus picturatus.

Scymnus picturatus, Woll. Col. Hesp. p. 164 (1867).

S. præcedenti similis, sed subminor (?), magis ater, nitidissimus, grosse, longe et suberecte cinereo pubescens; prothorace ut in illo; elytris vix parcius et magis æqualiter punctatis, singulis ad apicem, in maculâ sublunato-arcuatâ transversâ (in disco postico sitâ), in alterâ lineari longitudinali (intra discum positâ), et in tertiâ minore obliquâ (longe ante humerum terminatâ), vel in secundam mergente vel disjunctâ, flavo-testaceâ ornatis; pedibus corporeque subtus ut in sp. præcedente. Long. corp. lin. $\frac{3}{4}$ —1.

Habitat Fogo; in herbis intermediis haud infrequens, ad Monte Nucho deprehensus.

Scymnus maritimus.

Scymnus maritimus, Woll. Col. Hesp. p. 165 (1867).

S. præcedentibus duobus affinis, sed sensim minor, paulo minus nitidus, densius longiusque suberecte argenteo pubescens, et ubique subcrebrius (sed in elytris paulo levius) punctulatus; elytris minus nigris (sæpe omnino fusciscentibus), fere ut in *S. picturato* maculatis sed maculis obscuris sub-obsoletis (interdum ægre observandis) et maculâ in disco postico subrotundatâ (nec transversâ arcuatâ); pedibus corporeque subtus fere ut in sp. præcedente.

Var. β , *obliterata* (an species?). Elytra fusca, maculis omnino oblitteratis. (S. Antão.) Long. corp. lin. $\frac{2}{3}$ — $\frac{3}{4}$.

Habitat S. Antao (var. β) et S. Vicente; sub quisquillis in arenosis salinis, haud procul a mari ipso sitis, rarissimus.

Scymnus impexus.

Scymnus impexus, *Muls. Spec.* p. 979. 55.

Scymnus abietis,† *Muls. Sécur.* p. 247. 11.

Germany, France; on pines.

Scymnus argutus.

Scymnus argutus, *Muls. Spec.* p. 980. 56.

Armenia (Motschulsky).

Scymnus suturalis.

Scymnus suturalis, *Thunb. Ins. Suec.* ix., *Ed. Persoon*, p. 116 (1794).

Coccinella discoidea, *Ill. Kaf. Pr.* p. 418 (1798).

Scymnus discoideus, *Muls. Sécur.* p. 255.

Europe.

Abundant on pine-trees.

Scymnus scutellaris.

Scymnus scutellaris, *Muls. Ann. Linn.* p. 220 (1847).

Scymnus scutellaris, *Muls. Spec.* p. 982. 60.

Scymnus Mulsanti, *Waterh. Trans. Ent. Soc. Ser. 3. i.* p. 133 (1862).

Lyons.

Scymnus alpestris.

Scymnus alpestris, *Muls. Op.* ii. p. 86 (1853).

“Ovalis, pubescens, niger; elytris margine brevi apicali et puncto rubro-testaceis; puncto ante tertiam partem longitudinis, suturæ sat vicino.” L. $\frac{3}{4}$ lin.

Briançon.

Like *S. biverrucatus*, but differs by the abdominal laminae.

Scymnus anomus.

Scymnus anomus, *Muls. Op.* ii. p. 87 (1853).

“Ovato-oblongus, pubescens, niger, elytris aliquando nigropiceis, callo humerali destitutis; antennis palpis tibiis tarsisque rubrotestaceis. Laminiis abdominalibus integris, postice rotundatis, ultra tertiam partem segmenti prolongatis, similiter punctis haud parvis notatis.” L. $\frac{2}{3}$ lin. Hyères, in salt-marshes.

Very like *S. Redtenbacheri* in form.

Scymnus analis.

Coccinella analis, *Fab. Mant.* i. 60. 81 (1787).

Scymnus analis, *Muls. Sécur.* p. 250. 13.

Europe, E. Siberia (Maak).

Scymnus hæmorrhoidalis.

Scymnus hæmorrhoidalis, *Herbst, Käf.* VII. p. 342. Tab. 116. fig. 4 D. (1797).

Scymnus hæmorrhoidalis, *Muls. Sécur.* p. 252.

Europe.

Scymnus capitatus.

Coccinella capitata, *Fabr. Ent. Syst. Supp.* p. 79 (1798).

Scymnus capitatus, *Muls. Sécur.* p. 248.

Europe.

Scymnus tibialis.

S. tibialis, *Bris. Gren. Cat. Col. Fr.* p. 123. 150 (1863).

Ovalis, pubescens, niger, nitidus, antennis palpis tibiis tarsisque testaceis; laminis abdominalibus integris, postice rotundatis. L. $1\frac{3}{4}$ — $\frac{1}{4}$ millim. H. Pyrénées. Sur les Sapins. Voisin de *capitatus*; taille moindre, plus étroite, tête noire, corselet moins saillant au devant de l'écusson, métasternum moins fortement ponctué, ponctuation beaucoup moins forte.

Médiocrement convexe; pubescence d'un gris blanchâtre, mi-redressée, assez courte et peu serrée. Tête subcarrée, avec une faible impression longitudinale de chaque côté près des yeux; ponctuation excessivement fine et écartée. Corselet, transversal, élargi d'avant en arrière, en ligne légèrement courbe; angles postérieurs un peu obtus, noir avec le bord antérieur légèrement brunâtre; ponctuation fine et peu serrée. Elytres arrondies sur les côtés et à l'extrémité, le calus bien distinct, ponctuation assez forte et un peu écartée. Dessous noir, bord postérieur des segments 1—4, 5 entièrement brunâtre; métasternum couvert d'une ponctuation assez forte et avec quelques rides sur la partie antérieure de son disque, presque lisse postérieurement. Plaques abdominales couvertes vers leur base d'une ponctuation moins distincte que celle de l'arceau ventral.

Scymnus Brisoutii.

Scymnus rufipes II, *Bris. Gren. Cat. Col. Fr.* 123. 151 (1863).

Breviter ovatus, pubescens, niger, nitidulus; capite antennis palpis pedibusque rufo-ferrugineis; laminis abdominalibus integris postice rotundatis. L. $1\frac{3}{4}$ mm.

Voisin du *Capitatus* ♀; taille un peu moindre, forme moins large, moins brillante, ponctuation plus serrée et moins forte, calus moins saillant, pattes rouges, plaques abdominales plus larges. Narbonne (La Nouvelle).

Pubescence grise, courte et assez serrée, mi-redressée. Tête transversale, à ponctuation très fine et écartée. Corselet transversal, bord antérieur d'un brun ferrugineux, à ponctuation fine

et assez serrée, sur la partie antérieure du disque avec quelques vestiges d'impressions longitudinales en forme de stries et vers $\frac{3}{4}$ une transparence rougeâtre. Dessous noir avec le bord du dernier segment ferrugineux. Plaques abdominales prolongées presque au bord du 1^{er} arceau, à ponctuation plus forte mais moins serrée que celle de l'arceau.

Scymnus fraxini.

Scymnus fraxini, *Muls. Spec.* p. 991. 77.
Georgia (Motschulsky).

Scymnus ater.

Scymnus ater, *Kug. Schn. Mag.* iv. 15 (1794).
Scymnus ater, *Muls. Sécur.* p. 254.
Europe.

Scymnus carbonarius.*

Scymnus carbonarius, *Woll. Col. Hesp.* p. 159. 176.
S. breviter ovalis, niger, cinereo pubescens, sat profunde (præsertim in elytris) punctatus; prothoracis parte mediâ antescutellari vix productâ; antennis pedibusque in toto rufo-testaceis: subtus, præsertim in metasterno convexo, profunde punctatus.

Long. corp. lin. $1\frac{1}{4}$.

Hab. S. Vicente; à Dom. Gray semel tantum lectus.

Scymnus biguttatus.

Scymnus biguttatus, *Muls. Spec.* p. 991.
Kirghis (Motschulsky).

Scymnus testaceus.

Scymnus testaceus, *Mots. Mem. Mosc.* v. 419. pl. 16. 1, (1837).
Scymnus testaceus, *Muls. Spec.* p. 992. 80.
Caucasus (Motschulsky).

Scymnus minimus.

Coccinella minima, *Payk. Faun. Suec.* II. p. 8. 5 (1799).
Scymnus minimus, *Muls. Sécur.* p. 260. 18.
Europe.

Scymnus fulvicollis.

Scymnus fulvicollis, *Muls. Sécur.* p. 259. 17.
Europe.

Scymnus atricapillus.

Scymnus atricapillus, *Bris. Gren. Cat. Col. Fr.* p. 124. 152.

Ovalis, parce pubescens, ferrugineo-testaceus; capite, suturæ medio, pectore abdominis basi, nigricantibus: laminis abdominalibus integris. L. $1\frac{1}{3}$ millim.

Forme du *fulvicollis*, élytres plus larges, ponctuation moins forte, moins profonde, un peu plus serrée.

Pubescence blanchâtre brillante, mi-redressée. Tête sub-carrée, à ponctuation extrêmement fine et écartée. Corselet transversal, fortement élargi d'avant en arrière, en ligne à peu près droite; angles postérieurs presque droits; à ponctuation extrêmement fine et peu serrée. Elytres à ponctuation assez forte et un peu écartée.

France (Béziers).

Scymnus inconspicuus.

Scymnus inconspicuus, *Woll. Col. Hesp.* p. 166. 184.

S. breviter ovalis, niger, nitidus, suberecte cinereo pubescens; prothorace subconcolori (ad angulos anticos solos paulo dilutiore), unâ cum elytris distincte et argute punctulato; his saturate rufoferrugineis, in regione scutellari usque ad suturæ medium late et suffuse triangulariter nigrescentibus, necnon etiam in margine laterali paulo nebulosis; femoribus nigro-piceis, tibiis tarsisque saturate testaceis; metasterno transversim ruguloso, postice convexo.

Variat elytris omnino obscuratis, piceo-nigrescentibus, postice solum paulo dilutioribus; vel (immaturus) colore omnino pallidior, plus minus olivaceo-ferrugineo.

Long. corp. lin. circa $\frac{3}{4}$.

Hab. S. Antão, S. Iago, et Fogo; inter quisquilias aridas in inferioribus intermediisque lectus.

Scymnus depressiusculus.

Scymnus depressiusculus, *Woll. Col. Hesp.* p. 167. 185.

S. suboblongus, minus convexus, depressiusculus, fusco-testaceus, nitidus, brevius et demisse cinereo pubescens; capite paululum minus deflexo; prothorace latiusculo, minutissime leviter punctulato, in disco suffuse paulo obscuriore; elytris sub-parallelis, postice pygidio sensim brevioribus, distinctius punctulatis, vel concoloribus vel antice circa scutellum obsolete obscuratis; pedibus concoloribus; subtus paulo picescentior, metasterno minus convexus et in medio vix punctulato.

Long. corp. lin. $\frac{3}{4}$ -vix 1.

Habitat S. Iago, et Fogo; in apicis inferioribus rarior.

Scymnus epistemoides.

Scymnus epistemoides, Woll. *Col. Hesp.* 276.

S. ellipticus, niger aut subpiceo-niger, nitidulus, leviter punctulatus, et parce cinereo pubescens; prothorace breviter subconico, concolori; elytris subventricosis; labro, antennis, palpis pedibusque infusate testaceis.

Long. corp. lin. $\frac{3}{4}$.

Habitat Maderenses (P^{to} S^{to}); exemplar unicum olim collegit Dom. Bewike.

Obs. Species nigra, aptera, *S. limnichoides* propinquans; sed sub-minor (?), magis elliptica (i. e. antice et postice subacutior), vix minus nitida, et conspicue levius minutiusque punctata, prothorace magis conico (antice sensim angustiore) etiam ad latera concolori, lineâ basali magis per basin ipsissimam sitâ, elytris paulo magis ventricosis (pone basin utrinque magis rotundatis).

Scymnus gilvifrons.*

Scymnus gilvifrons, *Muls. Spec.* p. 995. 86.

Derbent (Motschulsky).

Scymnus biflammulatus.

Scymnus biflammulatus, *Mots. Mem. Mosc.* v. 418. 29. pl. 16. G. (1837).

Scymnus biflammulatus, *Muls. Spec.* p. 995. 87.

Georgia (Motschulsky).

Scymnus formicarius.

Scymnus formicarius, *Muls. Spec.* p. 996. 88.

E. Siberia (Motschulsky), in a nest of *Formica rufa*.

Scymnus guttifer.

Scymnus (Pullus) guttifer, *Muls. Op.* III. p. 154.

Brièvement ovale; pubescent; noir, avec les palpes maxillaires, les jambes, les tarse et deux taches sur chaque élytre, d'un rouge testacé: l'une arrondie, couvrant du cinquième interne aux trois cinquièmes de la largeur, et des trois cinquièmes environ aux quatre cinquièmes un peu plus de la longueur: l'autre, moins apparente, en forme de bordure, naissant vers l'angle postéro-externe, non prolongée jusqu'à l'angle sutural.

Narbonne.

Scymnus limnichoides.

Scymnus limnichoides, Woll. *Ins. Mad.* p. 470. t. 10. f. 3 (1854).

S. niger, prothorace interdum (præsertim ad latera) picescente, antennis pedibusque pallido-ferrugineis. L. $\frac{3}{4}$. *Habitat.* In montosis graminosis Portûs Sancti, sub lapidibus.

S. ovate, apterous, black, very finely pubescent, and most minutely, closely, and delicately punctulate.

B. *Species Indicæ.*

Scymnus flexibilis.

Scymnus (Diomus) flexibilis, Muls. *Op.* III. p. 143.

Suborbiculaire; d'un flave roussâtre ou testacé sur la tête et le prothorax, d'un flave pâle sur les élytres: celles-ci marquées chacune de quatre points bruns ou brunâtres; l'un presque commun, vers le cinquième de la suture: le deuxième, couvrant près de la base le deuxième cinquième de la largeur: le troisième, couvrant le quart, médiaire de la largeur, vers la moitié de la longueur: le quatrième, petit, près de la suture, aux deux tiers. L. $\frac{4}{5}$ l.

India (Deyrolle).

Scymnus martis.

Scymnus (Nephus) martis, Muls. *Op.* III. p. 144.

Brièvement ovale: pubescent. Prothorax d'un rouge testacé. Elytres noires, ornées chacune d'une tache d'un rouge testacé, couvrant la partie postérieure jusqu'aux trois cinquièmes du bord externe, aux quatre septièmes du milieu des étuis, aux trois quarts de la suture. L. 1 l. Asia (Motschulsky).

Scymnus bistillatus.

Scymnus (Nephus) bistillatus, Muls. *Op.* III. p. 145.

Obtusément ovulaire; pubescent; d'un flave testacé, en dessus. Elytres ornées chacune d'une tache punctiforme noire, située vers les deux tiers de la longueur, égale au moins dans ce point au quart de la largeur, séparée de la suture par un espace égal à la moitié de son diamètre. L. 1 l. Asia (Motschulsky).

Scymnus quadrillus.

Scymnus quadrillus, Motsch. *Études Ent.* 1858, p. 120.

Voisin du *Scymnus quadrilunatus*, III. par sa forme, ses couleurs et la disposition des taches testacées sur les élytres, mais deux fois plus petit et avec la tête, le corselet à l'exception d'une tache médiane, l'abdomen et les pattes d'un testacé plus ou moins clair.

Scymnus transverso-plagiatus.

Scymnus transverso-plagiatus, Motsch. *Études Ent.* 1858. p. 120.

D'un quart plus grand que le *Scymnus quadrillus*, et différent par sa tête et son corselet presque entièrement noirs, ne présentant de roussâtre que sur la marge antérieure du dernier.

Les taches sur les élytres sont plus rouges, plus transversales, celles de devant plus grandes que les postérieures; anus noir, métathorax finement et peu sensiblement ponctué.

Scymnus latemaculatus.

Scymnus latemaculatus, Motsch. *Études Ent.* 1858 p. 121.

Taille, forme, et couleurs à peu près celles du *Scymnus quadrillum*, mais avec les taches antérieures rouges sur les élytres très grandes, le corselet en majeure partie noir, et n'ayant de testacé que sur les côtés latéraux, et une marge en avant et l'abdomen à peine rembruni vers l'anus. Le dessous du corps est couvert de longs poils brunâtres peu serrés et la ponctuation sur le métathorax peu distincte.

Scymnus Motschulskii.

Scymnus suturalis||, Motsch. *Études Ent.* 1858, p. 120.

Taille et forme de *Scymnus marginalis*, Rossi, et avec les couleurs comme chez la variété claire de ce dernier, mais un peu plus allongé, recouvert d'une pubescence plus longue et plus blanchâtre à front et poitrine noirs. La tache noire suturale se dilate vers l'écusson qui est de la même couleur, et s'oblitère vers l'extrémité qu'elle n'atteint pas. La poitrine est assez fortement ponctué.

Scymnus nubilus.

Scymnus nubilus, Muls. *Spec.* p. 972. 45.
Assam (Hope, Deyrolle).

Scymnus Curtisii.

Scymnus Curtisii, Muls. *Spec.* p. 973. 45.
Assam (Hope).

Scymnus Guimeti.

Scymnus Guimeti, Muls. *Spec.* p. 979. 53.
E. Asia? (Hope).

Scymnus Victoris.*

Scymnus limbatus||, Motsch. *Études Ent.* 1858, p. 118.

Ovatus, subconvexus, punctulatus, cinereo puberulus, ater corporis limbo supra lato, capite, abdominis segmentis margine,

antennarum basi pedibusque rufo-testaceis; thorace transverso, basi medio producto, apice truncato, utrinque sinuato, angulis posticis rectis, lateribus arcuatis; scutello triangulare; elytris subovatis, humeris supra distinctis. Long. $\frac{5}{8}$ lin. Lat. $\frac{1}{2}$ lin.

Forme de *Scymnus analis* mais un peu plus petit et facile à distinguer par la large marge rousse qui entoure tout le dessus du corps.

Scymnus apiciflavus.

Scymnus apiciflavus, Motsch. 1858, p. 119.

Très-voisin du *Scymnus analis*, mais d'un tiers plus petit, plus court et plus arrondi; le corselet est un peu plus large en avant, d'une couleur rousse plus brunâtre et sans tache noire à la base; les élytres sont plus rondes, les angles huméraux presque pas saillants, la ponctuation assez forte, les stries ponctuées obliques de chaque côté de la suture, très-courtes, la tache testacée apicale en croissant sur chaque élytre, et avec la face convexe dirigée antérieurement, de sorte que sa partie la plus étroite se trouve sur la suture et sur les côtés latéraux. L'abdomen est testacé postérieurement; le métathorax finement ponctué et transversalement ridé.

Scymnus albopilis.

Scymnus albopilis, Motsch. 1858, p. 119.

Forme courte de *Scymnus analis* mais presque du double plus petit et d'une couleur testacée plus claire et plus vive sur la tête, le corselet, la moitié postérieure des élytres, l'abdomen et les pattes; la moitié antérieure des élytres et le métathorax sont noirs; celui-ci très-fortement ponctué ou même cicatrisé. Le dessus du corps est très-finement ponctué, recouvert d'une pubescence blanchâtre peu épaisse, et marqué antérieurement de chaque côté de la suture de deux stries obliques, formées par des points imprimés qui atteignent le milieu des élytres.

Scymnus hilaris.

Scymnus hilaris, Motsch. *Études Ent.* 1858, p. 119.

Extrêmement voisin du *Scymnus albopilis* par la forme et les couleurs, mais plus rond et à peine de la taille des plus petits exemplaires, avec une pubescence plus grisâtre, plus épaisse en dessus et une ponctuation plus distincte en dessous et moins marquée et nullement cicatrisée sur le métathorax; la tache apicale est étroite, lunaire et non coupée droitement comme chez le *Scymnus albopilis*.

Scymnus lepidulus.

Scymnus lepidulus, Motsch. *Études Ent.* 1858, p. 120.

Voisin du *Scymnus apiciflavus* par les couleurs et la forme des

taches apicales, mais huit fois plus petit; la tête, le corselet, les taches apicales, et les pattes d'un testacé très-clair, la forme des élytres moins arrondie et plus parallèle sur les côtés.

Scymnus rotundatus.

Scymnus rotundatus, Mots. *Et. Ent.* VIII. p. 170 (1859).

Subhemisphæricus, subtilissime dense punctulatus, brevissime cinereo-puberulus niger; ore antennis pedibusque rufo-testaceis, femoribus abdomineque infuscatis; corpore subtus nitido, punctato; thorace valde transverso, antice arcuatim angustato, angulis posticis subrectis; scutello minutissimo, triangulari; elytris ad basin thoracis latitudine, arcuatim dilatatis, rotundatis, humeris indistinctis.

Near *S. ater*, but more rounded, without humeral angles. Abdominal laminae triangular. Larvæ on the coffee-plant (Nietner).

L. $\frac{3}{4}$ lin. Ceylon.

Scymnus saciformis.

Scymnus saciformis, Motsch. *Études Ent.* 1858 p. 121.

Moitié plus petit que le *Scymnus minimus*, dont il a la forme allongée et à l'exception des parties de la bouche, des antennes, de la tête, de la partie antérieure du corselet, de l'abdomen, et des pattes qui sont d'un testacé clair et de l'extrémité des élytres qui est un peu rembrunie. La pubescence du dessus est épaisse et blanchâtre, la ponctuation du dessous insensible et le métathorax luisant et glabre.

Ceylon.

Scymnus ceylonicus.

Scymnus ceylonicus, Motsch. *Études Ent.* 1858, p. 121.

D'un testacé roussâtre unicolore comme le *Scymnus abietis*, mais quatre fois plus petit, et proportionnellement plus court et plus arrondi, la ponctuation du dessus est moins serrée, la pubescence plus longue.

Les montagnes de Nura Ellia sur l'île Ceylon.

Scymnus o-nigrum.

Scymnus (Pullus) o-nigrum, Muls. *Op.* III. p. 148.

Ovale; pubescent, d'un roux pâle ou d'un roux testacé en dessus et en dessous. Elytres ornées d'un signe brun ou noirâtre, commun aux deux étuis, en forme d'O ovale, prolongé depuis la base jusqu'aux trois cinquièmes de la longueur.

L. $\frac{2}{3}$ l. India (Deyrolle).

Scymnus xerampelinus.

Scymnus (Pullus) xerampelinus, *Muls. Op.* III. p. 149.

Ovale; pubescent; d'un roux livide ou testacé en dessus, d'une teinte un peu moins claire en dessous. Plaques abdominales prolongées jusqu'aux trois quarts ou quatre cinquièmes de l'arceau.

L. $\frac{3}{4}$ l. India (Deyrolle).

Scymnus venalis.

Scymnus venalis, *Muls. Op.* III. p. 146.

Ovale oblong; pubescent. Prothorax d'un rouge testacé, non sinué de chaque côté de la partie médiaire de sa base. Elytres d'un flave fauve, ornées d'une bordure suturale brunâtre, couvrant d'une manière nébuleuse les deux tiers de la base.

L. $\frac{3}{4}$ l. India (Deyrolle).

Scymnus pallidicollis.

Scymnus (Pullus) pallidicollis, *Muls. Op.* III. p. 152.

Ovale; pubescent. Prothorax d'un flave roux. Elytres noires sur leurs trois cinquièmes basilaires, d'un flave roux ou d'un roux flave sur le reste. Pieds d'un blanc roussâtre.

L. $\frac{7}{8}$ l. Asia (Motschulsky).

Scymnus pyrochellus.

Scymnus (Pullus) pyrochellus, *Muls. Op.* III. p. 153.

Ovale; pubescent. Prothorax d'un rouge testacé, orné d'un tache noirâtre, en demi-cercle, couvrant le tiers médiaire de la base. Elytres noires jusqu'aux trois cinquièmes ou un peu plus du bord externe et aux deux tiers de la suture, d'un rouge testacé postérieurement. Plaques abdominales terminales.

L. $\frac{1}{4}$ l. Calcutta (Perroud).

Scymnus corporosus.*

Scymnus corporosus, *Mots. Bull. Mosc.* xxxix. p. 425.

Colore et stat. *Scymnus abietis* sed brevior; subovato-rotundatus, convexus, nitidus brunnescente rufus, testaceo-pilosus; elytris fere glabris.

L. 1 lin. (Nura Ellia) Ceylon.

Scymnus brunnescens.*

Scymnus brunnescens, *Mots. Bull. Mosc.* xxxix. p. 425.

Stat. et colore præcedente sed minor; subovatus, convexus, subnitidus, rufo-testaceus, oculis suturaque angustissime nigrescentibus, elytris punctulatis, testaceo-pilosis.

L. 1 lin. (Nura Ellia) Ceylon.

Scymnus uniformis.*

Scymnus uniformis, Mots. Bull. Mosc. XXXIX. 425.

Stat. et color præcedenti sed sutura concolor; subovatus, convexus subnitidus, rufo-testaceus, pilosus.

L. $\frac{3}{4}$ lin. (Nura Ellia) Ceylon.

Scymnus nitidulus.*

Scymnus nitidulus, Mots. Bull. Mosc. XXXIX. p. 425.

Stat. et color præcedenti sed paulo minor et nitidior; subovatus, convexus, valde nitidus, rufo-testaceus; elytris punctatis.

L. $\frac{3}{4}$ lin. (Nura Ellia) Ceylon.

Scymnus stabilis.*

Scymnus stabilis, Mots. Bull. Mosc. XXXIX. p. 425.

Stat. et color *P. discoidei*, sed paulo major, ovatus, postice paulo attenuatus, convexus, subnitidus, pilosus, niger, elytris pedibusque rufis suturâ angustato nigra.

L. 1 lin. (Nura Ellia) Ceylon.

Scymnus gracilis.*

Scymnus gracilis, Mots. Bull. Mosc. XXXIX. p. 426.

Stat. et color *P. minimi*, sed minor; ovatus, subconvexus, nitidus, pilosus, niger, pedibus rufo-testaceis.

L. $\frac{1}{2}$ lin. (Nura Ellia) Ceylon.

Scymnus rotundulus.*

Pullus rotundulus, Mots. Bull. Mosc. XXXIX. p. 426.

Color et stat. præcedenti sed paulo latior; subovatus, rotundatus, convexus, nitidus, pilosus, niger, pedibus rufo-testaceis; elytris antice arcuatis, postice subattenuatis.

L. $\frac{1}{2}$ lin. (Nura Ellia) Ceylon.

Scymnus variabilis.

Scymnus variabilis, Walk. Ann. and Mag. Nat. Hist. Ser. 3. IV. p. 219 (1859).

Ceylon.

Scymnus simplex.

Coccinella simplex, Walk. Ann. and Mag. Nat. Hist. Ser. 3. IV. p. 219 (1859).

Ceylon.

Scymnus flaviceps.

Coccinella flaviceps, Walk. Ann. and Mag. Nat. Hist. Ser. 3. IV. p. 219 (1859).

C. *Species Africanae.***Scymnus quadrivittatus.**

Scymnus 4-vittatus, *Muls. Spec.* p. 958. 16.
Cape (Stockholm).

Scymnus oblongo-signatus.

Scymnus oblongo-signatus, *Muls. Spec.* p. 960. 18.
Mauritius (Westwood).

Scymnus Rosenhaueri.

Scymnus Rosenhaueri, *Muls. Spec.* p. 966. 31.
Caffraria (Stockholm).

Scymnus scapuliferus.

Scymnus scapuliferus, *Muls. Spec.* p. 968. 34.
Caffraria (Stockholm).

Scymnus constrictus.

Scymnus constrictus, *Muls. Spec.* p. 971. 42.
Mauritius? (Westwood).

Scymnus Moreletii.

Scymnus Moreletii, *Muls. Spec.* p. 973. 44.
Caffraria (Stockholm).

Scymnus binævatus.

Scymnus binævatus, *Muls. Spec.* p. 975. 48.
Caffraria (Stockholm).

Scymnus Thiollierii.

Scymnus Thiollierii, *Muls. Spec.* p. 977. 51.
Caffraria (Stockholm). Allied to *S. fasciatus*.

Scymnus Casstroemi.

Scymnus Casstroemi, *Muls. Spec.* p. 978. 52.
Caffraria (Stockholm).

Scymnus Deyrollii.

Scymnus Deyrollii, *Muls. Spec.* p. 996. 89.
Caffraria (Stockholm).

Scymnus oblongus.

Scymnus oblongus, *Muls. Spec.* p. 997. 90.
Caffraria (Stockholm).

Scymnus plutonus.

Scymnus (Pullus) plutonus, *Muls. Op.* III. p. 154.

Brièvement ovale; convexe, pubescent. Tête d'un rouge testacé (♂); noire avec la bouche d'un rouge testacé. (♀) Prothorax noir, avec les angles antérieurs (♀) ou les côtés, sur le sixième de la largeur et quelquefois le bord antérieur, d'un rouge testacé. Elytres noires, avec le bord postérieur brièvement et souvent peu distinctement d'un rouge testacé. Dessous du corps noir; trois derniers arceaux du ventre d'un rouge testacé. Pieds de cette dernière couleur. Plaques abdominales prolongées jusqu'aux cinq sixièmes de l'arceau. Madagascar (Deyrolle).

Scymnus pallidivestis.

Scymnus (Pullus) pallidivestis.

Ovale; pubescent; d'un roux testacé, en dessus. Elytres ornées d'une tache basilaire scutellaire, brune, commune aux deux étuis, couvrant la base jusqu'au calus, obtriangulaire, prolongée à peine jusqu'à la moitié de la suture. L. $\frac{7}{8}$ l. l'Egypte. (Motschulsky).

D. Species Americanae (boreales).**Scymnus terminatus.**

Scymnus terminatus, *Say, Bost. J. N. H.* I. 203 (1835).

————— *Muls. Spec.* p. 952. 3.

————— *Lec. Proc. Phil.* VI. p. 136. 6 (1852).

Subrotundatus, convexus, niger nitidus, punctatus, subtiliter pubescens, capite, thoracis abdominisque lateribus pedibusque testaceis, elytris apice late flavis.

Rounded, slightly oval, convex, black and shining, covered with very fine gray hair. Head testaceous; thorax finely and closely punctured, narrowed in front, but little rounded on the sides, base rounded, finely margined, scarcely at all sinuous, sides narrowly margined with testaceous. Elytra more coarsely punctured, apex with a large yellow spot occupying about one-fifth of the length, and having its anterior boundary slightly convex. Beneath black, abdomen testaceous, black at base; feet yellowish; the abdominal-plates extend to the posterior margin of the segment. Varies with the sides of the thorax widely testaceous, and the apex narrowly margined with the same colour.

Pennsylvania, Georgia.

Scymnus xanthaspis.

Scymnus xanthaspis, *Muls. Spec.* p. 952. 4.

Florida (Westwood). Evidently a variety of *S. terminatus*.

Scymnus femoralis.*

Scymnus femoralis, *Lec. Pr. Ac. Phil.* vi. p. 136. 7 (1852).

Subrotundatus convexus niger nitidus, punctatus subtiliter pubescens, capite, thoracis lateribus, elytrorum apice late testaceis, tibiis tarsisque piceis. L. .075.

Very similar to *S. terminatus*. The thorax is a little narrower, the lateral testaceous margin is very narrow; the body beneath and the thighs are entirely black, the tibiæ and tarsi piceous. The abdominal plates are as in the last, but seem to reach the posterior margin of the segment near the middle.

New York.

Scymnus amabilis.*

Scymnus amabilis, *Lec. Pr. Ac. Phil.* vi. p. 135. 1 (1852).

Ovalis, minus convexus, ater nitidus, punctatus, subtiliter pubescens, capite, thoracis lateribus, elytrorum macula obliqua, fascia postica, apice, pedibusque læte flavis. L. .07.

Oval, less convex than usual, shining, finely and densely punctured, and very finely pubescent. Head and organs of the mouth yellow. Thorax narrowed in front, base slightly sinuous, finely margined, black, sides with a yellow margin, which is wider in front. El. forming a very distinct angle with the sides of the thorax, black, with a large transverse spot, a posterior band and the apex yellow; the spot is oblique and extends from just below the humerus to the middle of the elytra ending near the suture; the band is placed at the second third of the elytra, is sinuate on each side, and at the sides and suture is confluent with the yellow apical margin, so that on each side a transverse black spot is included. Under surface black, venter testaceous at the sides and apex; feet yellow.

New Orleans.

Scymnus ornatus.*

Scymnus ornatus, *Lec. Lake Super.* p. 239, *Pr. Ac. Phil.* vi. p. 135. 2 (1852).

Ellipticus, convexus ater, opacus, breviter pubescens, subtiliter punctulatus, elytris maculis magnis utrinque duabus aurantiacis. L. .09.

Elliptical, moderately convex, black without lustre, finely punctulate and covered with short grey hair. Thorax narrowed in front, slightly rounded at the sides, base not sinuate, distinctly margined in the middle. Elytra with a large oblique orange-coloured spot before the middle, and another rounded, somewhat

transverse one behind the middle extending nearly to the sides and to the suture. Under surface black, tibiæ and tarsi very obscurely rufo-piceous. Abdominal plates shorter than the first segment of the abdomen.

Lake Superior.

Scymnus myrmidon.

Scymnus myrmidon, *Muls. Spec.* p. 954. 9.

N. America (Dejean).

Scymnus flavifrons.*

Scymnus flavifrons, *Melsh. Pr. Ac. Phil.* III. p. 181, *Lec. l. c.* p. 136.

Rotundatus, convexus, niger, punctatus, breviter pubescens, elytris, macula utrinque pone medium, ore tibiis tarsisque flavis. L. .08.

Rounded, convex, black, shining, distinctly punctured, covered with fine grey hair; mouth and its organs yellow. Thorax narrowed in front, scarcely rounded on the sides, finely margined at the base, which is truncate in front of the scutellum, and obliquely sinuous each side. Elytra with a large round yellow spot at the posterior third, and equidistant from the sides and suture. Body beneath entirely black, tibiæ and tarsi yellow. Abdominal plates shorter than the first segment; their posterior margin is parallel with the margin of the segment and reaches the side as in *S. guttulatus*.

New York and Pennsylvania.

Scymnus guttulatus.*

Scymnus guttulatus, *Lec. Pr. Ac. Phil.* VI. p. 136. 3 (1852).

Rotundatus convexus, niger nitidus, punctulatus, pubescens, elytris gutta parva utrinque ad medium, alterisque duabus pone medium rufis. L. .08.

Slightly oval, rounded, and convex, black, finely punctulate, tolerably densely pubescent. Thorax somewhat narrowed in front, very slightly rounded on the sides, not margined at the base, which is scarcely sinuate. Elytra more distinctly punctured than the thorax, marked with a small round red spot at the middle about the internal third of the breadth, and two others placed transversely about two-sevenths from the apex, of which the exterior is the larger and slightly oblique. Under surface entirely black. Abdominal plates a little shorter than the first joint of the abdomen.

San Francisco, California.

Scymnus bioculatus.

Scymnus bioculatus, *Muls. Spec.* p. 960. 20.

Scymnus bioculatus, *Lec. Proc. Phil.* p. 136. 5 (1852).

Rotundato-ovalis convexus, niger, punctatus, cinereo pubescens, elytrorum gutta pone medium, tibiis tarsisque flavis. L. '07.

This species exactly resembles *Sc. flavifrons*, but it is smaller and more oval, the elytra being a little narrowed behind, and not so regularly rounded on the sides. The punctures of the elytra are somewhat larger. In one specimen the head is testaceous, in the other it is black, but both are females. Mulsant distinguishes 2 varieties as *S. marginellus* and *S. guttiger*.

Georgia (rare).

Scymnus americanus.

Scymnus americanus, Muls. Spec. p. 965. 29.

Scymnus americanus, Lec. Proc. Phil. vi. p. 137. 8 (1852).

Breviter ovatus, ater, minus dense punctatus, pubescens, capite, thorace lateribus, abdomine, pedibus elytrorum apice brevi testaceis. L. '12.

A large species with short ovate black body. Above distinctly, not densely punctured, covered with coarse gray hair. Head testaceous. Thorax usually black, with testaceous sides, sometimes entirely testaceous, narrowed in front, and rounded on the sides; base margined, slightly truncate at the scutellum, scarcely sinuous each side. Elytra with a distinct testaceous apical margin. Beneath black, coarsely punctured, apex and sides of the abdomen testaceous, feet yellow. The abdominal plates reach nearly to the extremity; their margin then suddenly turns upwards and becomes obsolete.

New York and Pennsylvania.

Scymnus nebulosus.*

Scymnus nebulosus, Lec. Pr. Ac. Phil. vi. p. 137. 9 (1852).

Rotundato-ovalis, convexus, confertim punctatus, subtus niger, supra testaceus, griseo pubescens, thorace medio obscuro, elytris irregulariter parce piceo notatis, pedibus flavo-testaceis. L. '09.

Rounded, oval, convex, coarsely and densely punctured, above testaceous, densely pubescent. Thorax but little narrowed in front, base truncate at the scutellum, and finely margined, oblique but not sinuous on each side; the disc is darker each side of the medial line. Elytra forming a distinct angle with the sides of the thorax, irregularly mottled with small piceous dots. Body beneath black, coarsely punctured, anus testaceous. Abdominal plates reach nearly to the apex of the segment, their margin then turns upwards but does not reach the base. Feet yellowish testaceous.

Colorado River, California.

Scymnus icteratus.

Scymnus icteratus, Muls. Spec. p. 969. 38 (T).

N. America (Reiche).

Scymnus pallens.*

Scymnus pallens, *Lec. Pr. Ac. Phil.* vi. p. 137. 10 (1852).

Rotundato-ovalis convexus, subtus niger supra testaceus, pubescens, elytris subtilissime punctulatis, pedibus flavo-testaceis. L. .08.

Rounded, slightly oval, convex, above yellow testaceous, finely densely pubescent, thorax not visibly punctured, rounded on the sides, base very finely margined, slightly rounded. Elytra very finely punctulate, and very slightly rugous. Body beneath black, finely densely punctulate, abdomen posteriorly margined with testaceous; abdominal plates entire, shorter than the first segment, laterally not extending to the parapleuræ: their margin smooth and shining. Feet yellow.

San Francisco, on *Spiræa*.

Scymnus debilis.*

Scymnus debilis, *Lec. Pr. Ac. Phil.* 1852, p. 137. 11.

Rotundato-ovalis, testaceus, pubescens, elytris minus dense punctulatis, pedibus flavo-testaceis. L. .05.

Rounded, slightly oval, convex, above yellow testaceous, finely densely pubescent. Thorax very finely punctulate, rounded on the sides, margined at the base, which is slightly rounded. Elytra finely and distinctly punctured. Body beneath darker, finely punctulate, tip of the abdomen and feet pale yellow testaceous. (Abdominal plates not examined).

San José. California.

Scymnus cinctus.*

Scymnus cinctus, *Lec. Pr. Ac. Phil.* vi. p. 137. 12 (1852).

Rotundato-ovalis modice convexus, punctatus, longius pubescens, niger, capite, pedibus, thorace elytrisque testaceis, illa macula basali, his vitta suturali postice angustata nigra. L. .09.

Seems to resemble *S. Lewii*, and *floralis*, *Muls.*, but differs from the first by its entirely yellow feet, and from the second by its black abdomen. Rounded, slightly oval, moderately convex, finely pubescent. Head yellow, densely punctured. Thorax narrowed in front, rounded on the sides, base margined, truncate at the scutellum, obliquely sinuous each side, punctured more densely at the sides, yellow, with a large black spot, occupying two-thirds of the base and extending nearly to the anterior margin. Elytra tolerably densely, and more coarsely punctured than the thorax, yellow, with a large common sutural black vitta, which fits to the spot on the thorax and is gradually narrowed behind, reaching nearly to the tip. Body beneath black, densely not finely punctured; abdominal plates scarcely shorter than the first segment, reaching laterally to the parapleuræ. Feet yellow, thighs a little obscure.

New Orleans.

Scymnus Lecontii.

Scymnus suturalis||, *Lec. Pr. Ac. Phil.* vi. p. 138. 13 (1852).

Rotundato-ovalis, modice convexus, subtilius punctatus, pubescens, niger, capite thorace elytrisque obscure testaceis, illo macula maxima basali, his vitta suturali lateribusque infuscatis, tibiis tarsisque testaceis. L. '08.

Closely allied to *S. cinctus*, but is less coarsely punctured. Head testaceous, very finely punctured. Thorax narrowed in front, but little rounded on the sides, margined at the base, which is truncate at the scutellum, and very slightly sinuate each side; finely not densely punctured, testaceous, with a very large black spot occupying nearly all the base and extending almost to the apex. Elytra a little more coarsely punctured than the thorax, testaceous, with a common black sutural vitta broad at the base and gradually narrowed behind, reaching nearly to the apex, sides from the middle to near the apex blackish; epipleuræ testaceous. Body beneath black, densely punctured; abdominal plates shorter than the first segment, hardly extending as far as the parapleuræ. Feet piccous, tibiæ and tarsi testaceous.

Colorado river, California.

Scymnus Brullæi.

Scymnus Brullæi, *Muls. Spec.* p. 984. 63.

Florida (Westwood).

Scymnus fraternus.*

Scymnus fraternus, *Lec. Pr. Ac. Phil.* vi. p. 138. 14 (1852).

Rotundato-ovalis, convexus, niger, pubescens, capite, thoracis lateribus, pedibusque testaceis, elytris valde punctatis, apice late rufis. L. '09.

Rounded, a little oval, convex, black, shining, covered with fine grey hair. Head and thorax finely punctulate, yellow, the latter with a large basal black spot; sides rounded, base margined, truncate at the scutellum, and oblique each side. Elytra densely punctured with a transverse testaceous margin at the apex, which covers about one-fifth of the surface. Body beneath black, densely punctured, abdominal plates shorter than the segment, smooth at the margin, extending as far as the parapleuræ. Feet testaceous, margin of the abdomen rufous.

Middle States.

Scymnus hæmorrhous.*

Scymnus hæmorrhous, *Lec. Pr. Ac. Phil.* vi. p. 138. 15 (1852).

Rotundato-ovalis, convexus, niger, pubescens, capite thoracis

macula laterali, pedibusque testaceis, elytris grosse punctatis, apice late rufis. L. '09.

Similar to *S. fraternus*, but the punctures of the elytra larger and less obtuse. Rounded, slightly oval, convex, black, shining, finely pubescent. Head testaceous, finely punctulate. Thorax black, with a yellow lateral spot reaching from the anterior margin nearly to the base, which is truncate at the scutellum, and oblique each side, marginal line distinct, sides rounded. Elytra forming a distinct angle with the sides of the thorax, coarsely and not densely punctured, with a broad testaceous apical margin covering about one-fifth of the surface. Body beneath as in *S. fraternus*, but the sides of the venter are scarcely testaceous. The apical spot is not sufficiently large to permit this species to be referred to *S. Brullei*, *Muls.* 954.

New York.

Scymnus chatchas.

Scymnus chatchas, *Muls. Spec.* p. 986. 69.

Scymnus chatchas, *Lec. Proc. Phil.* vi. p. 138. 16 (1852).

Rotundato-ovalis, convexus, niger, punctatus, pubescens, capite thoraceque testaceis, hoc macula basali nigra, elytris margine apicali, ano, pedibusque rufo-testaceis.

Broad, oval, convex, black, shining, and moderately pubescent. Head and thorax finely punctulate, yellow, the latter with a small basal black spot reaching nearly to the middle; very much narrowed in front on the sides, base obtuse at the scutellum, oblique each side, marginal line distinct. Elytra somewhat plumbeous, densely but not deeply punctured, apical margin testaceous. Beneath black, densely punctured, two last segments of the abdomen and feet yellow; the abdominal plates are nearly as long as the segment, smooth except at base, and extend to the parapleuræ.

Atlantic States and Missouri Territory.

Scymnus creperus.

Scymnus creperus, *Muls. Spec.* p. 985. 66.

Scymnus caudalis, *Lec. Lake Sup.* p. 238, *Proc. Phil.* vi. p. 138. 17 (1852).

Breviter ovalis, convexus, niger, pubescens, capite thoraceque punctulatis, rufis, hoc medio nigro, elytris grossius punctatis, margine apicali, ano, pedibusque rufo-testaceis. L. '08—'09.

Very similar to *S. chatchas*, differs in the punctures of the elytra being larger and less dense, and the spot on the thorax less defined, reaching nearly to the apex. The abdominal plates are as in the last, smooth except at base.

Lake Superior. Georgia and Rocky Mountains.

Scymnus consobrinus.*

Scymnus consobrinus, *Lec. Pr. Ac. Phil.* vi. 1852, p. 139. 18.

Scymnus caudalis, ♂ *Lec. olim.*

Breviter ovalis, convexus, niger, densius pubescens, capite thoraceque subtilius parce punctulatis flavis, hoc medio nigro, elytris sat dense punctatis, margine apicali, ano, pedibusque rufotestaceis. L. .08.

Broadly oval, convex, black, covered with dense gray hair, head and thorax finely and sparsely punctulate, yellow; the latter with a large ill-defined black spot, occupying half the base, and extending nearly to the apex, sides rounded, base margined, obtuse in the middle, oblique each side. Elytra tolerably densely, not deeply punctured, apical margin testaceous. Beneath black, densely punctured; abdominal plates almost reaching to the posterior margin of the segment, densely punctured, smooth only at the inner margin, tip of the abdomen testaceous. Feet yellow.

Lake Superior.

Scymnus puncticollis.*

Scymnus puncticollis, *Lec. Pr. Ac. Phil.* vi. 1852, p. 139. 19.

Breviter ovalis, convexus, niger, pubescens, capite thoraceque dense subtiliter punctatis, hoc macula laterali testacea, elytris dense punctatis, margine apicali, ano tibiis tarsisque testaceis. L. .09.

Broadly oval, convex, black, covered with gray hair. Head finely punctured, mouth testaceous. Thorax black, with a small yellow spot at the anterior angles, finely and densely punctured, margined at the base, which is obtuse in the middle and obliquely sinuate each side. Elytra densely punctured, with a narrow testaceous apical margin. Beneath black, densely punctured, abdominal plates, extending almost to the posterior margin of the segment, punctured, smooth towards the inner margin. Sides and tip of the abdomen, tibiæ and tarsi ferruginous, femora piccous.

Upper Mississippi.

Scymnus cervicalis.

Scymnus cervicalis, *Muls. Spec.* p. 984. 64.

Scymnus cervicalis, *Lec. Proc. Phil.* vi. p. 139. 20 (1852).

Rotundato-ovalis, convexus, breviter dense pubescens, niger, capite thoraceque rufis, vix subtiliter punctulatis, elytris confertim punctatis, apice angustissime, ano, pedibusque rufis. L. .085.

Rounded, oval, convex, covered with short gray hair. Head very finely and sparsely punctulate, rufous. Thorax rufous, scarcely punctulate, base margined, obliquely subsinuate on each

side, obtuse in middle. Elytra shining, black, tolerably densely punctured, extreme apical margin testaceous. Beneath black, coarsely punctured, last joint of the abdomen rufo-piceous: abdominal plates a little shorter than the segment, smooth, punctured at base. Feet rufous.

Southern States.

Scymnus socer.*

Scymnus socer, *Lec. Pr. Ac. Phil.* vi. 1852, p. 139. 21.

Rotundato-ovalis, convexus, breviter pubescens, niger, capite thoraceque parce punctulatis, rufis, hoc macula basali nigra, elytris minus dense punctatis, apice angustissime, abdominis apice, pedibusque flavis. L. '07.

Very similar to *S. cervicalis*, but smaller, and less densely punctured on the elytra. Rounded, oval, convex, covered with short gray hair. Head and thorax very sparsely and finely punctured, rufous, the latter with a large black spot occupying more than half the base, and reaching nearly to the apex; base margined, obtuse in the middle, obliquely and scarcely sinuated each side. Elytra distinctly punctured, black, shining, with the extreme apical margin testaceous. Beneath black, coarsely punctured, last three joints of the abdomen yellow; abdominal plates shorter than the segment, smooth, punctured only at their base. Feet yellow.

Georgia.

Scymnus fastigiatus.

Scymnus fastigiatus, *Muls. Spec.* p. 986. 70.

N. America (Dejean).

Scymnus marginicollis.*

Scymnus marginicollis, *Mannh. Bull. Mosc.* 1843, p. 313, *Lec. l.c.* p. 140. 22.

Rotundato-ovalis, convexus, longius pubescens, niger, capite thoraceque subtilius punctulatis rufis, hoc macula basali nigra, elytris sat dense punctatis, femoribus anticis rufis. L. '095.

Rounded, oval, convex, covered with longer gray hair than usual. Head and thorax finely and sparsely punctulate, rufous; the latter with a basal black spot small in the male, large in the female, base very finely margined, scarcely sinuate. Elytra not deeply but tolerably densely punctured, entirely black. Body beneath black, densely punctured, abdominal plates a little shorter than the segment, smooth at their margin. Feet black, anterior thighs rufous.

San Francisco and San Diego, California.

Scymnus tenebrosus.

Scymnus tenebrosus, *Muls. Spec.* p. 989. 74.

Scymnus tenebrosus, *Lec. Proc. Phil.* vi. p. 140. 23 (1852).

Subhemisphæricus, niger, pubescens, thorace subtilius punctulato, elytris minus dense punctulatis, pedibus testaceis. L. .095:

Almost hemispherical, black, shining, covered with fine pubescence. Head finely punctured, testaceous in the male, black in the female; mouth testaceous. Thorax sparsely and finely punctulate, base margined, obtusely truncate at the middle, obliquely subsinuate each side. Elytra distinctly but not densely punctured. Beneath black, coarsely punctured; abdominal plates a little shorter than the segment, posteriorly smooth. Feet testaceous.

Southern States, not common.

Scymnus lacustris.

Scymnus lacustris, *Lec. Lake Sup.* p. 239 (1850).

Scymnus lacustris, *Muls. Spec.* p. 989. 75.

Scymnus lacustris, *Lec. Proc. Phil.* vi. p. 140. 24 (1852).

Scymnus nigrivestis, *Muls. Spec.* p. 990.

Breviter ovalis, convexus, niger, pubescens, elytris sat dense punctatis, pedibus testaceis basi nigris. L. .09.

Very similar to *S. tenebrosus*, but easily distinguished by the colour of the feet. Oval, almost hemispherical, shining, black, finely pubescent. Head finely punctured, mouth testaceous. Thorax finely and sparsely punctured, base margined, truncate in the middle, oblique each side. Elytra moderately densely punctured. Body beneath black, densely punctured, more finely upon the abdomen; abdominal plates scarcely shorter than the segment, smooth, punctured at the base. Feet testaceous, femora black for two-thirds the length. The apex of the abdomen of the male is more deeply impressed than usual. Varies with the feet entirely black.

North shore of Lake Superior.

Scymnus abbreviatus.

Scymnus abbreviatus, *Lec. Pr. Ac. Phil.* vi. 1852, p. 140. 25.

Breviter ovalis, convexus, niger, pubescens, elytris confertim punctatis, pedibus rufo-piceis, abdominis laminis brevibus. L. .085.

Oval almost hemispherical, black, densely pubescent. Head finely and densely punctured. Thorax sparsely punctured on the disc, densely at the sides, base finely margined, obtusely rounded in the middle. Elytra densely and coarsely punctured. Body beneath densely punctured; abdominal plates three-fifths as long as the segment, margin smooth. Feet entirely dark rufous.

Eagle Harbour, Lake Superior.

Scymnus nanus.

Scymnus nanus, *Lec. Pr. Ac. Phil.* 1852, p. 140. 26.

Rotundato-ovalis, convexus, nigro piceus, parce pubescens, thorace parce punctulato, elytris parce, minus subtiliter punctatis, pedibus rufis. L. .06.

Oval rounded, convex, blackish piceous, sparsely covered with fine pubescence. Head finely punctulate, mouth rufous. Thorax finely and sparsely punctulate, anterior angles rufous; base margined, obtuse in the middle. Elytra distinctly, but not densely punctured. Body beneath punctured, abdominal plates not shorter than the segment, smooth at their margin, scarcely extending to the parapleuræ. Feet rufous. Anus of the male broadly emarginate.

Missouri.

Scymnus punctum.*

Scymnus punctum, *Lec. Pr. Ac. Phil.* vi. 1852, p. 141. 27.

Rotundato-ovalis, convexus, niger, parce pubescens, thorace lateribus confertim punctatis, elytris subtiliter parce punctatis, pedibus testaceis, femoribus posterioribus piceis. L. .05.

On account of its size and form resembles *S. nanus*, but the coarsely punctured thorax distinguishes it. Rounded oval, convex, shining black, covered with fine and sparse pubescence. Head obsoletely punctulate, antennæ yellow. Thorax finely and sparsely punctured at the middle, coarsely and densely at the sides, base margined, obtuse in the middle, subsinuate each side. Elytra finely and sparsely punctured. Body beneath coarsely punctured, abdominal plates smooth, punctured at base, considerably shorter than the segment, not extending laterally to the parapleuræ. Feet testaceous-yellow, four posterior thighs piceous.

North shore of Lake Superior.

Scymnus cyanescens.

Scymnus cyanescens, *Muls. Spec.* p. 993. 82.

N. America (Dejean).

E. *Species Americane (australis)*.

Scymnus thoracicus.

Coccinella thoracica, *Fab. Syst. El.* i. 378. 125.

Scymnus thoracicus, *Muls. Spec.* p. 951. 1.

S. America (Copenhagen).

Scymnus roseicollis.

Scymnus (Diomus) *roseicollis*, *Muls. Op.* III. p. 142.

Ovale, pubescent. Tête, prothorax et pieds d'un rouge rose. Elytres noires, ornées chacune d'une tache d'un rouge rose, couvrant le tiers postérieur du bord externe, étendue jusqu'au quart interne de la largeur, échancrée dans la seconde moitié de son côté interne. L. $\frac{3}{4}$ lin. Cuba (Chevrolat).

Scymnus ochroderus.

Scymnus ochroderus, *Muls. Spec.* p. 951. 2 (T).

This seems to be a variety of *S. thoracicus*, and Mulsant indicates other varieties under the names *dichrous* and *ochroderus*.

I. St. Bartholomew, West Indies (Reiche).

Scymnus margipallens.

Scymnus margipallens, *Muls. Spec.* p. 953. 5.

Brazil (Germar).

Scymnus albidicollis.

Scymnus albidicollis, *Muls. Spec.* p. 953. 6.

S. America (Sallé).

Scymnus seminulum.

Scymnus seminulum, *Muls. Spec.* p. 954. 7 (T).

Brazil (Chevrolat, Germar).

Scymnus morio.

Scymnus morio, *Muls. Spec.* p. 954. 8 (T).

Probably a variety of *S. seminulum*.

Brazil (Chevrolat, Germar).

Scymnus tardus.

Scymnus tardus, *Muls. Spec.* p. 955. 10.

A variety from Chevrolat's collection is named *piger*.

Brazil (Mocquerys).

Scymnus pallidipennis.

Scymnus pallidipennis, *Muls. Spec.* p. 956. 11 (T).

N. Grenada (Reiche).

Scymnus tantillus.

Scymnus tantillus, *Muls. Spec.* p. 957. 12.

Carthage (Dejean).

Var. micros, *Muls. Op.* III. p. 144.

Carthage (Deyrolle).

Scymnus fulvipes.

Scymnus fulvipes, *Muls. Spec.* p. 958. 14 (T).
Cayenne (Reiche).

Scymnus volgus.

Scymnus (Polius) *volgus*, *Muls. Op.* III. p. 147.

Ovale; pubescent. Tête et prothorax d'un rouge jaunâtre. Elytres d'un noir verdâtre; ponctuées. Dessous du corps et pieds d'un rouge jaune, avec les médi et prospectus et le premier arceau ventral, noirs. L. $\frac{1}{2}$ lin. Caracas (Deyrolle).

Scymnus obscurus.

Scymnus obscurus, *Muls. Spec.* p. 962. 23.
Carthagena (Dejean).

Scymnus Fonscolombii.

Scymnus Fonscolombii, *Muls. Spec.* p. 974. 46.
Brazil (Mocquerys).

Scymnus Loewii.

Scymnus Loewii, *Muls. Spec.* p. 980. 57 (T).
Mexico (Reiche, Westwood).

Scymnus floralis.

Nitidula floralis, *Fab. Ent. Syst.* I. 1, p. 260. 23.
Scymnus floralis, *Muls. Spec.* p. 980. 58.
W. Indies (Reiche).

Scymnus phloeus.

Scymnus phloeus, *Muls. Spec.* p. 983. 62 (T).
W. Indies (Chevrolat).

Scymnus auritulus.

Scymnus auritulus, *Muls. Spec.* p. 985. 65 (T).
Mexico (Reiche).

Scymnus apicalis.

Scymnus apicalis, *Muls. Spec.* p. 987. 71.
Mexico, Columbia (Dejean), Brazil (Chevrolat).

Scymnus limbaticollis.

Scymnus limbaticollis, *Muls. Spec.* p. 388. 72 (T).
N. Grenada (Reiche).

Scymnus Pilatii.

Scymnus Pilatii, *Muls. Spec.* p. 990. 76.
Yucatan (Pilate).

Scymnus Laboulbenii.

Scymnus Laboulbenii, *Muls. Spec.* p. 992. 81 (T).
Brazil (Chevrolat).

Scymnus thelys.

Scymnus (Pullus) *thelys*, *Muls. Op.* III. p. 155.
Ovale; pubescent; noir en dessus; côtés du prothorax d'un rouge testacé. Dessous du corps noir. Pieds d'un rouge testacé. L. 1 lin. Yucatan (Deyrolle).

Scymnus inclytus.

Scymnus (Pullus) *inclytus*, *Muls. Op.* III. p. 149.
Ovale, médiocrement pubescent; noir en dessus. Elytres ornées chacune d'une tache ovale-oblongue, d'un beau jaune, couvrant du cinquième ou presque du quart presque jusqu'aux deux tiers de la longueur, et des deux septièmes internes aux cinq sixièmes de la largeur. Pieds d'un jaune pâle. L. 1 l. Brésil (Deyrolle).

Scymnus melanogaster.

Scymnus (Pullus) *melanogaster*, *Muls. Op.* III. p. 151.
Ovale; pubescent. Prothorax d'un rouge orangé. Elytres noires, ornées à l'extrémité d'une bordure d'un rouge testacé. Dessous du corps noir. Pieds d'un rouge testacé. L. 1 l. Caracas (Deyrolle).

Scymnus viaticus.

Scymnus (Pullus) *viaticus*, *Muls. Op.* III. p. 148.
Brièvement ovale, pubescent. Prothorax bispinueux près de l'écusson; d'un fauve testacé graduellement plus obscur sur la partie médiaire à la base. Elytres et dessous du corps noirs. Pieds d'un rouge testacé. L. $\frac{2}{3}$ l. Brésil (Deyrolle).

Scymnus bilucernarius.

Scymnus bilucernarius, *Muls. Spec.* p. 997. 91.
Yucatan (Pilate).

Scymnus albipes.

Scymnus albipes, *Muls. Spec.* p. 998. 92 (T).
?(Reiche). Entirely irrecognizable from the type.

Scymnus atomus.*

Scymnus atomus, *Muls. Spec.* p. 998. 93.
Yucatan (Pilate).

Scymnus rubicundus.*

Scymnus rubicundus, *Er. Arch. f. Nat.* XIII. p. 185. 1 (1846).
Orbicularis, convexus, cinereo-pubescent, niger, dense punctatus, capite prothoracis lateribus elytrorumque limbo apicali pallidis, elytrorum disco, abdominis apice pedibusque rufis.
L. 1 lin. Peru (Berlin).

F. Species incertæ.

Scymnus quadrivulneratus.

Scymnus quadrivulneratus, *Muls. Spec.* p. 970. 40.
?(Motschulsky).

Scymnus quercus.

Scymnus quercus, *Muls. Spec.* p. 982. 61.
?(Motschulsky).

Scymnus Waterhousii.

Scymnus Waterhousii, *Muls. Spec.* p. 994. 83.
?(Westwood).

Anisoscymnus.

gen. nov. (*typ. rufipes*).

Distinct by the unequal punctuation; this genus is well represented in the Malay Archipelago.

Anisoscymnus rufipes.

Coccinella rufipes, *Fab. Suppl.* p. 80 (1798).
Scymnus Ahrensi, *Muls. Sécur.* p. 231.
Spain, S. France, Italy, Algeria.

Clanis.

Muls. Spec. p. 999 (*typ. pubescens*).

Differs from *Scymnus* by its orbicular form; it may possibly be *Jauravia albidula* Motsch.

Clanis pubescens.

Coccinella pubescens, *Fab. Suppl.* p. 77 (1798).

Clanis pubescens, *Muls. Spec.* p. 999. 1.

Ceylon, Pondicherry (Guérin).

Jauravia.

Mots. Et. Ent. vii. p. 117 (1858). (*typ. pallidula*).

Differs from *Zonaria* by the form of the thorax and the coxal foveæ arcuate.

Jauravia pallidula.

Mots. l.c.

Orbiculata, convexa, punctatissima, nitida, supra brevissime albido-puberula, fulvo-testacea. Oculis nigris; thorace transverso, antice angustato, basi arcuato, utrinque leviter sinuato, angulis posticis fere rectis, lateribus subarcuatis, marginatis; elytris rotundatis, marginatis, subreflexis; corpore subtus glabro, pectore ruguloso-punctato; coxarum lamina semilunari; tarsis articulo penultimo triangulariter dilatato, unguiculis basi angulatim dilatatis; antennis 11-articulatis. L. 1 lin. India, Ceylon.

Par sa forme, assez voisin de *Lasia globosa*.

Jauravia limbata.

Mots. l.c. p. 118.

Pectore elytrisque nigris, margine laterali late albida tantum differt. India.

Jauravia albidula.

Mots. Bull. Mosc. xxxix. 424 (1866).

Stat. *Chilocori* sed puberula; orbiculata subglobosa nitida, punctulata, albescente puberula, rufo-testacea, pedibus dilutioribus, corpore subtus paulo infuscato. L. 1½ lin. (Nura Ellia) Ceylon.

Jauravia limbata.

Mots. l.c.

Stat. *Hyper. lateralis* sed minor, rotundata, convexa, nitida, vix puberula, pallido flava, oculis, elytrorum dorso corporeque subtus nigris. L. 1 lin. (Nura Ellia) Ceylon.

Subfamily 6. EXOPLECTRIDES.

This subfamily is quite heterogeneous; possibly *Ortalia* belongs to the *Scymnide*; *Azya* is evidently allied to *Hyperaspis*.

GROUP I. ORTALIÆ.

Thorax margined at the base, antennæ very short, first joint not dilate, claws bifid, epipleuræ not foveolate, eyes large, oval, very finely granulated, punctuation equal (*Ortalia*) or unequal (*Prodilis*, *Zenoria*), tibiæ not angulated.

Ortalia.

Muls. Spec. p. 893 (*typ. variata*).

Thorax margined at the base, punctuation uniform, claws bifid, epipleuræ not foveolated, acuminate, antennæ very short, eyes large, oval.

Ortalia variata.

Ortalia variata, *Muls. Spec.* p. 893. 1 (T).

Madagascar (Reiche).

♂ Fifth ventral segment with a medial tubercle.

Ortalia calliops.

Coccinella calliops, *Guér. Icon. R. A.* p. 320 (T).

Ortalia calliops, *Muls. Spec.* p. 894. 2.

Madagascar.

Ortalia flaveola.

Coccinella flaveola, *Klug, Abh. Berl. Akad.* 1834, p. 214.

Ortalia flaveola, *Muls. Spec.* p. 895.

More oblong and smaller, with much finer punctuation.

Madagascar.

Ortalia pallens.

Ortalia pallens, *Muls. Spec.* p. 895. 3 (T).

Ortalia Guillebeaudi, *Muls. Spec.* p. 896. 4.

Ortalia argillacea, *Muls. Spec.* p. 896. 5 (T).

Rodolia vermiculata, *Thoms. Arch. Ent.* II. p. 238.

This species is somewhat variable. The type sent me from Stockholm does not agree with description, having the head orange, but I have seen a specimen with a black head from Natal, and am certainly unable to separate my specimens from the W. Coast and from Natal. In M. Deyrolle's collection are two specimens labelled (by inadvertence?) *Brazil*.

Sixth ventral segment deeply emarginate and depressed in the ♂.

Abyssinia, Senegal, Gaboon, Natal.

Ortalia funesta.*

Ortalia funesta, *Muls. Spec.* p. 896. 6 (T).

Madagascar (Dupont).

Ortalia Duponti.

Ortalia Duponti, *Muls. Spec.* p. 897. 7.

Madagascar (Deyrolle).

Ortalia Maeklini.

Ortalia Maeklini, *Muls. Op.* III. p. 130 (1853).

I have referred an *Ortalia* common throughout the East Indian Archipelago, to this species. It is very like *E. calliops* but smaller, more strongly pubescent, the eyes more finely granulated and less approximated, the forehead appears somewhat concave. L. $1\frac{1}{2}$ —3 lin. Malacca, Penang, Singapore, Sumatra, Java, Borneo, Sarawak (Wallace).

Ortalia scabrosa, sp. n.

Brownish red, ovate, unicolorous, punctuation of the elytra coarse and scabrous on the disc, finer towards the sides; thorax coarsely punctured; metasternum very coarsely and roughly punctured especially at the sides, ventral segments roughly but more sparingly punctured. L. $2\frac{1}{2}$ lin. Macassar (Wallace).

Ortalia proxima, sp. n.

Intermediate between the last two species, but differing from *O. Maeklini* by the ovate form and dark red colour, from *O. scabrosa* by the less developed punctuation, which however shows signs of the same characteristics. L. $2\frac{1}{2}$ lin. Menado (Wallace).

Ortalia Wallacii, sp. n.

Shortly ovate, bluish-black, head, thorax (with a black spot in the centre of the base), elytra at the apex, legs, abdomen and prosternum orange; thorax closely punctulate; elytra purplish, clothed with a whitish pubescence, thickly and unequally punctate, the coarse punctures deep and apparent, body beneath punctate.

L. 2 lin. Aru, Salwaty (Wallace).

Prodilis.

Muls. Spec. p. 898 (*typ. pallidifrons*).

Punctuation of the elytra coarse, very unequal, sparse, thorax margined at the base, eyes large, finely granulated, abdominal plates complete, covering half the segment, the mesial process of the first ventral segment deeply sinuate. Epipleuræ subfoveolate and acuminate at two-thirds.

Prodilis pallidifrons.

Prodilis pallidifrons, *Muls. Spec.* p. 398. 1 (T).
N. Grenada (Reiche).

Prodilis marginithorax, sp. n.

Oval, blue-black, head, thorax (except the disc), legs, prosternum and venter orange, the first segment shaded with brown in

the middle; elytra with the extreme margin paler, head and thorax uniformly pretty closely punctured.

Claws bifid, antennæ rather short, abdominal plates semi-circular, nearly complete, punctuation unequal, the coarse punctures very numerous and visible, thorax not margined, epipleuræ narrow, concave; intermediate coxæ distant, prosternum margined between the coxæ. L. $2\frac{1}{2}$ lin. Mexico.

I have seen it in collections under the above MS. name. (Fry, Saunders, and Deyrolle).

Zenoria.

Muls. Spec. p. 898 (*typ. revestita*).

Punctuation of the elytra unequal, coarse, sparse, pubescence long; thorax sinuate at the base and with an impressed line; eyes smaller and more convex than in the preceding genera, legs slender, tibiæ not grooved. S. America.

Zenoria Ratzeburgi.*

Zenoria Ratzeburgi, *Muls. Spec.* p. 808. 1.

This beautiful species I have not seen.

Brazil (Paris).

Zenoria subcostalis.

Zenoria subcostalis, *Muls. Spec.* p. 899. 2 (T).

N. Grenada (Reiche).

Zenoria pilosula.

Zenoria pilosula, *Muls. Spec.* p. 900. 3.

Carthagenæ (Deyrolle).

Zenoria rodolioides, sp. n.

Yellowish-red, thorax dirty yellow, elytra brick-red, shining; punctuation coarse, sparse. L. $1\frac{1}{4}$ lin. Santarem (Bates).

The coloration is exactly that of *Rodolia*.

Zenoria revestita.

Zenoria revestita, *Muls. Spec.* p. 900. 4.

Zenoria linteolata, *Muls. Spec.* p. 901. 5.

Ega, Santarem, S. Paulo (Bates).

This species is apparently most variable; a fine series collected by Mr Bates, gives, however, good reasons for uniting the forms. I have a specimen marked "luridipes," *Muls. MSS.*

a. Metallic green, head, legs, prosternum and ventral segments pale ochreous.

β. Pale ochreous, elytra metallic green, thorax with a basal spot black.

γ. Elytra, meso- and metasterna metallic green.

δ. Elytra metallic green, the margins from the shoulder to the apex pale ochreous.

ε. Elytra as in the above but the disc pale.

ζ. Entirely pale ochreous.

Zenoria major, sp. n.

Closely allied to *Zenoria revestita*, but larger, more convex, elytra with the epipleuræ less sinuate, punctuation not so deeply impressed.

This species appears not to vary much; elytra, thorax except a very narrow anterior margin, mesosternum and epimera metallic green, the rest ochreous. L. 2 lin.

Pseudoladoria.

nov. gen. (*typ. simulans*).

Thorax margined at the base, punctuation of elytra sparse, rather strong, uniform, abdominal plates complete, rather pointed, eyes large, finely granulated, tibiæ grooved for the tarsi; claws minutely dentate at the base.

Pseudoladoria simulans, sp. n.

Dark blue, shining, thorax black, sides largely orange, head orange, vertex black, body beneath and legs orange. L. $1\frac{3}{4}$ lin.

Ega (Bates).

This has a most deceptive resemblance to *Ladoria desarmata*.

Rhynchortalia.

nov. gen. (*typ. insueta*).

Eyes prominent, head concave between them, antennæ tolerably long, inserted rather in front of the eyes, clypeus and labrum prolonged into a sort of rostrum; palpi long, hardly securiform; thorax truncate in front of the scutellum, slightly sinuate on either side, with a double impressed line along the base; epipleuræ lightly impressed; elytra with a coarse unequal punctuation, epipleuræ flat, not foveolated; legs rather long; slender, tibiæ not grooved for the tarsi, claws very strong and stout, equally bifid; abdominal plates complete, very narrow.

Rhynchortalia insueta, sp. n.

Pubescent, pale ochreous yellow, metasternum and elytra metallic blue, the latter with the apex ochreous. L. 2 lin.

Mysol, Waigiou, N. Dorey (Wallace).

GROUP II. AZYÆ.

Thorax finely margined at the base, antennæ short, but distinctly longer than in *Ortalia*, punctuation unequal, elytral epipleuræ deeply foveolate as in *Hyperaspis*, tibiæ armed with a spine (*Azya*) or simple (*Ladoria*).

Azya.

Muls. Spec. p. 928. (*typ. luteipes*).

Tibiæ dilated, thoracic epipleuræ foveolate, abdominal plates reach $\frac{2}{3}$ of the segment, punctuation unequal, the fine punctuation very close, elytral epipleuræ deeply foveolate especially for the intermediate legs, antennæ with the first joint large, but not dilated at the sides.

Azya luteipes.

Azya luteipes, *Muls. Spec.* p. 928. 1 (T).

Sides of the metasternum with very coarse deep punctures.

♂. Head red.

Brazil, Cayenne, Columbia, Mexico (Chev.).

Azya scutata.

Azya scutata, *Muls. Spec.* p. 929. 2 (T).

The specimens I have seen so named from Mexico were rubbed examples of *orbigera*.

♂. Head red.

Mexico?, Para, Ega, Santarem (Bates). Rio Janeiro (Fry).

Azya ardosiacæ.

Azya ardosiacæ, *Muls. Op.* III. p. 134 (T).

Black, with a slight shade of blue, hemispherical, resembling *Azya luteipes*; but larger, hardly blue, with a visible cinereous pubescence, the denuded patch is merely accidental; head, legs, and body beneath red.

Guadeloupe (Deyrolle).

Azya Pontbrianti.

Azya Pontbrianti, *Muls. Spec.* p. 929. 3 (T).

♂. Head red.

Cayenne (Reiche, Guérin), Chili, Montevideo.

Azya orbigera.

Azya orbigera, *Muls. Spec.* p. 930. 4.

♂. Head red.

Bogota, Mexico, Caracas, Venezuela (Fry).

Ladoria.*Muls. Spec.* p. 928.

Tibiæ unarmed, thoracic epipleuræ without foveæ, abdominal plates terminal, punctuation unequal. Antennæ with the first joint large.

Ladoria desarmata.*Ladoria desarmata*, *Muls. Spec.* p. 928 (T).

Brazil (Chevrolat, Deyrolle), S. Paulo (Bates), Bogota, Espiritu Santo (Fry), Rio Janeiro (Fry).

Ladoria rudepunctata, sp. n.

Resembles *Azya scutata* but is much smaller, the common spot is more discoidal, and much smaller, the punctuation is very coarse and deep, unlike any other species. L. $1\frac{1}{4}$ lin.

Tibiæ, tarsi, and ventral segments of the abdomen, orange.
Rio Janeiro (Fry, Clark).

Ladoria discomaculata, sp. n.

Closely resembling the last species, but uniformly metallic black above and below, the punctuation simple, close and almost uniform; the discoidal spot is very exactly circumscribed, but quite devoid of pubescence. L. $1\frac{1}{4}$ lin.

♂. Last three ventral segments orange.
Rio Janeiro (Clark).

GROUP III. EXOPLECTRÆ.

Thorax not margined, punctuation equal, tibiæ grooved for the tarsi, or armed with a spine, epipleuræ not, or hardly, foveolated, antennæ extremely short, first joint broadly dilated, clypeus emarginate (except in *Rodolia*, *Vedalia*, *Novius*).

Rodolia.*Muls. Spec.* p. 902 (*typ. ruficollis*).

Thorax not margined, punctuation variable, epipleuræ broad, dilated, concave. Antennæ extremely short, hardly longer than the width of the front; form orbicular.

Rodolia rubea.*Rodolia rubea*, *Muls. Spec.* p. 903. 1 (T).*Rodolia carneipellis*, *Muls. Op.* III. p. 131.

This species differs a little from the Chinese and Indian species by its less convex form and unicolorous red colour, but is very close to it.

Java, Singapore, Borneo, Sarawak, Celebes, Tonda (Wallace).

Rodolia rufopilosa.

Rodolia rufopilosa, *Muls. Spec.* p. 903. 2.

I refer to this species examples from Hongkong and Penang, which have the elytra of a rich rose-red, the thorax and head pale yellowish. The punctuation is sparse and scarcely uniform.

China (Melly).

Rodolia Rowlandi, sp. n.

Eyes ovate, antennæ very short, last joint ovate, thorax truncate in front of the scutellum; sinuate on either side, anterior angles produced, rounded, epipleuræ not foveolate, prosternum reduced to a minimum, the process between the coxæ flat, bicarinate. Elytra without a raised margin, punctuation uniform, not very fine, epipleuræ very broad at the base and markedly concave; abdominal plates complete, semicircular, not covering half the segment, claws dentate at the base; prosternum bicarinate, intermediate coxæ approximate, mesosternum not sinuate; anterior tibiæ broad, grooved, the outer edge emarginate, the inner fringed with hair, pale brownish-red, not very thickly pubescent. L. 3 lin.

Macassar (Wallace).

Vedalia.

Muls. Spec. p. 905 (*typ.* Sieboldi).

Very like *Rodolia* but oval, anterior tibiæ less emarginate.

Rodolia Sieboldi.

Vedalia Sieboldi, *Muls. Spec.* p. 905. 1 (T).

The punctuation is uniform, rather coarse, subrugulose, the clypeus slightly emarginate.

Mexico (Westwood, Deyrolle, Fry).

Vedalia ruficollis.

Rodolia ruficollis, *Muls. Spec.* p. 903. 3 (T).*

This species is more ovate than hemispherical, and has a close fine uniform punctuation as in the two following species. The head and thorax though paler are not so yellow as Mulsant seems to imply. In fact his description suits the Chinese species, which I have called *rufopilosa*, very well.

Bengal (Westermann).

Vedalia fumida.

Rodolia fumida, *Muls. Spec.* p. 904. 4 (T).

Epilachna arethusa, (*Muls.*) *Op.* III. p. 126 (T).

Epilachna testicolor, (*Muls.*) *Op.* III. p. 127 (T).

Rodolia roseipennis, *Muls. Spec.* p. 904. 5 (T).

Rodolia chermesina, *Muls. Spec.* p. 905. 6 (T).

The punctuation is very fine and uniform, and the general form oval. Mulsant redescribed it in 1853 as an *Epilachna*; *Rodolia roseipennis* is an immaculate form.

India, Bengal (Deyrolle), Madagascar, Réunion.

Vedalia Westermanni, sp. n.

Resembles *Rodolia fumida* in size, form, and punctuation, except that this latter is if anything a trifle finer. Colour rose-red turning to yellow; thorax with two small black spots at the base, one on each side in the middle; elytra with triangular mark below the callus, an elongate dash on the margin at $\frac{3}{4}$, and the suture from before the middle to $\frac{3}{4}$ black; these markings are not sharply defined, and may vary; under side pale red.

Celebes (Copenhagen).

Vedalia Guerinii, sp. n.

Subovate, rather shining, finely and uniformly punctulate, red; head, base of thorax, and elytra each with 3 spots (2 placed transversely at the base, 1 large, occupying the posterior third), black; thorax formed as in *Chilocorus*, broadly rounded behind, sides produced, narrow, rounded; tibiæ compressed, externally setose. L. $1\frac{1}{2}$ lin. Pondicherry (Guérin).

The American species, *R. carmelitana*, *Guinoni*, *pubivestis* appear to me to be *Epilachnæ*.

Novius.

Muls. Spec. p. 942 (*typ. cruentatus*).

(*Nomius*, *Muls.* 1846.)

Antennæ 8-9-articulate; thorax not margined at the base, abdominal plates complete, punctuation close, uniform, epipleuræ not foveolate for the femora. Very close to *Rodolia*, and only differing by the 8-jointed antennæ.

Novius cruentatus.

Nomius cruentatus, *Muls. Sécur.* p. 214 (1846).

France, Germany (Berlin).

Novius decempunctatus.*

Novius 10-punctatus, *Kraatz, Berl. Z.* vi. p. 272.

Sanguineo-rufus, thoracis fascia indeterminata elytrorumque punctis 10 nigris.

N. cruentatus gleich, von etwas gedrungenener Gestalt, ähnlich punktirt, anscheinend, etwas schwächer pubescent, dunkel blutroth, nur ein Querfleck auf der Mitte des Halsschildes, und 5 kleine rundliche wenig hervortretende Flecke auf jeder Flügeldecke

schwärzlich ; einer am Grunde in der Mitte, ein Paar vor, ein Paar hinter der Mitte, die äussern etwas tiefer als die innren gestellt, ungefähr ebensoweit vom Aussenrande, wie diese von der Nath. Der Scheitel ist am Grunde, die Mittelbrust nach hinten leicht schwärzlich angeflogen.

[Possibly a variety of *N. cruentatus*, as he suggests himself.]
L. $1\frac{1}{2}$ lin. Andalusia.

Novius algiricus, sp. n.

Resembles *N. cruentatus*, but much shorter, and more shining; entirely of a clear carmine-red, as in *N. cardinalis*; thorax with a spot on each side of the base, and a small dot before the scutellum, black; elytra finely and not closely punctulate, each with a dot on the callus, 2 near the suture (1 at $\frac{1}{3}$, 1 beyond the middle), a V-shaped mark near the margin about the middle, and a transverse spot at $\frac{2}{3}$, black. L. $1\frac{1}{4}$ lin. Blidah (Rippon).

Novius cardinalis.

Vedalia cardinalis, *Muls. Spec.* p. 906. 2.
Victoria (Tasmania).

Novius sanguinolentus.*

Novius sanguinolentus, *Muls. Spec.* p. 943. 2.
Australia (Westwood).

Novius limbatus.

Novius limbatus, *Mots. Bull. Mosc.* xxxix. p. 178 (1866).

Statura *N. cruentati* sed rotundior; subrotundatus convexus nitidus, brevissime cinereo puberulus, niger, thoracis margine, elytrorum limbo, basi suturaque rubris; thorace valde transverso; elytris thorace latioribus, subrotundatis. L. $1\frac{3}{4}$ lin.

Japan (Lewis).

Cœliaria.

Muls. Spec. App. p. 1042.

Differs from *Exoplectra* by the presence of a thoracic fovea. The epipleuræ of the elytra are subfoveolate in my specimen, though Mulsant says they are not.

Cœliaria erythrogaster.

Exoplectra erythrogaster, *Muls. Spec.* p. 916. 1.

Brazil. This species when fresh is clothed with a well-marked grey pubescence, leaving about 16 small bare patches, giving it a very peculiar appearance.

Exoplectra.

Chevr. Dict. univ. d'Hist. Nat. v. 545.

Abdominal plates terminal, angular, as in *Leis*; thorax perceptibly margined at the posterior angles, the line effaced in front of the scutellum; punctuation uniform; antennæ with the first joint dilated, eyes apparently bordered by the genæ.

Exoplectra tibialis.

Exoplectra tibialis, *Muls. Spec.* p. 917. 2 (T).

The oval form is very characteristic.

Mexico (Reiche, Boucard).

Exoplectra Batesii, sp. n.

Ovate, bluish green, finely pubescent, finely and closely punctured; thorax narrowly edged with red at the angles and along the anterior margin; body beneath and legs red. L. 3 lin.

This is the most closely punctured species of the green forms.

Ega (Bates).

Exoplectra dubia, sp. n.

Form rather oval, pubescence gray, very visible, punctuation not very strong, close, hardly finer on the thorax, colour metallic-green, nearly black. L. $2\frac{1}{2}$ lin. Bahia (Fry).

♂. head, 4 anterior legs and abdomen red.

♀. head and legs black, abdomen brownish red.

Exoplectra metallescens.

Exoplectra metallescens, *Muls. Spec.* p. 918. 3.

Exoplectra fucosa, *Muls. Spec.* p. 918. 4.

Brazil.

Exoplectra Companyoi.*

Exoplectra Companyoi, *Muls. Spec.* p. 919. 7.

Exoplectra luteicornis, *Muls. Spec.* p. 919. 6.

Exoplectra Vettardi, *Muls. Spec.* p. 920. 8.

Brazil.

Exoplectra calcarata.

Coccinella calcarata, *Germ. Ins. Spec. Nov.* p. 619. 886 (1824).

Exoplectra calcarata, *Muls. Spec.* p. 920. 10.

Exoplectra virescens, *Muls. Spec.* p. 920. 9.

Brazil.

Exoplectra ænea.

Coccinella ænea, *Fabr. Syst. El.* i. 376. 113 (1801).

Exoplectra ænea, *Muls. Spec.* p. 921. 11.

Exoplectra intestinalis, *Muls. Spec.* p. 917. 3.

The female has the legs black.

Cayenne, Ega, Santarem, S. Paulo (Bates).

Exoplectra Stevensii.*

Exoplectra Stevensii, *Muls. Spec.* p. 921. 12.

Mexico (Westwood).

Exoplectra Fryii, sp. n.

Size and form of *E. ænea*, differing principally by its coloration.

Head, body beneath, and legs red; thorax with the anterior angles largely red, disc and elytra bronzed green. L. $2\frac{1}{2}$ lin.

Punctuation rather sparsely and obsoletely impressed.

Cayenne (Fry, Deyrolle).

Exoplectra consentanea.

Exoplectra consentanea, *Muls. Spec.* p. 922. 13 (T).

Much smaller than *E. Fryii* and more deeply punctured.

Columbia (Dejean, Deyrolle).

Exoplectra impotens.

Exoplectra impotens, *Muls. Spec.* p. 922. 4 (T).

S. America (Copenhagen), Ega (Bates). Form markedly hemispherical like *Azya*; the brown colour is constant in four examples which I have seen.

Exoplectra coccinea.

Coccinella coccinea, *Fabr. Syst. El.* i. 357. 9 (1801).

Exoplectra coccinea, *Muls. Spec.* p. 924. 16.

Cayenne, Brazil, Columbia, Para, Ega (Bates), Bahia, Santarem, S. Paulo.

Var. *Heydeni*, *Muls. n.* 17.

Larger, and with the femora and metasternum black. Bahia.

Exoplectra rubicunda.

Exoplectra rubicunda, *Muls. Spec.* p. 925. 18 (T).

Punctuation rather coarse. Cayenne (Reiche).

Exoplectra miniata.

Coccinella miniata, *Germ. Ins. Nov. Sp.* p. 617. 882.

Exoplectra miniata, *Muls. Spec.* p. 926. 19.

A common species. Brazil, Minas Geracs, Petropolis, Mexico (Hope).

Exoplectra angularis.

Exoplectra angularis, *Muls. Spec.* p. 926. 20 (T).
Cayenne (Chev.).

Exoplectra Santaremæ, sp. n.

Allied to *E. rubicunda*, but hardly a variety of it.

Black, episterna and ventral segments red; elytra bright red, epipleuræ red, a round spot on the callus, the margin from the shoulder to the apex (dilated at $\frac{2}{3}$ and again at the suture), and a discoidal common ob-cordate spot black. L. 2 lin.

Santarem (Bates).

Var. *a.* the spot on the callus reduced to a point, the margin reduced to a marginal spot beyond the middle and an apical spot. Obydos (Bates).

Exoplectra amazonica, sp. n.

Again allied to *E. rubicunda*. Hemispherical, red, femora with the apical half blackish, head black; thorax black, margin pale red; elytra red, with a large common discoidal black spot. L. 2 lin. Ega (Bates).

Exoplectra irregularis, sp. n.

Hemispherical, red, thorax black, anterior margin and angles pale red, which colour runs in obliquely from the angles towards the disc; body and legs red. Punctuation very coarse and sparse, with a very few finer punctures intermixed; it ceases however just before the margin, leaving a faintly punctate band the whole length.

L. $1\frac{3}{4}$ lin. Santarem (Bates).

Chnoodes.

Chev. Dict. Hist. Nat. III. 612.

Abdominal laminae complete, subtriangular. Punctuation uniform, rather coarse; the species vary a good deal, it differs only from *Exoplectra* in the unarmed legs.

Chnoodes Chaudoirii.

Chnoodes Chaudoirii, *Muls. Spec.* p. 911. 6.
Brazil; Rio Janeiro (Fry).

Chnoodes trivialis.

Chnoodes trivialis, *Muls. Op.* III. p. 132 (T).

Subhemispherical, thorax black, anterior angles red; elytra red, with an orbicular sutural spot, and each with two other large spots black; body beneath black, abdomen red; femora black, tibiae and tarsi red. L. $1\frac{1}{2}$ lin. Pernambuco (Deyrolle).

Chnoodes Clarkii, sp. n.

Oval, bright red, shining, sparingly pubescent, punctuation uniform, very sparse; thorax with two black marks at the base, one on each side of the scutellum, head black, front red; meso- and metasterna black; legs black, knees, apex of tibiæ and tarsi red. L. $1\frac{1}{2}$ lin. Rio Janeiro (Fry).

Chnoodes gravata.

Chnoodes gravata, *Muls. Spec.* p. 912. 7 (T).
Brazil (Reiche).

Chnoodes pentagona, sp. n.

Subovate, coarsely punctured, head strongly and sparsely punctured, orange-yellow; thorax with the disc black, shading off on the sides; elytra each with four black marks, three forming a band parallel to the margin (one basal quadrangular transverse, one medial elongate quadrangular, one small subapical, touching the suture), and one discoidal (forming with its fellow a rough black pentagon in the middle of the elytra).

L. $1\frac{1}{4}$ lin. Santarem (Bates).

Chnoodes terminalis.

Chnoodes terminalis, *Muls. Spec.* p. 913. 8.
Chnoodes byssina, *Muls. Spec.* p. 913. 9.
Exoplectra rubripes, *Muls. Spec.* p. 923. 15 (T).
Columbia (Reiche), Mexico (Reiche).

Dapolia.

Muls. Spec. p. 1042 (*typ. fallax*).

Allied to *Chnoodes*, but distinct by the thorax with a fossette on the epipleuræ and the anterior angles margined.

Dapolia puberula.

Chnoodes puberula, *Muls. Spec.* p. 908. 1 (T).
Brazil (Dejean).

Dapolia hæmatina.

Chnoodes hæmatina, *Muls. Spec.* p. 908. 2 (T).

Dapolia corallina.

Chnoodes corallina, *Muls. Spec.* p. 909. 3 (T).
Columbia (Guérin, Reiche).

Dapolia fallax.

Chnoodes fallax, *Muls. Spec.* p. 910. 5 (T).
Epilachna Wachanrui, *Muls. Spec.* p. 806. 80 (T).
Brazil; St Catharina (Deyrolle).

Dapolia cordifera.*

Chnoodes cordifera, *Muls. Spec.* p. 909. 4 (T).
Brazil (Dejean).

Dapolia Deglandi.

Chnoodes Deglandi, *Muls. Spec.* p. 914. 10.

Chnoodes innocua, *Muls. Spec.* p. 914. 11.

Chnoodes dimidiatipes, *Muls. Spec.* p. 915. 12.

Chnoodes hæmorrhoidis, *Muls. Op.* III. p. 133 (T).

Mulsant describes some intermediate varieties under the names *dubitata* and *fulvicauda*. Brazil, Columbia, Chili.

Dapolia ahena.

Chnoodes ahena, *Muls. Spec.* p. 915. 13 (T).

Conspicuously oval in form.

Columbia (Chev.).

Dapolia sanguinipes, sp. n.

Oval, coarsely and thickly punctured, metallic green; sides of thorax broadly, legs and abdomen bright scarlet red. L. 2 lin.

Very conspicuous by its form and colour, and must be allied to Mulsant's *Aulis consanguinea*.

S. America? (Deyrolle).

Siola.

Muls. Spec. p. 931.

Claws bifid, punctuation very coarse, uniform, close; thoracic epipleuræ with a narrow channel.

Siola Boillæi.

Siola Boillæi, *Muls. Spec.* p. 931. 1 (T).

Columbia (Buquet, Reiche).

Siola Garnieri.

Siola Garnieri, *Muls. Spec.* p. 932. 2.

Columbia (Buquet).

Sub-family 7: RHIZOBIIDES.

Eyes coarsely granulated (except *Poria*), antennæ long, anterior coxal cavities open.

Poria.

Muls. Spec. p. 885 (*typ. cyanea*).

Punctuation of the elytra markedly unequal, the large punctures numerous and deep; thorax margined at base. The appearance of the species is a good deal altered by the removal of their pubescence.

Claws bifid; abdomen with 6 segments.

S. America and Mexico.

A. Colour above metallic blue or green.

Poria cyanea.

Poria cyanea, *Muls. Spec.* p. 885. 1 (T).
Brazil (Reiche), Rio Janeiro (Fry).

Poria Sallæi.*

Very close to the preceding, but rarely if ever green; thorax with a very fine scarcely perceptible punctuation, and with the base strongly bisinuate; body beneath black, legs red. L. $3\frac{1}{2}$ lin. Mexico (Stockholm).

Poria sanguinitarsis.

Poria sanguinitarsis, *Muls. Spec.* p. 885. 2 (T).
Distinct by its hemispherical form.
Brazil, New Granada (Deyrolle, Guérin).

Poria hæmatomelas, sp. n.

Hemispherical, resembling *P. sanguinitarsis*, but black underneath, only the claws and the last 3 segments of the abdomen being brown. L. $2\frac{1}{2}$. Espiritu Santo (Fry), Pebas.

Poria hæmatura.

Poria hæmatura, *Muls. Spec.* p. 886. 3. Brazil (Germar).

Poria cæsia.

Poria cæsia, *Muls. Spec.* p. 887. 4 (T).
Brazil (Chevrolat), Bahia (Fry).

Poria coxalis.

Poria coxalis, *Muls. Spec.* p. 887. 6 (T).

♂. Head yellowish red in front. This species is very variable in size.

The preceding 7 species want an attentive study; the sexual differences will probably furnish characters, but I have found them hitherto so rare in collections, that no certain results could be obtained.

Venezuela (Stockholm), Brazil (Reiche), Rio Janeiro, Minas Geraes (Fry).

B. Elytra more or less red.

Poria chrysomeloides.

Poria chrysomeloides, *Muls. Spec.* p. 888. 6 (T).

Thorax visibly punctured, last ventral segment with a deep triangular depression. The unique type is the only one I have

seen, and I do not feel at all convinced that it is more than an immature specimen of *P. cyanea*. Brazil (Reiche).

Poria togata.

Poria togata, *Muls. Spec.* p. 888. 7 (T).
Minas Geraes (Reiche).

Poria Deyrollii, sp. n.

Very like *P. togata*, but differently coloured; head, thorax, and body beneath black, elytra red; tarsi ferruginous; thorax with the anterior angles narrowly red, with the disc finely and sparsely punctate; elytra closely and coarsely punctate. L. 2¹/₂ lin. Minas Geraes (Deyrolle).

Poria Batesii, sp. n.

Short, ovate, entirely red, thorax darker, tolerably strongly punctate; front with an elevated longitudinal line in the middle; elytra unequally punctate, the large punctures lightly impressed, towards the apex almost obsolete, body beneath red. L. 2³/₄ lin.

Brazil, S. Paulo (Bates).

Poria amazonica, sp. n.

Short, oval, almost hemispheric, bright red, almost scarlet; vertex slightly infuscate; thorax bluish-black, with the anterior angles red; the sides suffused, sparingly and very finely punctulate; elytra scarlet, very shining, sparingly punctate, with a large common rounded discoidal spot; scutellum black, body beneath red, legs darker. L. 2 lin. S. Paulo (Bates).

Poria circumflexa.

Poria circumflexa, *Muls. Spec.* p. 889. 8.
Caracas (Sallé), Venezuela (Fry).

Eupalea.

Muls. Spec. p. 889 (*typ. formosa*).

This resembles *Poria* in having an unequal punctuation and marginal thorax; eyes coarsely granulated. *E. foveiventris* forms a new genus near *Rhizobius*. Mexico and S. America.

Eupalea formosa.*

Eupalea formosa, *Muls. Spec.* p. 890. 1 (T).
Columbia (Buquet, Mniszech).

Eupalea Mniszechii, sp. nov.

Short, ovate, rather convex, black; legs, antennæ, parts of the mouth, and venter orange; thorax blue-green, closely punc-

tate, anterior angles narrowly orange; elytra blue, thickly unequally punctate; apex with a small elongate orange patch; first ventral segment sparingly but deeply punctate.

$2\frac{1}{4}$ lin. Bogota.

Eupalea pulchra, sp. n.

Testaceous yellow, thorax blue, with the sides broadly orange; elytra blue, closely punctate, with an orange spot a little before the apex reaching the outer margin.

L. 2 lin. Venezuela (Brussels, Fry).

Eupalea picta.

Coccinella picta, Guér. *Icon. R. A.* p. 319 (T).

Eupalea picta, Muls. *Spec.* p. 890. 2.

Mexico (Guérin).

Eupalea Reinhardtii, sp. n.

Oval, thickly pubescent; pale ochreous-yellow; the margins of the thorax and elytra (and the suture) tinged with a delicate pink, fading into the ground colour; the elytra each with two small black dots, one on the callus, one close to the margin at $\frac{5}{8}$; the under side ochreous, epipleuræ tinged with pink; first ventral segment deeply and rather more closely punctured. L. $2\frac{1}{2}$ lin.

Sete Lågos (Copenhagen, Deyrolle).

Eupalea Suffriani.

Eupalea Suffriani, Muls. *Spec.* p. 891. 3.

Brazil, S. Paulo, Rio Janeiro (Fry).

Eupalea Fryii, sp. n.

Very close to *E. Suffriani*, but with five spots on each elytron. The first is parallel and not attenuate; the second begins at the callus, parallel to the first, and is divided in two; the third does not meet the suture, but is attenuated to a point, and a supplementary one intervenes beyond the first and between the third and the suture. L. $2\frac{1}{2}$ lin. Brazil, Rio Janeiro (Fry).

Eupalea intermedia, sp. n.

This may be only a variety of the last; the second spot is not divided; the third and fifth are united at their apex.

Brazil (Deyrolle).

Eupalea conglomerata, sp. n.

Pale ochreous-yellow; thorax with five indistinct brown spots; elytra each with two pitchy brown irregular patches; the first quadrangular, produced at the posterior internal angle into a

point, reaching from the base to beyond the middle; the second oval, towards the apex.

L. 2 lin. Rio Janeiro (Fry).

Oryssomus.

(Reiche) *Muls. Spec.* 939 (*typ. subterminatus*).

The punctuation appears to vary in the sexes, being much more sparse and obsolete in one of them; in both it is unequal.

The eyes are coarsely granulated; the antennæ very short and fusiform.

Oryssomus subterminatus.

Oryssomus subterminatus, *Muls. Spec.* p. 939. 1 (T).
Venezuela (Reiche).

Oryssomus Germainii, sp. n.

Oval, greenish black, metallic; thorax with the margins broadly reflexed, transverse; the margins translucent; last two ventral segments yellowish red.

L. $1\frac{1}{2}$ —2 lin. Chili (Germain).

Oryssomus Deyrollii, sp. n.

Ovate, brownish black, shining; thorax subquadrate, the margins (except the base) broadly orange; elytra with the external margin orange; epipleuræ, legs, and last two ventral segments reddish orange; the first ventral segment strongly but sparsely punctured.

L. $1\frac{3}{4}$ lin. Brazil (Deyrolle).

Oryssomus Chilensis, sp. n.

Ovate, uniform yellowish brown; thorax almost transverse, regularly rounded in front, base margined in front of the scutellum; elytra rather closely, almost uniformly, punctate. L. $1\frac{1}{2}$ lin.

Chili (Germain).

Oryssomus Fairmairii, sp. n.

Ovate, black, variegated with ochreous above; thorax regularly rounded in front, broader than long, black with yellow margins; elytra ochreous yellow, with varied black marks; a spot, tolerably large, on the callus, and extending towards the scutellum; its posterior edge dentate; a curved narrow deeply dentate fascia, coming from the scutellum and curving upwards to meet the callus; a very irregular blotch occupying the posterior half; apical half of the tibiæ and the tarsi pale yellow. L. $1\frac{1}{2}$ lin.

Chili (Germain).

Oryssomus varius, sp. n.

Ovate, brownish yellow; thorax dark brown, variegated with yellow; elytra yellow, irrorated with dark brown dots, and with brown, almost black, irregular markings; one on the callus reaching to $\frac{1}{3}$, rather large; one taking the form of a band at $\frac{2}{3}$, and running up the suture to the scutellum; an oblique line in the subapical portion.

L. $1\frac{1}{2}$ lin. Chili (Germain).

Oryssomus flavomarginatus, sp. n.

Ovate, brownish red; thorax subquadrate, margins broadly yellow, a dark curved mark enclosing a red spot at the base; elytra reddish-brown, with a yellow margin, broader towards the apex, and with a sharp tooth in the middle running into the common discoidal patch of brown; the basal part of this is margined inside with black; the colouring is continued on the thorax.

L. 2 lin. Chili (Germain).

Cranophorus.

Muls. Spec. p. 940 (*typ.* 4-notatus).

Antennæ long, club 3—4-jointed, abdominal laminæ complete, eyes coarsely granulated. Closely allied in colouring to the African *Rhizobii*, from which it differs by the produced thorax, which is margined at the base; the punctuation is extremely sparse and obsolete.

Cranophorus quadrinotatus.

Cranophorus 4-notatus, *Muls. Spec.* p. 940. 1.

Cranophorus scutelligerus, *Muls. Spec.* p. 941. 2.

Cape of Good Hope; not rare.

Cranophorus notatulus.

Cranophorus notatulus, *Muls. Spec.* p. 941. 3.

Cape of Good Hope (Melly, Deyrolle).

Aulis.

Muls. Spec. p. 933 (*typ.* annexa).

Claws dentate at the base; elytra with the punctuation unequal; epipleuræ flat, concave, not foveolated; thoracic epipleuræ with a deep fossette, distant from the margin; abdominal plates complete, subtriangular; prosternum simple; eyes coarsely granulated.

Aulis annexa.

Aulis annexa, *Muls. Spec.* p. 933. 1 (T).

The pubescence is long, especially on the thorax. The punctuation of the elytra is sparse, especially the coarse punctures.

Caffraria (Stockholm); Senegal (Deyrolle).

Aulis vestita.

Aulis vestita, *Muls. Spec.* p. 934. 2.

Very like the preceding. N. India (Dejean, Deyrolle).

Aulis Aumonti.*

Aulis Aumonti, *Muls. Spec. App.* p. 1043 (T).

Allied to *A. annexa*, but with the punctuation strong and uniform; pubescence rather erect; claws with a very large tooth, appearing almost bifid; epipleuræ of the thorax foveolated as in *A. annexa*.

Caffraria (Stockholm).

Aulis fœdata.*

Aulis fœdata, *Muls. Spec.* p. 935. 3 (T).

Differs from the preceding by the broad, rather shallow, thoracic fovea; the epipleuræ of the elytra broader, inclined; the punctuation rather strong, uniform.

Caffraria (Stockholm).

Aulis Redtenbacheri, sp. n.*

Oblong, of a dirty red, thickly pubescent; punctuation sparse, unequal; thorax closely, not very strongly punctured; anterior angles with an impressed line; elytra black with a red sign, consisting of a vitta from $\frac{1}{3}$ nearly to the apex, enlarged on the sutural side in an oblong shape; thorax deeply foveolate, metasternum deeply and coarsely punctate at the sides; abdominal plates subtriangular, complete, punctate.

L. $2\frac{1}{2}$ lin. ? (Vienna).

Aulis consanguinea.*

Aulis consanguinea, *Muls. Spec.* p. 935. 3.

Columbia (Dejean).

Aulis lineatosignata.*

Aulis lineatosignata, *Muls. Spec.* p. 936. 4.

Brazil (Melly).

Aulis circumcincta, sp. n.

Ovate, rather broad, convex; black, with a short erect cinereous pubescence; thorax rather strongly punctured, with an im-

pressed line along the margin and round the anterior angles, which together with the anterior margin are red; elytra sparingly but strongly and uniformly punctured; the external margin, a spot on the base just inside the callus, and a curved oblique mark (reaching from $\frac{1}{2}$ to $\frac{4}{5}$) orange red; underside more or less red.

Thorax with a deep epipleural fovea.

L. 2 lin. Brazil (Deyrolle).

Aulis plantaris.

Aulis plantaris, *Muls. Op.* III. p. 135 (T).

Convex, ovate, clothed with a short suberect pubescence, black; elytra with a punctiform red spot, at about $\frac{1}{3}$, near the suture; tarsi reddish. L. $1\frac{1}{3}$ lin.

Punctuation uniform, subrugulose, inserted from behind (as in *Aleochara*); elytra lepipleuræ sinuate, but not foveolate; plates subtriangular, subterminal; claws very weak and simple.

Cape of Good Hope (Deyrolle).

Aulis notivestis.

Aulis notivestis, *Muls. Op.* III. p. 136 (T).

Hardly convex, oblong-ovate, thickly clothed with an erect pubescence, black; thorax brown at the sides; elytra each with an orange vitta, nearly parallel to the suture, not reaching base or apex; legs yellowish red. Thorax without any epipleural fovea, claws rather long, simple, epipleuræ acuminate at $\frac{2}{3}$; punctuation unequal, sparse, the large punctures a little in lines. Clypeus certainly not emarginate. L. $1\frac{1}{4}$ lin. N. India (Deyrolle).

Cyrtaulis, gen. nov.

Evidently allied to *Aulis*; the eyes (coarsely granulate) are slightly bordered in front by the genæ; the antennæ have the basal joint dilated and are short; the thoracic epipleuræ have a broad deep fovea, elytral epipleuræ broad, dilated at the shoulder, lightly foveolate; claws dentate at the base; abdominal plates semicircular, complete, or slightly effaced in the posterior $\frac{1}{3}$.

Cyrtaulis puberula, sp. n.

Very convex, uniform dark red, with a short golden pubescence, punctuation sparse, unequal, the coarse punctures much stronger and thicker along the margin; thorax rather sparingly punctured, with a raised margin at the sides and anterior angles. L. $3\frac{1}{4}$ lin. Madagascar (Deyrolle).

Dioria.

Muls. Spec. p. 936 (*typ. sordida*).

Thorax very slightly emarginate in front, sides with a faint

impressed line, anterior angles with a broad shallow fovea, the angle itself impunctate; epipleuræ with a very shallow, hardly visible, impunctate fovea; abdominal plates complete; prosternum very short; antennæ short, with a broad 5-jointed club, and the 1st joint dilated into a large leaf-like plate. Punctuation unequal.

Dioria sordida.

Dioria sordida, *Muls. Spec.* p. 937. 1.

This I have not seen, but it must be very near the next species. Valparaiso (Melly).

Dioria setigera.

Dioria setigera, *Muls. Spec.* p. 937. 2 (T).

Brazil (Reiche). Specimens from Mexico are common in collections, and are generally labelled *D. sordida*, but the abdominal plates are subterminal. They are, however, very dark in colour.

Dioria anomala, sp. n.

Oval, very convex, brown, paler at the margins, thickly clothed with a long golden pubescence, punctuation unequal, coarse punctures sparse; body beneath pale red, tibiæ dilated as in *Exoplectra*; abdominal plates semicircular, complete; epipleuræ not foveolate.

Differs by the angulated tibiæ; the impressed line on the thorax is barely visible. L. 3 lin. S. Paulo (Bates).

Hazis.

Muls. Spec. p. 1001 (*typ.* Menouxii).

Eyes subrotundate, emarginate by the genæ.

Hazis Menouxii.

Hazis Menouxii, *Muls. Spec.* p. 1001. 1.

Aulis rufovittata, *Muls. Op.* III. 135 (1853) (T).

Brazil (Deyrolle).

Rodatus.

Muls. Spec. p. 1003 (*typ.* bajulus).

Allied to *Rhizobius*, but less convex, and with unequal punctuation. Eyes very coarsely granulated, antennæ long; prosternum compressed, forming a raised platform between the coxæ, square behind and rounded in front; mesosternum with a defined fovea to receive this process; abdominal plates complete; epipleuræ narrow, not foveolated; claws dentate. Thorax not margined, lightly emarginate in front.

Ranged by Mulsant partly in *Rhizobius*, partly in *Eupalea*; the sexual differences are remarkably characteristic.

Rodatus bajulus.

Rhizobius bajulus, *Muls. Spec.* p. 1003. 2.

Punctuation unequal, sparse, small punctures not numerous.

♂. 5th ventral segment with 2 large round foveæ which coalesce.

Queensland (Janson).

Rodatus carnifex.

Rhizobius carnifex, *Muls. Spec.* p. 1003. 3.

Eupalea foveiventris, *Muls. Op.* III. p. 129 (T).

Punctuation very rough, the coarse punctures almost in lines, the small punctures scarce.

♂. 5th ventral segment with 2 deep transversely oval foveæ, separated by a space equal to one of them, the margin of the segment raised in the middle; a sixth segment apparent.

Queensland (Janson).

Rodatus Bakewellii, sp. n.

Oblong, but little convex; pale red, elytra brownish black, margined externally very narrowly with red; punctuation almost uniform, rather strong; thorax with the posterior angles almost right angles; scutellum red. L. $2\frac{3}{4}$ lin.

♂. 5th segment with two broadly oval foveæ, separated by a space about half the width of one of them; apical margin of the segment deflexed.

Queensland, Victoria (Bakewell).

Rodatus Boucardi, sp. n.

Brownish red, oval-oblong, tolerably convex; elytra black, apex bordered with red; punctuation nearly uniform, rather sparse; ventral segments strongly punctured, especially the 1st.

♂. 5th ventral segment with 2 deep round foveæ separated by a distance greater than the diameter of one of them; the apical margin of the segment deflexed and sinuate.

The epipleuræ are black, but in immature specimens are sometimes red.

L. $3\frac{1}{4}$ lin. Moreton Bay.

Rhizobius.

Steph. Ill. Brit. Ent. Mand. v. p. 396 (1832) [*scripsit* Rhizobius]. (*typ. litura*).

Antennæ long, abdominal laminae complete, punctuation uniform, eyes coarsely granulated.

Rhizobius ventralis.

Scymnus ventralis, *Er. Arch. f. Nat.* VIII. 239 (1842).

Rhizobius ventralis, *Muls. Spec.* p. 1005. 5.

Less coarsely punctate than *R. discolor*. Tasmania, Queensland, Adelaide, Melbourne.

Rhizobius discolor.

Scymnus discolor, *Er. Arch. f. Nat.* VIII. 240 (1842) (T).

Rhizobius discolor, *Muls. Spec.* p. 1004. 4.

Victoria (Janson), Tasmania (Erichson).

Rhizobius Breweri, sp. n.

Closely allied to *R. discolor*, but smaller, more sparingly punctate, and with longer pubescence.

Swan River (Brewer).

Rhizobius submetallica, sp. n.

Brown, very shining, with a slight brassy tinge; pubescence fine, closely adpressed, golden; punctuation not deeply impressed, sparse; thorax a little paler at the anterior angles, strongly transverse.

L. $1\frac{1}{4}$ lin. Swan River (Brewer).

Rhizobius hirtellus.

Ovate, but little convex, pitchy brown, subæneous, sparsely but deeply punctate, the punctures almost in rows near the suture; pubescence suberect, ashy, intermingled with long black hairs; head, thorax, and legs red. The pubescence will serve to distinguish this species at once.

L. $1\frac{1}{4}$ lin. Queensland (Janson), Victoria.

Rhizobius Evansii.*

Rhizobius Evansii, *Muls. Spec.* 1006. 7 (T).

Adelaide (Hope).

Rhizobius xanthurus.

Rhizobius xanthurus, *Muls. Spec.* p. 1005. 6.

Punctuation very coarse, uniform; thorax less strongly punctured, with a smooth discoidal line obsolete anteriorly; epipleuræ of the thorax scabrous, prosternum not compressed or carinate. Tarsi bright orange. Thorax gently emarginate in front, not margined at the base. This is an approach to *Cranophorus*.

Victoria (Bakewell).

Rhizobius elongatulus, sp. n.

Elongate, dilated behind, black, clothed with a long, suberect ashy pubescence; punctuation rather close, coarse, subequal; thorax slightly emarginate in front, subtransverse, sides with a reflexed margin, anterior angles red, coarsely punctate, base not margined; elytra coarsely punctate, epipleuræ rough, pubescent; prosternum deeply punctate, subcompressed, not carinated. L. 2 lin. This and *R. xanthurus* will form a new genus leading to *Cranophorus*.

Queensland (Janson).

Rhizobius litura.

Nitidula litura, *Fab. Ent. Syst.* i. i. p. 260 (1792).

Rhizobius litura, *Muls. Sécur.* p. 262.

Rhizobius discimacula, *Muls. Sécur.* p. 266.

Europe.

Rhizobius Burmeisteri.

Rhizobius Burmeisteri, *Muls. Spec.* p. 1002. 1.

Cape of Good Hope (Deyrolle).

Mulsant has formed this into a subgenus *Axius*, characterized by the posterior angles of the thorax being acute. The punctuation is coarse and sparse.

Rhizobius Javeti.

Rhizobius Javeti, *Muls. Spec.* p. 1006. 10.

Punctuation sparse, coarse.

Cape of Good Hope (Chevrolat, Bewick).

Rhizobius oculatissimus.*

Rhizobius oculatissimus, *Woll. Cat. Col. Mad.* p. 139. 420 (T).

Niger, antice et postice rufo-testaceus, pubescens et ubique densissime punctulatus, oculis e lentibus plurimis multo minutioribus [quam in *R. litura*] compositis, scutello majore, elytris punctis majoribus superadditis in seriebus obsoletissimis suturam versus longitudinaliter dispositis, palpis antennis pedibusque rufo-testaceis.

L. 1½. Madeira (Mus. Brit.).

This evidently belongs to a distinct genus.

Midus.

Muls. Spec. p. 950 (*typ.* 4-stellatus).

Differs from *Phanis* (with which Mulsant unites it) by its elongate subdepressed form, complete abdominal plates, coarsely granulated eyes, and long antennæ.

Midus stragulatus.

Scymnus stragulatus, *Er. Arch. f. Nat.* VIII. p. 240 198 (1842).

Dilatato-ovalis, subdepressus, dense cinereo-pubescens, antennis pedibus thorace lateribus, abdomine præter basin elytrisque rufis, his plaga magna dorsali margineque laterali anteriore nigris.

S. nigrino duplo prope major et magis dilatatus, supra dense cinereo-pubescens. *Ant.* rufotestaceæ. *Cap.* subtilissime punctatum, piceum, antice rufum. *Th.* elytris angustior, latitudine plus duplo brevior, antrorsum parum angustatus, apice emarginatus parce subtiliterque punctatus, disco nigro, lateribus rufis. *Scut.* nigrum. *El.* statim pone basin amplissima, dein sensim angustiora, dense punctata, rufa, plaga magna communi dorsali, poste-

rius sensim angustata, vittaque marginali, a basi longe ultra medium descenditibus nigris. *Pect. nigrum*. *Abd. rufum* basi nigricans. *Ped. testaceo-rufi*.

[? an *Rhizobius*.]

Epipleuræ foveolate, attenuate before the apex, abdominal laminae subterminal, semicircular, meso- and metasterna sparingly and deeply punctured, as is also the 1st abdominal segment. The others are closely and finely punctate, prosternum broad, anterior margin elevated; elytra with unequal punctuation.

Tasmania.

Midus quadristillatus.

Pharus quadristillatus, *Muls. Spec.* p. 950. 2.
Caffraria (Stockholm, Bakewell).

Midus Brouzeti.

Pharus Brouzeti, *Muls. Spec.* p. 1045. 3 (T).
Cape of Good Hope (Chevrolat).

Neorhizobius, gen. nov.

Punctuation fine, sparse, subrugulose; eyes coarsely granulated, deeply emarginate by a prolongation of the genæ; abdominal laminae complete, thorax margined at the base.

Neorhizobius chilensis, sp. n.

Oblong, black, thorax very sparingly punctulate, sides broadly red; elytra each with 2 orange-red curved marks, 1 larger before the middle, free, discoidal, convex in front; 1 subapical, contracted in the middle, joining the margin, which is also reddish as far as the apex.

The red marks sometimes reduced to thin lines, or even broken into 2 or more dots.

L. 2 lin. Chili (Germain).

Coccidula.

Kugelmann, Ill. Verz. der Kaefer Preuss. p. 421 (1798) (*typ. scutellata*).

Coccidula scutellata.

Chrysomela scutellata, *Herbst, Arch.* v. p. 58. Tab. 23. fig. 20 (1783).

Coccidula scutellata, *Muls. Sécur.* p. 268.
Europe.

Coccidula rufa.

Dermestes rufus, *Herbst, Arch.* iv. p. 22. Tab. 20. fig. 7 (1783).

Coccidula rufa, *Muls. Sécur.* p. 269.
Europe.

Coccidula lepida.

Coccidula lepida, Lec. Pr. Ac. Phil. 1852, p. 132. 1.

Elongata oblonga, flava, subtiliter albo pubescente, capite pectoreque nigris, elytris disperse punctatis, basi, lateribus ad medium, maculaque communi pone medium nigerrimis. Long. 11.

One specimen. Vermont. Oblong elongate, convex, bright yellow, covered with fine short white hair. Head black, finely and not densely punctured; clypeus, mouth, and antennæ yellow. Thorax finely punctured, rounded on the sides, base rounded, posterior angles subobtus, not rounded. Elytra tolerably coarsely punctured, base and sides as far as the middle black; black portion broader at the scutellum and at the middle of the side; disc with a common rounded black spot at the second third; beneath yellow; breast entirely black; prosternum black posteriorly.

The anterior coxæ in this genus are much smaller than in any other of the present tribe, and are almost round.

Lithophilus.

Froehl. der Naturf. xxviii. p. 11 (1799). (*typ. connatus*).

Wollaston has carefully dissected this genus, and hence I cite his characters (*Out. Col. Can.* p. 430).

Corpus fere ut in Coccidulâ sed multo major; *prothorace* antice profundius excavato, postice magis contracto, ad latera late subrecurvo explanato. *Ant.* 10- (nec 11-) articulatae, art. 1^{mo} sat magno robusto, 2^{do} minore, 3^{tio} ad 7^{imm} gracilioribus (3^{tio} elongato), reliquis clavam triarticulatam haud abruptam efficientibus (ult^{mo} intus oblique truncato). *Labrum* transversum, submembranaceum, apice integrum. *Mandibulae* ad apicem acute bifidae, intus membranâ breviter ciliatâ auctae. *Maxillae* bilobae, breves, lobis pubescentibus, apice subito incurvis. *Palpi* maxillares elongati, art^o 1^{mo} parvo, 2^{do} longissimo, 3^{tio} brevior, ult^{mo} maximo securiformi: labiales art^o 1^{mo} parvo, 2^{do} et 3^{tio} longioribus, longitudine subaequalibus (3^{tio} fusiformi). *Mentum* parvum, corneum subobtriangulare basi truncatum, apicem versus regulariter latius, apice integrum. *Ligula* elongata, apice membranacea integra. *Pedes* longiores et validiores quam in Coccidulâ: *tarsis* fere similibus, sed longioribus; *unguiculis* multo majoribus, intus (ut in illâ) denticulo minuto armatis."

The anterior coxal cavities are open, the eyes very coarsely granulated, the elytra strongly margined, humeral angle prominent, abdominal and pectoral plates present, incomplete.

Lithophilus connatus.

Tritoma connata, Panz. Faun. Germ. xxxvi. 18 (1797).

Oblong, pubescent, head and elytra pitchy brown, thorax and underside reddish; thorax coarsely and visibly punctured, markedly

broader than long; elytra unequally punctate, the coarse punctures sparse; underside punctate.

L. $1\frac{1}{2}$ lin. Germany.

Lithophilus ovipennis.

Lithophilus ovipennis, Reiche MSS.

Very like *L. connatus*, but with the thorax markedly narrowed at the base; sides fringed with longer hairs; the elytra are wider in the middle so as to appear ovate, and have a humeral reddish spot; the punctuation is similar, except that the coarse punctures are rather more abundant.

L. $1\frac{1}{4}$ lin. Palestine (Reiche), Sinai (Palmer).

Lithophilus major, sp. n.

Very like *L. connatus*, but much larger, and more closely punctate, the coarse punctures being obsolete; the thorax is not narrowed at the base, and is very decidedly broader than long; the elytra are paler at the base.

L. 2 lin. Kurdistan (Millingen).

Lithophilus pallidus, sp. n.

Very near *L. ovipennis*, but with the thorax less narrowed at the base, and not so strongly fringed at the sides; the punctuation is more uniform, shewing hardly any trace of the coarse punctures; the colour is altogether pale testaceous, the elytra being somewhat darker on the disc.

L. $1-1\frac{1}{4}$ lin. Persia (Millingen).

Lithophilus deserticola.

Lithophilus deserticola, Woll. Cat. Can. Col. p. 431 (1864).

Oblongus, latiusculus, grosse fulvo pubescens, subopacus, rufo ferrugineus; prothorace minute punctato, ad latera rotundato explanato, postice angustato; elytris in disco late nigrescentioribus, minutissime punctulatis punctisque magnis (subseriatim dispositis) parce irroratis, interstitiis obsolete subelevatis. Long. corp. lin. 2.

Hab. Fuerteventuram; sub lapide in arenosis aridis ad Corralejo. Martio exeunte A.D. 1859, exemplar unum collegi.

Tribe 3. DISCOTOMIDES.

This tribe, confined to S. America, is one of the most distinct among the *Coccinellide*; the oblong depressed form gives them a *prima facie* resemblance to certain *Erotylide*. They may be recognized by the antennæ, which are generally serrate, and have the last joint broad and flattened out; the abdomen has 6 ventral segments, and the anterior cotyloid cavities are open.

Discotoma.*Muls. Spec.* p. 215 (*typ. ornata*).

Antennæ 10 jointed, 8-10 forming a club, claws bifid, punctuation unequal, form hemispherical.

Discotoma ornata.

Discotoma ornata, *Muls. Spec.* p. 216. 1. (1850) (T).
Cayenne (Buquet), Ega (Bates).

Vodella.*Muls. Opusc.* III. p. 20 (*typ. impressa*).

Unaccountably placed near *Anatis* by Mulsant; it is very close to *Discotoma*, with which it agrees in its bifid claws and unequal punctuation, also in coloration; the antennæ are broken in the typical specimen; the coxal foveæ semicircular, complete; form hemispherical.

Vodella impressa.*Vodella impressa*, *Muls. Op.* III. 21 (1853) (T).

Head, body beneath, and legs pale livid yellow; thorax dark brown, with the anterior angles narrowly livid; sides with an impressed fovea, anterior edge margined; elytra coloured as in *Disc. ornata*, but the apical spot not so defined, and merged in the ground colour.

L. 2 lin. Cayenne (Deyrolle).

Pristonema.*Er. Arch. f. Nat.* XII. p. 182 (1847).

Antennæ 10-jointed, 3-10 dentate within, claws with a basal tooth, coxal foveæ complete, covering about $\frac{1}{2}$ the segment; punctuation strong, unequal.

Pristonema coccinea.*Pristonema coccinea*, *Er. Arch. f. Nat.* XII. p. 182 (1847) (T).

Oblong, short, pale cherry-red, convex, shining, thorax marked on the sides with a pale spot; labrum and antennæ black.

L. $2\frac{3}{4}$ lin. Peru (Berlin).

Euseladia.gen. nov. (*typ. Waterhousii*).

Claws simple, antennæ dentate from the third joint, sparsely unequally punctate, the fine punctures very obsolete, abdominal plates complete. S. America (B. M.).

Euseladia Waterhousii, sp. n.

Carmine-red, thorax with the sides whitish, base with two dark marks; elytra with the callus, and a curved white mark, whitish; this starts from the base, follows the suture, and then curves sharply over to the margin just behind the middle.

L. $2\frac{3}{4}$ lin. S. America (B. M.).

Seladia.

Muls. Op. III. p. 29 (*typ. nigricollis*).

[*Selasia* ||, *Muls. Spec.* p. 216.]

Antennæ 10-jointed, 8-10 dentate within; claws with a basal tooth. This genus contains some very dissimilar forms, and must probably be subdivided.

S. nigricollis, *S. augustiniana*, and *S. rubripennis* have a very fine punctuation and varnished appearance. *S. maculicollis* has a coarse rough equal punctuation.

Seladia nigricollis.

Seladia nigricollis, *Muls. Spec.* p. 217. 1 (1850).

Elytra very smooth, polished, punctuation sparse, uniform, obsolete.

Mulsant notices a variety (*S. visceralis*) with the abdomen red.

Mexico (*Saunders, Dupont*).

Seladia rubripennis.

Seladia rubripennis, *Muls. Spec.* p. 218. 3 (1850).

Brazil (*Dejean, Germar, Saunders*). Allied to *S. nigricollis*.

Seladia augustiniana.*

Seladia augustiniana, *Muls. Mon.* p. 155. 2 (1866).

Black, thorax with the anterior angles narrowly white; elytra ochreous, each with two large spots and the suture black; the sutural vitta is suborbiculate dilate near the apex; body and legs black.

L. $3\frac{1}{2}$ lin. Mexico (*Sallé*).

Seladia maculicollis.

Seladia maculicollis, *Muls. Spec.* p. 156. 3 (1850).

Punctuation close, almost uniform, very coarse, and unlike that of the other species.

Brazil (*Dejean, Deyrolle*).

Seladia bicincta.*

Seladia bicincta, *Muls. Spec.* p. 218. 4.

Punctuation sparse, uniform, faint (but less obsolete than in *S. nigricollis*). Mulsant has made five species out of this, on what appear to me very insufficient grounds; but the species is so rare in collections that no certainty can be arrived at; still the differences indicated are merely those of coloration, and in almost every case the species are founded on unique types.

Brazil (*Dejean, Dupont, Fry, Berlin, v. Bruck*).

Var. *a. bicincta*, *Muls. Spec.* p. 218. 4.

Central $\frac{1}{3}$ of thorax, elytra, and breast beneath black (*Dejean*).

Var. *β. albofasciata*, *Muls. Spec.* p. 219. 5.

Thorax with two discoidal points and elytra black (apical $\frac{1}{5}$ fulvous, with a black dot) (*Dupont, Fry*).

Var. *γ. fastuosa*, *Muls. Mon.* p. 157 (T).

Thorax with four black dots; elytra brownish ochreous, fasciæ edged with dark brown; apical spot brown (v. Bruck).

Var. *δ. erato*, *Muls. Mon.* p. 158 (T).

Thorax with two black dots; otherwise like *S. fastuosa* (Berl.).

Var. *ε. Eugeniae*, *Muls. Mon.* p. 158.

This = *S. erato*, redescribed by accident.

Micaria.

Muls. Mon. p. 159 (*typ. erotyloides*).

[*Macaria, Dej. Cat.* p. 458, *Mulsant olim.*]

Antennæ dentate from the fourth joint, 8—9-jointed. Claws with a basal tooth. Punctuation unequal.

Micaria erotyloides.

Coccinella erotyloides, *Guérin, Icon. R. A.* p. 321 (1846).

Macaria erotyloides, *Muls. Spec.* p. 220. 1 (1850).

The variety with confluent spots has a very strange appearance. Columbia (*Guérin, Reiche*).

Micaria rosea.

Macaria rosea, *Muls. Spec.* p. 221. 2 (1850) (T).

Columbia (*Buquet*).

Micaria serraticornis.

Macaria serraticornis, *Muls. Spec.* p. 223. 3 (1850).

Brazil (*Reiche*).

Micaria Schaumii.

Macaria Schaumii, *Muls. Spec.* p. 224. 4 (1850).

Brazil, Rio Janeiro (Fry).

Var. *Macaria endomycha*, *Muls. Op.* III. 29 (1853).

This differs only in the colour of the thorax, which seems to have a tendency to become black in this genus. A series in Mr Fry's fine collection completely demonstrates this.

Micaria diluta.

Macaria diluta, *Muls. Spec.* p. 225. 5 (1850).

Cayenne (Dejean), Brazil (Bates).

Micaria La Saussayei.

Micaria La Saussayei, *Muls. Mon.* p. 162. 8 (1866) (T).

Subhemispherical, thorax black, with a white border on each side; elytra bright rose-red, with a punctiform spot near the scutellum, and the exterior margin white; antennæ black, joints 1-3 testaceous; body and legs rose-red.

L. $2\frac{1}{2}$ lin. Ega (Bates).

Var. *biguttulata*, *Muls. Mon.* p. 163. 9 (T).

Differs only by the thorax, which is rose-coloured with a white margin.

Cayenne (Deyrolle). This is redescribed (p. 163. 10) as *M. Kunckeli*!

Micaria Josephinæ, n. sp.

(*Muls. i. litt.*)

Short, rounded, pale carmine-red; thorax finely and very sparingly punctate; sides paler; elytra with the humeral angles well marked; punctuation sparse and unequal, each with five whitish dots; three in a transverse line at $\frac{1}{4}$, two obliquely at $\frac{5}{8}$, forming with the other pair an arc convex forwards; body and legs pale red.

L. 2 lin. Santarem (Bates).

Micaria sigillata.

Macaria sigillata, *Muls. Spec.* p. 226. 6 (1850).

Cayenne (Dejean).

This species differs, according to Mulsant, by the coxal foveæ, which reach the margin of the segment.

A P P E N D I X.

[Species dubiæ.]

C. felina, Fabr. Syst. Ent. p. 82.

Globosa, elytris atris, punctis 6 albis.

Parva, tota globosa; Cap. album immaculatum. Th. albus, macula baseos nigra. El. atra, punctis 3 lineolaque parva baseos albis. Am. bor. Drury.

C. limbata ||, Moll. Fuess. N. Mag. f. Ent. II. p. 181. 125 (1784).

Nigra, capite thorace elytris pedibusque rufis, oculis abdomine elytrorumque margine omni late, nigris. Nicht selten.

Brustschild roth mit einem lichterem Rande, und einem schwarzen Punkt in der Mitte; Schildchen dunkelbraun; Decken roth, durchaus schwarz eingesäumt. Nach dem Tode verlischt die schwarze Farbe, und wird aschgrau; Brustschild ändert ab mit einem grossen Flecken in der Mitte, und einem kleinen am Rande.

C. cembra, Moll. l. c. 182. 126.

Nigra, elytris flavis, punctis in quolibet tribus in linea verticali positis, abdomine nigro rufo-marginato, pedibus lividis. Auf *Pinus cembra*. Kopf schwarz, auf der Stirne ein gelber Flecken; Brustschild schwarz, gelbgerandet, mit vier kleinen gelben Punkten.

[? *Adalia obliterata*, L.]

C. ferrugata, Moll. l. c. p. 183. 127.

Nigra, subvillosa, capite, thorace, pedibus, abdomine et elytrorum apicibus rufis, oculis nigris. Auf Kirschbäumen im Frühlinge. Ein grosser Flecken an der Spitze des Brustschildes schwarz.

[= *Scymnus* — ?]

C. pallida, Rossi, Faun. Etr. p. 66. 166.

Oblonga, coleoptris pallide luteis, punctis 6 nigris obsoletis, et ad suturam positis. L. $2\frac{1}{2}$ lin. Hab. frutices rara.

Caput albicans, puncto nigro ad basin. Oculi nigri qui lunati videntur. Thorax luteus punctis sex nigris, quorum duo posteriora sunt. Elytra margine albicante, singulum punctis tribus longitudinaliter ad suturam positis. Pedes lutei. Corpus atrum.

C. 9-signata, Herbst, Käfer, v. 268. 7. pl. 55. 7.

Capite nigro, thorace punctis 4, elytris 9 nigris, margine fusco. $1\frac{1}{2}$ lin. Surinam (Herbst). Brustschild hochgelb, in der Mitte über dem Schildlein am Hinterrande steht ein dreieckiger schwarzer Fleck, dessen Spitze nach oben gekehrt ist; gegenüber am Vorderrande steht ein schwarzer halbrunder Fleck, und an jeder Seite steht auch ein runder Fleck. Schildchen schwarz; Deckschilde hochgelb, mit 9 schwarzen Flecken, wovon der eine gemeinschaftlich ist; 1 auf der Schulter, 1 etwas niedriger dicht an der Naht, noch niedriger stehen 2 unter einander (1 den Aussenrand berührt), 1 (verloschen) steht etwas unter der Mitte auf der Naht; unten braun, Füsse gelbbraun.

C. conspurcata, Florenc. in Meyer Zool. Arch. I. 211. 62 (1796). Gelbgrau mit schwarzgrauen Punkten. L. 2 lin.

C. fuscopunctata, Flor. l. c. n. 63.

Gelbe braunbefleckte Flügeldecken, hellgelbe Flügel. 2 lin.

Scymnus pusillus, Hb. Käf. VII. 346. 11.

Minimus, totus ater, pedibus fulvis.

C. fuscomaculata, Schr. Faun. Boica, I. p. 455. 465 (1798).

Durchaus roth, zwei braune länglichte Makeln auf jeder Flügeldecke. L. $1\frac{1}{3}$ lin.

C. catenata, Fabr. Syst. El. I. 361.

Ovata, elytris rubris; maculis annularibus connatis atris. Corp. majusculum. Cap. album. Th. ater, angulo antico albo. El. rufa nitida, annulis 2 atris, inter se et cum sutura connexis. Exserunt dentem ad marginem exteriorem, et postice ramus flexuosus exit, qui fere suturam attingit. Subtus fusca, puncto utrinque collari albo. Amboyna, Billard.

C. ramosa, Oliv. Ent. VI. p. 996. 13. pl. v. 61.

Hemisphaerica, elytris rubris fasciis 2 ramosis nigris. Ind. or. Media, caput flavum, immaculatum; thorax flavus, disco macula bifida, nigra; elytra rubra, ante medium fascia nigra quae antice ramum emittit, fasciaque versus apicem quae dentem emittit; sutura a fascia prima ad apicem nigra; corpus pallide rubrum.

[? *Cœlophora*, allied to *C. inaequalis*, var. *partita*.]

C. australis, Oliv. Ent. vi. p. 1053. 101. pl. vii. f. 111.

Ovata glabra, nitida, elytris nigris maculis 10 flavis.

C. 10-pustulata major. Antennæ flavæ. Caput flavum, oculis nigris. Thorax niger, macula media lateribusque flavis. Elytra nigra, in singulo maculæ 5 flavis 2, 2, 1. Corpus subtus pedesque flava. Ins. maris Pacif. (*Labill.*).

C. pulex, Schön. Syn. Ins. II. 157. 20.

Nigra, capite thorace elytrorumque marginibus flavis. Extra Europ. (Thunb.). Inter minimas, magnitudine *C. parvulæ* ovata glabra nitens. Caput totum flavum, oculis nigris. Thorax transversus, convexus, marginatus, totus flavus, fascia intra marginem anticum fusca, margines non attingente. Elytra atra lævia, margine extimo lineaque intra suturam flavis. Pectus, femora antica et basis femorum posteriorum flava. Abdomen et tibiæ nigre (Thunb.).

C. lunigera, Schön. Syn. Ins. II. 207. 191.

Capite pedibus elytrisque dimidiato-flavis. Magn. *C. parvulæ*, totus nitidus, tenuissime omnium villosus. Caput flavum. Thorax convexus, margine antico tenuissime flavus. Elytra antice atra, postice flava, nigredine in medio cornubus versus postice exeunte. Abdomen nigrum postice marginibus rufescens. Pedes rufescentes (Thunb. Extra Europ.).

C. signata, Grav. Zool. Syst. p. 124. 1664.

Fast hemisphärisch, Fl. roth, Hl. schwarz mit schmalem gelben Vorder- und Seitenrande, und einem kleinen halbmondförmigen Fleck vor dem Seitenrande; Kopf schwarz mit 2 kleinen gelben Strichen; Leib schwarz; Fussblätter gelbroth. L. 2 lin.

C. formosa, Grav. Zool. Syst. p. 224. 1672.

Länglicht, K. schwarz mit drei gelben Strichelchen. H. mit einem grossen schwarzen M und einem schwarzen Punkt an jeder Seite; F. schwarz gelberandet, an der Wurzel ein grosser gelber Fleck; auf der Mitte jeder F. ein herzförmiger gelber Fleck. Hinterleib schwarz. Beine fuchsroth. L. 2½ lin.

C. Illigeri, Grav. Zool. Syst. p. 127. 1706.

Fast halbkugelrund, tiefschwarz, glänzend; Seiten des H. und ein Randfleck vor der Spitze der F. gelbroth. Sie ist gedrungener wie der vorhergehende Art, und das H. ist schmaler. L. 1½ lin.

C. erythrochila. C. B. Sp.

Wiedemann (*Germ. Mag. d. Ent.* iv. p. 183) 1821.

Aenea, thorace lateribus elytrisque margine testaccis. 2 lin. Form wie *C. aurita*, aber das Schild viel grösser. Kopf u. alle übrigen Theile nicht lebhaft erzgrün, den Metallglanz abgerechnet,

eigentlich olivengrün. Hals an den Aussenrändern breit ziegelroth, welches an der Wurzel plötzlich schmaler wird. Aussenrand der Flügeldecken gleichfalls ziegelroth. Flgl. sehr fein, fast streifenweis punktirt.

Coccinella 14-plagiata, Ballion, *Bull. Mosc.* T. 43. p. 353 (1871).

Subhemisphærica flavotestacea, nitida, thorace punctis 5 nigris, elytris 14-plagiatis, plagis brunneis, utrinque 2, 3, 2. L. $4\frac{1}{2}$ lin. Chodsent.

C. melanocephala. B. Zoubkoff (*Bull. Mosc.* VI. 310), 1833.

La tête est noire. Le corselet est fauve avec une tache noire qui commence au bord postérieur et qui remonte en se rétrécissant vers le bord antérieur. Les élytres sont bleus, brillants, finement ponctués. Pieds fauves. $1\frac{1}{3}$ lin. 1 lin.

C. Turkmenica, Zoubkoff, l. c.

Tête jaune, front noir. Corselet jaune; il a une tache noire qui occupe tout le bord postérieur et qui en remontant vers le bord antérieur se divise en 4 bandes un peu courbées vers les côtés. Les élytres sont jaunes; ils ont au-dessous de l'écusson, sur la suture, une petite tache noire commune. Chaque élytre a encore une tache noire au-dessous de celle-ci, deux vers l'angle de la base, et une grande tache noire qui commence à la moitié et occupe presque tout le reste de l'élytre. Dessous noir. Pieds jaunâtres, cuisses intermédiaires et postérieures presque toutes noires; dans les antérieurs le bord extérieur seul est de cette couleur. $1\frac{1}{2}$ lin.

C. Kingii, W. MacLeay, in *King's Voyage to Australia*, 1827.

Pallide testacea, thorace medio maculis 5 nigris, 2 auticis elongatis, tribusque posticis rotundatis; elytris nigro tripunctatis, punctis humeralibus 2 alioque medio marginali.

C. Richesiana, Montrouz. *Ann. Lyon.* VII. 75. 1855.

Un peu en cœur, tomenteuse. *El.* jaunes, marquées en tout de 12 points noirs, dont les deux placés au milieu sont quelquefois unies entre eux de manière à former une ligne transversale. Voisin de *12-notata*, Fabr. L. $3\frac{1}{2}$, 2.

[= *Epilachna*.]

C. cristovallensis. Montrouz. *Ann. Lyon.* VII. 75. 1855.

Hémisphérique, arrondie, lisse, jaune. *Cors.* rembruni au milieu. *El.* ayant chacune 4 taches noires, dont la première à la base, grande, sinueuse. 3 lin. *S. Cristoval.*

C. Laportei. Montrouzier, l. c. p. 75.

Hémisphérique, arrondie, lisse, jaune. *El.* ayant chacune 5 points noirs. Dess. testacé. L. 3 lin. *S. Cristoval.*

C. nitida, Phil. Stett. Ent. Zeit. xxv. p. 403 (1864).

Oblonga, ovata, nitidissima, pubescens, atra; capite, antennis, palpis, parte antica thoracis, pedibusque obscuro fulvis; elytris punctulatis, utroque guttis 2 luteis ornata quæ simul quadratum formant. L. 1 lin. Santiago, Oct.

Kopf und Halsschild sind äusserst fein, Flügeldecken deutlicher punktirt. Kopf ist bis auf die schwarzen Augen dunkelbraungelb, ebenso Fühler u. Taster. Halsschild hat vorn dieselbe Farbe, wird aber hinten allmählig dunkler, fast kastanienbraun. Schildchen und Flügeldecken sind tiefschwarz; letztere haben jede in der Mittellinie zwei kleine braungelbe runde Flecke; der vordere steht im ersten Drittheil der Länge, der zweite etwas hinter dem zweiten Drittheil, zusammen bilden diese vier Flecke ein Quadrat. Bei dem breiteren Ex. (? ♀) ist der hintere Fleck ein wenig grösser als der vordere, bei dem schmälern (? ♂) ist er bedeutend kleiner. Die Vorderbrust ist dunkelbraungelb, der Bauch tiefschwarz. Die Beine dunkelbraungelb.

C. funebris, Phil. Stett. Ent. Zeit. xxv. p. 403 (1864).

Oblongo ovata, pubescens, tenuissime punctulata, nigra, angulis anterioribus prothoracis, antennis, palpis, pedibus, apiceque abdominis ferrugineis. L. fere 2 lin. lat. $1\frac{1}{3}$ lin. Sub lapidibus ad radicem Adesmiæ arboreæ. In Prov. Aconcagua.

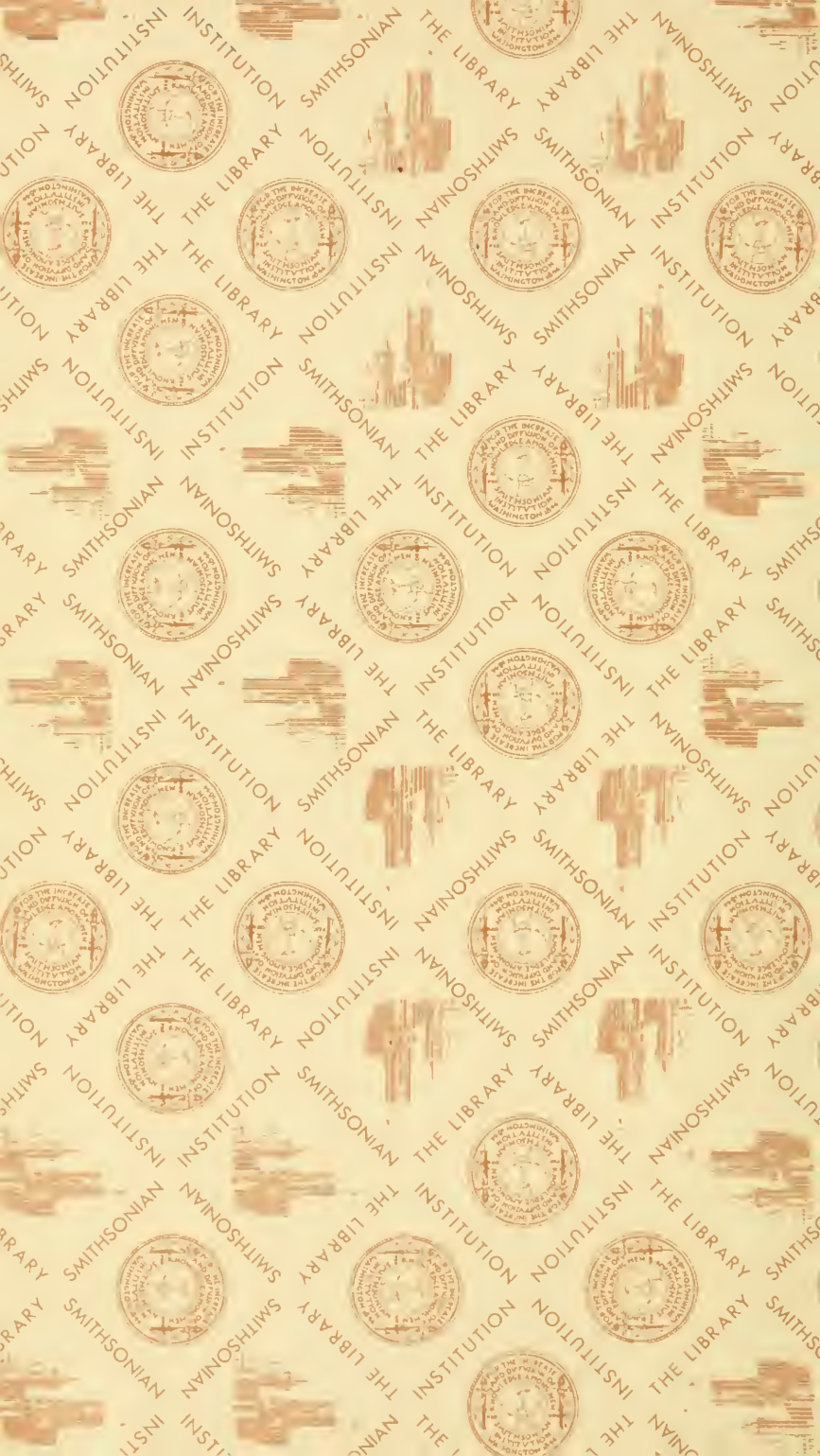
Mässig gewölbt, fein und unregelmässig punktirt, dicht behaart. Das Halsschild ist vorn schmaler, sein Hinterrand ist convex, die Seitenränder sind ebenfalls gekrümmt, die vordern Winkel sind sehr abgerundet. Der Vorderrand, namentlich aber die vordern Winkel, sind dunkelrostbraun, welche Farbe allmählig in die schwarze Grundfarbe übergeht. Die Unterseite ist stark glänzend, punktirt, schwächer flaumhaarig als die Oberseite. Kopf zum Theil auch Vorderbrust und die letzten Segmenten des Hinterleibs sind dunkelrostgelb. Die Beine sind kurz und kräftig. Die Fühlerkeule scheint mir auffallend breit zu sein.

C. vittata, Phil. Stett. Ent. Zeit. xxv. p. 404 (1864).

Rufa, pilis albidis puberula; elytris atris, utroque vitta helvola parum semilunari notato. L. 1 lin.

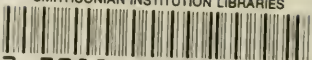
Santiago.

Glatt, glänzend, ohne Sculptur, aber mit kurzen weissen Härchen bekleidet. Kopf und Halsschild roth. Augen schwarz. Flügeldecken tiefschwarz, jede zeigt eine gelbweisse Längsbinde, welche weder Vorder- noch Hinterrand erreicht, an ihrem Innenrande schwach convex, an ihrem Aussenrande etwas stärker concav und vorn und hinten abgerundet ist.





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