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VI.—*Contributions to the Knowledge of the Cicindelidæ of Tropical Asia, containing Descriptions of new Species, a List of those hitherto described, and Synonymical Notes.* By Dr. H. SCHAUW.

1. *Cicindela lacrymans.*

C. supra viridi-cuprea; labro nigro, basi albo; prothoracæ cylindrico; elytris elongatis, viridi-purpureis, puncto humerali, vitta e basi oriente abbreviata maculisque tribus vittam continuantibus albis.—Long. 8 lin.

Habitat in insula Ceylon (*D. Nietner*).

Labrum nigrum, basi album, apice dentibus quinque parvis munitum. Mandibulæ basi testaceæ. Palpi testacei, articulis ultimis cupreis. Caput supra viridi-cupreum, juxta oculos utrinque subtiliter striatum, subtus cyaneum. Prothorax cylindricus, capitæ, oculis exceptis, latitudine, subcupreus, impressionibus transversis parum profundis viridibus, episternis cupreis. Scutellum cupreum. Elytra viridi-purpurea, elongata, parallela, margine postico serrato, sutura dente minuto vix conspicuo, puncto humerali, vitta a media basi exeunte, in tertia elytri parte abbreviata maculisque tribus albis vittam continuantibus, a sutura et margine æqualiter remotis, prima vittam fere attingente, ultima ante apicem albis. Pectus subtus, præsertim lateribus, cupreum, abdomine violaceo. Femora cuprea; tibiæ tarsique magis violacea.

I have adopted for this beautiful species, which belongs to Dejean's fifth section of the genus, the name applied to it in the Museum of Berlin.

2. *Cicindela araneipes.*

C. cuprea; capite plano, utrinque juxta oculum puncto majore notato; prothoracæ versus apicem angustato; elytris albis, sutura, strigis duabus longis antice connexis strigaeque brevi anteriore cupreis; pedibus tenuibus, longissimis.—Long. 4 lin.

Habitat in insula Borneo (*D. Wallace*).

Species hæc e numero earum quæ genus *Habroscelis*, Hope, constituunt (v. infra).

C. tenuipedi Dej. similis, sed minor et elytris aliter signatis. Labrum album, dente medio minuto. Mandibulæ elongatæ, graciles, acutæ, albidæ, apice dentibusque nigro- vel viridi-æneis. Palpi toti albidi. Antennæ articulis quatuor basalibus viridi-æneis, reliquis rufo-testaceis. Caput cupreum, planum, fronte, strigis nonnullis pone oculos exceptis, fere lævigatum, utrinque in oculi sinu puncto majore notatum. Oculi supra parum, sed lateribus satis prominentes. Prothorax cupreus, trapezoideus, basi multo latior quam apice, angulis posticis acutis, lateribus et medio subtilissime transversim strigosus, sulcis transversis profundis, linea media subtili. Scutellum cupreum. Coleoptera basi thoracis basi vix latiora, elongata, postice non dilatata, apice oblique truncato, margine serrato, sutura denticulata, supra albida, fortiter punctata, punctis basi subtilioribus, sutura pone scutellum dilatata, in utroque strigis duabus ante medium incipientibus, apicem fere attingentibus, antice confluentibus, ut reversæ literæ V valde elongatæ forma fere efficiatur, strigaque brevi anteriore, fortius punctata, cupreis. Subtus viridis, metallica, lateribus thoracis albo villosis, ano rufescente. Pedes longissimi, gracillimi, viridi-ænei, trochanteribus tibiærumque basi testaceis.

3. *Cicindela punctatissima*.

C. viridi-cuprea; capite subplano, utrinque juxta oculum puncto majore notato; prothorace subquadrato, apice vix angustiore; elytris punctatissimis, limbo dentato, ramo descendente vittulaque basi connexa albis. —Long. 5-5½ lin.

Habitat in China prope Amoy (*W. W. Saunders* dedit).

Etiã hæc species e numero earum quæ genus *Habroscelis*, Hope, constituunt.

Labrum album, apice dentibus tribus parvis, medio majore. Mandibulæ testacæ, apice elongato dentibusque metallicis. Palpi albidi, articulo ultimo apice æneo. Antennæ apice fuscæ. Caput viridicupreum, fere planum, subtiliter intra oculos striatum, puncto majore utrinque in oculi sinu impresso. Oculi magni, lateribus valde sed supra parum prominentes. Prothorax viridicupreus, subquadratus, basi parum latior quam apice, sulcis transversis profundis, linea media subtiliore, basi pone angulos posticos distincte marginata. Scutellum cupreum. Elytra pone medium sublata, apice valde oblique truncata, margine postico serrato, punctatissimo, viridi-cuprea, limbo basi juxta scutellum incipiente ibique cum vittula suturæ parallela, in quintam elytri partem abbreviata connexo, extus pone humerum emarginato, ramo ante tertiam elytri partem e limbo exoriente, qui paulo infra vittulam baseos fractus versus apicem descendit et prope suturam in medio dimidii posterioris desinit, atque dente prope angulum posteriorem cum limbo connexo albis. Subtus viridi-ænea, ano rufescente. Pedes modice elongati (ut in *C. ancorali*), viridi-ænei, trochanteribus tibiærumque basi rufo-testaceis.

4. *Cicindela craspedota*.

C. supra subcuprea, subtus cyanea; labro flavo, unidentato; elytris extus anguste viridibus limbo chalybeo, guttis duabus flavis, prima majore.—Long. 4–4½ lin.

Habitat in insula Celebes (Menado) (*D. Wallace*).

Statura speciebus nonnullis e stirpe *Euryoda* (*C. tetrastactæ* Wied.) assimilis. Labrum flavum, breviusculum, antice dente medio unico parvo instructum, supra medio subcarinatum, carina subcuprea. Mandibulæ viridi-æneæ, basi testaceæ. Palpi testacei, maxillares articulis duobus ultimis, labiales ultimo viridi-æneis. Antennæ apice fuscæ. Caput supra viridi-æneum, fronte media cuprea juxta oculos sat regulariter striata, subtus cyaneum. Prothorax dorso cupreus, sulcis transversis viridi-cyaneis, subtus præsertim lateribus cyaneus, latitudine brevior, subcylindricus, linea media subtilissima. Scutellum cupreum. Coleoptera prothorace plus duplo longiora, subcylindrica, postice parum latiora, punctulata, dorso subcuprea, parum micantia, extus anguste viridia, chalybeo limbata, macula media alteraque minore ante apicem a margine distantibus in utroque flavis. Pectus et abdomen cyanea; pedes cyanei, femoribus cupreo-aureis.

5. *Cicindela discreta*.

C. supra viridi-fusca, opaca; labro flavo, unidentato; elytris punctis quinque vel quatuor discretis flavidis, primo humerali.—Long. 4 lin.

Habitat in insula Celebes (Menado) (*D. Wallace*).

C. minuta Fabr. (*pumila*, Dej.) paulo major et in elytris magis dilatata, supra viridi-fusca, opaca, capite prothoraceque vix nitidioribus. Labrum breviusculum, flavum, apice dente medio parvo instructum. Mandibulæ basi testaceæ, apice viridi-æneæ. Palpi testacei, maxillares articulis duobus ultimis, labiales ultimo viridi-æneis. Antennæ apice fuscæ. Caput juxta oculos crebre subtiliter striatum. Prothorax latitudine parum brevior, subquadratus, sulco transverso anteriore fere obsoleto, posteriore magis distincto, fovea utrinque profundiore terminato, subtilissime granulato-rugulosus, rugis apice distinctioribus. Elytra prothorace plus duplo longiora, medio subdilatata, apicem versus attenuata, apice ipso rotundato, margine postico subtilissime serrato, subtiliter punctata, punctis quinque stramineis, primo humerali, secundo a margine subremoto in loco quo lunula humeralis si adesset desineret, tertio marginali quartoque discoidali mediis, quinto ante apicem, in loco quo lunula apicalis desineret, posito, hoc nonnunquam deficiente. Corpus subtus viridi-æneum, subcyanescens, prothoracis lateribus glabris. Pedes viridi-ænei. Fœmina plaga minuta vix conspicua ante medium elytrorum.

6. *Cicindela foveolata*.

C. supra nigra, subtus cyanea; labro albo, apice fusco; prothorace dorso rugoso; coleopteris sparsim punctatis et foveolatis, foveolis juxta suturam subseriatis.—Long. 3½ lin.

Habitat in insula Celebes (*D. Wallace*).

Sculptura ab omnibus speciebus notis distincta. Supra nigra, nitidula, subtus cyanea, thoracis lateribus aureo micantibus. Labrum majusculum, antrorsum angustato-rotundatum, album, apice fuscum, dente medio minuto vix conspicuo. Palpi testacei, maxillares articulis duobus ultimis, labiales ultimo fusco-æneis. Antennæ fuscæ. Caput granulatum, juxta oculos modice prominentes crebre rugoso-striatum. Prothorax latitudine non brevior, subcylindricus, lateribus granulatus, disco rugosus, rugis oblique versus lineam mediam directis, sulcis transversis medio subtilibus, extus utrinque magis profundis, quasi in foveolam dilatatis, limbo tenui chalybeo. Coleoptera prothorace plus duplo longiora, subcylindrica, margine integro, lateribus minus crebre punctata, dorso foveolis et impressionibus oblongis parum profundis inæqualia, foveolis sex satis distinctis secundum suturam subseriatim dispositis, posticis quatuor magis approximatis. Pedes ænei.

7. *Cicindela pupillata*.

C. viridi-fusca; labro albo, apice denticulato; prothorace subcylindrico; elytris viridi pupillatis, margine tenui bis interrupto hamoque parvo cum margine connexo albis; pedibus pallidis, femorum tibiarumque apice et tarsis violaceis.—Long. 3½ lin.

Habitat in insula Mysol (*D. Wallace*).

Labrum album, majusculum, antice angustato-rotundatum, dente medio minuto. Palpi testacei, maxillares articulis duobus ultimis, labiales ultimo nigro-æneis. Caput fusco-viridi-æneum, juxta oculos fortiter striatum. Antennæ setacæ, extus fuscæ. Prothorax latitudine non brevior, subcylindricus, antice posticeque sulco constrictus, fusco-viridi-æneus, fere lævis, linea media obliterata. Elytra prothorace plus duplo longiora, parallela, postice oblique attenuata, apice ipso truncato, margine integro, supra parum convexa, viridi-fusca, maculis ocellatis viridibus, punctum impressum cyaneum ut pupillam includentibus præsertim postice discretis, medio confluentibus, margine tenui pone humerum et ante apicem late interrupto hamoque parvo e medio margine exeunte albis. Corpus subtus cupreo-æneum, abdomine cyaneo. Pedes pallidi, femoribus, tibiis articulisque tarsorum apice violaceis.

8. *Cicindela placida*.

C. cyanea, labro concolore; elytris dorso nigro variegatis, lunula tenui humerali, linea transversa media punctoque postico albis; antennarum basi pedibusque testaceis cyaneo indutis.—Long. 3½ lin.

Habitat in insula Mysol (*D. Wallace*).

Species parva sed valde jucunda. Labrum magnum, cyaneum, antrorsum angustatum, apice subtruncatum. Mandibulæ testacæ, apice fuscæ. Palpi testacei, articulo ultimo cyaneo. Antennæ articulis quatuor basalibus testaceis cyaneo indutis, reliquis fuscis. Caput cyaneum, opacum, fronte inter oculos fortiter longitudinaliter striata. Prothorax cyaneus, opacus, dorso nonnunquam obsolete nigro varie-

gatus, latitudine brevior, lateribus rotundatus, supra subconvexus, apice et basi sulco transverso constrictus, basi paulo angustior quam apice, linea media oblitterata. Elytra prothorace duplo longiora, fere parallela, postice sensim attenuata, margine integro, cyanea, præsertim antice punctata, dorso secundum suturam nigro variegata, signaturis parum conspicuis, lunula tenui humerali, linea transversa vix arcuata punctoque postico nonnunquam ad marginem extenso et tunc cornu superius lunulæ apicalis simulante albis. Subtus cyanea, nitida. Pedes infra testacei, supra cyaneo induti, tibiarum apice tarsisque cyaneis.

9. *Tricondyla nematodes*. (Pl. IV. fig. 1.)

T. virescenti-ænea; antennis basi pedibusque rufo-testaceis; prothorace subconico, transversim strigoso; coleopteris elongatis, subcylindricis, transversim rugosis.—Long. 8½ lin.

Habitat in insula Ceylon (*D. Nietner*).

Species insignis forma extensa angusta cylindriciformi, elytris postice non inflatis, ad sectionem *Deroocraniam* Chaud. pertinet, quarum species Ceylonenses capite postice attenuato, ut in *Collyridibus* basi strangulato, menti lobis lateralibus in spinam deorsum directam productis instructæ sunt. Corpus virescenti-æneum. Caput lævigatum, fronte excavata, argute bisulcata. Antennæ basi, articulis duobus primis exceptis, rufo-testaceæ, apicem versus magis fuscæ. Prothorax latitudine plus duplo longior, subconicus, basi apiceque modice constrictus, supra crebre et regulariter transversim strigosus. Coleoptera elongata, angusta, subcylindrica, pone medium vix dilatata nec altiora, apicem versus sensim subangustata, apice emarginata, undique transversim rugosa, rugis versus apicem minus distinctis. Pedes rufo-testacei, tarsis magis fuscis.

10. *Collyris plicata*.

C. cyanea; fronte postice convexa; elytris subvirescentibus, medio in plicam transversam elevatis, lateribus pone plicam fortiter, ceterum parce subtiliter punctatis.—Long. 9 lin.

Habitat in insulis Philippinis.

C. acrobia Chaud. statura et magnitudine similis, fronte postice tumidula et plica media elytrorum transversa valde distincta. Cyanea, elytris subvirescentibus. Caput postice valde convexum, fere tumidulum, fronte nonnisi in parte anteriore declivi excavata, totum lævigatum. Antennæ articulo tertio quartoque apice rufis. Prothorax basi sat fortiter constrictus, postice lævigatus, antice obsolete transversim strigosus. Coleoptera plica transversa a medio usque ad suturam extensa valde elevata, extus in rugas duas dissoluta, ante plicam et rugas parce subtiliter punctata, lateribus pone rugam subimpressis fortiter et sat crebre punctata, in parte posteriore punctis sparsis minutissimis obsita. Femora rufa, cyaneo induta.

11. *Collyris speciosa*.

C. cyaneo-violacea; fronte postice excavata; elytris basi posticeque punctatis, medio transversim rugosis; femoribus rufis.—Long. 10 lin.

Habitat in insulis Philippinis.

Coll. acrolis Chaud. iterum affinis, fronte postice magis excavata, elytris basi apiceque sat fortiter punctatis, medio multo minus fortiter sed in spatio majore transversim rugosis, femoribus dilutius rufis abunde distincta. Corpus cyaneo-violaceum. Caput usque pone oculos valde excavatum, excavatione postice latiore. Antennæ articulo tertio quartoque apice rufis. Prothorax basi modice constrictus, supra obsolete transversim strigosus. Coleoptera basi et postice sat crebre punctata, punctis apice ipso evanescentibus, medio irregulariter transversim rugosa. Pectus albo villosum. Femora rufa.

Besides *C. plicata* and *C. speciosa*, there are two more Philippine species of *Collyris* described: *Coll. acrolia*, Chaud. Bull. d. Mosc. iv. 1860, a large and beautiful species, described by Chaudoir as blackish, but as being, in a fresh state, of a bluish green colour like *C. plicata*; and *Coll. albitarsis*, Er. (*femorata*, Westw.), a small species, which varies, independently of the sex, in the colour of the posterior legs (v. Chaud. Berl. Zeitschr. 1861, p. 399).

SYNONYMICAL NOTES.

1. *Cicindela latipennis*, Parry, Trans. Ent. Soc. iv. p. 84 = *C. angulata*, Herbst, Dej.
2. *C. Prinsepii*, Saund. Trans. Ent. Soc. i. p. 64, sec. typum = *C. minuta*, Fabr. (*pumila*, Dej.). The figure in the Transactions is very inaccurate.
3. *C. Gyllenhalii*, Dej., and *C. limosa*, Saund. l. c., which have been considered as identical, are distinct species. In the former the elytra are entirely shining in the female and the sides of the thorax rounded; in the latter the elytra are opaque, with only a shining spot in the female, and the sides of the thorax nearly straight.
4. *C. funerea*, MacLeay (Ann. Jav.), sec. typum = *C. marginepunctata*, Dej. A second specimen in the East India Cabinet, standing as *funerea*, is = *C. undulata*, Dej.; but MacLeay's description only refers to *C. marginepunctata*.
5. *C. tremebunda*, MacLeay (Ann. Jav.). The type specimen in the East India Cabinet is probably a small variety of *C. Sumatrensis*, Herbst.
6. *C. aurovittata*, Brullé (Arch. du Mus. i. pl. 8. fig. 3) = *C. sex-punctata*, Fabr., var.

7. *C. erythropus*, Brullé (l. c. pl. 9. fig. 2), = *C. erudita*, Wiedem. (Zool. Mag. ii. p. 1).
8. *C. triramosa*, Kollar (Ann. d. Wien. Mus. i. p. 330), is, sec. typum, also = *C. erudita*, Wied. (*chloropus*, Brullé).
9. *C. insularis*, Blanch. (Voy. au Pôle Sud), from the Philippine Islands, = *C. lacrymosa*, Dej.
10. *C. grammophora*, Chaud. (Bull. d. Mosc. 1850), is in all probability = *C. cognata*, Wiedem. (Zool. Mag. ii.).

List of described Species of CICINDELA from Tropical Asia.

The numerous species may be divided into several sections, the three first of which are well defined, and contain only allied species, while the fourth is polymorphous, embracing species of very different shape; it cannot, however, be divided, as numerous and insensible passages connect even the forms which appear at first most different.

I. *Sutures by which the episterna of the prothorax are united to its dorsum visible on the back of the prothorax.*

SECT. I. *Hypætha*, LeConte (Revision of American Cicindelidæ, Trans. Amer. Philos. Soc. xi. p. 28).

1. *C. quadrilineata*, Fabr., Dej., and, 2. *C. biramosa*, Fabr., Dej., are the only known species of this group.

II. *Sutures of the episterna of the prothorax with its dorsum visible on the under surface.*

A. *Labrum with five or seven teeth.*

SECT. II. *Prothorax et coleoptera cylindrica. Labrum septem-vel quinque-dentatum.* Divisio III., Dej. *Euryoda*, Lac. *Heptadonta*, Hope. *Ænictomorpha* et *Odontocheila*, p., Chaud.

The species of this group are:—

3. *C. Hopei*, Parry (Trans. Ent. Soc. iv. p. 84).—Assam.
4. *C. analis*, Fabr., Dej.—Java and Borneo.
5. *C. posticalis*, White (Ann. of Nat. Hist. xiv.).—Hong Kong.
6. *C. variipes*, Chaud. (Bull. Mosc. 1850).—India bor. Unknown to me.
7. *C. melanopyga*, Schaum (Berl. Zeitschr. 1862, p. 173).—Manilla.
8. *C. patricia*, Schaum (l. c. 1861, p. 68).—Celebes (Menado).
9. *C. quadripunctata*, Fabr., Dej.—Java.
10. *C. proxima*, Chaud. (Bull. Mosc. 1860).—India bor.

11. *C. tetrastacta*, Wiedem. (Zool. Mag. ii. p. 1) = *C. Colon*, Klug (Jahrb. p. 11), Brullé (Arch. d. Mus. i. pl. 7. f. 9).—Bengala.
12. *C. limbata*, Wiedem. (Zool. Mag. ii. pp. 1, 65) = *Euryoda tetrastipitata*, Chaud. (Bull. Mosc. 1852, p. 29).—Bengala.
13. *C. heteromalla*, MacLeay (Ann. Jav.), Van der Linden (Essai sur l'Ins. de Java, p. 10).—Java.

The species 3–8 constitute Chaudoir's group *Ænictomorpha* (Bull. Mosc. 1850, p. 11); the species 9–12 are referred by Chaudoir (Bull. Mosc. 1860, iv.) to the genus *Odontocheila*, Lap.

The following two species I have not been able to examine. I conclude, however, from their descriptions, that they may also belong to this group.

14. *C. scrobiculata*, Wiedem. (Zool. Mag. ii. pp. 1, 65).—Bengala. (Omitted in Lacordaire's Gen. d. Col.)
15. *C. exornata*, Schmidt-Goebel (Faun. Birm. pl. 1. f. 7).—Birma.

The colour of the upper lip varies in the species of this group, being yellow in *C. analis*, &c., bluish green with a white stripe in *C. quadripunctata*, coppery in *C. heteromalla*, and black in *C. limbata*.

SECT. III. *Prothorax et elytra subdepressa. Labrum semper quinque-dentatum.* Divisio V., Dej. *Calochroa*, Hope.

16. *C. heros*, Fabr., Van der Linden (l. c. p. 11), Brullé (Arch. du Mus. i. pl. 8. f. 10).—Celebes.
17. *C. lacrymans*, Schaum (v. supra).—Ceylon.
18. *C. octonotata*, Wied., Dej.—Bengala.
19. *C. chinensis*, Fabr., Dej.—China.
20. *C. Duponti*, Dej.—Cochinchina.
21. *C. aurulenta*, Fabr., Dej. Var.: *C. flavomaculata*, Chevr. (Rev. Zool. 1845, p. 95).—Java et China.
22. *C. intermedia*, Chaud. (Bull. Mosc. 1852, p. 6).—Ind. or.
23. *C. princeps*, Vigors (Zool. Journ. i.). Varr.: *C. aurofasciata*, Dej.; *C. crucigera*, Hope (Col. Man. ii. pl. 1. f. 2); *C. lepida*, Gory, Mag. d. Zool. 1833, pl. 96 (*Goryi*, Chaud. Bull. Mosc. 1852, p. 4).—Ind. or.
24. *C. calligramma*, Schaum (Berl. Zeitschr. 1861, tab. 1 B. f. 1).—Ind. or.
25. *C. dives*, Gory (Mag. d. Zool. 1833, pl. 97).—Ind. or.
26. *C. semivittata*, Fabr., Schmidt-Goeb. Faun. Birm. pl. 1. f. 2. Varr.: *C. striolata*, Illig. (Wiedem. Archiv, i. 2. p. 114); *C.*

Vigorsii, Dej.; *C. dorsolineata*, Chev. (Rev. Zool. 1845); cf. Schaum, Berl. Zeitschr. 1862, p. 173.—Sumatra, Java, Ins. Philipp., Hong Kong.

27. *C. assamensis*, Parry (Trans. Ent. Soc. iv. pl. 11).—Assam.
28. *C. Shivah*, Parry (l. c. v. pl. 11).—Assam.
29. *C. bicolor*, Fabr., Dej.—Ind. or.
30. *C. hæmorrhoidalis*, Wied. (Zool. Mag. ii. 1. p. 63)=*C. quadrimaculata*, Sturm (Cat. 1826, tab. 1. f. 1)=*C. flavopunctata*, Audouin (Mag. d. Zool. 1832, pl. 18).—Bengala.
31. *C. octogramma*, Chaud. (Bull. Mosc. 1852, p. 4).—Ind. or.

The following species, which I know only by their descriptions, seem also to belong to this group.

32. *C. guttata*, Wiedem. (Zool. Mag. ii. 1. p. 63), omitted by Lacordaire.—Bengala.
33. *C. interruptofasciata*, Schmidt-Goebel (Faun. Birm. pl. 1. f. 1).—Birma.
34. *C. tritoma*, Schmidt-Goebel (Faun. Birm. pl. 1. f. 3).—Birma.

The colour of the upper lip varies also in the species of this group. It is yellowish with a more or less brown apex in *C. heros*, *lacrymans*, *princeps*, *calligramma*, *dives*, *eucosmeta*, *semivittata*, *guttata*; yellowish with a black or green basis in *chinensis*, *aurulenta*, *octonotata*; yellowish with green spots, or green with yellowish spots, in *Duponti*, *tritoma*, *interruptofasciata*; entirely black in *assamensis*, *Shivah*; entirely metallic green in *bicolor*, *hæmorrhoidalis*, and *octonotata*.

B. *Labrum* with never more than three small teeth, usually but one, often entirely unarmed.

SUCT. IV.: Div. VI., Dej.

A. *Prothorax lævigatus*, *nixidus*, *cylindricus*.

35. *C. gloriosa*, Schaum (Berl. Zeitschr. 1861).—Celebes (Menado).
36. *C. eximia*, Van der Linden, Schaum (l. c.).—Celebes (Menado).
37. *C. Diana*, Thoms. (Arc. Nat. ii. 90), et var.? *C. Latonia*, Schaum (l. c. tab. 1 B. f. 5).—Celebes (Menado).
38. *C. eustalacta*, Schaum (l. c. tab. 1 B. f. 4).—Celebes (Menado).
39. *C. didyma*, Dej.—Java.
40. *C. theratoides*, Schaum (l. c. f. 3).—Celebes (Menado).

The specimen which I described has a coppery-golden upper lip;

I have since obtained others where it is quite yellow, with scarcely any metallic hue.

41. *C. guttula*, Fabr., Guér. (Mag. d. Zool. 1835, pl. 131).—Archip. Indic.
42. *C. conspicua*, Schaum (Berl. Zeitschr. 1862, p. 177).—Ins. Philipp.
43. *C. virginea*, Schaum (Berl. Zeitschr. 1860, p. 182).—Ins. Philipp.
44. *C. Clara*, Schaum (Berl. Zeitschr. 1860, p. 181, tab. 3. f. 3), et var. *suavissima*, Schaum (l. c. 1862, p. 176).—Ins. Philipp.
45. *C. elegans*, Dej.=*C. versicolor*, MacLeay (Ann. Jav.)=*C. superba*, Koll. (Ann. d. Wien. Mus. i.).—Java, Sumatra.

In the majority of the preceding species the upper lip is metallic or black, in *C. theratoides* its colour is variable (coppery golden or yellow), in *C. eximia* and *C. Diana* it is yellow with a metallic hue, in *C. didyma* and *C. guttula* yellowish white.

B. *Prothorax non levigatus, granulatus aut rugulosus, plerumque parum nitidus.*

a. *Labrum metallicum aut nigrum, rarissime flavomaculatum.*

46. *C. fugax*, Schaum (Berl. Zeitschr. 1862, p. 177).—Ins. Philipp.
47. *C. stenodera*, Schaum (Berl. Zeitschr. 1861, p. 72).—Celebes (Menado).
48. *C. decempunctata*, Dej.—Ind. or. Unknown to me. The labrum with a small yellow spot.
49. *C. viridilabris*, Chaud. (Bull. Mosc. 1852, p. 24).—Ind. or.
50. *C. viduata*, Fabr.=*O. triguttata*, Herbst, Dej., Schmidt-Goeb. =? *C. Myrrha*, Thoms. (Arch. Entom. i. p. 129)*.—Java, Sumatra, Celebes, &c.
51. *C. chlorochila*, Chaud. (Bull. Mosc. l. c. p. 25).—Hong Kong.
52. *C. nana*, Schaum (Berl. Zeitschr. 1862, p. 177).—Ins. Philipp.
53. *C. conicollis*, Schaum (l. c.).—Ins. Philipp.

The female of this species, which I had not seen when I published my description, has the prothorax broader at the base than the male, and more attenuated in front; the elytra are subtruncate at the extreme apex. The tooth of the suture mentioned by me (sutura aculeata) is even in the male usually very small.

* I have not seen a type of *C. Myrrha*, Thoms.; but the very unsatisfactory description agrees with *C. viduata*.

54. *C. mandibularis*, Schaum (Berl. Zeitschr. 1860).—Ins. Philipp.

The two last species are remarkable by their unusually long and slender mandibulæ, by their long last joint of the palpi (that of the labial being not much shorter than the penultimate), and by their thorax more or less attenuated in front, as in *C. psammodroma*, *ancora*, &c.

b. *Labrum albidum*.

55. *C. sexpunctata*, Fabr., Dej.; var. *C. aurovittata*, Brullé (Arch. d. Mus. i. pl. 8. f. 3).—Ind. or., Ins. Philipp.

56. *C. Whithillii*, Hope (Col. Man. ii. p. 23, omitted by Lacordaire).—Ind. or. (Madras).

57. *C. decemguttata*, Fabr., Dej.—Celebes, Amboina.

58. *C. albina*, Wiedem.; *albida*, Dej.—Ind. or.

59. *C. catena*, Fabr., Dej.—Ind. or.

60. *C. Candei*, Chevr. (Rev. Zool. 1845).—China (Hong Kong).

61. *C. cancellata*, Dej., Schmidt-Goebel (tab. 1. f. 4).—Java, Birma.

62. *C. striatifrons*, Chaud. (Bull. Mosc. 1852).—Ind. or.

63. *C. funerea*, MacLeay (Ann. Jav.) = *C. marginepunctata*, Dej. Var. *C. opigrapha*, Dej., et var. *multinotata*, Schaum (Berl. Zeitschr. 1861).—Java, Birma, Celebes, &c.

64. *C. Himalayica*, Redtenb. (Hugel's Kaschmir, iv. 2. pl. 23. f. 1).—Himalaya.

65. *C. fuliginosa*, Dej., Schmidt-Goebel (pl. 1. f. 6).—Malacca.

66. *C. lacrymosa*, Dej. = *C. insularis*, Blanch. (Voy. au Pôle Sud, pl. 1. f. 1).—Ins. Philipp.

67. *C. vittigera*, Dej.—Java (teste Van der Linden, p. 15).

68. *C. vigintiguttata*, Herbst, Dej.—Ind. or.

69. *C. multiguttata*, Dej.—Ind. or.

70. *C. angulata*, Herbst, Dej., Schmidt-Goeb. (tab. 1. f. 8) = *C. latipennis*, Parry (Trans. Ent. Soc. iv.).—Ind. or.

71. *C. sumatrensis*, Herbst, Dej. = *C. arcuata*, Koll. (Ann. d. Wien. Mus. i.) = ? *C. angulata*, Fabr. = ? *C. tremebunda*, MacLeay.—Malacca, Java, Sumatra, Ins. Philipp.

72. *C. LeGuillovi*, Guér. (Rev. Zool. 1841, p. 120) = *C. Boyeri*, Blanch. (Voy. au Pôle Sud, pl. 1. f. 2).—Borneo.

73. *C. nitida*, Wiedem., Dej. = *C. venosa*, Koll. (l. c.).—Bengala.

74. *C. cognata*, Wiedem. (Zool. Mag. ii. 1) = ? *C. grammophora*, Chaud. (Bull. Mosc. 1852).—Bengala.

75. *C. excisa*, Schaum (Berl. Zeitschr. 1862).—Ins. Philipp.

76. *C. minuta*, Fabr.=*C. baltimorensis*, Herbst=*C. pumila*, Dej.,
=*C. acuminata*, Koll. (l. c.)=*C. Prinseppii*, Saund. (Trans.
Ent. Soc. i.)=?*C. tremebunda*, MacLeay.—Ind. or., Java.
77. *C. erudita*, Wiedem. (l. c.)=*C. triramosa*, Kollar=*C. chloropus*,
Brullé (Arch. d. Mus. pl. 9. f. 2).—Ind. or.
78. *C. amabilis*, Dej.—Ind. or.
79. *C. bigemina*, Klug=*C. tremula*, Brullé (l. c. pl. 9. f. 3).—Ind. or.
80. *C. undulata*, Dej.=♀*C. speculifera*, Chevr. (Rev. Zool. 1845).—
Java, Hong Kong.
81. *C. fastidiosa*, Dej.=*C. litigiosa*, Dej., sec. typum, teste Chaud.—
Ind. or.
82. *C. ludia*, Dej.—Java.
83. *C. distinguenda*, Dej.=*Myriochila Dohrnii*, Motsch. Etud. Entom.
vi. p. 109, teste Chaud.—Ind. or.
84. *C. atelesta*, Chaud. (Bull. Mosc. 1854, p. 4); *C. imperfecta*, Chaud.
(Bull. 1852).—Ind. bor.
85. *C. leucoloma*, Chaud. (Bull. Mosc. 1852).—Ind. bor.
86. *C. albopunctata*, Chaud. (l. c.).—Ind. bor.
87. *C. discreta*, Schaum (v. supra).—Celebes (Menado).
88. *C. dromicoides*, Chaud. (Bull. Mosc. 1852).—Ind. bor.
89. *C. funebris*, Schmidt-Goebel.—Birma.
90. *C. macilenta*, Schaum (Berl. Zeitschr. 1862).—Ins. Philipp.
91. *C. craspedota*, Schaum (v. supra).—Celebes (Menado).
92. *C. terminata*, Dej.—Ins. Philipp.
93. *C. Gyllenhalii*, Dej.—Ind. or.
94. *C. limosa*, Saund. (Trans. Ent. Soc. i. tab. 8. f. 6), Schmidt-
Goebel.—Bengala.
95. *C. niveicincta*, Chevr. (Rev. Zool. 1845).—China (Hong Kong).
96. *C. phalangoides*, Schmidt-Goebel (tab. 1. f. 5).—Birma.
97. *C. araneipes*, Schaum (v. supra).—Borneo.
98. *C. tenuipes*, Dej.—Cochinchina.
99. *C. longipes*, Fabr., Dej.—Java.
100. *C. punctatissima*, Schaum (v. supra).—China (Amoy).
101. *C. psammodroma*, Chevr. (Rev. Zool. 1845).—China (Hong
Kong).
102. *C. ancoralis*, Chevr. (l. c.).—China (Hong Kong).

The last six species have a comparatively small head with a flat front, and a distinct point on each side in the emargination of the

eye, the prothorax is more or less attenuated in front, and the legs of unusual, or even extraordinary length. On such species Hope's genus *Habroscelis* is founded; they cannot, however, even be separated as a section, as an insensible passage between them and the other species may be traced through *C. Ypsilon*, *nitidula*, *niveicincta*, *phalangoides*, &c. The two following species, unknown to me, seem also to be such intermediate forms.

103. *C. Kinbergi*, Bohem. (Eugen. Reis.).—Ind. or. (Puna).

104. *C. copulata*, Schmidt-Goebel.—Ind. or. (Bengala?).

SECT. V. *Labrum majusculum, antice rotundato-angustatum.*

Div. VII, Dej.

a. *Labrum flavum.*

105. *C. funesta*, Fabr., Dej. = *C. cayennensis*, Herbst.—Ind. or.

106. *C. pupillata*, Schaum (v. supra).—Mysol.

107. *C. foveolata*, Schaum (v. supra).—Celebes.

b. *Labrum concolor.*

108. *C. placida*, Schaum (v. supra).—Mysol.

There are a few more species described, to which I am unable to assign a place.

109. *C. limbata*, Schmidt-Goebel, p. 7, from Birma, having a yellow labrum with three teeth, may either belong to Sectio IV. b. b., or to Sectio I. (*Hypætha*), as the author compares it to *C. biramosa*, without, however, noticing the dorsal sutures of the prothorax. As the name *limbata* was preoccupied for another species by Wiedemann, I propose for the present that of *Helferi*.

110. *C. holosericea*, Fabr., from Java. A small species, which is entered in Dejean's Catalogue (3rd ed.) after *C. funesta*, Fabr., from which it would appear that it belongs to Sectio V.

111. *C. interrupta*, Fabr., from Java. A small species with a yellow labrum, which belongs either to Sectio IV. b. b., or to Sectio V. a.

A species completely unknown to all modern entomologists is *C. cyanea*, Fabr., stated to be a large blue insect from India; it may not even belong to the genus *Cicindela*. *C. viridula*, Schön., Dej., a species from Mauritius, but stated by Schönherr to occur in India, belongs to the genus *Megalomma*, Westw., distinguished from *Cicindela* by the swollen antepenultimate joint of the labial palpi.

List of the Species of TRICONDYLA.

I cannot consider the genus *Derocrania*, established by Baron

Chaudoir (Bull. Mosc. 1860, iv.) on some Ceylonese species, as being well founded. He distinguishes it from *Tricondyla* principally "capite basi strangulato, fronte parum excavata, menti lobis acutissimis." The head is, however, equally attenuated behind and constricted at the base in *T. cyanipes* and allied species; the flat front is also found in *T. planiceps*; the lobes of the mentum are also very acute in *T. planiceps*, which does not belong to *Derocrania*. The genus *Tricondyla*, constituted as it is, is so eminently natural, that it only admits of further division into sections, not into genera. The known species of it have been simultaneously enumerated both by Chaudoir (Bull. Mosc. 1860) and by me (Berl. Zeitschr. 1861); the list given of them requires, however, some emendation, as I have convinced myself by the examination of a vast number of specimens in the British Collections, especially in those of W. W. Saunders and A. Wallace. The actually known species may be thus arranged.

I. *Caput postice non strangulatum.*

A. *Prothorax inter sulcum transversum basalem et apicalem plus minusve inflatus, lævigatus.*

1. *T. aptera*, Oliv., Dej.; *connata*, Lamarck*.

Var. *T. Chevrolatii*, Lap., Brullé.

Var. *T. pedestris*, Klug=*varicornis*, Chaud. (Ann. Soc. Ent. d. France, 1861).

Var. *T. violacea*, Chaud. (Bull. d. Mosc. 1860).

T. Chevrolatii, Lap., Brullé, which is in all probability erroneously stated by Laporte to have come from Java, is a variety of *aptera* with red femora, found in the various islands of the Eastern Archipelago approaching New Guinea. Neither the sculpture nor the form offers any real difference from *aptera*, and a great number of specimens in the collection of Mr. Saunders show all passages in the colour of the femora. *T. pedestris*, Klug, and *varicornis*, Chaud., are established on specimens in which not only the femora, but also the apex of the labrum and the first joint of the antennæ are reddish. *T. violacea*, Chaud., is a more marked variety, with somewhat shorter elytra and a more violaceous colour; but even these differences shade off gradually. It is probable, but not yet quite ascertained, that the black variety of *T. cyanea* described by Van der Linden, on which Brullé founded his *T. atrata*, is = *Chevrolatii*, Lap. *T. Wallacei*, Thoms., from Borneo, formerly, in consequence of its unsatisfactory description, referred to *T. Chevrolatii*, is, as I am informed by Baron Chaudoir,

* The full quotations are given by me in Berl. Zeitschr. 1861 and 1862.

a distinct species, allied to *cyanea*, Dej., which has been taken by Count Castelnau also on the Malayan peninsula.

2. *T. punctipennis*, Chevr. ; *globoicollis* et *vicina*, Chaud.—Philippine Islands.
3. *T. ventricosa*, Schaum.—Philippine Islands.
4. *T. annulicornis*, Schmidt-Goebel.—Birma. (Cf. Berl. Zeitschr. 1862, p. 184.)
5. *T. gibba*, Chaud. (Bull. Mosc. 1861, ii. p. 358).—Cambodia. Evidently closely allied to the preceding.
6. *T. punctulata*, Chaud. (Ann. Soc. Ent. Fr. 1861).—Ceram. Unknown to me.
7. *T. Wallacei*, Thoms.—Borneo, Malacca.
8. *T. cyanea*, Dej.—Java.
9. *T. macrodera*, Chaud.—Hindustan.
10. *T. Mellyi*, Chaud.—Hindustan. Unknown to me.
11. *T. tuberculata*, Chaud.—China? Unknown to me.

B. *Prothorax non inflatus, cylindricus, transversim strigosus.*

12. *T. coriacea*, Chevr.—Ceylon.
13. *T. granulosa*, Motsch.—Ceylon.
14. *T. pulchripes*, White.—Hong Kong.

II. *Caput postice attenuatum, basi strangulatum.*

A. *Prothorax levigatus. Menti lobi laterales antrorsum directi.*

The known species of this section are all from the Philippine Islands.

15. *T. conicicollis*, Chaud.
16. *T. cyanipes*, Eschsch., Dej.
17. *T. cavifrons*, Schaum.
18. *T. planiceps*, Schaum.

B. *Prothorax, saltem in parte, transversim strigosus. Menti lobi in spinam deorsum directam producti. Derocrania*, Chaud.

The known species are all from Ceylon.

19. *T. Dohrnii*, Chaud.
20. *T. concinna*, Chaud.
21. *T. nematodes*, Schaum.
22. *T. gibbiceps*, Chaud.
23. *T. raphidioides*, Schaum ; *levigata*, Chaud.

The description of *levigata*, Chaud., is published in No. iv. Bull.

d. Mosc. 1860. This, however, appeared later than the first part of the Berliner Zeitschrift for 1861.

List of the Species of COLLYRIS.

The number of described species of this genus is very considerable ; but as many of them are closely allied, and described in an unsatisfactory manner, frequently without reference to those already known, it is only by comparison of the type specimens that the synonymy of the obscurer species can be cleared up. The following list must therefore be considered as provisional only.

1. *C. longicollis*, Fabr.—Siam. (Type in the Banksian cabinet.)
2. *C. Lafertei*, Chaud. (Bull. Mosc. 1860, iv.)—Hindustan.
3. *C. Dohrnii*, Chaud.—Ceylon.
4. *C. aptera*, Lund (Skifter af Naturh. Selsk. i. p. 65, tab. 6. f. 1 : Copenh. 1790), Fabr.—Ind. or. (Type in the Copenhagen collection.)
 - ? *C. aptera*, Chaud. (Bull. 1860).—Bengala.
 - ?? *C. major*, Latr. (et Dej. Icon. i. pl. 2. f. 4), Brullé (Hist. Nat. d. Ins. iv. pl. 3. f. 1).
5. *C. acrobia*, Chaud.—Philippine Islands.
6. *C. speciosa*, Schaum (v. supra).—Philippine Islands.
7. *C. plicata*, Schaum.—Philippine Islands.
8. *C. Chevrolatii*, Guér. (Mag. d. Zool. vii. pl. 226).—Java.
 - ? *C. major*, Latr. l. c.
9. *C. tuberculata*, MacLeay = *C. longicollis*, Dej., non Fabr. = *C. Audouinii*, Lap., Brullé.—Java.
10. *C. crassicornis*, Dej. = *C. Diardi*, MacLeay (sec. typ.) = *C. MacLeayi*, Brullé = *C. purpurata*, Klug (sec. typ., purple-coloured variety).—Ind. or., Java.
11. *C. modesta*, Dej.—Java.
12. *C. Arnoldi*, MacLeay.—Java.
13. *C. Horsfieldii*, MacLeay, Van der Linden, Brullé = *C. rugicollis*, Klug.—Java.
14. *C. lugubris*, Van der Linden.—Java.
15. *C. elegans*, Van der Linden.—Java.
16. *C. Robynsii*, Van der Linden.—Java.
17. *C. emarginata*, Dej. ; *longicollis*, Oliv.—Ind. or.
18. *C. Diardi*, Latr. (et Dej. Icon.) = *C. tarsata*, Klug.—Java, Sumatra.

19. *C. rufitarsis*, Klug.—Java.
20. *C. brevicollis*, Klug.—Ind. or.
21. *C. Bonellii*, Guér. (Bélang. Voy.).—Bengala, Java.
22. *C. cribellata*, Chaud. (Bull. Mosc. 1860).—Deccan.
23. *C. distincta*, Chaud. (l. c.).—Ind. or.
24. *C. celebensis*, Chaud. (l. c.).—Celebes.
25. *C. puncticollis*, Chaud.—Hindustan.
26. *C. filiiformis*.—Chaud. (Bull. 1843).—Java.
27. *C. caviceps*, Klug ; *C. longicollis*, Herbst, non Fabr.—N.
28. *C. obscura*, Lap., Brull. (Arch. d. Mus.).—Java.
29. *C. postica*, Brull. (Arch. d. Mus. pl. 9. f. 8).—Java.
30. *C. ruficornis*, Brull.—Bengal.
31. *C. flavitarsis*, Brull.—Java.
32. *C. Ortygia*, Buquet (Ann. Soc. Ent. Fr. iv. p. 604).—Java.
33. *C. albitarsis*, Erichs. (Act. Leopold.)=*C. femorata*, Westw. (Proc. Zool. Soc. 1837).—Manilla.
34. *C. attenuata*, Redtenb. (Hügel's Kaschmir).—Himalaya.
35. *C. pleuritica*, Schmidt-Goebel.—Birma.
36. *C. melanopoda*, Schmidt-Goeb.—Birma.
37. *C. moesta*, Schmidt-Goeb.—Birma.
38. *C. cruentata*, Schmidt-G.—Birma.
39. *C. cylindrica*, Schmidt-G.—Birma.
40. *C. linearis*, Schmidt-G.—Birma.
41. *C. diffracta*, Schmidt-G.—Birma.
42. *C. fuscitarsis*, Schmidt-G.—Birma.
43. *C. parvula*, Chaud. (Bull. Mosc. 1848 ; Bull. 1860).—Ind. or.
44. *C. amœna*, Chaud.—Ind. or.
45. *C. saphyrina*, Chaud. (Bull. 1850)=*C. Boysii*, Chaud. (Bull. 1860), var. *major*.—Ind. bor.
46. *C. maculicornis*, Chaud.—Simlah.
47. *C. subdilata*, Chaud.—Deccan.
48. *C. flavicornis*, Chaud.—Hindustan.
49. *C. chloroptera*, Chaud.—Singapore.
50. *C. varitarsis*, Chaud.—Hindustan.
51. *C. dolens*, Chaud. (Berl. Zeitschr. 1861, p. 399).—Borneo.
52. *C. sarawakensis*, Thoms.—Borneo (Sarawak). (Nomen horribile.)

53. *C. cribripennis*, Thoms.—Borneo.
 54. *C. leucopus*, Schaum ; *albitarsis*, Thoms. ; *leucodactyla*, Chaud.—Borneo.
 55. *C. gibbicollis*, Motsch. (Etud. vi. pl. f. 4).—Assam.

THERATES.

Having given a list of the species (Berl. Zeitschr. 1860) and a supplementary note to it (*ibid.* 1862), I will confine myself here to a few observations.

Therates vigilax, Schaum, from the Philippine Islands, varies in the extent of the black colour of the elytra ; I have seen specimens where it has even completely disappeared and the elytra are quite yellow. The same variation seems to occur in *Th. fasciatus* from Celebes ; for a specimen in Mr. Wallace's collection with entirely yellow elytra did not, on a cursory examination, appear to me to be anything but a variety. *Th. flavilabris*, Fabr., seems to have been established on such a specimen ; his type was considered as a variety of *fasciatus* (Boisd. Faun. de l'Océan. p. 10) by Latreille.

To the list of species enumerated by me is to be added *Th. cyaneus*, Chaud. (Bull. d. Mosc. 1861, iv.), from Mysol.

The name of the species no. 3 of my list (Berl. Zeitschr. 1860, p. 183) ought to be *cæruleus* instead of *cyaneus*.

VII.—Descriptions of four new Genera of Carabidæ.

By Dr. H. SCHAUM.

TYLONOTUS [tribum novum *Tylonotini* constituens].

Coxæ mediæ valde approximatae, mesosterno et metasterno apice angustia.

Epimera mesothoracis *episternis* concreta coxas medias attingentia.

Tibiæ anticae simplices, anteriores intus ciliatae.

Prothorax dorso turbinatus.

Margo *elytrorum* integer.

This most interesting insect, on which I propose to establish a new tribe of Carabidæ, bears a great similarity to the Oxænidæ (especially to the genus *Tropopsis*, Sol.), and agrees with them (and the Pseudomorphidæ) in having a very narrow mesosternum, so that the middle coxæ are nearly contiguous ; it differs, however, by its completely *simple* anterior tibiæ, by the margin of the elytra not being interrupted, and by the epimera and episterna of the mesothorax being entirely connate.

Eyes prominent, entirely globose, not truncated or emarginated behind