

Lar. Genei, Sch.—On dead and desiccated Thistles, Sardinia: Küster, loc. cit. xi. p. 94.

Lar. rugicollis, Sch.—Carduaceæ, May, June, July: Lucas, loc. cit. p. 445, Algeria.

Lar. albicans, Lucas, loc. cit. p. 445.—In capitula of Carduaceæ, February, Algeria.

Lar. Chevrolatii, Sch.—Along the stems of Thistles, Algeria: Lucas, loc. cit. p. 446.

Lar. cardopatii, Lucas, loc. cit. p. 446.—Vicinity of Cherchel, Algeria; with an account (after *Dr. Mialhes*) of the habits of the larva, feeding on *Cardopatum amethystinum*, Sp., where it undergoes all its transformations.

Lar. nanus, Lucas, loc. cit. p. 447.—Under stones, Boudjarea mountains, near Algiers, January.

Lar. lineola, Dufour, Excursion Entomologique dans les montagnes de la vallée d'Ossau, in Bulletin Soc. Scienc. Lettr. et Arts de Pau, 1843; on flowers of Compositæ.

III.—Characters of undescribed Species of the Genus *Leucospis*.

By F. WALKER, F.L.S.

THE *Leucospidæ* are very distinct from the other families of Chalcidites, and appear to be nearly as much allied to the Cynipites, and to connect the two tribes.

In New Caledonia they are represented by *L. antiqua*; in the Aru Islands by *L. Aruera* and *Aruina*; in China by *L. Sinensis*; in Hindostan by *L. atra*, *petiolata*, and *Guzeratensis*; in South Africa by *L. ornata* and *incarnata*; in West Africa by *Marres dicomas*; in North Africa by *L. brevicauda*, *Fabricii*, and *Algirica*; in Egypt by *L. miniata*, *frenata*, *scutellata*, *obsoleta*, and *intermedia*; in Arabia by *L. elegans*; in Tauria by *L. aculeata* and *gibba*; in South Europe by *L. grandis*, *gigas*, *nigricornis*, *intermedia*, *Spinolæ*, *varia*, *Biguetina*, *dorsigera*, *rufonotata*, *clavata*, *Grohmanni*, *assimilis*, and *Sicelis*; in Canada by *L. Canadensis*; in the United States by *L. Shuckardi*, *subnotata*, and *basalis*; in Mexico by *L. Klugii* and *Mexicana*; in the West Indies by *L. Cayennensis*; in South America by *L. Hopei*, *Cayennensis*, *leucotelus*, *Santarema*, *Egaia*, *Tapayosa*, and *speifera*, and by *Polistomorpha Surinamensis* and *sphegoides*.

It thus appears that the Mediterranean region is their chief habitation, and there they have their most characteristic form, which is more or less modified in several other districts.

In North America and in China there is no alteration of the

typical structure; in Hindostan the species, as represented by *L. atra*, hardly differ from the Mediterranean type, except in colour, and the same may be said of *L. ornata* in South Africa. In West Africa the only one known species is very peculiar, and in Aru Island the species differ less from those of Europe than in New Caledonia; but the greatest variation occurs in Mexico, in the West Indies, and in South America, and the principal group in the latter continent may be divided into at least four subgroups. One of these has been named *Metallopsis*, but is hardly sufficiently different from *Leucospis*. *Polistomorpha* forms a very distinct genus.

LEUCOSPIS ALGIRICA. *Fœm.* Nigra, sat angusta, scapo subtus, prothoracis margine interrupto scutellique fascia flavis; abdomen fasciis quatuor flavis, 1^a lata, 2^a angusta, 3^a arcuata, 4^a apicali; pedes flavi, femoribus anterioribus nigris apice flavis, femoribus posticis nigris flavo late marginatis.

Female. Black, rather narrow. Antennæ with the scape yellow beneath. Prothorax with a yellow margin, which is interrupted on each side of the fore border. Scutellum with a broad yellow band. Epimera of the metathorax yellow. Abdomen sessile, subfusiform, with four yellow bands; first band broad; second narrow, much interrupted; third arched; fourth apical, vertical. Oviduct reflexed to the base of the abdomen. Legs yellow; anterior femora black, with yellow tips; hind femora black, broadly bordered above with yellow. Wings cinereous, brownish along the costa and at the tips. Length of the body 4½ lines; of the wings 7 lines.

Algeria. In Mr. Saunders's collection.

LEUCOSPIS CANADENSIS. *Mas.* Nigra, pallido pubescens; antennæ scapo subtus flavo; prothorax gutta transversa antica, lateribus margineque postico flavis; mesothorax parapteris et epimeris flavo notatis, scutello fasciato; abdomen basi rufum, fascia antica lunata fasciis duabus posterioribus strigaeque apicali flavis; pedes femoribus apice tibiisque flavis, femoribus posticis basi flavo guttatis, tibiis anterioribus fusco vittatis, tarsis pallide rufescentibus, alis luridis.

Male. Black, thickly punctured, with pale pubescence. Scape of the antennæ yellow beneath. Prothorax bordered with yellow behind and on each side, and with a transverse yellow dot in front. Mesothorax with a yellow stripe on each of the paraptera; scutellum with a yellow band. Pectus with a clavate oblique yellow streak on each of the epimera. Abdomen red at the base; first segment linear, with a lunate yellow band, narrower than the rest of the abdomen, which is fusiform, and has two yellow bands and a short apical longitudinal yellow streak. Femora yellow at the tips; hind femora with a yellow dot at the base and with several very minute teeth beneath; tibiæ yellow; anterior tibiæ striped with brown on the outer side; tarsi pale

reddish. Wings lurid, with a paler stripe in each disk. Length of the body $4\frac{1}{2}$ lines; of the wings 7 lines.

Canada; discovered by Mr. D'Urban. In the British Museum.

LEUCOSPIS SENENSIS. *Fem.* Nigra; antennæ scapo subtus flavo; prothorax fulvo bifasciatus; mesothorax fulvo marginatus; metathorax fulvo trimaculatus; abdomen subpetiolatum, subcompressum, flavo bifasciatum; oviductus brevis; pedes tibiis piceis, tarsis rufescentibus, femoribus posticis flavo marginatis; alæ obscure cinereæ, apud costam luridæ, apice nigricanti-fuscæ.

Female. Black, thickly and minutely punctured. Head with pale cinereous tomentum in front. Scape of the antennæ mostly yellow beneath. Prothorax with two tawny bands, the fore one slightly curved. Mesothorax with a callus on each side, and with the hind border of the scutellum tawny. Metathorax with a tawny spot hindward and with one on each side. Abdomen subpetiolated, slightly compressed; first segment linear, yellow hindward, full half the breadth of the other part, which is fusiform and has one yellow band. Oviduct much less than half the length of the abdomen. Tibiæ piceous; knees and tarsi dull reddish; hind femora of the typical structure, bordered with yellow before and behind, armed with six large teeth. Wings dark cinereous, lurid along the costa, blackish-brown towards the tips. Length of the body 6 lines; of the wings 10 lines.

Shanghai. Discovered by Mr. Fortune. In the British Museum.

LEUCOSPIS ABUERA. *Fem.* Nigra; antennæ apice ferruginæ, scapo subtus flavo; prothorax flavo bifasciatus, fascia postica interrupta; paraptera flavo notata; scutellum flavo bimaculatum; metathorax flavo unimaculatus; abdomen subcompressum, maculis duabus basalibus fasciæ postice flavis; oviductus brevis; pedes tibiis anterioribus flavis, femoribus tibiisque posticis supra flavis, tarsis rufescentibus; alæ obscure cinereæ, costa apiceque nigricantibus.

Female. Black, very thickly and minutely punctured; pubescence very short. Antennæ ferruginous at the tips; scape yellow beneath. Prothorax with two yellow bands; the fore one dilated on each side; the hind one narrower, interrupted in the middle. Mesothorax with a yellow streak on each of the paraptera, and with a yellow spot on each side of the scutellum. Metathorax with a large yellow spot. Metaplectus with a yellow streak on each side. Abdomen hardly petiolated, slightly keeled and compressed; first segment nearly linear, with a yellow spot on each side, more than half the breadth of the other part, which is fusiform and has a yellow band hindward. Oviduct recurved above to much less than half the length of the abdomen. Legs of the typical form; tarsi reddish; anterior tibiæ and tips of anterior femora yellow; hind femora and hind tibiæ yellow above, the former with six large teeth. Wings dark cinereous, very iridescent; fore wings black-

ish along the costa and at the tips. Length of the body $6\frac{1}{2}$ lines; of the wings 10 lines.

Aru Island. Discovered by Mr. Wallace. In the British Museum.

LEUCOSPIS ARUINA. *Mas.* Nigra; caput antice aureum; antennæ scapo flavo; prothorax et scutellum flavo fasciata; paraptera et epimera flavo notata; abdomen subpetiolatum, basi fascisque duabus flavis; pedes rufescentes, femoribus basi coxisque nigris, femoribus posticis nigris flavo marginatis, tibiis posticis subtus nigris; alæ obscure cinereæ, costa apiceque nigricantibus.

Male. Black, very thickly and minutely punctured, hardly pubescent. Head with gilded tomentum in front; cavity for the base of the antennæ shining, metallic. Scape of the antennæ yellow. Prothorax with a yellow band, which is dilated on each side. Mesothorax with a yellow streak on each of the paraptera and with a yellow spot on each of the epimera; scutellum with a semicircular band, which is dilated on each side. Metathorax and pectus slightly metallic. Abdomen slightly petiolated; first segment very convex, mostly yellow above, about half the breadth of the other part, which is short-fusiform and has two yellow bands; first band very narrow. Legs reddish; femora towards the base and coxæ black; hind femora yellow, of the typical form, with black disks, armed with one large and with about nine very minute teeth; hind tibiæ black beneath. Wings dark cinereous; fore wings blackish along the costa and at the tips. Length of the body $4\frac{1}{2}$ lines; of the wings 8 lines.

Aru Island. Discovered by Mr. Wallace. In the British Museum.

LEUCOSPIS ANTIQUA. *Mas.* Nigro-metallica, albo-pubescent; scapus flavo subtus maculatus; prothorax fascia discali lunata maculisque duabus lateralibus flavis; scutum flavo bipunctatum et bimaculatum; scutellum et metapectus flavo bimaculata; abdomen subpetiolatum, fasciis duabus flavis, 1^a lata, 2^a tenuissima; coxæ posticæ flavo strigatæ; alæ nigricanti-cinereæ.

Male. Black, minutely punctured, with a slight metallic tinge and with short white pubescence. Vertex and keel of the front metallic green. Antennæ black, metallic green at the base; scape with a yellow spot beneath. Prothorax with a yellow lunate discal band and with a yellow spot on each side. Scutum with a yellow point on each side by the suture of the parapsides and with a yellow spot on each of the paraptera; scutellum with a yellow spot on each side of the hind part. Metapectus with a yellow spot on each side. Abdomen subpetiolated; first segment slightly convex on each side, with a broad yellow band, hardly half the breadth of the following part, which is fusiform and has a very slender yellow band. Hind coxæ with a yellow streak; hind femora much less dilated than in the typical species, armed with five teeth, of which the first one is much broader than the others.

Wings blackish-cinereous, very iridescent, darkest along the costa of the fore wings. Length of the body 5 lines; of the wings 9 lines.

New Caledonia. Discovered by Mr. Macgillivray. In the British Museum.

LEUCOSPIS MEXICANA. *Fam.* Nigro-metallica; caput sulco antico læte cupreo; antennæ piceæ, scapo flavo; abdomen subfusiforme, subcompressum, dimidio postico aurato; oviductus scutellum attingens; femora postica flavo lineata; alæ fuscæ, postice cinerascens.

Female. Black, very thickly and minutely punctured, with iridescent metallic reflexions and with pale pubescence. Head with smooth bright cupreous furrows wherein the scapes of the antennæ are lodged. Antennæ piceous; scape yellow, except at the tip. Abdomen subfusiform, slightly compressed, clothed with bright gilded pubescence on the apical half. Oviduct retracted above to the hind border of the scutellum. Hind femora with a dull yellowish line above and with another on the fore part beneath, where they are armed with one large and with several very minute teeth. Wings brown, greyish towards the hind border. Length of the body 5 lines; of the wings 9 lines.

Mexico. Discovered by M. Sallé. In the British Museum.

LEUCOSPIS EGAIA. *Fam.* Rufa; caput viridi-cupreum; antennæ ferrugineæ, scapo basi flavo; prothorax striga transversa discali nigra, flavo late marginatus; pectus flavo bivittatum; abdomen viride, subcompressum, antice rufum flavo himaculatum, postice flavo bifasciatum; oviductus scutellum fere attingens; pedes flavi, coxis femoribusque posticis rufis flavo marginatis; alæ cinereæ, apud costam nigricantes.

Female. Red, thickly punctured. Head cupreous, varied with metallic green. Antennæ ferruginous; scape yellow towards the base. Prothorax broadly bordered with luteous-yellow; a transverse black mark in its disk. Scutum and scutellum black, with metallic reflexions, bordered with luteous-yellow. Pectus with a metallic disk; two oblique yellow stripes on each side. Abdomen slightly compressed, metallic green; first segment red, linear, with a yellow spot on each side of the hind border, a little narrower and shorter than the following part, which is elliptical and has two yellow bands. Oviduct recurved nearly to the hind border of the scutellum. Legs luteous-yellow; hind coxæ and hind femora with red disks; the latter with one large and with several very minute teeth. Wings grey, blackish along the costa. Length of the body 4 lines; of the wings 7 lines.

Ega. Discovered by Mr. Bates. In the British Museum.

LEUCOSPIS SANTAREMA. *Fam.* Rufa; caput luteo-flavum, nigro fasciatum; antennæ piceæ, scapo flavo; prothorax flavo late marginatus; scutum vittis tribus nigris lanceolatis antice connexis; metathorax niger, flavo fasciatus; pectus nigrum, flavo bivittatum; abdomen fusiforme, subcompressum, fascia basali nigra arcuata fasciisque duabus posterioribus flavis, 1^a lata arcuata; oviductus scutellum attingens;

pedes flavi, coxis femoribusque posticis rufis flavo marginatis; alæ fuscæ, postice cinerascetes.

Female. Red, thickly punctured. Head luteous-yellow, with a black band on the vertex. Antennæ piceous; scape luteous-yellow. Prothorax broadly bordered with luteous-yellow. Scutum of the mesothorax with three black lanceolate stripes which are connected in front. Metathorax black, with a yellow band. Pectus black, with a broad yellow stripe on each side. Abdomen fusiform, slightly compressed, with a black arched band at the base, and with three luteous-yellow bands, of which the first is broad and much arched. Oviduct recurved above to the hind border of the scutellum. Legs luteous-yellow; hind coxæ and hind femora with red disks; the latter with one large, and with several minute teeth. Wings brown, greyish along the hind border. Length of the body 4 lines; of the wings 7 lines.

Santarem. Discovered by Mr. Bates. In the British Museum.

LEUCOSPIS TAPAYOSA. *Fem.* Nigricanti-viridis; caput viridi-cupreum, antice argenteo tomentosum; antennæ ferruginæ, basi pallide rufescentes; prothorax flavo marginatus; mesothorax flavo fasciatus et bilineatus; epimera flavo notata; abdomen sessile, subcompressum, basi rufum, fascia antica interrupta fascia posteriore lineisque duabus apicalibus flavis; pedes femoribus anticis flavo vittatis, femoribus posticis flavo marginatis; alæ fuscæ, apud costam nigricantes.

Female. Blackish metallic green. Head bright cupreous and metallic green above and hindward, with silvery tomentum in front. Antennæ ferruginous, pale reddish towards the base. Prothorax bordered with yellow. Mesothorax with a yellow line along each side, and with a yellow band on the hind border of the scutellum; a yellow streak on each of the epimera. Metathorax and pectus bright metallic green. Abdomen sessile, slightly compressed, red towards the base, with an arched yellow interrupted band hindward, a little narrower than the following part, which is short, fusiform, and has a yellow band and two yellow apical and vertical lines. Oviduct recurved to the base of the abdomen. Anterior legs mostly piceous; fore femora striped with yellow beneath; hind coxæ and hind femora yellow above; the latter much incrassated, yellow beneath, armed with one large and with several very minute teeth. Wings brown, blackish along the costa, with a pale line in each disk. Length of the body 4 lines; of the wings 6 lines.

Tapayos. Discovered by Mr. Bates. In the British Museum.

LEUCOSPIS SPERIFERA. *Fem.* Nigricanti-viridis; caput, metathorax et pectus læte viridis; antennæ basi rufescentes, scapo subtus flavo; prothorax flavo marginatus, linea antica brevi; abdomen compressum, sessile, elongatum, basi obscure rufescens, apice aureum; oviductus metathoracem attingens; pedes flavi, coxis femoribusque anterioribus

nigra, femoribus posticis tibiisque nigro vittatis; alæ cineræ, apud costam fuscæ.

Female. Blackish metallic green, thickly and minutely punctured. Head, metathorax and pectus bright metallic green. Antennæ black, reddish towards the base; scape yellow beneath. Prothorax with a yellow short transverse line in front, bordered with yellow behind and on each side, where the yellow part is triangular. Abdomen compressed, sessile, about twice the length of the thorax, bright golden towards the tip; first segment dark red, with metallic green reflexions, very little narrower than the other part, which is fusiform and keeled. Oviduct recurved to the metathorax. Legs yellow; anterior femora, except towards the tips, and anterior coxæ black; tibiæ striped with black; hind coxæ very large, green, striped with yellow; hind femora dilated, striped with black, with one obtuse and with about eight minute teeth. Wings cinereous, brown along the costa. Length of the body 6 lines; of the wings 10 lines.

Eggs. Discovered by Mr. Batea. In the British Museum.

LEUCOSPIS IGNOTA. *Mas.* Nigra; caput postice cupreum; antennæ basi obscure rufescentes, scapo subtus flavo; prothorax flavo bifasciatus; scutum flavo marginatum; scutellum flavo bimaiculatum; abdomen subpetiolatum, basi apice et segmentorum marginibus seneis; pedes femoribus tibiisque posticis femoribusque anticis flavo vittatis, tarsis rufescentibus; alæ cineræ, apice nigricantes.

Male. Black, thickly and minutely punctured. Head cupreous hindward. Antennæ dark reddish towards the base; scape yellow beneath. Prothorax bordered with yellow in front and behind. Mesothorax with the border of the scutum and a spot on each side of the scutellum yellow. Metathorax dull reddish. Abdomen subpetiolated, bright seneous towards the base and towards the tip and on the hind borders of the segments; first segment cylindrical, hardly half the breadth of the following part, which is fusiform. Knees yellow; tarsi reddish; fore femora, hind femora and hind tibiæ striped above with yellow; hind femora moderately dilated, striped beneath with yellow towards the base, armed with one large and with several very minute teeth. Wings cinereous; fore wings blackish at the tips. Length of the body 3 lines; of the wings 5 lines.

Hab. — ? In the British Museum.

POLISTOMORPHA SPHEGOIDES. *Fem.* Piceo-nigra; antennæ rufæ, basi nigra; prothorax linea postica transversa brevi pallide fulva; mesothorax lineis duabus pallide fulvis postice approximatis; abdomen cinereo-pubescentis, fulvo unifasciatum; pedes tibiis tarsisque anterioribus fulvis, femoribus posticis fulvo pallidissimo vittatis; alæ luridæ.

Female. Piceous-black, very thickly and minutely punctured. Head in front and mouth much prolonged. Antennæ red, black towards the base. Prothorax with a short pale tawny transverse line on the hind border. Mesothorax with two pale tawny lines which converge hind-

ward; epimera partly pale tawny. Metathorax with a dorsal ridge and with an elevated border. Abdomen with thick cinereous pubescence, keeled above and beneath; first segment linear, with a tawny hind border, much narrower than the other part, which is elongate-pyriform. Anterior tibiae and tarsi mostly tawny; hind femora slightly dilated, striped with very pale tawny, armed with six rather large teeth. Wings lurid. Length of the body 9 lines; of the wings 16 lines.

St. Paulo. Discovered by Mr. Bates. In the British Museum.

IV.—Descriptions of New Genera and Species of Eumolpidae.

By J. S. BALY.

THE chaotic state of the *Eumolpidae*, the crowd of species which remain unnamed and unarranged in our collections, and the want of generic landmarks, have induced me to select some of the more interesting for description, proposing in many instances new genera, of which I have briefly given the differential characters.

GENUS BASILEPTA.

Caput exsertum, facie subelongata, fere perpendiculare; *oculis* prominentibus, rotundatis, integris; *antennis* gracilibus, filiformibus, corpore longioribus, articulo tertio quarto fere dimidio breviori; *palpis maxillaribus* subfiliformibus, articulo ultimo angustato-ovato, ad apicem attenuato. *Thorax* lateribus marginatis, pone medium angulatis; *antepectoris segmento antero-laterali* (fig. 1 *b*) cuneiformi, apice acuto, angulo exteriori ad thoracis angulum anticum extenso. *Scutellum* subtrigonatum, apice obtusum. *Elytra* thorace latiora, oblonga, modice convexa. *Pedes* elongati, graciles; *femoribus* dimidio basali attenuatis, filiformibus, dimidio apicali incrassatis, ampullatis, quatuor posticis subtus ante apicem dente acuto armatis; *tibiis* gracilibus, extus ante apicem emarginatis; *tarsis* (fig. 1 *d*) gracilibus, articulo primo duobus sequentibus aequali; *unguiculo* (fig. 1 *c*) basi appendiculato.

Type, *Basilepta longipes*, Baly.

Basilepta longipes. (Plate I. fig. 1.)

B. subelongata, valde convexa, nitida, supra obscure viridi-aenea; pedibus elytrorumque tuberculo obscure piceis, corpore subtus antennisque (his basi fulva exceptis) nigro-piceis; thorace lateribus angulato.—Long. 2 lin.

Subelongate, very convex, nitidous, above obscure metallic green, body beneath and the antennæ (the fulvous base of these latter excepted) obscure pitchy-black; a large shining circular protuberance on the basilar space of each elytron, together with the legs, piceous; attenuated base of four posterior thighs obscure fulvous. Head smooth above, forehead with a longitudinal groove; lower portion of face deeply punctured; antennæ slender, filiform, longer than the body, three basal