KIRBY.

A Synopsis of the Genera of the Chalcididæ, Subfamily Eucharinæ; with Descriptions of several new Genera and Species of Chalcididæ and Tenthredinidæ. By W. F. KIRBY, Assistant in the Zoological Department, British Museum. (Communicated by Dr. J. Murie, F.L.S.)

[Read 17th June, 1886.]

(PLATE I.)

Synopsis of the Genera of Eucharinæ.

I have here attempted to give a generic revision of the subfamily Eucharinæ, which includes some of the most beautiful and remarkable species of the Chalcididæ. With few exceptions, the species are extra-European, and appear to be most numerous in Tropical America and Australia. The species in the British Museum represent at least fifteen well-marked genera, of which only ten have been previously characterized. I have selected only the most salient characters of each genus; for minute and detailed characters are unnecessary in the present imperfect state of our knowledge of the subfamily.

The Eucharinæ are large, strongly-sculptured, metallic-coloured Chalcididæ; the abdomen is always more or less petiolated, and is frequently raised and compressed, giving the insects some resemblance to the Cynipidæ. From the *Perilampinæ*, to which they have some resemblance, they may be distinguished by the longer petiole, the absence of the stigmatic nervule, &c.

List of Genera of Eucharinæ, with indication of Types, and characters of new Genera.

1. Eucharis, Latr., Hist. Nat. Crust. Ins. xiii. p. 210 (1805).

Type, CYNIPS ADSCENDENS, Fabr.

Cynips adscendens, Fabr. Mant. Ins. i. p. 251. n. 1 (1787). Eucharis Kollari, Först. Verh. Ver. Rheinl. xvi. p. 91. n. 25 (1859).

Details: Westw. Thes. Ent. Oxon. pl. xxviii. f. 15, a-d (1874). Hab. Europe.

Parzer (Faun. Germ. Heft 89, pl. 10) represents the legs as yellow, saying only "antennæ tarsorumque ungulæ nigræ;" and

his insect thus appears to differ from that of Fabricius, who says "pedes pallide femoribus basi nigris." Förster regarded them as distinct; and as Fabricius merely gave a brief diagnosis in his Syst. Piez. p. 157, and this apparently founded on Panzer's figure, Förster was not unnaturally misled into redescribing and renaming the Fabrician instead of the Panzerian insect.

2. Obasema, Cameron, Biol. Centr.-Amer., Hym. p. 104 (1884).

Type, ORASEMA FLAVIPES, Cam.

Orasema stramineipes, Cam. l. c. p. 105 (1884).

Orasema flavipes, Cam. op. cit. pl. v. figs. 20, 20 a-c, pl. vi. figs. 18, 18 a-e (1884).

Hab. Panama.

There seems to be some error about this species, as the description does not well agree with the figure. Judging by the figure, I would refer *Eucharis festiva*, Fabr., E. rapo, Walk., and Schizaspidia maculata, Westw., to this genus. All these are South-American insects.

### 3. TRICORYNA, gen. nov.

Male. Antennæ 11-jointed, thick, moniliform, striated and firely pubescent; scape short; second joint short and transverse; third joint four times as long as broad, much thickened beyond the middle; fourth narrower, longer than broad; the remainder gradually decreasing in length, but not in width, to the ninth; the tenth shorter and narrower than the ninth, and the eleventh minute. Head and thorax coarsely punctured, moderately pubescent; scutellum gibbous, but not produced; petiole longitudinally striated, moderately broad, about two thirds as long as the abdomen. Abdomen about four times as long as broad, tapering at both ends, and rather finely punctured; first joint of tarsi very thick, and much longer than all the rest put together.

Type, Eucharis Iello, Walk.

Eucharis Iello, Walk. Mon. Chalc. ii. p. 12 (1839).

Details: Haliday, Entomol. i. pl. P. figs. 3, 3 a, b (1842).

Hab. Tasmania.

Sy two reads bot wiest I year

### 4. METAGEA, gen. nov.

Male. Antenuæ nearly naked; the third joint four times as long as broad, and gradually thickened to the extremity; the remainder thickened at the extremity, and gradually decreasing in length to the eighth, which is only slightly longer than broad; the rest broken off; petiole short. First joint of the tarsi as long or longer than all the rest together, but not thickened. Abdomen obtuse at tip.

Type, EUCHARIS ZALATES, Walk.

Eucharis Zalates, Walk. Mon. Chalc. ii. p. 13 (1839).

Details: Haliday, Entomol. i. pl. P. figs. 4, 4 a-c (1842).

Hab. Australia.

5. PSILOGASTER, Blanch.,

Hist. Anim. Art. iii. p. 260 (1840); ? Brullé, Ins. Hym. iv. p. 573 (1846).

Type, PSILOGASTER CUPREUS, Blanch.

Psilogaster cupreus, Blanch. l. c. (1842).

Hab. Egypt.

Brullé has figured a Tasmanian insect to represent this genus (P. pallipes, Brullé, l. c. pl. xxxix. figs. 1 & 2), and the British Museum possesses many species congeneric with this from Australia and Tasmania. It is, however, very probable that the Egyptian insect may prove to be generically distinct from these, in which case the Australian group will require a new name.

### 6. CHALCURA, gen. nov.

Male. Antennæ pubescent, 12-jointed; joints 3-11 throwing off a long pubescent ramus from the extremity on the outside. Scutellum gibbous, unarmed. Petiole moderately stout, about two thirds as long as the conical abdomen, and longitudinally striated.

Female with scarcely the rudiments of the antennal rami. Petiole short and broad. Abdomen oval. First joint of tarsi

nearly as long as all the remainder, but not expanded.

Type, EUCHARIS DEPRIVATA, Walk.

Eucharis deprivata, Walk. Ann. & Mag. N. H. (3) vi. p. 359 (1860); Westw. Thes. Ent. Oxon. p. 155, pl. xxviii. fig. 6 (1874). Hab. Ceylon.

## 7. RHIPIPALLUS, gen. nov.

Male. Antennæ pubescent, 13-jointed, with short joints; joints 4-12 throwing off long pubescent rami (thickened at the tips) from the outside, and shorter ones from the inside. Scutellum gibbous, unarmed. Petiole moderately slender, as long as the oval and moderately raised abdomen.

Type, Eucharis volusus, Walk.

Eucharis volusus, Walk. Mon. Chalc. ii. p. 9 (1839). Details: Haliday, Entomol. i. pl. P. figs. 1, 1 a-d (1842). Hab. Australia.

8. STILBULA, Spin., Ann. Mus. xvii. p. 150 (1811).

Type, Ichneumon cynipiformis, Rossi.

Ichneumon cyniformis (sic), Rossi, Mant. Ins. p. 125, pl. vi. fig. G (1792).

Hab. S. Europe.

9. Schizaspidia, Westw., P. Z. S. 1835, p. 69.

Type, Schizaspidia furcifera, Westw.

Schizaspidia furcifera, Westw. l. c. (1835); Thes. Ent. Oxon. p. 151, pl. xxviii. fig. 2 (1874).

Hab. India.

### 10. Tetramelia, gen. nov.

Male. Antennæ 12-jointed; joints 3-11 each throwing off a long pubescent ramus. Scutellum bidentate. Metathorax throwing off a stout horn-like process on each side, curving outwards horizontally nearly as far as the level of the petiole, which is slender and about as long as the height of the abdomen. The latter is of an irregular shape, elevated, compressed, and rather pointed in front, the first segment covering about half the abdomen.

Type, Schizaspidia Plagiata, Walk.

Schizaspidia plagiata, Walk. Trans. Ent. Soc. (3) i. p. 385 (1862); Westw. Thes. Ent. Oxon. p. 152, pl. xxviii. fig. 11 (1874).

Hab. Para.

# 11. LOPHYROCERA, Cameron, Biol. Centr.-Amer., Hym. p. 103 (1884).

Types, Lophyrocera stramineipes and L. Nigromaculata,

Cam.

(1) Lophyrocera stramineipes, Cam. l. c. pl. v. figs. 18, 18 a (1884).

Hab. Panama.

(2) Lophyrocera nigromaculata, Cam. l. c. p. 104, pl. v. figs.
 19, 19 a, b (1884).

Hab. Nicaragua.

# 12. KAPALA, Cameron,

Biol. Centr.-Amer., Hym. p. 102 (1884).

Chirocerus, Brullé (nec Latr.), Ins. Hym. iv. p. 571 (1846). Type, Eucharis furcata, Fabr.

Eucharis furcata and E. flabellata, Fabr. Syst. Piez. p. 158

(1804).
Thoracantha furcata, Haliday, Entomol. i. pl. P. figs. 2, 2 a-c (1842).

Kapala furcata, Cam. l. c. p. 103, pl. v. figs. 17, 17 a-d (1884).

Hab. South and Central America.

There are several species of this genus, from different parts of South America, in the British Museum. *Chirocerus furcatus*, Bruilé (Ins. Hym. pl. xxxviii. figs. 5, 5 a, b, 1846), seems to me to agree better with *Thoracantha atrata*, Walk. (Trans. Ent. Soc. (3) i. p. 383, 1862), than with the Fabrician species.

# 13. THORACANTHA, Latr., Cuv. Règne Anim. ed. 2, v. p. 297 (1829).

Galearia, Brullé, Spec. Hym. iv. p. 572 (1846).

Type, THORACANTHA LATREILLII, Guér.

Thoracantha Latreillii, Guér. Icon. Règne Anim., Ins. p. 415, pl. lxvii. fig. 8 (1829-44).

Thoracantha Latreillii vel coleopteroides, Waterh. Trans. Ent. Soc. ii. p. 196, pl. xvii. fig. 3 (1839).

Galearia violacea, Brullé, l. c. pl. xxxviii. figs. 6, 6 a, b (1846). Hab. Brazil.

Although Latreille specified no type, yet his description clearly indicates this genus; moreover, T. Latreillii was figured and described as a Thoracantha before any other species to which the generic name could apply.

# 14. LIRATA, Cameron,

Biol. Centr.-Amer., Hym. p. 102 (1884).

Type, LIRATA LUTEOGASTER, Cam.

Lirata luteogaster, Cam. l. c. pl. v. figs. 16, 16 a (1884). Hab. Panama.

15. UROMELIA, gen. nov.

Thoracantha, Brullé (nec Latr.), Ins. Hym. iv. p. 572 (1846).

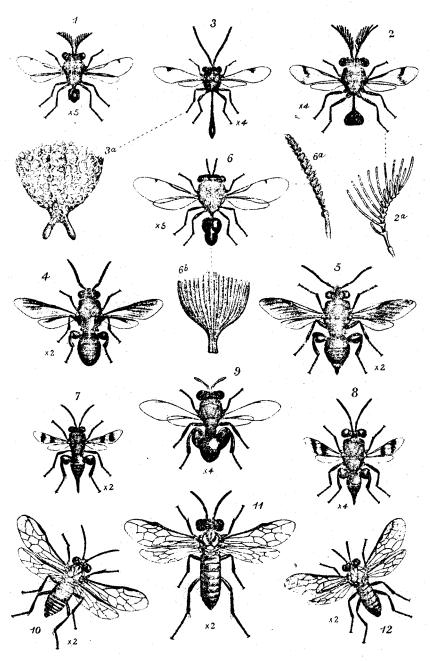
Type, THORACANTHA STRIATA, Perty.

Thoracantha striata, Perty, Del. Anim. Art. p. 135, pl. xxviii. figs. 15, 16 (1834).

Hab. Amazons.

# Table of Genera of Eucharina.

A. Scutellum not bidentate.  B. Antennæ simple in male.		
C. Antennæ moniliform.  D. Abdomen compressed, ascending  DD. Abdomen not compressed, nor ascending.	1.	Eucharis.
E. First joint of tarsi much thickened	3.	Tricoryna.
EE. First joint of tarsi very long, but not thicker than the others	4.	Metagea.
CC. Antennæ not moniliform.  F. Joints of antennæ long  FF. Joints of antennæ short		Psilogaster. Orasema.
BB. Antennæ ramose in male. G. Antennæ ramose in male GG. Antennæ biramose in male AA. Scutellum bidentate.		Chalcura. Rhipipallus.
H. Scuteflum off moderate size. I. Antennæ simple in male II. Antennæ ramose in male.	8.	Stilbula.
K. Metathorax unarmed	9.	Schizaspidia.
L. Metathoracic processes curving downwards		Lophyrocera.
of two diverging horizontal teeth  HH. Scutellum often as long as the abdomen.  M. Scutellar processes covering the whole abdo-	10.	Tetramelia.
men. N. Scutellar processes very broad	13.	Thoracantha.
NN. Scutellar processes long contiguous, and tapering to the extremity	15.	Uromelia.
rally curving inwards towards the tips.  O. Third joint of antennæ as long as all the rest together	14.	Lirata.
OO. Third joint of antennæ not much longer than fourth	12.	
LINN. JOURN.—ZOOLOGY, VOL. XX.		3



SPECIES OF CHALCIDIDÆ AND TENTHREDINIDÆ.

#### EUCHARISSINÆ.

#### SACCHARISSA, nov. gen.

Antennæ 18-jointed, scape rather long, second joint small, transverse, third and fourth simple, third longest, fifth to fifteenth short, with a series of long bristly fin-shaped projections on the upper surface, that on the fifth segment half the length of that on the sixth, the rest gradually decreasing until on joints 16-18 they almost disappear; scutellum with a long spear-shaped projection behind; head very narrow, transverse; occili arranged in a straight line; petiole short; abdomen short, ascending. (The abdomen is damaged in the type, and the figure may not therefore give the correct shape.)

Type, Eucharis contingens, Walk., from Borneo. (Pl. I. figs. 6, 6 a, 6 b.)

The species of Eucharissa are South-African insects, and their scutellum is unarmed.

#### EUCHARINÆ.

8. Rhipipallus Cameroni. (Pl. I. figs. 2, 2 a.)

Long. corp. 5 millim.

Male. Coppery, rugose; head and metathorax greener, antennæ brown, the rami less thickened than in R. volusus, Walk.; lege flavotestaceous; hind coxæ globular, very dark green; petiole purplish cupreous, longitudinally striated; abdomen flavo-testaceous, brown on the back at the base; wings yellowish hyaline, with yellowish and unusually distinct nervures; a large smoky cloud below the cubitus.

Hab. Australia (?) or Celebes (?).

This very fine species much resembles Chalcura deprivata, Walk., in size and appearance.

#### DESCRIPTION OF PLATE I.

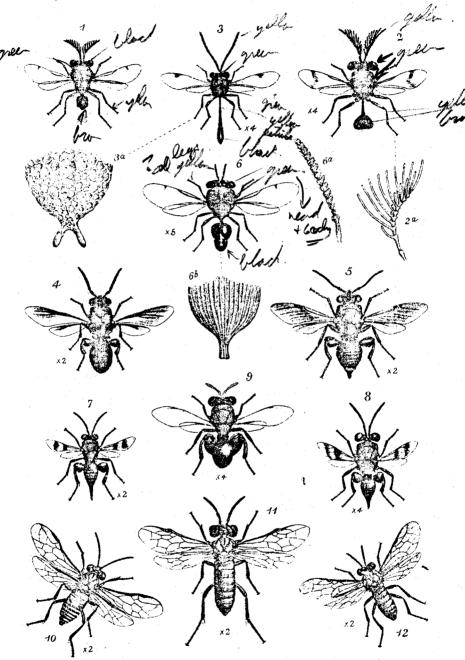
Fig. 6a. S. contingens. Antenna. \*Fig. 1. Schizaspidia Murrayi, Kirb., 6b. Ditto. Scutellum. 7. Stomatocer as Magrettii, Kirb., Q. 2. Rhipipallus Cameroni, Kirb., &. 8. S. diversicornis, Kirb., Q. 2a. Ditto. Antenna. 3. Stilbula cynipiformis, Rosei, 3. 9. Chalcis Kassalæ, Kirb., 3. 10. Hemidianeura Cameroni, Kirb., 3 a. Ditto. Scutellum. 4. Trichoxenia cineraria, Walk., d. 11. Macrophya Saundersi, Kirb., Q. 5. Ditto, ♀. 6. Saccharissa contingens, Walk., 6. 12. Sclandria meridionalis, Kirb., Q.

<sup>\*</sup> S. Murrayi, Kirby, Ann. & Mag. Nat. Hist. (5) xiii. p. 403 (1884), from Tongatabu.

colonate

WF.Kirby.

LINN. SOC. JOURN. ZOCL. VCL. XX.PL.1.



SPECIES OF CHALCIDIDÆ AND TENTHREDINIDÆ

Hannart imp.

Hammond delet lith