

## DESCRIPTIONS OF NEW HYMENOPTERA. No. 3.

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Most of the species described in this paper were received for determination through the Bureau of Entomology, United States Department of Agriculture, and are of economic importance. The figures made to illustrate certain details were all drawn with the aid of the camera lucida. Comparative measurements were made with an eye-piece micrometer used in the Zeiss binocular microscope.

### Superfamily APOIDEA.

*HALICTUS SANSONI*, new species.

*Female*.—Length about 7 mm. Belongs to the group with no obsolescent wing veins and hair bands on the apical margins of the abdominal segments. Black, the mesonotum with a greenish luster; face above insertion of antennæ closely punctured and finely lineolated; below the antennæ the punctures sparser; clypeus, supraclypeal area, and sides of face below, smooth, polished and with a few scattered punctures; facial quadrangle subquadrate, the clypeus distinctly produced; mesoscutum and scutellum, smooth, shiny, the punctures small, separated from each other by more than the width of a puncture; metanotum closely, finely rugoso-punctate and tomentose; propodeum finely rugulose and minutely reticulate, the rugulae reaching the apex of the propodeum only medially; truncation not surrounded by a salient carina; wings hyaline, veins and stigma honey colored; second submarginal cell narrowed anteriorly, receiving the first recurrent vein much before apex; third submarginal almost twice as long as the second, narrowed one-half anteriorly; legs dark brown, the pubescence yellowish-white, that on the inner side of hind tarsi more yellowish; inner spur of hind tibiæ with about six short teeth; abdomen brownish, with very slight metallic luster, polished, and finely, sparsely punctured; beyond the second segment, the abdomen very finely transversely rugosely-lineolate; hair bands white, those on segments one and two interrupted medially (worn?).

*Habitat*.—Banff, Alberta, Canada.

*Type*.—Cat. No. 13753, U.S.N.M.

One specimen sent by Mr. N. B. Sanson, curator of the Rocky Mountains Park Museum, with the additional information that the specimen was taken on the "Anthracite Road, altitude 4,700 ft., on June 17, 1908."

Named in honor of Mr. Sanson.

Owing to the sparse punctures of the mesoscutum, as well as other characters, this species does not at all resemble the species of the *provancheri* group, nor is it at all similar to any of the species without any green on them.

## Superfamily PROCTOTRYPOIDEA.

### Family SCELIONIDÆ.

#### SCELIO PULCHELLUS, new species.

*Female*.—Length about 3.75 mm. Black, scape, pedicel and first two or three joints of antennæ (the rest missing), and legs, including coxæ, fulvous, the coxæ somewhat darker; head smooth, polished, with a few scattered, fine punctures; occipital foraminal depression margined, semicircularly striate; pronotum, mesocutum and scutellum, coarsely reticulately rugose, a transverse area on middle lobe mesocutum between anterior ends of parapsidal furrows with a few large shallow scattered punctures; parapsidal furrows apparent; parapsidal areas smooth, with large shallow punctures; propodeum reticulate, at apex with two large smooth spots; mesopleuræ horizontally striate, metapleuræ reticulate; wings, except bases, dusky; segments one and two of abdomen longitudinally striate, segment two depressed at base; segment three finely reticulate, segment four with similar sculpture at base, the apex and lateral margins smooth; following segments hardly sculptured, ventral segments one and two longitudinally striate, segment three with an area on each side of middle, punctured, segment four with similar smaller area.

*Habitat*.—Lake Cowal, New South Wales.

One specimen bred from eggs of the "small plague locust" (which Mr. A. N. Caudell says is the common name of *Chortoicetes pusilla* Walker), and sent by Mr. W. W. Froggatt under his number 96.

*Type*.—Cat. No. 13968, U.S.N.M.

The sparse punctures of the head separate this species from the species of this genus described from Australia.

#### SCELIO FROGGATTI, new species.

*Female*.—Length 5 mm. Black, legs including coxæ fulvous; face, cheeks, rear of head and thorax coarsely reticulately rugose; antennal fossa hardly depressed, smooth for two-thirds the length of the scape; lower part of face with striæ converging toward mouth parts; lateral ocelli about one-half their own width from eyes; head deeply excavated behind, the occipital foraminal depression margined; antennæ

dark brown; first joint of funicle conical, about as long as pedicel; following joints transverse; parapsidal furrows obliterated by the coarseness of the sculpture; propodeum longitudinally rugose; lateral hind angles of propodeum produced; inflexed sides of pronotum coarsely reticulately rugose, but not as coarse as dorsum; mesopleuræ coarsely punctured; metapleuræ reticulately rugose; wings, except the hyaline bases, dusky; abdomen strongly longitudinally rugulose, narrow apical margins of the segments smooth; segment two strongly depressed at base; venter more finely longitudinally rugose, the rugæ failing medially and apically.

*Male*.—Unknown.

*Habitat*.—Childers, Queensland.

*Type*.—Cat. No. 13967, U.S.N.M.

Two specimens bred from the eggs of the "Plague locust" (which Mr. Caudell says is the common name of *Chortoicetes terminifera* Walker), by Mr. W. W. Froggatt and sent by him under his number 95.

Named in honor of the sender.

SCELIO FULGIDUS, new species.

*Female*.—Length about 3.5 mm. Head and thorax black, abdomen dark brown, legs fulvous, the coxæ somewhat darker in color; scape, pedicel and basal joints of funicle, fulvous; apical joints of antennæ brown; head smooth, polished, with a few scattered, small punctures, sides of face below with a few striæ converging toward mouth parts; occipital foraminal depression margined, vertically striate; dorsum of pronotum coarsely rugose laterad; parapsidal furrows apparent, consisting of a row of large pits; parapsidal areas with a few very large scattered punctures; anterior half of median lobe similarly sculptured, the posterior half with close large punctures, the medial punctures smaller than those laterad; scutellum with large punctures separated from each other by about half the width of a puncture; propodeum closely, coarsely, irregularly punctured, the punctures laterad resembling thimble-like punctures; posterior half of mesopleuræ longitudinally striate, the anterior half smooth, with a few punctures; metapleuræ with sculpture like the propodeum; wings dusky with hyaline bases; abdomen finely longitudinally striate, the apical margins of the segments smooth; segment five with a median area which is not striate; venter longitudinally striate with the middle of the segments smooth.

*Habitat*.—New South Wales.

Three specimens sent by Mr. W. W. Froggatt, during 1900 under number 60 with the additional record "parasitic in the eggs of *Pachytylus australis*."

*Type*.—Cat. No. 13969, U.S.N.M.

Separated at once from the preceding by the striæ on the face, and the sparsely punctured mesonotum.

## TELENOMUS DALMANI (Ratzeburg) Mayr.

The collections of the United States National Museum contain specimens of this species reared from the eggs of *Orgyia antiqua* in England by Miss A. Taylor and also others from Holland from the same host. There is also a series from Ottawa, Canada, from the same host, which are entirely identical with the European specimens. The species described as *T. fiskei* by Brues is undoubtedly this species.

## TELENOMUS ABNORMIS, new species.

*Female*.—Length 0.75 mm. Belongs to the group having the antennæ with only ten segments; black, the legs, including coxæ and antennæ, except club, testaceous; club of antennæ 4-jointed (fig. 1); pedicel slightly longer than first joint of funicle; lower part of face finely reticulated; along inner margin of eyes a single row of punctures; above insertion of antennæ a smooth space; ocellar area finely reticulated; mesonotum finely closely punctured, appearing almost granular; scutellum smooth, polished, with a few punctures around the edge, metanotum rugose; first segment of abdomen strongly striate for almost the whole length; striæ on segment two longer than first segment of abdomen; segment two at base pitted between the striæ; second segment about as long as wide.

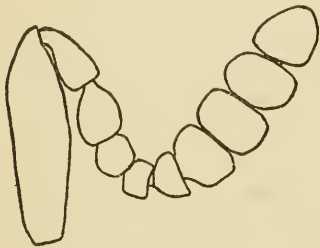


FIG. 1.—TELENOMUS ABNORMIS. OUT-LINE OF ANTENNA OF FEMALE.

*Male*.—Length 0.75 mm. Similar to the female, the sculpture of the face and thorax stronger; joints of flagellum except first one, subquadrate.

*Habitat*.—Deli, Sumatra.

Many specimens reared from lepidopterous eggs (said by Dr. H. G. Dyar to be Liparidæ or Notodontidæ) by Dr. L. P. de Bussy and sent under his number 3.

*Type*.—Cat. No. 13879, U.S.N.M.

*T. dalmani* (Ratzeburg) Mayr, which in the female has 10 jointed antennæ, is larger, has the pedicel and first joint of funicle more elongated, the latter slightly longer than the pedicel, and the club of antennæ distinctly five-jointed in the female; in the male the second and third joints of the funicle are elongate.

## DISSOLCUS TETARTUS, new species.

*Female*.—Length 0.75 mm. Black, the first abdominal segment red; the legs, including most of coxæ, and antennæ, except club, flavous; first joint of funicle about as long as pedicel; the second shorter, the third quadrate, the fourth transverse; cheeks and face below eyes vertically striate; face with a carina on each side that

follows inner orbits of eyes but below continues to mouth; another carina at each side of antennal fossa, these also continuing to mouth parts; space between these two sets of carinæ coarsely punctured; mesoscutum strongly reticulated with impressed lines, appearing scaly; scutellum finely rugose; apical margin of scutellum and metathorax at base each with a row of pits separated by strong carinæ; base of scutellum, especially laterally, and lateral margin of lateral lobes of mesoscutum with a row of similar pits; first abdominal segment striate at base; second, except laterally where it is smooth, striate almost to apex.

*Male*.—Unknown.

*Habitat*.—Medan, Deli, Sumatra.

*Type*.—Cat. No. 13880, U.S.N.M.

Sixteen specimens reared from eggs of an unknown host by Dr. L. P. de Bussy.

### Superfamily CHALCIDOIDEA.

#### Family CHALCIDIDÆ.

##### HALTICHELLA STOKESI, new species.

*Female*.—Length 5 mm. Black, lower margins of abdominal segments reddish-brown; tegulæ and legs, including coxæ, red; head closely, coarsely punctured; facial excavation bounded by a carina which includes anterior ocellus; carina at top of antennal fossa situated just in front of anterior ocellus; pronotum sculptured about as head; mesonotum with somewhat finer punctures, separated by about a puncture width; scutellum with an apical emarginate plate; propodeum with lateral angles produced; mesopleuræ longitudinally rugose, posterior part of mesopleuræ, metapleuræ, and sternum umbilicately rugoso-punctate; wings with a small infuscated spot covering marginal vein and extending about half way across wing; apicad of this a slightly smaller discal spot; postmarginal vein longer than marginal; abdomen smooth, polished, the apical segments finely reticulately lineolated.

*Male*.—Length 4 mm. Similar to the female, punctures of mesothorax closer; wings hyaline; front legs black, intermediate legs brownish black, posterior tibiæ with basal two-thirds fuscous; all tarsi slightly lighter than their tibiæ.

*Habitat*.—Glen Innes, New South Wales.

*Type*.—Cat. No. 13971, U.S.N.M.

One of each sex sent by Mr. Froggatt under his number 107 with the additional record "in codlin moth, 2-3-09, W. S. Stokes."

Named in honor of the collector.

Of the species of this genus described from Australia by Walker, *fabricator*, *indignator*, and *internata* are said to have the scutellum

unarmed and *proxenus*, described from a male, has black legs; *dexius*, a male, has red legs; *eracon* has black legs; *nyssa* has a red abdomen and the legs partly black; *indignator* has the legs partly black; *H. bicolor* Ashmead has the abdomen entirely red.

CHALCIS COMP SILURÆ, new species.

*Female*.—Length about 4.25 mm. Black, the tegulæ and the legs in part, yellow; head and thorax coarsely, umbilicately punctured; carina at front of malar space dividing before reaching eye, one branch running up anterior orbits the other directed backward; there is also a branch running to eye; malar space weakly sculptured; depressed apical margin of scutellum emarginate; lateral projections on propodeum obsolete; wings subhyaline; front and intermediate legs beyond middle of femora, a large spot at apices of hind femora, hind tibiæ, except bases and a median black annulus, and hind tarsi entirely, yellowish; hind coxæ without a tubercle; hind femora on inner side distinctly, finely, closely punctured and without a tubercle on inner side near base; lower margin of hind femora with a large triangular tooth near middle and between it and the apex eight or nine smaller ones.

*Male*.—Length about 4 mm. Similar to the female, except in secondary sexual characters.

*Type-locality*.—Wisconsin.

Other locality: Massachusetts.

Types reared from tachinid puparia from Pine Tussock moth at the Gipsy Moth Laboratory at Melrose Highlands, Massachusetts, and recorded under their number 4623 Bb (female) and 4628 D (male).

Seven paratopotypes with the same record are recorded under numbers 4610a, 4650 Ta, 4651 Ta (one each); 4655 T (four).

Five paratypes under numbers 4355 A, 4338 E, 493, 1280 ai, from Massachusetts were reared from puparia of *Compsilura concinnata*.

*Type*.—Cat. No. 13802, U.S.N.M.

This species has the malar carina and the markings of the hind legs about as in *paraplesia* and *minuta* but the absence of the tubercle on the hind femora and the distinct close punctures of the inner side of the hind femora readily separates them. The males are harder to separate from the males of the other species but the absence of the lateral projections on the propodeum added to the other characters is satisfactory.

CHALCIS THRACIS, new species.

*Male*.—Length 5 mm. Black; tegulæ, knees, bases and apices of front and middle tibiæ, a line on front of anterior tibiæ, spot at apex of hind femora, a spot on outer side near base of hind tibiæ and one at apex and all tarsi, yellow; carina at front of malar space dividing

before reaching eye, one branch directed backward, the other weaker, running up inner orbits to join a few vertical rugæ which extend to summit of eye; face below insertion of antennæ finely rugoso-punctate; above, coarsely, reticulately, umbilicately punctured; pronotum and mesonotum coarsely, closely, umbilicately punctured, the walls between the punctures flattened and finely lineolate; disk of lateral lobes of mesoscutum toward rear with a space in which the punctures are subobsolete; propodeum without lateral angular projections; wings glassy hyaline; hind femora closely minutely punctured on outer side, the punctures coarser and closer along upper edge; inner side of hind femora distinctly, finely punctured and without a tubercle on lower margin near base.

*Female*.—Unknown.

*Habitat*.—Manila, Philippine Islands.

Three specimens reared from the pupæ of *Erionota thrax* Linnaeus, D. B. Mackie, collector.

*Type*.—Cat. No. 13870, U.S.N.M.

Received through the Bureau of Entomology, United States Department of Agriculture, from Mr. C. M. Conner, of the Philippine Bureau of Agriculture.

### Family EURYTOMIDÆ.

#### EURYTOMA NESIOTES, new name.

This is proposed to replace *E. fulvipes* Crawford, 1910, not of Fitch.

#### EURYTOMA PYRRHOCERUS, new species.

*Female*.—Length 4 mm. Black, the antennæ fulvous, the club and pedicel fuscous; face with coarse irregular umbilicate punctures; clypeus medially smooth; first joint of funicle almost twice as long as pedicel, following joints of funicle successively shorter, the last slightly longer than wide; the back of head, pronotum, and mesonotum with crowded umbilicate punctures; pronotum about twice as wide as long; posterior face of propodeum with thimble-like punctures and medially a vertical row of irregular, shallow pits bounded laterally by two quite regular rugæ; sides of propodeum coarsely irregularly rugose; prepectus almost smooth; mesopleuræ, except the anterior margin, horizontally striate, with punctures between the striæ; metapleuræ coarsely rugose; marginal and postmarginal veins subequal in length, the stigmal shorter; coxæ black, trochanters fulvous; femora black, the tips and extreme bases and a line on front of anterior ones, fulvous; tibiæ fulvous, the tips, together with the tarsi, whitish; abdomen elongate, polished, the sides of the segments punctured; segments 1–3 subequal, 4 slightly longer than 3.

*Male*.—Unknown.

*Habitat*.—Glen Innes, New South Wales.

Two specimens sent by Mr. W. W. Froggatt under his number 107 with the additional record "in codlin moth, W. S. Stokes."

*Type*.—Cat. No. 13970, U.S.N.M.

In addition to the fulvous antennæ this species is separated from some of the other forms by the following characters:

The enlarged stigmal knob distinguishes *E. eucalypti* Ashmead; *E. binotata* has a whitish spot on each side of the pronotum, the legs lighter color and the propodeum rugose; *E. australiensis* has the propodeum rugose and the fourth segment of the abdomen fully as long as segments 1-3 combined.

#### BEPHRATA CUBENSIS Ashmead.

Mr. Patricio Cardin has sent to the Bureau of Entomology, United States Department of Agriculture, from Santiago de la Vegas, Cuba, two females of this species, with the record that they were reared from seeds of *Anona* species.

This record, together with the one for the following species, constitute, so far as is known to the author, the first rearing records for this genus and add the genus to the list of those which are phytophagous.

#### BEPHRATA PARAGUAYENSIS, new species.

*Female*.—Length about 5 mm. Entirely reddish-testaceous; scape and pedicel testaceous, rest of antennæ brown; first joint of funicle twice as long as pedicel and two-thirds as long as scape; the joints of the funicle gradually decreasing in length (see fig. 2); club slightly longer than joint one of funicle; head and notum of thorax coarsely, closely, umbilicately punctured; the punctures, except on disk of



FIG. 2.—BEPHRATA PARAGUAYENSIS. OUTLINE OF ANTENNA OF FEMALE.

scutellum, separated only by a narrow wall; space between punctures when more than a thin wall, finely lineolated; propodeum and metapleuræ reticulately umbilicately punctured; mesopleuræ longitudinally striate; wings dusky; petiole short; abdomen about as long as head and thorax combined.

*Male*.—Length about 4 mm. Similar to the female, but the petiole longer, the dorsum of thorax with black on the disk, the first joint of the funicle almost as long as the scape, the following joint successively slightly shorter, the club hardly longer than the last.

*Habitat*.—Paraguay.

Reared from seeds of *Anona* species received at the United States Department of Agriculture.

*Type*.—Cat. No. 13801, U.S.N.M.



Family PERILAMPIDÆ.

PERILAMPUS NESIOTES, new species.

*Female*.—Length 4 mm. Above black, with bluish reflections in places, the face bluish or greenish, the pleuræ more bluish than the dorsum, the legs blue; face smooth; facial excavation with a carina on each side near eyes, extending downward to about middle of eyes; anterior ocellus at the head of this depression; rear of head circularly striate; mesonotum closely, coarsely punctured; inner edges of lateral lobes of mesoscutum with a broad smooth area; wings hyaline; tarsi whitish.

One specimen reared from a *Prodenia* larva at Medan, Deli, Sumatra, by Doctor de Bussy.

*Type*.—Cat. No. 13875, U.S.N.M.

Family ENCYRTIDÆ.

Subfamily EUPELMINÆ.

Genus LECANIOBIUS Ashmead.

*Zalophothrix* CRAWFORD.

The front femora in the type species of this genus are distinctly swollen, and the genus will not therefore run where it was placed by Doctor Ashmead in his tables. On this account the genus was overlooked by me and *Z. mirum* Crawford is *L. cockerelli* Ashmead.

Subfamily ENCYRTINÆ.

Tribe ENCYRTINI.

SOPHENCYRTUS, new genus.

Mandibles at apex apparently blunt, almost edentate, antennæ inserted on the middle of the face, elongate, the scape over twice as long as the distance from insertion of antennæ to anterior ocellus; pedicel short, slightly longer than wide; one ring-joint; funicle 6-jointed, first joint of funicle as long as distance from insertion of antennæ to anterior ocellus, joints 3-6 subequal, 2 shorter; club showing only one joint; viewed in profile, the thorax above greatly rounded, especially the scutellum; axillæ meeting medially; propodeum elongate; marginal vein thickened, as long as postmarginal or stigmal (see fig. 3); anterior wings with two infuscated areas; wings with marginal fringes; hind tibiæ with two apical spurs, one very small.

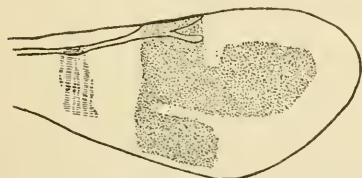


FIG. 3.—SOPHENCYRTUS TOWNSENDI. WING OF FEMALE. SHADING TO SHOW INFUSCATION.

The mandibles in the only specimen are partially covered by the labrum and the dentition is hard to see. The general aspect of the

insect seems to place the species in the Encyrtini rather than in any other group. The shading in the figure of the wing is intended only to give an idea of the general shape of the infuscated areas.

*Type of the genus.*—*S. townsendi* Crawford.

SOPHENCYRTUS TOWNSENDI, new species.

*Female.*—Length 2.25 mm. Brownish black; antennæ light brown; head broader than thorax, thin antero-posteriorly, excavated behind, the vertex carinated medially and laterally sharply angulated; lateral ocelli touching carinated edge; head about one-third broader than high; face finely lineolate, above insertion of antennæ becoming indistinct; mesoscutum anteriorly finely transversely lineolated, posteriorly smooth; dorsal part of axillæ finely, deeply, closely punctured, the oblique part smooth; scutellum basally with fine, deep, crowded punctures, rest of scutellum, except smooth apical portion, semicircularly striate, so that from above the scutellum appears more conical than it really is; propodeum and pleuræ smooth; legs brown, knees, apices of tibiæ, and the tarsi lighter; wings, except infuscated spots, hyaline; abdomen smooth, polished.

*Male.*—Unknown.

*Habitat.*—Piura, Peru.

*Type.*—Cat. No. 13869, U.S.N.M.

Described from one specimen received through the Bureau of Entomology from Prof. C. H. T. Townsend, who reared it from the abdomen of an adult *Stenomacra*, sp. and sent it under his number 10010°3a.

Professor Townsend, in a letter to Dr. L. O. Howard, says regarding this species:

This parasite exactly counterfeits the small black ants that make their nests in mesquite trunks and are always running up and down the trunks among the *Stenomacras*, but never molesting the latter. The parasite in life holds its black-barred wings tightly appressed to body, so that they are quite invisible. Even with a lens I thought the parasite was wingless. After death the wing muscles relaxed, and I was surprised to note the wings at the first glance with the lens. The form of the body and the color are both quite like the ant, but I could see by its movements in life that it was not an ant, and that with the naked eye. It jumps when disturbed.

Tribe MIRINI.

LEUROCERUS, new genus.

Belongs to the series in which the female has greatly dilated and flattened foliaceous antennæ; front prominent and with fine thimble-like punctures interspersed with larger ones; antennæ with 6-jointed funicle, the joints of the club fused (fig. 4); facial impression bounded by an angulation but not carinated; lateral ocelli touching eyes and nearer to each other than to the anterior ocellus; axillæ not touching medially; scutellum without an apical tuft of hairs; wings fuscous,

with a short, narrow, hyaline streak directed backward from just apical of the end of the postmarginal vein and reaching a little caudad of the end of the stigmal vein; marginal vein punctiform, stigmal longer than the postmarginal (fig. 5).

In Doctor Ashmead's classification of the tribe<sup>1</sup> this genus would run to *Zarhopalus*, a genus which does not have the foliaceous antennæ and which has the postmarginal and stigmal veins greatly elongated, the lateral ocelli distinct from the margin of the eye and nearer to the anterior ocellus than to each other.

In general appearance this genus most resembles *Cerapterocer* and *Eusemion*, two genera which have the club of the antennæ segmented and the marginal vein elongate, in addition to the characters given in the above description. The genus is of especial interest, since the genera it most resembles are parasites of scale insects.

*Type of the genus.*—*L. ovivorus* Crawford.

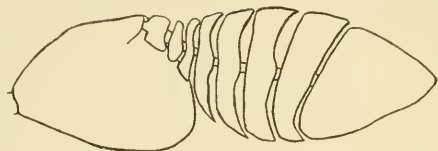


FIG. 4.—LEUROCERUS OVIVORUS. OUTLINE OF ANTENNA OF FEMALE.

LEUROCERUS OVIVORUS, new species.

*Female.*—Length about 1.5 mm. Head and thorax above, varying shades of bluish and purple; abdomen, antennæ, and pleuræ deep brown; facial impression except antennal prominence very finely punctured, the punctures almost thimble-like; vertex at rear carinated; cheeks and sides of face below finely rugulose; pronotum finely transversely rugulose, mesonotum with fine shallow thimble-like punctures, those on the mesoscutum so shallow that they appear almost as reticulations; tegulæ large, brown, sculptured almost as the mesoscutum; legs dark brown, tibiæ lighter, tips of tibiæ and the tarsi entirely, whitish-testaceous.

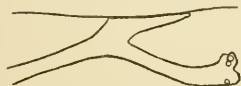


FIG. 5.—LEUROCERUS OVIVORUS. DETAIL OF WING OF FEMALE SHOWING VENATION.

*Male.*—Unknown.

*Habitat.*—Medan, Deli, Sumatra.

*Type.*—Cat. No. 13877, U.S.N.M.

Ten females reared from the eggs of an unknown butterfly and sent by Doctor de Bussy under number 7.

OOENCYRTUS PAPHIONIS Ashmead.

Two specimens of this were received from the Philippine Bureau of Agriculture, reared from the eggs of *Erionota thrax* Linnæus, collected at Manila, Philippine Islands, by Mr. D. B. Mackie.

## Family PTEROMALIDÆ.

## AGIOMMATUS, new genus.

Belongs to the tribe Sphegigasterini as defined by Doctor Ashmead; mandibles large, strongly 4-toothed; eyes strongly converging above; antennæ inserted on the middle of the face, 13-jointed, with 3 ring joints, very similar in the two sexes; lateral ocelli hardly their own width from eyes; cheeks below broad, at rear sharply angu-

lated; head strongly excavated behind, the vertex thin; parapsidal furrow incomplete; abdomen petiolated, petiole slightly shorter than the hind coxæ; anterior coxæ with a distinct spine in front; propodeal spiracles elongate; propodeum with a strong median and a transverse carina which touches the caudal ends of the lateral

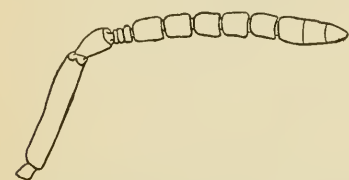


FIG 6.—AGIOMMATUSSUMATRAENSIS. OUTLINE OF ANTENNA OF FEMALE.

fold forming a depressed area; propodeum with a neck; marginal vein long, slightly thickened, postmarginal about two-thirds as long as marginal, stigmal shorter; prepectus with a small obscure triangle above; hind tibiæ with one spur; segments 1-3 of abdomen short, segment 4 longer than all other segments together.

The convergent eyes and spine on the front coxæ readily distinguish this genus.

*Type of the genus.*—*A. sumatraensis* Crawford.

## AGIOMMATUS SUMATRAENSIS, new species.

*Female.*—Length about 2.25 mm. Head and thorax blue green, abdomen brown; legs whitish, the coxæ more testaceous; antennæ light brown, the scape and pedicel whitish; face finely rugulose reticulated; median lobe of mesoscutum, scutellum and most of mesopleuræ with thimble-like punctures; lateral lobes of mesoscutum and axillæ finely reticulated; sculpture of propodeum between spiracles similar to that on scutellum but much finer; neck of propodeum with a few fine lines.

*Male.*—Length about 2.10 mm. Similar to the female except in secondary sexual characters.

*Habitat.*—Medan, Deli, Sumatra.

*Type.*—Cat. No. 13878, U.S.N.M.

Seven specimens reared by Doctor de Bussy from eggs which Doctor Dyar says are probably noctuid.

## Family EULOPHIDÆ.

## Subfamily TETRASTICHINÆ.

## TETRASTICHUS ECHTHRUS, new species.

*Female*.—Length about 2.25 mm. Green, the antennæ brown with the scape and pedicel testaceous; coxæ green, the anterior ones partly brown; legs whitish-testaceous; all trochanters brown; anterior femora except tips, brown; intermediate femora basally suffused with brown, hind femora outwardly brown on the basal two-thirds; face finely lineolate, above antennæ with scattered large punctures; clypeus with a median depression; from below insertion of each antennæ a shallow depression runs toward the median depression of clypeus making a V; joints of funicle elongate, the first over twice as long as the pedicel; pronotum with thimble-like punctures, these coarser on the inflexed sides; mesonotum very finely longitudinally lineolate, the lines on the axillæ more irregular; median furrow of mesoscutum very apparent; metanotum finely rugulose; propodeum with a median carina and lateral folds, the area between them finely rugulose, almost resembling thimble-like punctures; lateral folds broadened at rear to form a triangular area which has thimble-like punctures; laterad of the lateral folds the sculpture much finer; just back of the metapleuræ the surface finely lineolated; prepectus and metapleuræ with thimble-like punctures; hind coxæ caudad strongly rugose; wings hyaline, veins honey-color; abdomen basally smooth, apically reticulately lineolated with impressed lines.

*Male*.—Length 2 mm. Very similar to the female except in secondary sexual characters.

*Habitat*.—Deli, Sumatra.

Seven specimens sent by Doctor de Bussy and probably a hyperparasite of *Apanteles* (*Protapanteles*) species.

*Type*.—Cat. No. 13876, U.S.N.M.

## Subfamily ELACHERTINÆ.

## Genus EUPLECTRUS Westwood.

In my table of the species from Japan<sup>1</sup> the names *fukavi* and *kuwanæ* should be transposed, as may readily be seen from the description of the species.

## EUPLECTRUS BUSSYI, new species.

*Female*.—Length about 2.25 mm. Black, the abdomen with a large basal whitish spot; venter largely whitish; scape whitish, the rest of the antennæ light brownish; first joint of funicle distinctly longer than the second joint or the pedicel; joints 2-4 of funicle

<sup>1</sup> Proc. U. S. Nat. Mus., vol. 39, p. 620.

almost subquadrate, the second about as long as the pedicel; face above insertion of antennæ very finely lineolated; dorsum of pronotum smooth, polished, the anterior truncation finely lineolated; median lobe of mesonotum coarsely rugose, lateral lobes finely reticulated; axillæ smooth; scutellum more coarsely rugose than the mesoscutum, propodeum twice as long as the metanotum, with a median carina dividing anteriorly to form the usual medial lip; hind coxæ black, the front and middle ones deep brown; hind femora largely black, rest of legs reddish testaceous; basal joint of hind tarsi about twice as long as the second; longer spur of hind tibiæ reaching slightly beyond apex of second tarsal joint.

*Male*.—Length about 1.75 mm. Similar to the female, the sculpture of the face a little stronger.

*Type-locality*.—Medan, Deli, Sumatra.

Nine specimens, reared from an unknown lepidopterous larva by Dr. L. P. de Bussy, after whom the species is named.

*Type*.—Cat. No. 13871, U.S.N.M.

The coarse sculpture of the scutellum distinguishes this species from any other known from the Oriental region.

#### EUPLECTRUS MEDANENSIS, new species.

*Female*.—Length about 1.5 mm. Black, the clypeal area whitish, abdomen brown, with a large basal testaceous spot; venter largely testaceous; antennæ brown, the scape and pedicel testaceous; first joint of funicle slightly longer than the pedicel; following joints slightly longer than wide, subequal, about as long as the pedicel; face indistinctly lineolated; mesoscutum finely rugose, axillæ and scutellum finely reticulated with impressed lines; propodeum with the usual median carina and anterior medial lip; legs including coxæ, testaceous; longer spur of hind tibiæ reaching slightly beyond apex of second tarsal joint; first joint of hind tarsi almost twice as long as second.

*Male*.—Length about 1.25 mm. Similar to the female; the antennæ entirely yellowish, the scape somewhat dilated in front; legs yellowish.

*Habitat*.—Medan, Deli, Sumatra.

*Type*.—Cat. No. 13872, U.S.N.M.

Many specimens reared by Doctor de Bussy from an unknown lepidopterous host.

This species is related to *E. fukavi*, Crawford, which, however, has the first joint of the funicle fully one and one-half times as long as the pedicel, the second joint of the hind tarsi almost as long as the first, the sculpture of the mesoscutum much coarser and is larger and more robust.

## EUPLECTRUS INSULANUS, new species.

*Female*.—Length about 2 mm. Black, the clypeal area black; abdomen brown, with a large basal testaceous spot; the legs, including coxæ, scape of antennæ, and pedicel, testaceous; rest of antennæ brown; first joint of funicle distinctly longer than pedicel, succeeding joints of funicle elongate, the fourth as long as the pedicel; face above insertion of antennæ, finely indistinctly lineolate; pronotum above finely reticulated; mesoscutum finely rugose; axillæ and scutellum smooth; propodeum with the usual median carina and anterior medial lip; longer spur of hind tibiæ reaching apex of second joint of tarsi; first joint of hind tarsi slightly longer than the second.

*Male*.—Length about 1.75 mm. Very similar to the female, the scape strongly dilated in front.

*Habitat*.—Medan, Deli, Sumatra.

*Type*.—Cat. No. 13873, U.S.N.M.

Seventeen specimens reared by Doctor de Bussy from an unknown lepidopterous host. This species resembles *E. ceylonensis* Howard, which has the first joint of the hind tarsi much longer than the second.

## EUPLECTRUS AGARISTÆ, new species.

*Female*.—Length about 2.25 mm. Black, the abdomen largely reddish-testaceous; the clypeal region whitish, the legs, including coxæ, reddish-testaceous; antennæ testaceous, becoming darker toward tips; first joint of funicle distinctly longer than pedicel; following joints decreasing in length, the fourth about equal in length to pedicel; mesoscutum with a median longitudinal carina, rather finely rugose, the rugæ more or less transverse, the parapsidal area more finely sculptured than the median lobe; axillæ much more finely striate; scutellum finely indistinctly lineolately reticulated, the lines more or less longitudinal; wings slightly yellowish, the veins honey colored; first joint of hind tarsi slightly longer than second; abdomen reddish-testaceous margined all around with dark brown.

*Male*.—Unknown.

*Habitat*.—Sydney, New South Wales.

Four specimens sent by Mr. W. W. Froggatt, under number 99, with the additional data, "reared from the larvæ of *Agarista glycinæ*."

*Type*.—Cat. No. 13972, U.S.N.M.

This is related to *E. fukaii* Crawford and *E. medanensis* Crawford, but differs from both by the distinct median carina of the mesoscutum.

## Genus ELACHERTUS Spinola.

## ELACHERTUS EUPLECTRIFORMIS, new species.

*Female*.—Length about 1.4 mm. Translucent yellowish-testaceous, the abdomen suffused with brown, the antennæ beyond the pedicel brown; eyes in dried specimens red; first joint of funicle about one and one-half times as long as the pedicel, following joints elongate, the fourth as long as the pedicel; all sculpture obscure due to the semitransparent chitin; face above antennæ finely lineolate; mesoscutum and scutellum finely rugose; propodeum with an anterior median lip, as in the species of the genus *Euplectrus*, back of this two carinæ forming an inverted V; first joint of hind tarsi slightly longer than second; the single spur on the hind tibiæ long, reaching about to middle of second joint of tarsi.

*Male*.—Length about 1.15 mm. Similar to the female.

*Habitat*.—Medan, Deli, Sumatra.

*Type*.—Cat. No. 13874, U.S.N.M.

Fifteen specimens reared by Doctor de Bussy from an unknown lepidopterous host, and sent under his number 6.