NOTES ON THE EUCHARIDS FOUND IN THE UNITED STATES.

BY WM. H. ASHMEAD.

Since becoming better acquainted with that great complex of the Hymenoptera, at present known to us under the family name Chalcididae, I have gradually come to the conclusion that instead of a single family to deal with we have several distinct families. Indeed, in many cases, these families are even more distinct and sharply separable than many other of the so-called families in this order; and, until these are properly separated and defined, I believe but little real progress can be made in our systematic knowledge of the Chalcididae.

It is not my intention now to go deeply into this subject, but to call attention to one group that I believe should be elevated to family rank, and to make some notes on the species found in the United States.

This group is the sub-family Eucharinae. It is represented both in Europe and North America by but few species, although in warmer climates the species become quite numerous. In South America, Africa, Asia, and adjacent Isles, however, it is well represented, and by some forms that appear to be the most unique and wonderful to be found amongst the Hymenoptera.

I hope soon to be able to contribute a paper on their structure and classification, and have here merely my notes relating to the species found in North America.

ORASEMA CHURCH

In this genus two specimens have been:
1. O. violacea Ashm. Ent. Am. 1841, Hab.—Fla.
2. O. minuta Ashm., l.c. p. 188. Hab.—Fla.
To these I now add a third species, which is:
3. O. occidentalis sp. n.

2.—Length, 2.5 mm. Dull umber green, and of a brighter metallic green; scape, trochanters, and mandibles brownish-black; genal plates and humeri brownish-yellow; mandibles brownish. Thorax not visible from above; the maximum length of the mesotome lobes convex; scutellum rounded, elevated, with a small furrow before the tip, while the metapleuron is densely covered with pubescence. Hind coxae and metasoma in the hind coxae, and metallic green; body of the female about as long as above at base. Hab.—Los Angeles, Cal.

Type in National Museum.

Described from a single specimen collected by W. H. Ashmead.

CHALCURA KIRBY

(1) C. gibbosa Prov.

This species was described by Provancher from specimens taken in Canada, but the description does not properly belong to the species as it stands. The species is described as Stenoleptus tuberculatus, and that it must be relegated to the genus Stenoleptus, the sex being ramosa.

Although rare, the species extends far south, and in the National Museum there is a series of specimens evidently distinct, that may be described under the name C. gibbosa.
which have no close relatives in this.

Another question by Mr. Hopkins
solved our American Braconidae
he introduced European Clerus,
the European species is not mas
Mr. Hopkins stated that he
stated that he had found it feeding
European Scolytids, and that since his
had observed it feeding in confinement,
exhibited specimens of living Clerus.
bers of the Society were fortunate
beetles feeding upon a Scolytid
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V. M. A. Exemead.

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OF WASHINGTON.

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Otaesma Cameron.

In this genus two specimens have been described, as follows:
Hab.—Fla.
2. O. minuta Ashm., l. c. p. 188.
Hab.—Fla.
To these I now add a third species from California.
3. O. occidentalis sp. n.

—Length, 2.5 mm. Dull bronz green, closely, finely punctate, the
head of a brighter metallic green; scape, trochanters, tips of femora, tibie
and tarsi, pale brownish-yellow; flagellum black, the joints after the first
quadrate; mandibles brownish. Thorax not very gibbous; the collar is
not visible from above; the mesonotum trilobed, the furrows punctate,
the lobes convex; scutellum rounded, elevated posteriorly and with a trans
verse furrow before the tip, while the metasternum slopes obliquely off post
teriorly with lateral sulci. Wings hyaline with brownish nervules; the
marginal nervule is long, two-thirds the length of the subcostal, the sig
nal minute, the postmarginal developed. Abdomen annulated, the petiole
short, stout, finely rugose, one and a half times as long as thick, or as long
in the hind coxa, and metallic green; body of abdomen subtriangular, sul
tate above at base.
Hab.—Los Angeles, Cal.
Type in National Museum.

Described from a single specimen collected by A. Koebele.

Chalcura Kirby.

(1) C. gibbosa Prov.
Hab.—Canada and United States.

This species was described by Provancher, from a female
specimen taken in Canada, but the discovery of the male shows
it does not properly belong to the genus Eucharina as now
stricted, and that it must be relegated to Chalcura, the antennae
this sex being ramose.

Although rare, the species extends from Canada to Texas.
In the National Museum there is a second species closely allied,
evidently distinct, that may be described as follows:

1. C. gibbosa Prov.
Hab.—Canada and United States.

This species was described by Provancher, from a female
specimen taken in Canada, but the discovery of the male shows
it does not properly belong to the genus Eucharina as now
stricted, and that it must be relegated to Chalcura, the antennae
this sex being ramose.
ENTOMOLOGICAL SOCIETY

C. californica sp. n.
Length, 3.5 mm. Black, coarsely rugose; frons with coarse longitudinal grooved lines; face below antennae transversely striate; scape, pedicel, and legs, except the coxae, brownish-yellow; coxae and flagellum black; femora obtusated toward base. The flagellar joints after the third are broken, but each of those present is furnished with a band longer than the scape. Thorax high, gibbous, more elevated than in C. gibbon Prov.; the metathorax with a depression on each side. Wings hyaline; the tegula and the base of the subcostal nervure brownish. Abdome clavate, polished black; the petiole long and slender, as long as the body of abdomen, and finely striate.

Hab.—Santa Cruz Mts., Cal.
Type in National Museum.
Described from a single specimen collected by A. Koebbe.

STYRBLULA Spinola.

Hab.—West Cliff, Col.
Up to the present time the above species, collected by Mr. T. D. A. Cockerell, is the only species known in our fauna.

METAGRA Kirby.

In this genus only a single species is known, M. zalatii Walker, from Australia.
To this I now have the pleasure of adding a second species, collected by Mr. E. A. Schwarz in Maryland and the District of Columbia.

(2) M. schwarzi sp. n.
♂ ♂ ♀.—Length, 1.5 to 2 mm. Black; antennae fusaceous, the pedicel neath yellowish; legs, except coxae, brownish-yellow, the femora toward base, especially the hind pair, sometimes obtusated; coxae black; wings hyaline, with a subobsolete cloud beneath the stigmas. The head, except the stellateum, and the thorax except anteriorly, smooth, polished, impunctate; the parapsidal furrows and a central furrow feebly defined by minute punctures; scutellum, conical, convex, with a longitudinal central furrow, and the apex margined but not bidentate; pleura and metasthax rugose. Antennae 11-jointed, in ♂ subdivate, scarcely reaching to the tegula, the scape and pedicel very short, the first funicular joint being the longest joint and as long as the two former united, the following joints gradually shortened towards the apex; in ♂ filiform, longer, reaching the metathorax; the third joint also the longest, but the following are twice as long as thick.

Hab.—District of Columbia and Maryland.
Types in Coll. Ashmead.

LOPHYRHECT.

(1) L. nigromaculata Cam. C. I. v., fig. 19.
Hab.—Nicaragua and Arizona.
A single specimen of this species of the American Entomologist, and is an interesting addition to our fauna.

The type of this species is in the National Museum, and contains a single male.

(3) L. apicollis sp. n.
♂ ♂.—Length, 4 mm. Euneous black; antennae black; pedicel brownish-yellow; coxae black; tegulae brownish-black; flagellar joints, after the first, wide-

KAPALA (1)

Hab.—Florida.
The genus Thoracantha Latreille, long held as containing only T. latereclis Guér., and must now remain, belongs to the above genus. The opportunity here taken to turn over to other species of the collection of the American Entomologist, which will probably be found to contain a number of new species.
of Washington.

Lophyrocera Cameron.


ab. — Nicaragua and Arizona.

A single specimen of this species was recognized in the Collection of the American Entomological Society collected in Arizona, as an interesting addition to our fauna.


ab. — Florida.

The type of this species is in my collection, although the National Museum contains a second specimen collected by Mr. R. Schwanz in Florida.

I now add a third species collected by A. Koebele in Santa Cruz Mountains, in California.

L. apicis sp. n.

— Length, 4 mm. Exuinos black, coarsely rugose; frons with longitudinal strie; face below antennae transversely striate; scape, pedicel, two apical joints of antennae brownish-yellow; legs, except coxae, brownish-yellow; coxae black; femora toward base dusky. The ptilar joints, after the first, widen out toward the apex, the 5 or 6 terminal joints being obliquely directed. Thorax very high, gibbous, the humeral crest terminating in two prongs that are scarcely one-third as long as the scutellum, while the metathorax has a tooth-like projection on side. Wings hyaline, the tegula and venation pale ferruginous or purplish, the stigmal vein rather long, two-thirds the length of the post-median. Abdomen oblong, very slightly compressed, with the pediole rather stout, nearly as long as the hind femur and coarsely rugose.

ab. — Santa Cruz Mountains, Cal.

Type in National Museum.

Described from a single specimen.

Kapala Cameron.


ab. — Florida.

The genus Thoracantha Latreille, as now restricted, will contain only T. laterellus Guér., and all the species described as such must now be relegated to other genera.

T. floridana belongs to the above genus.

The opportunity is here taken advantage of to describe a Cuban species in the Collection of the American Entomological Society, which will probably be found to occur in South Florida.
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It is closely allied to *K. furcata* Fabr., but presents some differences from my specimens of this South American species that I believe entitle it to a separate specific name.

*K. terminalis* sp. n.

_f._—Length, 4 mm. Metallic bronze green; scape, pedicel, legs, except the antennae or metallic coxae, and abdomen except the petiole and the second segment above, pale brownish-yellow; flagellum brown-black with 9 very long, nearly equal branches; frons longitudinally striate, the face transversely striate. Thorax very high, transversely striate, the mesonotum and scutellum longitudinally striated; processes of the scutellum as long as the abdomen, purplish, finely longitudinally striate. Wings hyaline; the tegula and venation yellowish. The abdominal petiole is very long and slender, fully as long as a hind femur, blue-black and finely striate.

Hab.—Cuba.


Described from 4 badly broken specimens. Comes nearest to *Kapala (Thoracantha) furcata* Fabr., but of a brighter metallic color, the antennae and the color of the abdomen being different.

In discussing this paper Mr. Howard asked concerning the exact evidence of the parasitism of certain of the Eucharidæ upon ants. Mr. Ashmead replied that absolute observations had been made in Australia and had been recorded by Forel. The Eucharidæ issued from the pupa of the ant. Mr. Howard stated that if such an observation had actually been made, the matter must be considered as settled, but that he had previously doubted this parasitism for the reason that some of the Eucharidæ are almost too large to be ant parasites. He had suspected that they might be parasitic upon some inquilines in ants' nests. He mentioned the fact that in the collection of St. Vincent Chalcidæ sent to Prof. Riley from Cambridge University there is a specimen of *Kapala furcata* Fabr., which bears in its jaws a medium-sized red ant. He also called attention to the fact that probably the first Eucharid exhibited in this country was shown to this Society at its second meeting, June 5, 1884.

Dr. Riley dissented from Mr. Ashmead's conclusion as to the family rank of this group, and expressed the opinion that it should still be retained as a sub-family of the Chalcididae.

Professor Riley then presented the following paper: