

rites; their posterior margins fringed with very strong setae. Femora and tibiae of the legs with many small and several strong setae.

Wings 1.5 and 1.6 mm. long in male and female respectively, with broadly rounded apex bearing a long apical seta; first longitudinal vein curved, second and third longitudinal veins divergent near the apex of the wing; all longitudinal veins provided with strong setulae, and in their basal parts bearing strong setae; the sixth longitudinal vein with a short portion of its basal part devoid of setae. Calipteron (c.) as shown in the drawing 2, A.

Abdomen sacciform, its lateral surfaces with many small setae, the ventral one with slightly stronger setae, especially in the male. The sclerotized plates of the posterior part of the abdomen with long setae along their dorsal margin.

The male abdomen differs from that of the female in the following respects: — its posterior part ends in a conical hypopygium, of which the structure is shown in the drawing 2, C. In the posterior part of the ventral surface of the abdomen, there is a sternite-like plate which bears strong setae near the posterior margin.

Two specimens were examined, the holotype, female, and the allotype, male, from the collection of the Deutsches Entomologisches Institut. The specimens were collected by Mr. J. F. Zikan from a bat, in Brazil (Estado do Rio de Janeiro).

#### References.

- Jobling, B. A revision of the subfamilies of the *Streblidae* and the genera of the subfamily *Streblinae* (*Diptera Acalypterae*) including a redescription of *Metelasmus pseudopterus* Coquillett and a description of two new species from Africa. *Parasitology*, 3, 355, 1936.
- Lima, A. da Costa. Sobre os Streblideos americanos (*Diptera Pupipara*). *Arch. Esc. Agric. Med. ved.*, (Nicttheroy), 5, 17, 1921.

## Two New Species of *Platychalcis* from Costa Rica.

(*Hymenoptera: Chalcidoidea.*)

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(With 6 Text-Figures.)

The genus *Platychalcis* Cameron was established in 1904 for a species of *Chalcidinae* from Nicaragua, and was said to be „near *Haltichella*“. Through the kind assistance of Dr. Ch. Ferrière of the British Museum, London, I have been able to identify this genus as a member of the tribe Chalcidini, closely allied to *Chalcis*. The genus may be redescribed as follows:

*Platyhalcis* Cameron.

Cameron, *Invertebrata Pacifica*, **1**, 57, 1904; Schmiedeknecht, *Gen. Ins.*, **97**, 49, 1909; Burks, *Proc. Nat. Acad. Sci.*, **22**, 286, 1936. Orthotype, *Platyhalcis flavicollis* Cameron.

Antennae inserted considerably ventrad of center of frons, but dorsad of level of ventral margins of compound eyes; flagellum of antenna stout and slightly enlarged toward apex; head, from anterior aspect, subtriangular, wider than long; dorsum of thorax flattened; anterior dorsal margin of pronotum acarinate; pro- and mesofemora constricted at base, broadened and flattened toward apex; metacoxa smooth and asetose on outer dorsal surface; metafemur with many small teeth; apex of metatibia slender, long: reaching metatrochanter when tibia is completely appressed to ventral margin of femur; petiole almost as long as or longer than metacoxa; apex of hypopygium exerted, reaching or exceeding end of abdomen; ovipositor normally held almost at right angle to longitudinal axis of body.

The following key to the Central American genera of the tribe Chalcidini will most readily show the relationships of *Platyhalcis*. This key treats only the females, as the males of the species of this genus are at present unknown.

1. Parapsidal grooves obliterated . . . . . *Xanthomelanus* Ashmead  
    Parapsidal grooves present . . . . . 2
2. Hypopygium produced and extending to or beyond apex of abdomen; ovipositor arising near apex of gaster . . . . . 3  
    Hypopygium imperceptible or only slightly indicated far anteriorad of apex of abdomen; ovipositor arising near base of gaster . . . . . 5
3. Metafemora with three or four long, slightly curved teeth; anterior dorsal margin of pronotum with a lamina extending completely across . . . . . *Metadontia* Ashmead  
    All metafemoral teeth small, or only basal one long; anterior dorsal margin of pronotum acarinate or carinate only at lateral margins . . . . . 4
4. Dorsum of thorax flattened; anterior dorsal margin of pronotum acarinate; antennae inserted ventrad of center of frons . . . . .  
    *Platyhalcis* Cameron  
    Dorsum of thorax arched; antero-lateral angles of dorsum of pronotum carinate; antennae inserted in center of frons . . . . .  
    *Chalcis* Fabricius
5. Dorsum of thorax flattened; third abdominal tergite occupying at least two-thirds of the dorsal length of gaster . . . . . *Bterochalcis* Burks  
    Dorsum of thorax arched; third abdominal tergite never occupying more than one-third dorsal length of gaster . . . . . 6

6. Petiole long, slender: three-fourths or more length of metacoxa.

*Ceratismicra* Ashmead

Petiole short, more stout: never more than one-half as long as metacoxa . . . . . *Spilochalcis* Thomson

*Platychalcis phalara* new species.

Description: Black with yellow and brown markings; antennal scape, two lateral spots on frons, dorsum of pronotum, apices of coxae, front and middle tibiae and all tarsi, two posterolateral spots on meso-scutellum, tegulae, and petiole, yellow; antennal flagellum, vague areas on femora, indefinite spot around stigma of forewings, and gaster, brown; apex of metafemur yellow.

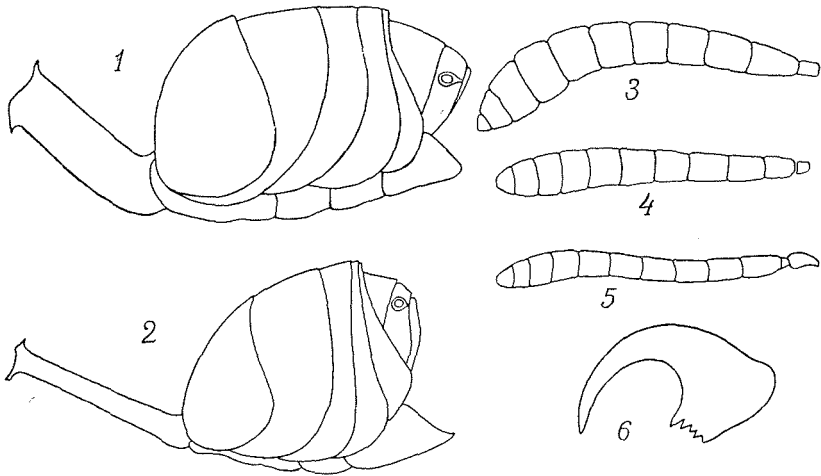


Fig. 1. *Platychalcis phalara*, abdomen. — Fig. 2. *P. areta*, abdomen. — Fig. 3. *P. flavicollis*, antennal flagellum. — Fig. 4. *P. phalara*, antennal flagellum. — Fig. 5. *P. areta*, antennal flagellum. — Fig. 6. *P. phalara*, tarsal claw.

Female: 3.0 mm. Antennae inserted almost at level of ventral margins of compound eyes, situated very low on frons, but well separated from clypeal margin; apex of scape reaching level of anterior ocellus; pedicel minute, as long as first flagellar segment, flagellum becoming progressively broader toward apex so that antenna is slightly clavate (see figure); mandibles symmetrical, each with two teeth of which ventral one is larger; width of malar space two-thirds height of compound eye; fronto-clypeal suture straight; inter-ocellar space twice as great as paracellar. Dorsum of thorax flattened, smooth and shining on meson but lightly pitted at sides; metacoxae smooth, shining; metafemora with an inner tooth, outer ventral margin with 12 or 13 small teeth, basal one no longer than others; apex of metatibia long, slender, reaching to meta-

trochanter; metatarsal claw (see figure); propodeal spiracles slit-like, almost vertical; propodeum with two baso-lateral areas lightly shagreened, almost smooth, remainder of dorsal surface covered with strong carinae; petiole two and one-half times as long as wide; gaster smooth, aetose except at apex; apex of hypopygium exerted, not quite reaching tip of abdomen (see figure).

Male: Unknown.

Types: Holotype, ♀, San Mateo, Costa Rica, 100 meters, 1923, Bollow. Paratypes, 1 ♀, same data as holotype; 1 ♀, La Ceiba, Honduras, Dec. 19, 1916, F. J. Dyer, Acc. No. 24309. Holotype and one paratype deposited in the Deutsches Entomologisches Institut, Berlin-Dahlem; one paratype, American Museum of Natural History, New-York.

This species and *P. flavicollis* Cameron are quite similar, but not identical. The antenna of *flavicollis*, drawn from the type in the British Museum by Dr. Ferrière (see figure), can be seen to differ in relative proportions from that of *phalara*. The petiole of *flavicollis* is, also, brown, whereas it is yellow in *phalara*.

#### *Platychalcis areta* new species.

Description: Black with yellow and brown markings; antennal scape and pedicel, anterior and middle legs, tegulae, metafemora, petiole, and base of gaster, yellow; antennal flagellum, bases of metacoxae, small areas at base and near apex of metafemur, and apex of abdomen, brown.

Female: 3.0 mm. This species differs from *P. phalara* in the following particulars: apex of antennal scape slightly surpassing level of vertex; width of malar space one-third height of compound eye; ridge paralleling fronto-genal suture continued around posterior margin of compound eye; antennal flagellum less clavate than in *phalara* (see figure); mandibles asymmetrical, right mandible with three teeth, left with two, dorsal tooth the longer on each mandible; inter-ocellar space three times as great as para-ocellar; entire dorsum of thorax punctured; metafemur with 13 or 14 ventral teeth, basal one larger than others; petiole five times as long as wide; apex of hypopygium exerted, reaching tip of abdomen (see figure).

Male: Unknown.

Types: Holotype, ♀, San Mateo, Costa Rica, 100 meters, 1923, Bollow. Paratype, ♀, same data as holotype. Types deposited in the Deutsches Entomologisches Institut, Berlin-Dahlem.