

NOTES AND DESCRIPTIONS OF NORTH AMERICAN PARASITIC  
HYMENOPTERA.

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BETHYLIDÆ.

CHELOGYNUS Haliday.

The six species at present known from North America may be recognized as follows. In addition to these it is probable that several Mexican forms described by Cameron (Biol. Cent. Am. Hymenoptera, p. 444 *et seq.*) under the genus *Dryinus* belong here.

Females.

1. Body entirely black.....4  
Body wholly or partly ferruginous.....2
2. Entirely ferruginous, mandibles 4-dentate.....  
.....*ferrugineus* sp. nov.  
In part black.....3
3. Head and abdomen black, thorax reddish, mandibles  
4-dentate.....*atriceps* Brues  
Ferruginous, abdomen alone black.....*atriventris* Cress.
4. Legs pale rufous.....5  
Femora black, except apical part of anterior pair;  
mandibles 4-dentate.....*grandis* sp. nov.
5. Clypeus pale or rufous, mandibles 5-dentate.*henshawi* Ashm.  
Clypeus black, mandibles 3-dentate.....*canadensis* Ashm.

CHELOGYNUS FERRUGINEUS sp. nov.

Female. Length 5 mm. Entirely ferruginous, except for the darker tips of the antennæ and tarsi. Head large, the vertex gently convex, rugoso-punctate, the front below the ocelli longitudinally striate-reticulate. Occiput and cheeks shining, sparsely punctate, margined as are also the eyes. Antennæ ten jointed, the scape slightly shorter than the first flagellar joint, which is two times the length of the pedicel; following joints about equal, two-thirds as long as the first; scape whitish at base below and apical five joints infuscated. Mandibles yellow, with four black teeth. Prothorax shining, finely punctured and covered with short griseous pubescence, a little longer than the mesonotum; the latter polished, with a few punctures and two distinct furrows.

Scutellum and post-scutellum convex, shining, the latter with an oval fovea on each side, the foveæ vertically striated. Metathorax short, abruptly declivous behind, finely reticulated. Abdomen short, oval, stout, polished and impunctured. Legs ferruginous, the anterior femora thickened as usual; first tarsal joint not longer than the following three united; chelæ small. Wings hyaline, with two fuscous bands; the first indistinct, crossing at the tips of the basal cells; second broad, beginning at the stigma and fading out apically and posteriorly. Both basal cells distinct. Stigma pale, oval, marginal cell incomplete.

One specimen labelled Texas. Type in the collection of the American Entomological Society.

This species is readily recognizable by its reddish color. The broad abdomen gives it a very wasp-like appearance, its general habitus simulating that of a small pompilid.

CHELOGYNUS ATRICEPS Brues.

*Bocchus atriceps*, Brues, Can. Ent. XXXVI, 118.

On re-examination of the type of this species together with a second specimen recently acquired from Wisconsin, I find that the maxillary palpi are five jointed so that the species falls more properly in this genus.

CHELOGYNUS GRANDIS sp. nov.

Female. Length 7 mm. Black, legs in part yellow. Head moderately large, the vertex gently convex, finely rugose; the front below the ocelli with three median raised lines beside the lateral margins around the eyes; sides of face below rufous. Antennæ rufous, the apical five joints blackened; scape scarcely two-thirds the length of the first flagellar joint which is three times the length of the pedicel; second flagellar joint distinctly longer than the third. Mandibles 4-dentate, black, except for a pale band just before the teeth. Palpi fuscous, five jointed. Occiput and cheeks shining, finely punctured and sparsely clothed with white hairs. Prothorax strongly contracted, about equal in length to the mesonotum, marked with a reddish spot at the base of the fore coxæ; pronotum closely punctured. Mesonotum polished, delicately punctulate. Parapsidal furrows very well marked, tegulæ rufous. Scutellum shining, convex. Metanotum short, convex, finely rugulose. Abdomen polished black, narrow and elongate, as long as the thorax. Legs black, except the four anterior tibiæ and tarsi, the base of the anterior trochanters

and the tip of the anterior femora. Wings hyaline, with two fuscous bands, the first narrow, just beyond the basal cells, second broad, beginning at the middle of the stigma. Stigma oval, black, pale at base; two basal cells present, radial nervure incomplete although the marginal cell is closed by a delicate indistinct nervure. A discoidal cell is also indicated by very delicate nervures.

One female from Riverside, Mass., collected by Mr. C. W. Johnson and transmitted to me by Mr. H. L. Viereck.

This species resembles *henshawi* Ashm., but is distinct by the darker color of the legs; *henshawi* also lacks the raised frontal lines.

CHELOGYNUS HENSHAWI Ashm.

Bull. U. S. National Museum, No. 45, p. 93.

The color of the clypeus varies considerably in this species. One specimen which I have seen has the latter and the sides of the face below light yellow.

ANTEON Jurine.

ANTEON ANNULICORNIS n. sp.

Female. Length 3 mm. Black, the front legs and antennæ in part yellow, wings bifasciate. Head opaque black, finely scabrous; front with a central and two lateral raised lines; eyes, occiput and cheeks margined, the latter finely punctulate. Mandibles 4-dentate, rufous at base; clypeus punctate. Antennæ piceous, the scape and flagellar joints 3-5 reddish yellow. Scape slightly longer than the pedicel and first flagellar joint together, the latter one-half longer than the pedicel; second flagellar joint equal to pedicel, following joints becoming longer and stouter to the last which is two-thirds the length of the scape. Pronotum shining, about one-half as long as the mesonotum, the latter shagreened and with a few large punctures anteriorly. Parapsidal furrows not indicated. Scutellum short, convex, with a punctate frenum anteriorly and with a few rather stiff black hairs on its disc. Metathorax reticulated, with a transverse carina where it bends down and a few indistinct striations apically. Abdomen short, shining black, the extreme tip rufous. Legs black, except the tips of the anterior femora, anterior tibiæ and tarsi and tips of four posterior tarsi, which are yellow. Chelæ rather small, the first joint of the anterior tarsi no longer than the three following, fourth joint but little longer than the third. Wings hyaline, with a distinct narrow band at the tips of the basal cells and a

second wider sharply defined one beginning at the base of the stigma and reaching two-thirds of the way to the wing tip; neither band reaches the posterior margin of the wing. Stigma black; the stigmal vein as long as the stigma, knobbed at the tip.

Described from a female specimen from Mexico, collected by Mr. E. A. Schwartz. Type in the collection of the American Entomological Society.

This species comes near to Cameron's *Dryinus albitarsis* (Biol. Cent. Am. Hym. 447.) but is distinct by its annulate antennæ and different sculpture.

#### COSILIDÆ.

##### SIEROLOMORPHA Ashm.

This peculiar Cosilid genus is represented by but a single species which occurs in the United States, previously known only in the male sex.

In a lot of Bethylids recently received from Mr. H. L. Viereck there are a large number of males and two female specimens.

The female differs from the male by its more strongly thickened femora and stout tibiæ, and by the incrassated antennæ which are only 12 jointed (13 jointed in the male). The head and thorax are more shining, being very highly polished. The legs, except coxæ, are ferruginous.

The single species, *S. ambigua* Ashm. (Bull. U. S. N. M. 45, 56) is widely distributed. I have seen specimens from New Hampshire, Connecticut, Massachusetts, Georgia, and Vancouver.

#### PROCTOTRYPIDÆ.

##### DISOGMUS OBSOLETUS sp. nov.

Female. Length 2.5 mm. Black, more or less brownish, shining; legs brownish yellow. Head transverse, about two and one-half times as wide as long antero-posteriorly; smooth and polished above, front prolonged below forming a strong carina between the antennæ; eyes large and convex, sparsely hairy. Lower part of face roughly sculptured, brownish; mandibles rufous, palpi pale yellow. Antennæ slightly longer than the head and thorax, brownish yellow, darker apically and at the incisures. Scape sub-globose, pedicel very small, only about one-third the length of the first flagellar joint; second flagellar joint

two-thirds the length of the first, about twice as long as wide; following joints subequal to second, except last which is nearly twice the length of the penultimate. Mesonotum with indications of parapsidal furrows near its anterior margin, elsewhere shining and convex, impunctured. Scutellum as usual, with a deep groove at its base. Tegulae yellow. Metathorax brownish yellow, with a median carina which extends almost to the base of the petiole and a lateral carina on each side, the three connected across the top of the posterior face by a transverse carina; elsewhere coarsely reticulate. Abdomen as long as the head and thorax together, cauda one-third as long as the abdomen. Petiole brown, about as wide as long, rugosely sculptured. Abdomen piceous brown lighter basally and yellow; cauda yellow at base, black at tip. Legs brownish yellow, tips of tarsi blackish; posterior tibial spurs weak. Wings brownish hyaline; the stigma long, with parallel sides, pointed at tip, four times as long as wide. Stigmal vein short, marginal cell a little longer than the stigma, triangular. Discoidal veins very faintly indicated by fuscous streaks.

♀ One female, Morris Cove, Conn., May 20, 1904, received from H. L. Viereck.

The present species differs from the more typical forms of *Disognus* in having only slight indications of mesonotal furrows. The venation agrees much more closely with this genus than with *Proctotrypes* however, and I am led to place it here.

#### DIAPRIIDÆ.

##### GALESUS VIERECKII sp. nov.

Male. Length 3.5 mm. Black, the first three antennal joints brown, legs, except coxæ, rufous yellow. Head shining, impunctured, sparsely clothed with long pale hairs; convex above, flat beneath; front projecting just in front of the anterior ocellus, the margin of the projection toothed laterally and sinuate medially; prominence below antennæ rounded-truncate, deeply emarginate medially. Antennæ 14 jointed, reaching to the middle of the abdomen; scape, pedicel and first flagellar joint rufous, remainder piceous black; scape thickened, angulated beyond the middle; pedicel and first flagellar joint both very small, together shorter than the second flagellar joint, the pedicel stoutest; second and following flagellar joints about equal, decreasing in thickness, last a little longer and pointed. Mouthparts rostriform, black; tips of palpi testaceous. Collar thickly white hairy.

Mesonotum shining, impunctate, with two deep furrows. Scutellum with two large oblique, oval basal foveæ; grooved laterally behind, its posterior margin crenate, straight; postscutellum with a median and lateral carinae. Metathorax with an A-shaped series of carinæ, the upper triangular portion very small, its surface rugose, shining, the posterior angles produced. Abdomen clavate, polished; petiole coarsely fluted, pale hairy; second segment at base with three short, deep sulci, very long, the remaining segments barely projecting beyond it. Genitalia projecting as three rufous prongs. Legs ferruginous, the coxæ black. Wings entire, not emarginate at apex; submarginal vein terminating some distance from the costal margin in an oval brownish, stigma-like spot; basal veins pale brown.

One male from Colebrook, Conn., July 21, 1905.

Named in honor of my friend Mr. H. L. Viereck, to whose kindness I owe many interesting species of Proctotrypids.

*LOXOTROPA MODESTA* sp. nov.

Female. Length 1.5 mm. Black, with legs and antennæ, including the club, reddish. Head shining black, not angulated above the eyes. Antennæ rufous, the scape as long as the club, but shorter than the funicle. Pedicel about one-third as long as the scape and slightly longer than the first and second flagellar joints together; second to fifth flagellar joints about equal, shorter than the first and narrower than the sixth and seventh. Club of the usual shape, brown; its joints of equal length, the second quadrate. Posterior surface of head delicately transversely aciculated. Thorax shining black, the tegulæ and metathorax rufous. Scutellar fovea not extending across the entire base, rather deep; the lateral grooves wanting. Upper surface of metathorax slightly darkened, without any central carina, its posterior margin strongly emarginated, the lateral angles continued into prominent teeth. Petiole of abdomen rufous; woolly. Second segment very long, polished. Wings pubescent, very faintly tinged with brownish.

Described from a single female collected at Lehigh Gap, Pa., July 13, 1900 and transmitted to me by Mr. Henry L. Viereck.

The present species is related most closely to *L. abrupta* Thoms. and *L. californica* Ashm., but differs from both in the form and color of the antennæ and sculpture of the scutellum.

Public Museum, Milwaukee,  
Oct. 26, 1905.