

NOTES AND DESCRIPTIONS OF NORTH AMERICAN
PARASITIC HYMENOPTERA. VIII.

BY CHARLES T. BRUES.

FAMILY BETHYLIDÆ.

Lælius fumipennis sp. nov.

Female. Length 2.5 mm. Black; legs, except coxæ, and base of antennæ honey-yellow. Head as wide as long, semicircularly narrowed behind the eyes. Antennæ 13-jointed, about twice as long as the head; black, the first two joints honey yellow and the third brownish at the base. Pedicel about one-half longer than the first flagellar joint; second flagellar joint longer than the first, following growing slightly shorter, nearly quadrate; apical joint acute. Head above shagreened, with a few coarse punctures intermixed. Ocelli in a small equilateral triangle on the vertex. Eyes oval, removed by two-thirds of their length from the base of the mandibles. Mandibles apparently 4-toothed. Maxillary palpi 5-jointed; labials 3-jointed. Underside of head shining, punctulate. Thorax shining, faintly punctulate; pronotum very slightly longer than the mesonotum and scutellum together; these of about equal length, the scutellum with a transverse, slightly arcuate impressed line across the base; mesonotum without furrows. Superior face of metanotum as long as the pronotum and mesonotum combined, with three complete longitudinal discal carinæ, the median one of which continues down the posterior slope; between these carinæ and the lateral raised margin is another carina which extends only to the middle of the superior face. Entire metathorax finely transversely rugulose between the carinæ. Propleura with a round foveate depression just above the coxa; mesopleura punctulate, with a similar small fovea centrally and with a slightly impressed oblique line along its posterior edge; metapleura with a similar, more nearly vertical impressed line near the base, its surface punctulate. Abdomen as long as the thorax, smooth and shining; second segment as long as the following taken together. Legs stout, the femora thickened; the tibiæ fringed with hairs, but not

spinose. Wings hyaline basally, strongly infuscated on their apical half; nervures pale brown. Median and submedian cells completely closed, of equal length on the externo-median nervure. Stigma very minute, about twice as long as thick; marginal vein as long as the linear stigma, straight. Body sparsely set with conspicuous black hairs.

Described from a female specimen collected by Professor W. M. Wheeler at Forest Hills, Mass.

This is the fifth species to be discovered and may be distinguished by the aid of the following key:

Laelius Ashmead.

1. Wings conspicuously bicolored; basal half hyaline, apical half fuscous *fumipennis* Brues.
Wings hyaline or evenly somewhat grayish. 2
2. Legs entirely yellow or rufous. 3
Legs with all coxæ and femora except tips of the latter, black.
trogo-dermatis Ashmead.
3. Superior face of metathorax with four discal carinæ.
rufipes Ashmead.
Superior face of metathorax with three discal carinæ.
tricarinatus Ashmead.
Superior face of metathorax with one discal carina.
nigripilosus Ashmead.

FAMILY SCELIONIDÆ.

Hadronotus robustus Brues.

Bull. Wisconsin Natural History Society, Vol. 5, p. 156, (1907).

This species occurs also at Fayetteville, Arkansas, from whence Dr. C. F. Adams has sent me a male specimen. The male is very similar to the female first described, differing mainly in the conformation of the antennæ. These are quite distinctly thickened from the base of the flagellum and the pedicel is scarcely over half the length of the first flagellar joint, while the second and following joints are quadrate or slightly moniliform.

The following dichotomy will serve to distinguish the species of *Hadronotus* at present known to occur in North America.

Hadronotus Förster (females)

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| 1. Head and thorax smooth, punctulate or shagreened..... | 2 |
| Head and thorax coarsely punctate or rugose..... | 5 |
| 2. Head shagreened | 3 |
| Head distinctly punctate or opaque..... | 4 |
| 3. Pedicel longer than the first flagellar joint; scape honey-
yellow..... | largi Ashmead. |
| Pedicel shorter than the first flagellar joint; scape dark
rufous..... | mesillæ Cockerell. |
| 4. Abdomen beyond the second segment punctate. | |
| | leptocorisæ Howard. |
| Abdomen beyond the second segment smooth, shining. | |
| | myrmecophilus Ashmead. |
| 5. Female with abbreviated wings..... | brevipennis Harrington. |
| Female fully winged..... | 6 |
| 6. Head with two facets on the vertex between the ocelli; scape
and legs honey-yellow..... | carinatifrons Ashmead. |
| Head with the vertex simple..... | 7 |
| 7. Coxæ brownish yellow | 8 |
| Coxæ black | 9 |
| 8. Abdomen with coarse longitudinal cribrate rugosities on all
the segments; smooth and polished along the sutures. | |
| | rugosus Howard. |
| Abdomen cribrate rugose, the first segment with deep coarse
striae; the following smoother; segments not smooth along
the sutures | floridanus Ashmead. |
| Abdomen finely evenly rugose; the first segment striate at
the base | anasæ Ashmead. |
| 9. Legs brownish yellow; wings subfuscous; marginal vein in
wing nearly as long as the stigmal..... | rugiceps Ashmead. |
| Legs black, except knees, tibiae and tarsi; wings hyaline;
marginal vein about one-half the length of the stigmal. | |
| | robustus Brues. |

FAMILY PLATYGASTERIDÆ.

Eritrissomerus Ashmead.

Table of Species.

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| 1. Body rufo-piceous; antennæ, except apex, yellow. | pallipes Harrg. |
| Body black; antennæ black or piceous; brownish-yellow in the
male | 2 |

2. Vertex rugulose; legs more or less black. *cecidomyiæ* Ashm.
 Vertex transversely aciculate; legs yellow, rarely somewhat
 infuscated. *noveboracensis* sp. nov.
Eritrissomerus noveboracensis sp. nov.

Male. Length 2mm. Black; legs yellow, sometimes infuscated on the hind femora; antennæ piceous brown, scape lighter brown. Head slightly wider than the thorax, very much contracted behind the eyes; about twice as wide as thick. Vertex and occiput finely transversely aciculated. Lateral ocelli more than their diameter removed from the eye-margin, about as close as to the median ocellus. Front punctate or slightly transversely aciculate, with a smooth, median, slightly impressed line below the anterior ocellus. Face transversely striate. Cheeks sparsely punctate. Mandibles ferruginous. Antennæ 10-jointed; scape reaching to the median ocellus; pedicel obovate, twice as long as the first flagellar joint which is half as long and only about one-third as wide as the greatly swollen second joint; two following joints narrow, each about one-half longer than wide; following growing shorter except the last which is longer, narrower and acuminate. Mesonotum elongate, with two very distinct, complete parapsidal furrows which are closely approximated; its surface shining, faintly punctulate. Scutellum very convex, rounded, with a very distinct carinate margin. Pleure smooth, shining; the mesopleura with a large impression below and with a few coarse striæ just beneath the tegulæ. Collar below on the sides closely punctulate. Metapleura thinly hairy, not striated, with a short basal carina above, which forms a triangular area with a second oblique carina lower down on the metapleura. Abdomen elongate, pointed, about one-third longer than the head and thorax united. Petiole and basal third of second segment finely striated, the striæ on the sides of the second segment shorter; second segment nearly as long as the following united. Legs bright or honey yellow; coxæ black and the four posterior tibiæ sometimes infuscated. Wings hyaline, with a slight yellowish tinge.

Described from two specimens (a1360) bred by Dr. E. P. Felt at Albany, New York, April 5th, 1907 from a *Cecidomyid* gall. A third specimen (a1339) was reared May 7, 1907.

The species looks very much like certain species of *Polygnotus*, but the peculiar swollen condition of the second flagellar joint, characteristic of males of the present genus will readily serve to distinguish from that very extensive genus.

Aneuron gen. nov.

Similar to *Polygnotus*, but differing in the structure of the antennæ which have the pedicel and the first and second flagellar joints elongated, slender and of equal length in the female. In the male they are also lengthened, and the second flagellar joint is scarcely at all thickened. Otherwise the type species might be readily mistaken for a true *Polygnotus*.

Aneuron anormis, sp. nov.

Female. Length 2.2 mm. Black; antennæ, except club, and legs, except coxæ, reddish yellow; the thickened parts of the femora very slightly infuscated. Head broad, slightly wider than the thorax: two and one-half times as wide as thick. Ocelli in a triangle, the lateral ones well removed from the eye-margin, but closer to it than to the median ocellus. Eyes oval, slightly, but distinctly pubescent. Vertex quite sharp above, but not distinctly carinated, except indistinctly so on the sides close to the eyes: transversely striate: on the occiput with vertical striæ. Cheeks punctulate, as long as the eye-height. Front finely punctulate; face coarsely transversely striate. Antennæ 10-jointed; slender, scape reaching to the ocelli, straight and slender; pedicel, first and second flagellar joints elongate, slender, of approximately equal length and together over three-fourths as long as the scape; following joints moniliform; one-half as long as the second flagellar; apical five joints forming a slender club, but of equal length; last slightly longer, more slender. Thorax more elongate than in species *Polygnotus*. Pronotum visible above as a line. Mesonotum nearly smooth; subshining, without traces of parapsidal furrows except near the base of the scutellum where they are very close together, defining a narrow truncate lobe which projects slightly over the depression across the base of the scutellum. Scutellum transverse, very convex, separated from the mesonotum by a very deep depression; sharply declivous behind and with a thin reflexed margin especially noticeable on the sides. Metathorax very short. Propleuræ punctulate above, smooth below; mesopleura polished, with a curved or slightly angulate depression below the middle. Metapleuræ thinly pubescent, with a carina defining their upper edge, and with a second one above the middle which forms a triangular area with the marginal carina and the mesopleural suture. Abdomen as long as the head and thorax together, pointed apically. First segment of abdomen subpetiolate, half

as long as the second, its median third elevated and bounded laterally by two longitudinal carinæ which are united across the middle of the segment by a transverse carina. Second segment with a fovea on each side half way to the margin; between, and from each of the foveæ with a fan-shaped series of extremely delicate aciculations which reach nearly to the middle of the segment; third, fourth and fifth segments equal, short; sixth triangular, but rounded at the tip, twice as long as the preceding. Legs as in *Polygnotus*; yellow with the coxæ black, and the posterior femora and tibiæ somewhat infuscated. Wings hyaline, veinless.

Male. Differs from the female mainly in the form of the antennæ. The first flagellar joint is shorter, only about two-thirds as long as the pedicel which is equal to the second flagellar joint. The latter is somewhat thickened and arcuate, stouter at the tip. The antennæ are entirely yellow.

Described from nine specimens bred by Dr. E. P. Felt from Cecidomyid galls collected at Albany, New York, and Beverly, Massachusetts.

FAMILY BRACONIDÆ.

SUBFAMILY BLACINÆ.

Brachistes magdali sp. nov.

Female. Length 5.5 mm. Ovipositor 2. mm. Shining black, the palpi, base of antennæ, tegulæ and legs, including the coxæ, honey-yellow. Head full behind the eyes, transverse, twice as wide as thick. Eyes oval, bare, removed from the hind margin of the head by their own width and from the base of the mandibles by one-half their width; inner margins parallel. Vertex and head behind polished, with scattered delicate punctulate sculpture; the posterior margin very distinct. Ocelli in a small, nearly equilateral triangle. Antennæ 33-34-jointed, filiform, about as long as the body. Scape oval, pedicel globose; first flagellar joint three times as long as thick, slightly longer than the scape; second as long as the first, the following gradually growing shorter until those near the apex which are but one-half longer than thick. Maxillary palpi five-jointed, as long as the head-height; labials three-jointed, the first joint very short. Face sparsely punctulate, griseous pubescent. Clypeus strongly elevated, its anterior margin almost straight. Mandibles rufous. Thorax elongate, shining. Meso-

notum with punctate parapsidal furrows, which converge before reaching the scutellar fovea; scutellum strongly convex at the base, with a large depression which is rugulose and indistinctly divided by a raised median line. Metanotum rugose, indistinctly areolate; medially at the base with a short carina which bifurcates to form two carinae extending to the posterior angles; several other irregular and indistinct carinae present. Pro- and mesopleurae smooth, the former with a longitudinal depression which has a series of small foveae along its base, and with a few short grooved lines posteriorly. Mesopleura behind with a row of large punctures and a small fovea in the middle near the posterior margin. Abdomen nearly as long as the thorax, first segment with a strongly elevated carina arising at each anterior angle, converging and becoming less prominent behind; irregularly longitudinally striated but less conspicuously so along the median cavity between the discal carinae, following segments polished, smooth; second and third segments equal, together one-half longer than the first; fourth, fifth and sixth growing shorter, others still shorter. Ovipositor as long as the abdomen, its sheaths black, hairy. Legs rather stout, honey yellow or pale fulvous, including the coxae; the hind tibiae with a piceous stripe above, wings hyaline; veins and stigma piceous; the latter broad, as wide as the transverse cubitus; radial cell pointed, one-third longer than the stigma; first section of radius one-half as long as the transverse cubitus; discoidal cell sessile above, the recurrent nervure received at a distance before the tip of the first cubital cell equal to the length of the first section of the cubitus; submedian cell slightly longer than the median; second discoidal cell closed at its lower apical angle; anal cell with two short stumps of veins above.

Male. Length $4\frac{1}{2}$ mm. Otherwise like the female.

Described from two females and one male bred by Mr. C. W. Johnson at Wellesley, Mass., May 25th, from *Magdalis olyra* Hbst. Type in the Museum of the Boston Society of Natural History.

SUBFAMILY HECABOLINÆ.

Monolexis lycti Cress.

This species was originally described by Cresson (Am. Entom. III, p. 24) as an *Anisopelma* and later placed by him in *Hecabolus* in his classification of North American Hymenoptera. I have

seen specimens bred by Mr. C. W. Johnson from the same host, *Lyctus striatus* Say, at Framingham, Mass., which agree perfectly with Cresson's description, but belong in the genus *Monolexis* Förster.

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February 5, 1910.