

## Descriptiones Hymenopterorum Chalcidoidicorum Variorum cum Observationibus. II.\*

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### *Signiphora dipterophaga* new species.

♀. Length, 1.00 mm. In the table of species (Proc. U. S. National Museum, 45, pp. 227 ff.) runs to the *nigra* group and in that runs to *nigra* itself from which it differs in having the wings hyaline and the body much more robust and the caudal wings broader. Differs from *hyalinipennis* in being wholly dark metallic green except the tarsi, the marginal fringes of the fore wing are considerably shorter (those at apex being not quite a fourth of the greatest wing width), the pedicel longer ( $2\frac{1}{2}$  times longer than wide), the club shorter. Middle femur compressed, convexed ventrad (like a dilated scape) as in *hyalinipennis* but here the middle tibial spur is black and barely longer than the stout curved spine from the dorsal aspect of the middle tibia (between middle and knee), longer in the other species. Fore wing slightly yellowish along the venation. Mandibles acutely bidentate. Caudal wings three-fourths or more the width of the fore wings. Thorax finely transversely lined, the abdomen scaly. Head lined like the thorax and with a few pin punctures scattered. Pronotum large, half the length of the scutum. Body glistening. Fore tibiae yellowish.

Described from a large number of females reared from the pupa of a dipteran collected on sugar cane in a tunnel of *Diatraea*, Diego Martin, Trinidad, British West Indies, January, 1914 (F. W. Urich).

*Types*: Catalogue No. 20222, United States National Museum, six females on a slide.

### *Coccophagus aleurodici* new species.

♀. Length, 1.00 mm. Habitus of the species usually referred to *Prospaltella*. Lustrous purplish black, the wings hyaline, the fore tibiae and tarsi dull yellow, funicle 3 dull white. Venation pale yellow. Club as long as the funicle and distinctly wider; funicles 1 and 3 subequal, each a third longer than wide; 2 twice longer than wide. Pedicel subequal to funicle 2, the scape pallid, except the dusky dorsal edge. Mandibles with the second tooth broadly truncate yet with its dorsal angle acute (so that there are apparently two small acute teeth and an inner truncation from the base of the second). Marginal vein somewhat longer than the submarginal, the stigmal oblique, of nearly uniform

\*The first of this series was published in this journal in May, 1916, pp. 223 ff. and marked III by mistake.

width, neckless. Marginal cilia of the fore wing short, the discal cilia uniform, about twenty-three lines where the wing is broadest. Strigil large. Thorax flat, with a velvety sheen due to the dense minute scaly sculpture. Abdomen shining. Distal four tarsal joints short, the first joint long, very much longer. Middle tibial spur long, a little stout. Ovipositor not extruded. Funicle 2 and all tibiae sometimes suffused with yellow.

♂. Similar but the flagellum is filiform, the pedicel globular, the funicle joints subequal, each over twice longer than wide, the club joints each somewhat shorter. The male organ is projected for a length equal to that of the abdomen and is tapering and curved upward.

Described from a large number of specimens reared from *Aleurodicus* on *Theobroma bicolor*, Trinidad, British West Indies, December, 1914 (F. W. Ulrich).

*Types*: Catalogue No. 20223, United States National Museum, two pairs on separate tags with a slide bearing one male, three females and a female head (crushed).

***Encyrtus cecidomyiae*** Howard. Genotype of *Pseudencyrtus* Ashmead.

Original description of the species correct but the scape has a moderate uniform ventral dilation (seen mostly at apex) and thus appears rather much compressed, the dilation not being convexed. Funicle 1 is a little shorter than the pedicel and only a third longer than wide, 2 quadrate, 6 a little wider than long. The club is 3-jointed, ovate, wider than the funicle, obliquely truncate at apex. The body is not punctured but scaly with very minute setigerous punctures scattered over the thorax. The marginal vein is twice longer than wide, subequal to the post-marginal, the stigmal a third longer. The fore wing is infuscated lightly under the marginal and stigmal veins and there is a small substigmal spot directly from the end of the stigmal vein. Discal cilia of fore wing very dense, very fine, many somewhat coarser cilia proximad of the hairless line. Mandibles tridentate, the first tooth acute and longer than the subequal other two yet not projecting beyond them. Axillae just meeting, narrow. Propodeum very short at the meson, transverse. Face inflexed, the scrobes joined above. Frons not prominent, broad. Cheeks as long as the eyes. Ovipositor valves a little extruded. Abdomen depressed. Funicle joints in the male about twice longer than wide, the club solid and much longer; male scape short, greatly convexed-dilated (not twice longer than wide by far), the pedicel globular. Flagellum (male) clothed with rather long hairs. From the male and female types in the United States National Museum.

**Neocatolaccus syrphidis** new species.

♀. Length, 1.50 mm. Differs from *Zatropis deuterus* Crawford in having the femora concolorous and a transverse carina on the propodeum at proximal third which forms the caudal margin of a transverse sulcus of some width and which terminates laterad in a fovea at cephalic margin (two-thirds the way over to the spiracle); from *Z. catalpae* Crawford in having the transverse carina on the propodeum and all the tibiae testaceous; from *Neocatolaccus tylodermae* (Ashmead) in being very much less robust, in lacking the lateral carina on the propodeum, in having the cross-carina abbreviated (ending at the fovea but in the other species much more extended, running caudo-distad from the fovea to nearly over the caudal coxa, hence to a point laterad of the spiracle and far caudad); also the spiracular sulcus is complete, distinct (in *tylodermae* abruptly cut off by the cross-carina); from *Neocatolaccus nigrocyaneus* Ashmead in having all the tibiae testaceous, *nigrocyaneus* is much more robust, lacks a cross-carina on the subglabrous propodeum and the lateral carina (but with a complete spiracular sulcus and a small fovea at cephalic margin half-way to the spiracle from the meson); also it bears two caudal tibial spurs.

Dark metallic green and with the usual flattened setae on the head and thorax; wings hyaline, the venation pale yellow; scape, pedicel (except above), legs (except coxae and femora), yellowish brown. Head and thorax finely, densely scaly punctate, the abdomen shining. Pubescence very sparse on the scutellum. Funicle 1 twice longer than wide, longer than the pedicel, 5 subquadrate. Mandibles 4-dentate. Post-marginal vein longer than the stigmal.

♂. Abdomen narrower, the legs pale except the coxae and the caudal femur; the proximal third of the abdomen is yellow (except at extreme base and the lateral margins). Antennae with two ring-joints; funicle 6 a half longer than wide, 1 nearly thrice longer than wide. Mandibles 4-dentate. Antennae yellowish.

Described from a large series of both sexes reared from a Syrphid pupa, Cocal, Trinidad, British West Indies, July, 1913 (F. W. Urich).

*Types*: Catalogue No. 20224, United States National Museum, three pairs on separate tags.

The genus *Zatropis* Crawford is probably a synonym of *Neocatolaccus* which has a very short propodeal neck not a distinct one; the median carina usually dilates at apex. *Zatropis*, however, may be distinguished from *Neocatolaccus* in lacking the cross-carina on the propodeum. *N. nigrocyaneus* Ashmead is not described; it is an Italian species. The male

type of *Catolaccus pallipes* Ashmead has no cross-carina on the propodeum. *Catolaccus carinatus* Howard is a *Neocatolaccus* and differs in having the pubescence less conspicuous yet much denser and quite normal; also the cross-carina of the propodeum does not limit a sulcus but a plain surface and the spiracular sulcus is a mere fovea in which is situate the spiracle; also funicle 1 is thrice longer than wide (a ♀ of *carinatus* in the United States National Museum and apparently a paratype specimen, "St. George's, Grenada, H. H. Smith"). The propodeal neck in *carinatus* is somewhat more distinct.

**Eulophus magnisulcatus** new species.

♀. Length, 2.00 mm. Dark metallic green, the wings hyaline, the venation, tibiae, tarsi and scape pale straw yellow. Head delicately scaly, the thorax densely scaly punctate, the propodeum more densely so and with a long median carina which joins the semi-circular carinated apex of the propodeum and a deep distinct spiracular sulcus whose margins are carinated and which narrows caudad. Abdomen delicately scaly distad, round-ovate (dorsal aspect), its second segment occupying about a fourth of the surface, the region not as long as the thorax. Propodeal spiracle small, round, placed in a boomerang-shaped sulcus. Marginal vein somewhat (about a third) over twice the length of the stigmal, the latter distinctly shorter than the postmarginal. Axillae half advanced into the parapside. Pronotum transverse quadrate. Antennae inserted on a level with the ventral end of the eyes, the scrobes soon uniting and running as a narrow sulcus to the cephalic ocellus. Funicle 1 twice longer than wide, 3 quadrate, as long as the pedicel which is yellowish ventrad. Club 1 somewhat shorter than funicle 3, largest, the third joint terminating in a distinct nipple which appears to be articulated. Genal suture present. Mandibles 7- and 8-dentate.

Described from one female in the collections of the United States National Museum, reared from a cherry "Coleophor," Jamesburg, New Jersey.

*Type*: Catalogue No. 20225, United States National Museum, the female on a tag, the head, a caudal leg and the antennae on a slide.

**Sympiesis massasoit** Crawford.

This is a valid species. It differs from *nigrifemora* Ashmead in having the cephalic tibiae black and the other tibiae more or less so.

**Aphelinus speciosissimus** Girault.

From eggs of *Xiphidium* (?), Richmond, Indiana, W. J. Phillips, 1906.

**Aphelinus subapterus** new species.

♂. Length, 0.75 mm.; short. Black and scaly, the tips of the tibiae, tarsi and the funicle and club dull yellow. Fore wings very small, only somewhat longer than wide, smoky, with a hyaline cross-stripe at the bend of the submarginal vein, naked, the marginal vein bearing three long bristles, the apex of the wing's blade squarely truncate. Second tooth of mandible truncate. Funicles 1-2 subequal, each a half wider than long, 3 a half longer than wide, longer than the preceding two joints taken together but not half the length of the club, subequal to the pedicel. Scape long and slender. Strigil present. With the generic characters except the wings.

Described from three males labelled *Baobharis marlatti* Ashmead, Riley County, Kansas, May (Marlatt).

*Type*: Catalogue No. 20226, United States National Museum, two of the specimens in fragments on a slide, a third on a tag.