

THREE NEW GENERA AND SPECIES OF PARASITIC HYMENOPTERA.

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Two of the genera described in this paper were received in the regular course of work through the Department of Agriculture, and the other was first found in the material donated to the U. S. National Museum by the Washington Biologists' Field Club. Of the genera described, two are very interesting on account of their hosts, and the one first described is the most interesting, belonging as it does to a family no member of which has hitherto been reported as an egg parasite. In the study of these species, as in all other work on the Chalcidoidea, a Zeiss binocular microscope, with a magnification of from 28 to 35, has been used.

Superfamily CHALCIDOIDEA.

Family MISCOGASTERIDÆ.

ERIXESTUS, new genus.

Head slightly wider than thorax; clypeus medially deeply incised; mandibles with four long teeth; antennæ 12-jointed, with two ring joints, inserted on the middle of the face, very similar in the two sexes; funicular joints almost quadrate, slightly pedicellate at base; club of antennæ slightly enlarged in the female, in the male not thicker than the joints of the funicle; parapsidal furrows complete; scutellum at base with an arcuate fovea and with a cross furrow before apex; axillæ almost meeting; hind tibiæ with two apical spurs, one very small; abdomen with a short petiole; wings with marginal fringes, the postmarginal vein about as long as the marginal, the stigmal shorter.

In Doctor Ashmead's classification of the Chalcidoidea this genus would run to the Miscogasterini, where it does not seem closely related to any known genus.

Type of genus.—*E. winnemana* Crawford.

ERIXESTUS WINNEMANA, new species.

Female.—Length 1 mm. Above deep purple, the parapsidal areas, the abdomen, face and cheeks greenish-blue; antennæ brown, scape and pedicel testaceous; face smooth, polished, vertex back of ocelli finely roughened; median area of mesonotum finely transversely lineolate, parapsidal areas, axillæ and postscutellum before cross furrow indistinctly reticulate; back of cross furrow smooth; metathorax smooth, medially with a transverse carina, back of this a median longitudinal carina which at apex of metathorax divides and runs laterally; legs testaceous; abdomen smooth, polished.

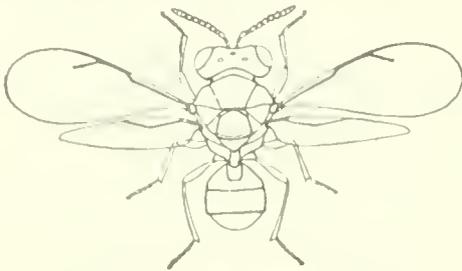


FIG. 1.—ERIXESTUS WINNEMANA, ADULT FEMALE.

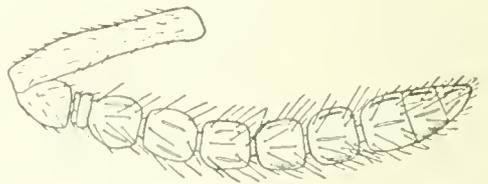


FIG. 2.—ERIXESTUS WINNEMANA, ANTENNA OF FEMALE.

Male.—Length 1 mm. Similar to the female, the antennæ more hairy.

Type-locality.—Plummer's Island, Maryland.

Ten specimens bred from the eggs of *Calligrapha bigsbyana*, collected by Mr. E. A. Schwarz; also twelve paratypes bred from the eggs of *Calligrapha sealaris* collected by Mr. Frederick Knab on the Virginia shore of the Potomac River opposite Plummer's Island.

Type.—Cat. No. 12916, U.S.N.M.

The specific name is an Indian name applied to the island and means "beautiful island."

The insect so completely fills the parasitized egg that it seems impossible for it to be anything but a primary parasite.

Family ENCYRTIDÆ.

Subfamily ENCYRTINÆ.

Tribe MIRINI.

PSYLLEDONTUS, new genus.

Head not thin antero-posteriorly; not distinctly lenticular; lateral ocelli away from the margins of the eyes; the eyes pubescent; antennæ inserted close to the mouth, the funicle 5-jointed, no ring joint apparent, the antennæ similar in both sexes; axillæ contiguous; marginal vein punctiform; post-marginal not developed; marginal fringes of wings short; mesonotum strongly metallic; abdomen above flat, not strongly pubescent.

This genus differs from the genus *Rhopus* by being metallic, by having the antennæ similar in both sexes, the head robust, and by the short marginal fringes of anterior wings. The genus *Metallon* is described as having rudimentary wings and the axillæ slightly separated.

Type of genus.—*P. insidiosus* Crawford.

PSYLLEDONTUS INSIDIOSUS, new species.

Female and male.—Length 1 mm. Head and thorax somewhat purple; the scutellum bright bluish-green; eyes large, distance between them greatly less than length of scape; face well produced below the eyes; face above finely reticulate; mesonotum finely

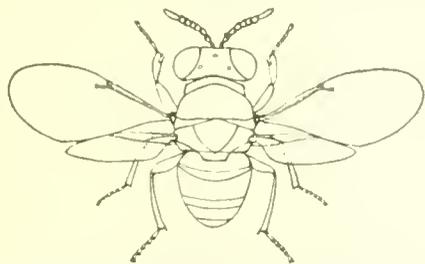


FIG. 3.—PSYLLEDONTUS INSIDIOSUS,
ADULT FEMALE.

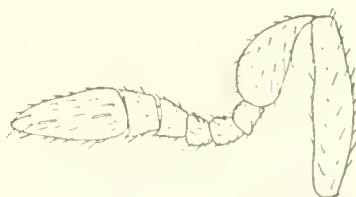


FIG. 4.—PSYLLEDONTUS INSIDIOSUS,
ANTENNA OF FEMALE.

reticulate; the scutellum elongate, triangular, finely longitudinally rugulose; wings hyaline, strongly iridescent; legs black, femora at bases and apices, tips of tibiæ, and tarsi almost entirely, light yellowish.

Type-locality.—Geneva, New York. Bred from nymphs of the pear psylla.

P. J. Parrott, collector.

Type.—Cat. No. 12782, U.S.N.M.

PLAGIOMERUS, new genus.

Metallic; antennæ 9-jointed, the funicle 4-jointed, the first two joints transverse, pedicel elongate, much longer than joints one and two of funicle together, no ring joint apparent; labrum not prominent; eyes strongly convergent above; antennæ inserted below the level of the eyes; vertex without thimble-like punctures, ornamented with two bristles; axillæ meeting along the median line; scutellum at apex with a cluster of flattened scales; wings hyaline; marginal vein not punctiform, as long as the stigmal, postmarginal distinct; abdomen flattened above, sheaths of ovipositor subexserted.

Homalopoda Howard has the vertex with thimble-like punctures; the wings dusky with hyaline spots; the pedicel hardly longer than wide, the first two joints of the funicle subquadrate, as long as the pedicel, the last two slightly longer.

Cercobclus Walker is said to have the abdomen elongate compressed; the pedicel elongate, the first joint of the funicle longer than wide.

Type of genus.—*Plagiomerus diaspidis* Crawford.

PLAGIOMERUS DIASPIDIS, new species.

Female.—Length about 1 mm. Metallic colored, the head greenish or bluish, the mesonotum bronzy black, the metathorax and base of abdomen greenish or bluish, the rest of abdomen deep bronzy; face almost smooth, the vertex finely roughened; antennæ light yellowish, base of scape and pedicel dark, basal joints of funicle and the club slightly dusky; mesonotum finely reticulate; scutellum with very fine thimble-like punctures; postscutellum and metathorax smooth; wings strongly iridescent; legs dark, the tarsi whitish; knees and apices of tibiæ of

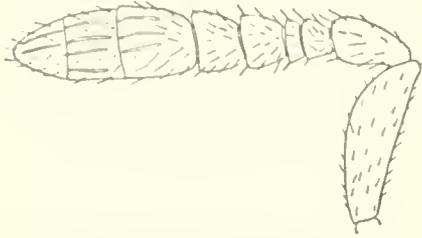


FIG. 5.—*PLAGIOMERUS DIASPIDIS*, ANTENNA OF FEMALE.

front legs, basal half and apices of femora, bases and apical half of the tibiæ of middle legs, knees, bases and apices of tibiæ of hind legs, light colored; abdomen smooth.

Male.—Unknown.

Type-locality.—New Mexico.

Host.—*Diaspis cacti*.

Type.—Cat. No. 12917, U.S.N.M.