

## A NEW GENUS AND SPECIES OF MYMARIDÆ.

[Hymenoptera, Chalcidoidea.]

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The very minute and structurally interesting insects of the family Mymaridæ have attracted considerable attention, and several well-known entomologists have written about their curious structure and habits. Haliday, Westwood, Förster, and Nees ab Esenbeck have in their turn interested themselves to a considerable extent in these most curious creatures; Ashmead and the writer have described a few American forms, and Mr. A. A. Girault is about to monograph the species found in this country. So far as known, all of the species are parasitic in the eggs of other insects, and as a consequence they are extremely minute in size—in fact the family has been stated by some writers to contain the most minute of all insects.

Among a number of interesting parasitic Hymenoptera reared by Dr. A. W. Morrill in the course of his investigations, for the Bureau of Entomology of the U. S. Department of Agriculture, on the white fly of the orange (*Aleyrodes citri* R. & H.) at Orlando, Fla., and which Doctor Morrill has sent to the writer for study, there occurs a very striking mymarid, notable for its large size, which seems with little doubt to belong to a genus hitherto uncharacterized.

- Family MYMARIDÆ Ashmead.

Subfamily MYMARINÆ Howard.

Genus COSMOCOMOIDEA, n. gen.

*Female*.—General form rather slender. Head well rounded; eyes smooth, prominent, well separated; ocelli large, situated at angles of a slightly obtuse-angled triangle, the lateral ocelli farther apart from each other than from the eye margin; face with a very distinct transverse carina above, with oblique carinæ arising near each extremity and extending towards mouth. Antennæ (fig. 11) inserted on middle of face, bases widely separated, touching eye margin; 11-jointed; scape short, slightly rounded out below; pedicel short, obconical, a little longer than wide; first funicle joint a little longer than pedicel but much shorter than second, third, and fourth joints which decrease gradually in length from 2 to 4; joints 5 to 8 also decrease gradually in length; club obliquely truncate and somewhat longer than the three

preceding funicle joints together. Pronotum prominent, well rounded, posterior margin incised in the middle. Mesoscutum with well-marked parapsidal furrows somewhat divergent anteriorly. Metanotum with shallow median longitudinal sulcus. Abdomen petiolate, petiole nearly as long as hind coxa; remainder of abdomen shorter than thorax,



FIG. 11.—*Cosmocomoidea morrilli*: Antenna of female.

narrow ovate. Forewings slender but well-rounded; submarginal vein extending for a little more than a third of the wing length and ending in a rounded knob; hind wings excessively narrow.

*Male*.—Antennæ 11-jointed, all joints appearing flattened, subequal in length, terminal joint shortest; all joints well separated and longer than broad; scape short, only slightly longer than pedicel, rounded on anterior border; pedicel with rounded margins.

The genus resembles in many respects *Polynema* Hal. (= *Cosmocoma* Först.), but differs in the 11-jointed antennæ of the female and in other respects. It derives its name, however, from the general resemblance.

#### COSMOCOMOIDEA MORRILLI, n. sp.

*Female*.—Length, 1.4 mm. Expanse, 3.9 mm. Greatest width of fore wings, 0.4 mm. Greatest width of hind wings, 0.06 mm.

General surface of body smooth, shining; mesoscutellum faintly aciculate-punctate; general color very light brown, almost light yellowish clay color; eyes black; ocelli reddish; a transverse black band across the hinder portion of the mesoscutum; metascutum dusky; abdomen with two transverse dusky bands at base and near middle. Pronotum edged with brownish; antennæ black, except 5th and 6th segments of funicle which are silvery white, and the scape and pedicel which are honey-yellow. Tarsi and tibiæ dark, the remainder of the legs concolorous with body; wings hyaline except for faint dusky patch beyond stigma. These colors are darker in some individuals.

*Male*.—Measurements about the same. Antennæ black. Body entirely black, shining. All femora and coxæ black; tibiæ and tarsi brownish. Wings perfectly hyaline.

*Type*.—No. 11856, U. S. National Museum. Described from 1 male and 6 female specimens reared by Dr. A. W. Morrill at Orlando, Fla., March 29, 1907, from the eggs of what is apparently a homopterous insect. According to Doctor Morrill's notes, the eggs of the host insect seem to be de-

posited just below the epidermis of the leaf of orange in a parallel series and dusted over with a whitish powder. These eggs are quite frequently found in citrus leaves and in the leaves of *Magnolia fuscata*.

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—Mr. Schwarz exhibited a series of the species of the Scarabæid genus *Dynastes*, and pointed out the specific differences. He said that *Dynastes neptunus* should be generically separated from the rest of the species, as was done many years ago by Burmeister, who erected the genus *Theogenes* for this species. He said also that the large species from Central America should not be quoted as *Dynastes hercules* L. All of the specimens in the U. S. National Museum collections from Honduras belong to *D. perscus* Oliv., which is probably specifically different from *D. hercules*. The National Museum collections contain also specimens of *D. alcides* Fab., from British Honduras, which may be only a form of *D. perscus*. The species lately described by Mr. A. H. Verrill from the Island of Dominica as *Dynastes vulcan* is not in the National Museum collection. From the description and figure it appears to be closely allied to *Dynastes alcides*. A number of fine photographs of the various species, made by Mr. H. S. Barber, was exhibited (see Plates I, II).<sup>a</sup>

—In connection with Mr. Schwarz's remarks on *Dynastes*, Mr. Barber exhibited the described species of the allied genus *Megasoma* Kirby, and pointed out a specimen from Arizona which no doubt represents a new species close to *M. thersites* Lec. A single dead and mutilated specimen of this new species was found by Hubbard and Schwarz on the road between Tucson and Nogales.

—Mr. Webster stated that on April 1, 1890, a number of insects were taken from a crow's nest, among them a considerable number of lepidopterous larvæ of different sizes. These were sent to the Bureau of Entomology on May 3 and

<sup>a</sup> EXPLANATION OF PLATES I AND II.—Fig. 1, *Dynastes* (*Theogenes*) *neptunus*; fig. 2, *Dynastes hercules*; fig. 3, *D. perscus*; fig. 4, *D. alcides*; fig. 5, *D. vulcan* Verrill; fig. 6, *D. hyllus*; fig. 7, *D. granti*; fig. 8, *D. tityus*. Two-thirds natural size.