

TWO ASIATIC MUSCOID FLIES PARASITIC UPON THE SO-CALLED JAPANESE BEETLE.

By J. M. ALDRICH,

Associate Curator, Division of Insects, United States National Museum.

The two species of parasitic flies described below were both reared by J. L. King, of the United States Bureau of Entomology, Department of Agriculture, in the course of investigations in Japan upon the so-called Japanese beetle (*Popillia japonica* Newman), which has been introduced into the United States and has become a serious pest near Philadelphia, Pennsylvania.

OCHROMEIGENIA ORMIOIDES Townsend.

Ochremeigenia ormioides TOWNSEND, Proc. U. S. Nat. Mus., vol. 56, p. 578, 1919.

This species now proves to be widespread and probably of considerable economic importance in the oriental region and northward to Japan. It is therefore deemed advisable to give a fuller description of the generic and specific characters than was contained in the reference cited above.

Genus OCHROMEIGENIA Townsend.

Front in profile long and straight. The antennae attached at the level of the middle of the eye, face moderately receding, a little protuberant at the vibrissae; the bucca slightly over a fourth of the eye-height, but ascending in its anterior portion so that the front edge of the mouth is considerably above the lower edge of the head; back of head moderately bulging below; antennae reaching about three-fourths of the way to the vibrissae, the third joint twice as long as the second; the arista with slight pubescence extending to the tip; facial ridges low, not convergent below, without hairs except close to the vibrissae. Front narrow in the male, somewhat wider in the female. Ocellar and vertical bristles very small in the male; frontals small except above, about 8 in number, extending to the base of the second antennal joint. In both females the bristles of the top of the head are rubbed off, but apparently

there are no orbitals. Para frontals with small hairs below on the widened portion, continuing along the parafacial almost to the lower edge of the eyes, but not very conspicuous; palpi rather large, proboscis small.

Thorax without any striking peculiarities, chaetotaxy as follows: Acrostichals, 1 anterior; 2 (small) posterior far back; dorsocentrals, 3 anterior, 3 posterior (one of the anterior is quite far down on the neck); humeral, 2; presutural 1 large; interhumeral 1; notopleural 2; intraalar 2; supraalar 1; postalar 2; sternopleural 2 anterior, 1 posterior; pteropleural 2 or 3 minute; mesopleural 5 in posterior row. Scutellum with two lateral, no apical. Below the scutellum the usual transverse ridge of the Tachinidae.

Abdomen normal, no piercer, no discals. Legs normal, fore tarsi of female not flattened. Wing with fourth vein rounded at bend, ending almost in the apex; first vein bare, third bristly more than halfway to the small crossvein, also with several bristles below at base; apical cell narrowly open; costal spine present but small; third costal segment about half as long as fifth.

The genus is allied to *Emphanopteryx* Townsend, but has narrower parafacials, no discal macrochaetae, and first posterior cell ending more nearly in the apex.

Type of genus.—The following species. No other is known.

OCHROMEIGENIA ORMIOIDES Townsend.

Male.—Wholly yellow. The wing-veins yellow except the crossveins and tip of the auxiliary vein, which are blackish; front at the narrowest point hardly wider than the ocellar triangle; frontal stripe reddish yellow; arista yellow, thickened on the basal fifth; palpi rather stout, with black hairs. Thorax slightly opaque above with yellowish pollen. First abdominal segment without marginals, second with a stout erect pair, third with a row of ten, fourth with a similar row. The abdomen has very thin yellow pollen, and there are slight traces of a dark band along the posterior edge of the second, third, and fourth segments. Legs entirely yellow, the tarsi appearing a little darker from being covered with dense black hairs; middle tibia with one bristle on the outer front side at two-thirds its length, a small one on the inner front side at the same level and three on the outer hind side; hind tibia with two each on the inner hind, outer hind, and outer front sides. Wings not very hyaline, rather uniformly brownish.

Female.—Front twice as wide as the ocellar triangle; palpi longer than in the male and distinctly swollen toward the apex. Abdomen curved downward, the second, third, and fourth tergites being much narrower below than above. This brings the genital opening rather far forward underneath and not at the apex. Otherwise as in the male.

Length of male, 6.2 mm., of the female 5.4 mm.

Described from one male from Mount Salak, Java, collected May 15, 1909, by the Bryant-Palmer Expedition. Mr. King reared several specimens in Koiwai, Japan, from *Popillia japonica*, of which 2 males and a female are in the United States National Museum. A female specimen has also been received from Rev. D. C. Graham, collected by him at Shin Kai Si, Mount Omei, Szechuen, Western China.

Type.—Male, Cat. No. 22209, U.S.N.M.

Mr. King states that this species deposits maggots.

CENTETER,¹ new genus.

Head in profile shorter than high the front prominent, almost horizontal to the antennae in the male, in the female curving but little downward to the antennae, which are therefore very high up. Below antennae the profile curves gently backward and is very long, the oral (ventral) portion of the head being short; back of head not bulging, almost straight. Eyes bare, small, the bucca (below) equal to half the eye-height. Parafrontals and parafacials wide. Antennae long, the third joint five times the second, arista with short basal joints. Facial depression long, narrow and deep, the long and prominent ridges provided with strong bristles almost to the arista, vibrissae a little above mouth, two bristles below them. The facial depression is less than twice as wide as one parafacial, and has a low median keel for its whole length; ridges not convergent toward oral margin. Proboscis short and fleshy, palpi normal. Ocular bristles well developed, diverging forward; frontals about 8, the upper not enlarged and reclinate, the lowest at the middle of the second antennal joint. Parafrontal with small uniformly scattered hairs, which continue on the parafacial in a narrowing space next the ridge, as far as the last third of the third antennal joint. Bucca bare except on lower edge.

Thorax of ordinary structure, with the following chaetotaxy: Acrostichals, 3 anterior, 3 posterior; dorsocentrals, 2 anterior, 3 posterior; humeral 3; presutural 1 large; interhumeral 1; notopleural 2; intraalar 3; supraalar 3; postalar 2; sternopleural 2 anterior, 1 posterior; pteropleural 1 small; mesopleural 5 in posterior row. Scutellum with 4 lateral, 1 discal, and 1 minute apical (in female).

Abdomen normal, no piercer, no discals, first to third segments with marginals, weak in females. Legs normal, fore tarsi of female not flattened. Wing with fourth vein rounded at bend, thence slightly concave, ending only a little before apex. First vein bare, third with two or three hairs; apical cell narrowly open. No costal spine; third costal segment about four-fifths as long as fifth.

¹ Greek *κεντερες* one who spurs or goads.