

A New Species of Platygasteridae from Hawaii (Hym.: Proctotrupoidea)

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The platygasterid described in this note appears to be an accidental introduction into the state of Hawaii. The species was first recorded in Hawaii by Hardy (1950) as *Platygaster* sp., a parasite of the Chrysanthemum gall midge, *Diarthonomyia chrysanthemi* Ahlberg. The Hawaii State Department of Agriculture subsequently recovered the parasite from the Klamath weed gall midge, *Zeuxidiplosis giardi* (Kief.), during the summer of 1968. The new species description was prepared from the latter material.

Platygaster acciculosus sp. n. (Fig. 1)

Coloration.—Head, thorax and abdomen black. Legs black or black-brown, becoming brown on tarsal segments. Antennae brown-black.

Female.

Head.—Transverse, wider than thorax. Frons shining, weakly acciliated, becoming more strongly acciliated near antennal insertions. Occiput strongly acciliated, acciliation following contour of occipital foramen, shining. Lateral ocelli equidistant from median ocellus and eye margin. Eyes without hair. *Antennae*.—Ten segmented, longer than head and thorax combined, with setae less than half as long as width of corresponding flagellomere. Scape longitudinally acciliated, other antennal articles not acciliated. Flagellomeres one through three appearing partially fused. Flagellomeres five to eight with a strong ventral sensory spine. All flagellomeres rectangular in outline. *Thorax*.—Pronotum smooth and shining, proplurae strong to moderately acciliated, with few scattered hairs. Mesonotum on anterior margin weakly shining, rugulose punctate, becoming smooth and shining posteriorly, with few scattered hairs. Parapsidal furrows converging posteriorly, weakly indicated, disappearing anteriorly. Mesoplurae smooth and shining, without hairs. Scutellum strongly convex, set off from mesonotum by two deep depressions, one on each side, scutellum above smooth and shining, without hairs; below with two large circular depressions, one on either side, few hairs around depressions. Metaplurae smooth and shining with numerous long hairs. *Wing*.—Veinless, hyaline, pubescent, with short fringe on anterior and distal margins, unclothed behind. Hind wings fringed on apex, fringe becoming longer on posterior margin near proximal end of wing, anterior margin of wing without hairs. Hamuli with two hooks. *Legs*.—Coxae on medial and posterior legs pilose. All legs with few

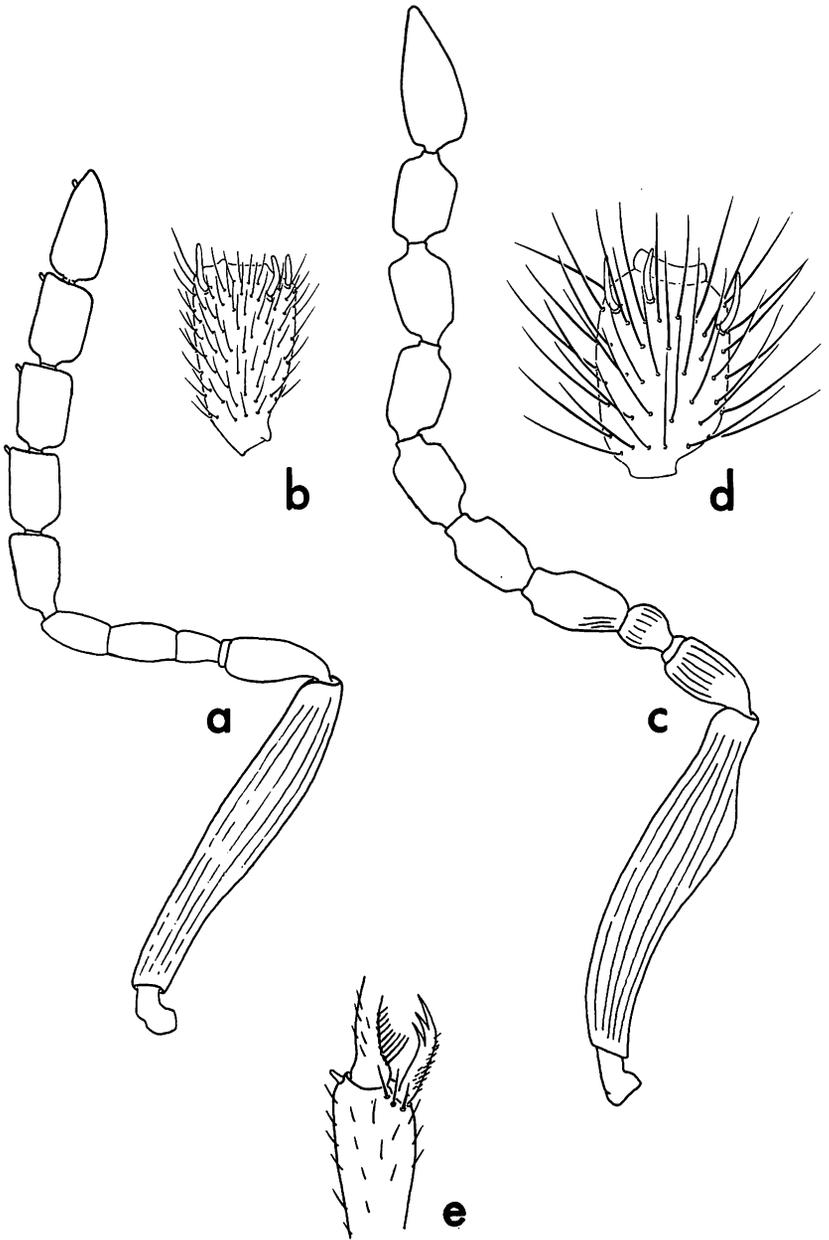


FIG. 1. *Platygaster acciculosis* sp. n. a) left female antennae; b) sixth flagellomere of same; c) left male antennae; d) sixth flagellomere of same; e) tibia of female foreleg.

scattered setae. First tarsomeres of anterior legs with well developed combs, first tarsomeres nearly as long as remaining four, apical tarsomeres black, all others brown or red-brown. *Abdomen*.—Gaster with six visible tergites, smooth and shining. Nearly pilose on first gastric sternite. First gastric tergite strongly longitudinally carinate, width of tergite twice its length. A deep suture separating first two gastric tergites. Second tergite twice as long as wide at anterior margin, with numerous striations, becoming weak and disappearing in posterior half of tergite, not reaching posterior margin. Remaining tergites each with one transverse row of setae. Last two abdominal segments more elongate than previous two, fifth abdominal segment three times wider than long. Last segment triangular, as long as wide at basal end, with one row of hairs across tergite parallel to distal margin.

Male. Essentially as in female, except as follows:

Antennae.—Slightly longer than thorax, with setae as long as three-quarters width of corresponding segment. Scape, pedicel and first flagellomere weakly longitudinally acciculated. Second flagellar article trapezoidal in outline, longitudinally acciculated on lower posterior edge. *Abdomen*.—Basally identical to female, apical segments more truncate than in female, last tergite broadly rounded.

Length.—Males .7–.9 mm. Females .8–1.0 mm.

Types.—Holotype female and allotype male from Mt. Hualalai, Hawaii Co., Hawaii, July 25, 1968, by H. Yamayoshi, deposited in the Bishop Museum, Honolulu, Hawaii, under Museum no. 7987. Twenty-three male and seven female paratypes with the same data also deposited in the same Museum. Two female and two male paratypes from the Bishop Estate, Hawaii Co., Hawaii, July 25, 1968, by H. Yamayoshi, will be deposited in the U. S. National Museum, and two male and one female paratypes from the Bishop Estate with data above will be deposited in collection of Hawaii State Department of Agriculture, Entomology Division. One paratype of each sex will be retained by the author.

Hosts.—Klamath weed gall midge, *Zeuxidiplosis giardi* (Kief.) and the Chrysanthemum gall midge, *Diarthonomyia chrysanthemi* Ahlberg.

In Fouts (1924), *P. acciculosis* keys to *P. eurae* Ashmead but differs from the latter in having antennae longer than the thorax and a thorax one-third longer than wide. In Kieffer (1926) it runs to *P. lyciicola* Kieffer, but differs in having the fourth flagellar article of the female antennae broadly joined to the third article. In *P. lyciicola* the junction of these two articles is constricted.

There are no other members of the genus *Platygaster* presently recorded from Hawaii, so there should be little difficulty identifying the species in the Hawaiian fauna. The species should be easily distinguishable using characters as follows: acciculated frons and antennal scape, combined with the unusually long basal flagellomeres in the female which are partial-

ly fused and not flexible. It is interesting to note that the female antennae are morphologically most similar to South American *Platygaster* species.

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