A NEW ENTEDONTINE CHALCID-FLY FROM SEED CAPSULES OF EUCALYPTUS IN CALIFORNIA¹ (Hymenoptera:Eulophidae)

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The discovery of a phytophagous chalcid-fly attached to *Eucalyptus* in California is of unusual interest because it is the first known species of insect that must have been introduced into California with this host plant. This chalcid-fly was first brought to my attention in January, 1954, by R. A. Flock, who reared it from seed capsules of *Eucalyptus umbellata* (Gaertn.) Domin. It is described herewith as a new genus and species.

Flockiella Timberlake, new genus

In Ashmead's keys (1904) this insect runs to the Omphalini and runs out strictly at couplet 2, but if continued on it agrees best with the characters of *Euderus* as given in the key. In Girault's keys (1913) it agrees best with the Omphalini group of the Entedontinae and runs near the genera *Rhicnopeltella* and *Rhicnopeltomyia*. It differs from those genera in having four grooved lines on the scutellum, a median grooved line on mesoscutum, and twelve-jointed antennae with four ring joints.

Female: Parapsidal furrows deep and complete, the mesoscutum also with a fine, impressed median line .Scutellum large, pulvinate, with two impressed submedian lines and also an impressed line on each side. Propodeum smooth, without carinae, and hardly longer in the middle than the metanotum. Abdomen sessile, elongate oval, depressed above, about as long as the head and thorax together, with six distinct dorsal segments; last five segments about equal and each but little more than half as long as the first. Ovipositor sheaths rather massive but only very shortly protruded. Tarsi four-jointed. Antennae twelve-jointed, with four ring joints, three funicle joints, and three club joints; pedicel large, more than half as long as the scape and somewhat longer than the ring joints and first two funicle joints combined (Fig. 1). Fore wing with a short, fine marginal fringe and moderately close discal setae except on narrow part of disk below the submarginal vein. Marginal and submarginal veins long and equal, about four times as long as the stigmal, the submarginal broken; stigmal and postmarginal veins about equal, the former very slender and colorless at base, only slightly widened apically, and with a slender beak.

Type of genus: *Flockiella eucalypti* Timberlake.

This genus is dedicated with much pleasure to my esteemed colleague, R. A. Flock, who discovered it.

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Flockiella eucalypti Timberlake, new species

Female: Dark brassy green, becoming more coppery on the face. Antennae brown. Legs pale brownish yellow, a cloud on posterior side of front and middle femora, hind femora, except apical fourth, and apex of all tarsi, fuscous. Wings hyaline, the nervures fuscous. Head longer than wide, the malar space equal to length of eyes. Ocelli widely separated, posterior pair close to occipital border and the margin of eyes. Antennae a little longer than head, only slightly clavate, flagellum thickest at basal club joint; first ring joint distinct, the others very thin; the three funicle joints increasing very slightly in size distad; club conical in outline, the three joints subequal in length and, together, almost as long as funicle and ring joints

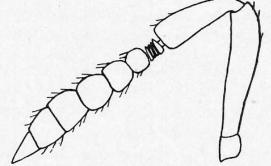


Fig. 1. Antennae of Flockiella eucalypti Timberlake.

combined. Axillae large, more than half anterior to basal line of scutellum, the suture between them and scapulae almost exactly bisecting the parapsidal furrows. Scutellum large and broad, about as wide as long, with area between the two submedian grooves twice as long as wide. Legs rather slender, with femora slightly swollen; first three joints of tarsi subequal, fourth joint stouter and a little longer than the others, and with small claws and a large pulvillus. Head, thorax, and abdomen shining, minutely tessellate, but face and propodeum polished. Length, about 1–1.8 mm.; anterior wing almost equaling length of body or about 0.9–1.7 mm.

Male: Unknown.

Described from 141 females (holotype and paratypes) reared in January and February, 1954, from seed capsules of *Eucalyptus umbellata*, collected at the CITRUS EXPERIMENT STATION, RIVER-SIDE, CALIFORNIA by R. A. Flock. The type in Station collection at Riverside, but paratypes or additional material will be widely distributed.

References

ASHMEAD, W. H.

1904. Classification of the Chalcid Flies, or the Superfamily Chalcidoidea. Memoirs Carnegie Museum, 1:225-551.

GIRAULT, R. A.

1913. Australian Hymenoptera Chalcidoidea. IV. The Family Eulophidae with description of New Genera and Species. Memoirs Queensland Museum, 2:140-296.



Timberlake, P. H. 1957. "A new entedontine Chalcid-fly from seed capsules of eucalyptus in California (Hymenoptera: Eulophidae)." *The Pan-Pacific entomologist* 33, 109–110.

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