

THE GENUS BRACHYPTEROMYIA WILLISTON
(DIPTERA PUPIPARA; HIPPOBOSCIDÆ)

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The genus *Brachypteromyia*, of the family Hippoboscidae, was named by Williston in 1896 for the reception of the single species, *B. femorata* Williston. It has since been recognized that this species is unquestionably identical with the earlier described *Anapera fimbriata* Waterhouse, but the genus *Brachypteromyia* has been accepted as valid. Through the kindness of Dr. V. M. Tanner I have been enabled to examine two specimens of this species. It is evident that the genus is purely a synonym of *Myiophthiria* Rondani.

These two genera have presumably been separable by the character of the wings. In *Brachypteromyia* they are described as "minute, projecting but little beyond the scutellum," while in *Myiophthiria* they attain about half the length of the abdomen. With the rediscovery of the type species of *Brachypteromyia* it appears that this difference has been exaggerated. Although the wings in the latter species are shorter than in those which have been referred to *Myiophthiria* they are of the same type and the difference cannot be regarded as more than specific.

There is the more reason for uniting the two genera, since all the species occur upon birds of the family Micropodidae, the swifts, and to separate them generically is merely to obscure the facts concerning this peculiar distribution.

MYIOPHTHIRIA FIMBRIATA (Waterhouse)

Figures 1, 2

1887. *Anapera fimbriata* Waterhouse, *Proc. Zool. Soc., London*, 164; fig. 163.
1896. *Brachypteromyia femorata* Williston, *Ent. News*, 7:184-5.
1923. *Brachypteromyia fimbriata* (Waterhouse), Aldrich, *Insecutor Insc. Mens.*, 11:78.
1926. *Brachypteromyia fimbriata* (Waterhouse), Austen, *Parasitology*, 18:359.

Previous records. From *Aeronautes* (as *Cypselus*) *melanoleucus*, Ft. Wingate, Arizona (Waterhouse), and (as *Macropis*) from Wyoming (Williston).

Present record. A male and a female from *Aeronautes melanoleucus*, near Tuba, Arizona.

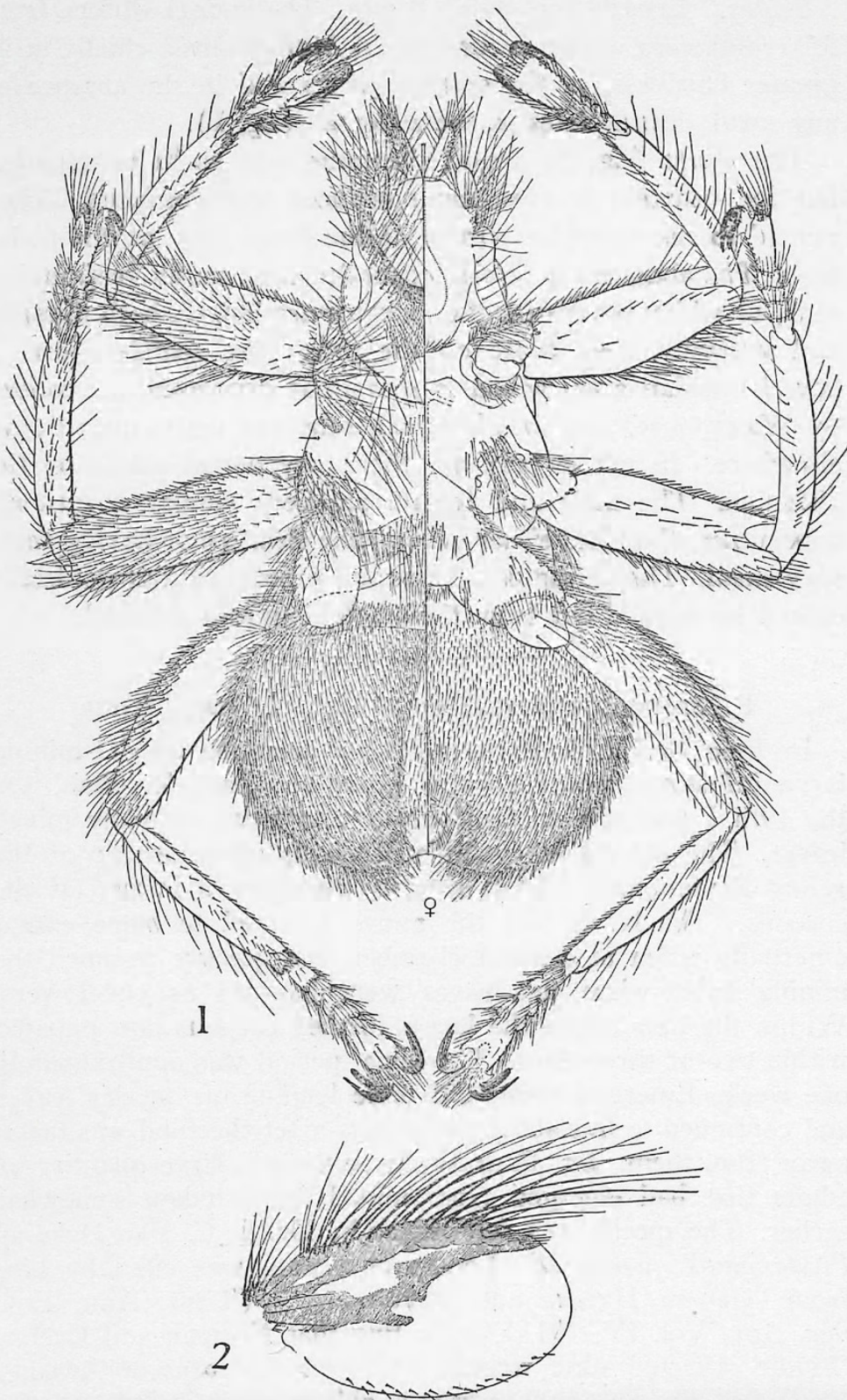


Figure 1. *Myiophthiria fimbriata* (Waterhouse); female.

Figure 2. *Myiophthiria fimbriata* (Waterhouse); wing.

Notes. Length (on slide) 8 mm. The species differs from *M. reduvioides*, which is the type of *Myiophthiria*, chiefly in its greater hairiness, in the smaller wings and in the absence of any small, dorsal plates on the abdomen (fig. 1).

The wings (fig. 2) are of the same type as in *reduvioides*, but the venation is even more reduced and confused. They extend to the posterior border of the basal plate of the abdomen. The abdomen is almost concealed beneath its vestiture of setæ, of which those near the margins are longer, both dorsally and ventrally, than those on the disc. The female shows a dorsal, median area, which is somewhat depressed, as noticed by Waterhouse, and in which the setæ are more sparse than elsewhere. In neither sex are there any dorsal plates on the abdomen. The male and female are very similar in general appearance, the male either lacking the claspers or having them very small. The oedeagus is large and prominent, but its details cannot be worked out from the single specimen at hand.

PHYTONOMUS QUADRICOLLIS LEC., A LEAF MINER

In June Dr. H. J. Pack called my attention to leaf-mining larvæ infesting *Rumex venosus* Pursh at Clearfield, Utah. On the 19th I was able to find only a few larvæ in many mined leaves. The old mines contained cocoons characteristic of the genus *Phytonomus*. Adult weevils were found in two of the cocoons. The larvæ left the mines and fed to some extent externally when in a moist chamber, but quickly resumed the mining habit when the leaves were handled as cut-flowers. Within the new mines the larvæ formed cocoons and pupated within two or three days. The pupal period was approximately one week. Emerged adults did some feeding on the dry leaves and continued to live about two weeks after the food was taken away from them. Dr. Pack kindly sent me a large quantity of adults that had emerged from mined leaves taken somewhat earlier. The species was determined by Dr. E. C. Van Dyke as *Phytonomus quadricollis* Lec., and a note was cited by him from "Genera Hypera and *Phytonomus*" (Titus, Ann. Ent. Soc. Am., Vol. IV, 1911), indicating that Norman and Evelyn Criddle collected adult weevils on *Rumex venosus* at Aweme, Manitoba. So far as the writer is able to ascertain, this is the first instance of a leaf-mining habit in the genus *Phytonomus* or in the tribe to which it belongs.—Wyatt W. Jones.

ON DINAPATE WRIGHTI HORN

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It has been commonly supposed that the attack of the California palm borer, *Dinapate wrighti* Horn, was confined to the trunks of dead trees of the native California fan palms. During the last two years various reports received at the office of the horticultural commissioner of Riverside County, California, stated that large black beetles were injuring the growing tip of most of the transplanted fan palms about Palm Springs. On July 31, 1927, while at the Citrus Experiment Station, Riverside, I received a live female beetle through the mail with an accompanying note stating that the pest was taken from a burrow in the bud of a living fan palm at Palm Springs and that the beetles were very abundant and injuring many transplanted palms in that vicinity. Upon investigation of these reports on August 4, it was found that at least 90 per cent of the transplanted fan palms were injured by the beetles burrowing down into the succulent, growing tip of the trees. The burrows measured from five-eighths to seven-eighths inches in diameter and from about eight to sixteen inches deep. One gardener had removed as many as five beetles from a single tree and two or three were commonly taken from one tree. In a few cases it was found that the beetles had made numerous burrows into the trunks of living trees and one tree, about sixteen feet tall with a trunk about twenty inches in diameter, had been so severely injured that it had apparently succumbed to the attack in spite of an abundant water supply, and the leaves and bud had entirely withered.

Even most of the large palms which had been transplanted thirty-five or forty years ago showed the effects of beetle attack; the large characteristic masses of fibrous excelsior-like frass near the growing tip, and the elongate holes in the leaf petioles were quite common in these trees. According to the residents of Palm Springs the main flight of the beetles occurred about July 1 to 15, although some beetles were active as early as June 15 and as late as the latter part of August. Many attempts were made to control the beetles, but all resulted in killing them in most cases only after they had burrowed deeply into the plant.



Ferris, Gordon Floyd. 1928. "The genus *Brachypteromyia* Williston (Diptera Pupipara; Hippoboscidae)." *The Pan-Pacific entomologist* 4, 140–143.

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