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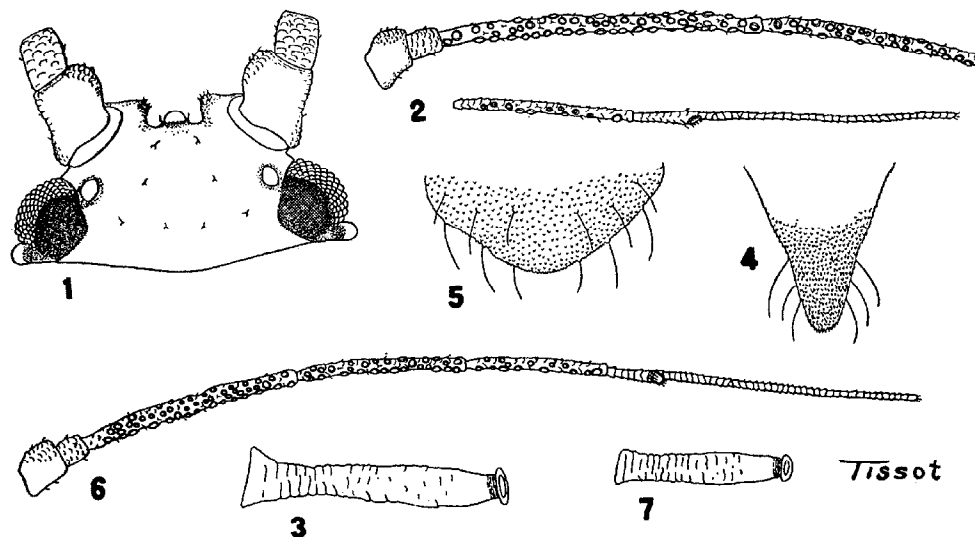
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A NEW MYZUS FROM FLORIDA*

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From loquat, apple, and hawthorn has been taken a brown aphid belonging to the genus *Myzus*. As this insect is apparently new to science, the opportunity is taken in this paper to describe the known forms of the species.



Explanation of Plate III

Myzus eriobotryae n. sp.

Figs. 1-5.—Alate viviparous female: 1, head; 2, antenna; 3, cornicle; 4, cauda; 5, anal plate.

Figs. 6-7.—Alate male: 6, antenna; 7, cornicle.

MYZUS ERIOBOTRYAE new species

ALATE VIVIPAROUS FEMALE. (Plate III, figs. 1-5). Prevailing color of body and appendages, brown. Length, 2.08 mm. Head dark brown. Width nearly twice as great as the length. Antennal tubercles short, but rather strongly converging. Front of head and antennal tubercles with a few short, thick, hyaline, spines. Width through the compound eyes, .476 mm. Eyes reddish-brown, large, with very prominent ocular tubercles. Ocelli

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large, bordered with very dark brown. Antennae six-segmented, somewhat longer than the body, very tuberculate. First two segments concolorous with the head, remaining segments very dark brown, almost black. First segment strongly gibbous on the inner margin, much wider than the second. Surface of the first three segments without imbrications, fourth and fifth faintly imbricated and the sixth distinctly imbricated. The third, fourth, and fifth segments with scattered, tuberculate sensoria, oval or circular in outline and varying considerably in size. The third segment with 50-65 sensoria, the fourth with 20-30 sensoria, and the fifth with 10-20 sensoria, the sixth with a group of one large and five or six small sensoria at the base of the unguis. Length of the antennal segments as follows: I, .095 mm., II, .075 mm., III, .775 mm., IV, .503 mm., V, .422 mm., VI, base, .150 mm., unguis, .626 mm. Rostrum brown, black-tipped, reaching to second coxae.

Prothorax reddish-brown, the other two thoracic segments yellowish-brown with the dorsal lobes dark brown. The wing insertions yellowish. Anterior margin of prothorax about equal in width with the head, posterior somewhat wider. Lateral margins without tubercles. Wings hyaline, stigma and veins brown, the anal and basal portion of the cubitus narrowly bordered with brown shading. Fore wing with radial sector long and rather sharply curved. The media twice-branched, the distance between the second fork and the margin of the wing about equal to the distance between the first and second forks. Hind wing with two oblique veins. Legs brown, the bases of the femora and the mid-portions of the tibiae light; the apical portion of the femora, the two extremities of the tibiae, and the tarsi, dark brown.

Abdomen a dull dark brown, the embryos within showing through the body wall as light areas. Cornicles yellowish-brown, the apical portion somewhat darker than the remainder. The basal half narrow, the apical half distinctly swollen, somewhat narrowed before the apex which is flared. The surface faintly imbricated, the narrowed portion having a somewhat wrinkled appearance. Length, .394 mm. Cauda and anal plate concolorous with the abdomen. Cauda broad at the base, tapering toward the apex, with a very slight constriction above the middle. Each side with two or three slightly curved, hyaline hairs. Length, .163 mm. Anal plate large, the sides nearly straight and the posterior margin rounded, with several curved hyaline hairs. The surface of the cauda and anal plate covered with short, thick, spine-like processes.

ALATE MALE. (Plate III, figs. 6-7). General color of body and appendages brown. Smaller and more slender than the alate female. Length, 2.00 mm. Head dark brown, anterior margin nearly black. Antennal tubercles short, sharply converging. Width of head through the compound eyes, .490 mm. Eyes reddish-brown, very large, occupying the whole sides of the head, ocular tubercles large. Ocelli prominent, bordered with very dark brown. Antennae six-segmented, about equal in length with the body. The first segment concolorous with the head, the remaining segments very **dark brown or black**. The first segment somewhat gibbous on the inner margin, the surface faintly imbricated. The second segment with very definite curved imbrications. The third and fourth segments faintly imbricated, the fifth and sixth definitely so. The sensoria are scattered over most of the third, fourth, and fifth segments as in the alate female, but they

are smaller and somewhat less tuberculate than in that form. Third segment with 50-60 sensoria, fourth with 25-30, and the fifth with 10-15 sensoria. Sixth segment with one large and six small sensoria at the base of the unguis. Length of antennal segments as follows: I, .082 mm., II, .068 mm., III, .530 mm., IV, .394 mm., V, .326 mm., VI, base, .122 mm., unguis, .612 mm. Rostrum brown, with apex black, reaching to third coxae.

Thorax reddish-brown, with the dorsal lobes dark brown. Prothorax but little wider than the head, the sides nearly parallel. Wings hyaline, the stigma and veins dark brown. Fore wing with the radial sector sharply curved at the base, the media twice-branched, the distance between the second fork and the margin of the wing about equal to the distance between the first and second forks. Hind wing with two oblique veins. Legs brown; the apical two-thirds of the femora, both extremities of the tibiae, and the tarsi, dark brown. The inner posterior margin of the femora sharply serrated.

Abdomen brown, somewhat lighter than in the female. Cornicles light brown from base to apex. Shorter and thicker than in the alate female. Somewhat swollen above the middle and constricted before the apex which is flared. Length, .272 mm. Cauda and anal plate brown, considerably darker than the abdomen. Cauda shorter, thicker, and more conical than in the female. Anal plate broadly rounded. Both these structures with curved hyaline hairs, and their surface covered with spine-like processes as in the alate female.

TYPE LOCALITY: Gainesville, Florida.

TYPES: Holotype, alate viviparous female taken from *Eriobotrya japonica*, Loquat, Dec. 4, 1928 (F 428-28). Allotype, male, same data as the holotype. The above types deposited in the U. S. National Museum Collection, Cat. No. 44301. Paratypes in the collection of the Entomology Department, Florida Agricultural Experiment Station and in that of the author. Types selected from a series of forty-one alate females and two males. Type material collected by the author.

NOTES: This aphid has been found on apple and hawthorn in addition to loquat. A single specimen was taken from within the funnel of a pitcher plant in western Florida. The majority of the specimens were taken from loquat, all being alate females except for two males. On apple there were taken a few immature oviparous females in addition to the alate viviparous females. All specimens from hawthorn were alate females. This species may be distinguished from other species of this genus found in Florida by the numerous, somewhat tuberculate antennal sensoria.

A study of ten alate females gave the following range in size: length, 2.08-2.40 mm., width of head across the eyes, .476-.517 mm., length of antennal segments, III, .626-.775 mm., IV, .408-

.571 mm., V, 3.354-.422 mm., VI, base, .122-.150 mm., unguis, .490-.626 mm., length of cornicle, .340-.422 mm.

RECORDS: *Eriobotrya japonica*, Loquat, Gainesville, Dec. 4, 1928 (F 428-28), Dec. 27, 1928 (F 443-28), Dec. 30, 1931 (F 842-31); *Pyrus malus*, Apple, Gainesville, Dec. 7, 1928 (F 430-28); *Crataegus uniflora*, Gainesville, Feb. 19, 1929 (F 475-29); within funnel of *Sarracenia flava*, Marianna, Apr. 13, 1930 (F 753-30), (L. W. Ziegler coll.).

WALNUT CATERPILLARS EATEN BY BLUEJAYS?

On a recent evening (Aug. 25, 1934), before dark, the writer observed a bluejay busily rubbing and belaboring something that he held in his beak against the horizontal top board of a lattice fence. It was surmised that he had a caterpillar from which he was endeavoring to remove the sparse whitish hair, preparatory to eating. The bird shortly swallowed the caterpillar. I further surmised that it was a specimen of the Walnut caterpillar (*Datana integerrima*) as several colonies of these were present in the few pecan trees growing in our yard.

The next morning I again observed a bluejay alighting on the same fence, this time undoubtedly with one of the caterpillars in question as it was plainly visible from the window. However, the bird flew away thus putting an end to this particular observation. Nevertheless, I had seen enough to satisfy me that these bluejays were consuming some of the caterpillars in question. But additional observations verified this.

Early in the evening of the same day, before dusk, I again noted a bluejay, this time belaboring a caterpillar on a small branch of one of the pecan trees. I observed the bird until he had swallowed three of the wormy tribe. I also noted that he hopped to the other side of the tree just above a large crotch, four or five feet away, to get the caterpillars. Investigation displayed a colony of these, that had come down to shed their skins, as the bird's source of supply. And to think that the bird had directed the writer to this!

A week later, this time early (7 a.m.) in the morning, a bluejay was again observed on the lattice fence eating a caterpillar. Soon there were two, to which two nearly matured young birds were soon added. In this instance they flew to the ground nearby for their supply of caterpillars, evidently finding some that had dropt or fallen from the tree.

Two hours later two birds were again observed on the fence and one on a branch, each preparing a caterpillar that they ate. Single birds would leave and return several times with a fresh caterpillar. In this instance, however, I failed to locate the colony of "worms".

Examination of the fence showed the presence of some of the whitish hairs that the birds had succeeded in removing from the caterpillars.

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