

A NEW SPECIES OF APHID FROM THE MARQUESAS*

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Included in a collection of aphids taken by the Pacific Entomological Survey in the Marquesas Islands were four apterous forms of a hitherto undescribed species of doubtful affinities taken in the cloud zone on Hivaoa. This species is characterized by the conspicuously constricted cauda, the thickened body skin, and the sculptures on the dorsum.

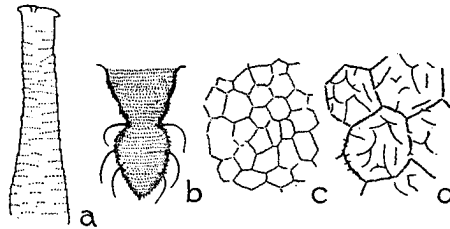


FIGURE 1.—*Aphis mumfordi*, new species (apterous viviparous female): *a*, cornicle; *b*, cauda; *c*, dorsal reticulations; *d*, dorsal reticulations and sculptures.

Aphis mumfordi, new species (fig. 1).

Apterous viviparous female. In specimens treated with caustic potash, dark yellowish brown, head paler, antennae colorless, except on the basal two joints which are pale brownish, cornicles yellowish-brown, not dusky on the apex, cauda pale yellowish brown, legs colorless, slightly dusky on the distal parts of tibiae and on the tarsi.

Body oval, skin somewhat thickened, distinctly reticulated and with numerous minute irregular sculptures on the dorsum, except on the head and posterior part of abdomen, with a few very short setae hardly discernible. Head not imbricated, lacking spinules and granules. Frontal tubercles not developed. Eyes normal. Antennae slender, imbricated, much shorter than the body, 5- or 6-jointed, with a few very short setae; the 3d joint about 0.014 mm. wide at the middle, lacking sensoria; the penultimate segment with a rather small circular sensorium on the distal part; the relative length of joints (5-jointed antennae) approximately as follows: III, 38; IV, 20; V, 15 + 36; (6-jointed antennae) III, 26; IV, 17; V, 22; VI, 14 + 38 mm. Rostrum stout, obtuse at the tip, reaching the middle coxae. Prothorax and the 1st and 7th abdominal segments with a very small conical lateral tubercle. Abdomen with numerous minute spinules in many transverse rows on the posterior part; the segments not discernible except on the posterior part. Cornicles cylindrical, moderately expanded on the basal part, nearly straight, imbricated except on the distal small part, not reticulated, about 3.4 times as long as wide, about 1.7 times as long as the cauda, nearly as long as the 3d joint of the 5-jointed antenna, and with a flange; cauda distinctly constricted at the middle, the distal part nearly globular, rounded apically, a little longer than wide with 5 or 6 long curved bristles. Anal plate broadly rounded, with 6 very long, fine curved hairs. Tibiae rather slender, with some rather

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long setae especially on the distal half, stouter than the 3d antennal joint; tarsi imbricated, the basal joint with 2 setae on the distal part; hind tarsi nearly as long as the basal part of the last antennal joint.

Length of body about 1.0 mm. Width of head excluding eyes about 0.212 mm. Length of antenna about 0.56 mm.; cornicle about 0.175 mm.; cauda about 0.106 mm.; hind femur about 0.24 mm.; hind tibia about 0.42 mm.

Hivaoa: Matauuna, altitude about 3700 feet, March 4, 1930, 4 apterous forms, host unrecorded, Mumford and Adamson.

The type specimens are preserved in the collections of Bernice P. Bishop Museum, Honolulu, Hawaii; paratypes in the Department of Agriculture Research Institute, Taihoku, Formosa.