

Body 1.9, wing 3, antennæ 1.3, cornicles .18 mm. Joints of antenna: III .34, IV .21, V .20, VI .11, VII .28 mm. Cornicles cylindrical, without marked thickening towards base, and without flange at distal end. Antennæ black, wing-veins black, with 2nd fork of cubital vein rather short, stigma rather short and, along with subcostal vein, a little greenish in colour. Hind tibiae 1.1 mm. long. Prothoracic tubercles rather stout and prominent, and usually the abdominal segments show well-developed lateral tubercles. Cauda short, black and upturned; 3rd joint of antenna with about eight moderately tuberculate sensoria.

*Apterous Viviparous Female* (Plate 11, Fig. 3), taken along with the alate form.

Deep, dull, sooty-black throughout, never polished; tibiae, except distal ends, most of anterior femora, bases of middle and hind femora, third joint of antennæ and basal joint of beak, pale yellow or slightly dusky in colour. Body short and broad, almost globular, about 2.5 mm. long by 1.6 mm. broad. Length of antenna 1.3 mm., and the joints measure about as follows: III .40, IV .24, V .22, VI .11, and VII .24 mm. respectively. Cornicles .26 mm. long, without flange at tip, and somewhat broadened towards the base; cauda short and upturned. Tubercles of prothorax and abdomen as in the winged form. There is considerable variation in measurements of antennal joints, but joint 3 is longest, and joints 4 and 5 are about equal.

*Apterous Viviparous Female*. Taken Sept. 23, '07, at Ft. Collins, Colo.

Varies little from early summer form, but is a trifle smaller. Measurements vary little from: length, 2.10 mm.; width, 1.10 mm.; antenna 1.10 mm.; joints of antenna: III .26, IV .20, V .19, VI .11, VII .23 mm. Cornicles, .21 mm.

*Apterous Male* (Plate 11, fig. 5), taken at Ft. Collins, Colo., Oct. 6, 1907.

In colour like the females or a little lighter, the abdomen being a dark olive green when put into alcohol. Length of body, 1.30 mm.; antenna, .94 mm.; joints: III .22, IV .16, V .14, VI .10, VII .20 mm. Joint 3 with 8 to 10 oval sensoria of varying size, and joint 4 with about half as many. Joints distinctly crenulate, especially those beyond the 3rd. Cornicles, .11 mm.

*Apterous Oviparous Female*, taken along with the males above.

Very similar to viviparous form, but a little smaller, about 1.9 mm. long; antenna barely 1 mm. Depositing yellowish-brown eggs about bases of dock stems. The eggs soon become polished black.