

Achorutes sensilis, n. sp.

Plate 2, figs. 12-18

Elongate dark blue. Eyes 8+8. Postantennal organs (fig. 12) small, slightly longer than the diameter of an eye, with four peripheral tubercles. Antennae shorter than the head, with segments in relative lengths about 1.5:6:7:7. Third antennal segment with many distal lateral sensory setae (fig. 13). Ungues (fig. 14) long, slender, feebly curving, indeterminate, one-fifth to one-half as long as the apex. Unguenitus extending one-half as far as the unguis, with proximal half subovate and distal half acuminate. One long knobbed tenent hair. All the distal tibio-tarsal setae are apically bent and minutely knobbed. Rostrum of temenulum tridentate. Dentes three times as long as micromes, each with a long curving subapical dorsal seta. Micra about as long as hind unguenitus, variable in form (figs. 15, 16), with broad outer lamella and narrow inner lamella. Anal spines (fig. 17) short, stout, feebly curving, one-fifth as long as hind unguis, on contiguous papillæ one-third as long as the spines. Clothing (fig. 18) of few short stout curving setæ and longer stout suberect setæ, the latter often feebly denticulate. Maximum length 2.2 mm.

I regarded this form as being *A. cinctus* Tullberg, until I found the peculiar sense organs of the third antennal segment. In *cinctus*, of which I have many European specimens, the sense organ of the third antennal segment is as in figure 19, with a pair of sense rods, a single finger-like accessory seta, and one guard seta. In this new species there are, however (fig. 13), two pairs of sense rods, each pair with the usual basal ridge. Also a distal ovate petiolate papilla seated in a pit and covered basally with an otegumentary fold, and in addition as many as nine lanceolate accessory sensory setæ, with five guard setæ, a wide departure from the condition typical for the genus. The other differences between the two species are of minor importance. In *sensilis*, as compared with *cinctus*, there are not three long knobbed tenent hairs; the temenulum is not quadridentate; and the anal spines are somewhat shorter, stouter, and less curving. The clothing is of the same general type in the two species; the stout suberect setæ of the body being, however, somewhat shorter than in *cinctus* (compare fig. 18 with fig. 19).

This species occurred in masses on the surface of a pond at Bernard harbour, Northwest Territories, July 5, 1916. E. Johansen.

Achorutes armatus (Nicolet).

Plate 3, figs. 21-25

Podura armata Nicolet, 1811.

Achorutes armatus Gervais, 1844; Nicolet, 1817; Lubbock, 1868-1873; Tullberg, 1871, 1872, 1876; Paroma, 1879, 1882, 1888, 1895; Tomosvary, 1883; Oudemans, 1890; Uzel, 1890, 1891; MacGillivray, 1891; Schott, 1891, 1894, 1896, 1902; Moniez, 1891; Dalla Torre, 1895; Reuter, 1895; Meimert, 1896; Schaffer, 1896, 1897; Poppe and Schaffer, 1900a, 1900b; Carpenter, 1897; Lies-Petersen, 1896, 1898; Poppe and Schaffer, 1897; Scherbakov, 1898b, 1899; Carl, 1899, 1901; Carpenter and Evans, 1899; Wahlgren, 1900a; Borner, 1901a; Krausbauer, 1902; Willem, 1902; Agren, 1903, 1904; Axelson, 1905a, 1905b, 1906; (Axelson) Lannaniemi, 1907, 1909; Collinge and Shoebottom, 1910; Innis, 1912; Shoebottom, 1914; Folsom, 1916.

Achorutes boliturus Packard, 1873; MacGillivray, 1891; Dalla Torre, 1895; Guthrie, 1903.

Achorutes marmoratus Packard, 1873; MacGillivray, 1891; Harvey, 1893.

Achorutes texensis Packard, 1873; MacGillivray, 1891; Dalla Torre, 1895.

Achorutes pratorum Packard, 1873; MacGillivray, 1891; Dalla Torre, 1895.