Pacific Insects Monograph 7: 166–169 July 15, 1964

# INSECTS OF CAMPBELL ISLAND.
# PROSTIGMATA: BDELLIDAE[1]

By Warren T. Atyeo[2]

University of Nebraska, Lincoln 3, Nebraska

*Abstract*: *Bdellodes* (*Hoploscirus*) *gressitti* from Campbell Island is described. A key to the identification of Campbell I. species of *Bdellodes* is given.

Bdellid species from Campbell I. and the Auckland Is. were described recently by Atyeo (1963) from material collected by the staff of the Dominion Museum, Wellington, New Zealand. The new species and the new records in the present paper are based on collections made by Dr. J. L. Gressitt (Bishop Museum, Honolulu).

### Key to Campbell Island species of Bdellodes

1. Median propodosomal setae more than 8× length of posterior sensilla; tips of posterior sensilla in contact with adjacent median propodosomal setae; palpal genu shorter than telofemur ..... 2
   Median propodosomal seta not more than 3× length of posterior sensilla; posterior sensilla slightly removed from and not in contact with median propodosomal setae; palpal genu longer than telofemur ..... 3
2. Trichoboth on tibia IV inserted at 3/4 the length of segment; cheliceral setae separated by approximately 1/4 the cheliceral length ..... **Bdellodes (Hoploscirus) petila**
   Trichoboth on tibia IV inserted at 1/2 length of segment; cheliceral setae approximate ..... **B. (H.) gressitti**
3. Palpal genu with 8–10 setae ..... **B. (H.) flexuosa**
   Palpal genu with 4 setae ..... **B. (H.) multicia**

**Bdellodes (Hoploscirus) petila** Atyeo, 1963

This species was originally described from a single specimen collected at Homer Forks, Otago, New Zealand. Two additional specimens (♀♀) have been taken from Lookout Bay Beach, Campbell I., 16–19.XII.1961 by J. L. Gressitt, under a rock at high tide level. These specimens differ from the holotype in that they are almost 2× larger, have the internal humeral setae 3/4 the length of 1st interspace, have 2 setae on the lateral row of palpal tibiotarsus, and have 30 ventral setae on tarsi I–II. The numbers of setae mention-

1. Results of field work supported by grant G-18800 from the National Science Foundation (U. S. Antarctic Research Program).
2. Published with approval of the Director as Paper No. 1506, Journal Series, Nebraska Agricultural Experiment Station and Contribution No. 243 of the Department of Entomology.

ed are greater than those given in the original description, but as there is a positive correlation between length and number of setae, these increases could be accounted for by intraspecific variation.

**Bdellodes (Hoploscirus) flexuosa** Atyeo, 1963

This species was collected on Campbell I. only at Perserverance Harbor and Tucker Cove.

**Bdellodes (Hoploscirus) multicia** Atyeo, 1963

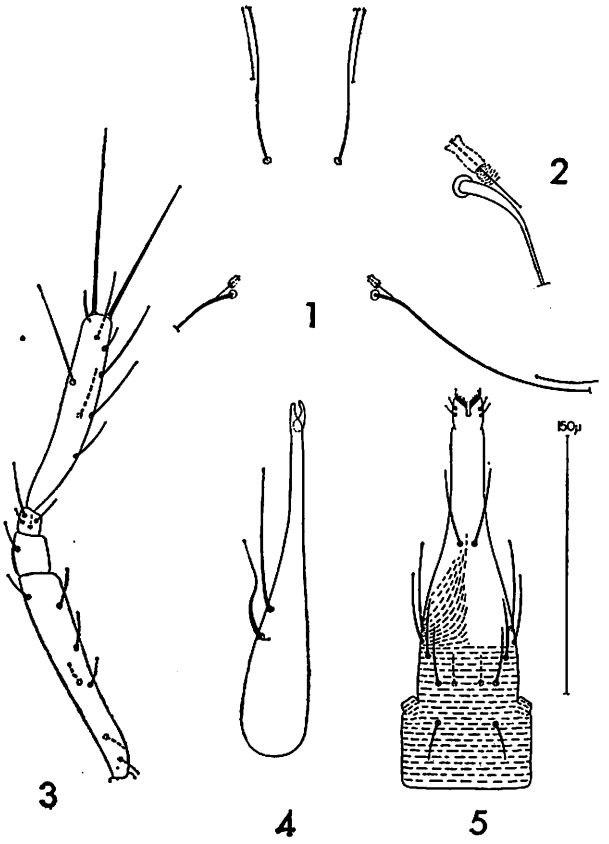
This species was described from material collected on the Auckland Is. Additional records show that *B. (H.) multicia* was discovered on Campbell I., Tucker Cove, Beeman Camp, St. Col Ridge, Courejolles Pen., Monument Harbor, and Mt. Puiseux, XII. 1961, by J. L. Gressitt.

**Bdellodes (Hoploscirus) gressitti** Atyeo, n. sp. Figs. 1–5.

The cheliceral setae of this n. sp. are arranged as in *B. (H.) norwegica* (Thor), and the palpal chaetotaxy is similar to *B. (H.) petila*. The latter species can be distinguished from *B. (H.) gressitti* by having the trichoboth on tibia IV inserted at 3/4 length rather than at 1/2 length.

♀: Length, including gnathosoma, approximately 1000 $\mu$. *Gnathosoma* (figs. 1–5): Palpal basifemur with 3 setae on mesal surface; measurements: II, 125 $\mu$; III, 24 $\mu$; IV, 16 $\mu$; V, 120 $\mu$; *des*, 98 $\mu$, *ves*, 85 $\mu$. Chelicera nonstriated, 205 $\mu$ in length; movable digit flattened subapically; setae as figured; anterior seta, 119 $\mu$, posterior seta, 137 $\mu$ from apices of chela. Gnathosomal base and hypostome striated to *vh* 6, remainder nonstriated; *vh* 6 nearer to *vh* 5 than to hypostomal tip. Dorsal hypostomal seta, 18 $\mu$ in length. *Dorsal idiosoma*: Striae with superimposed oscillatory pattern. Dorsal propodosoma without subcuticular thickenings; anterior sensilla, 115 $\mu$ in length, separated by 65 $\mu$; posterior sensilla, 28 $\mu$ in length, separated by 115 $\mu$; median propodosomal setae, 195 $\mu$ in length, nude (fig. 2). Hysterosomal setae nude; length of internal humeral seta, 83 $\mu$, about 2/3 of 1st interspace; external humeral seta, 78 $\mu$ in length. *Ventral idiosoma*: Striae with superimposed oscillatory pattern in paragenital region. Each genital plate with 7 setae in linear arrangement, 2 pairs of paranal setae; 3 pairs of paragenital setae. *Legs*: Each claw with 4–6 lateral rays, row of minute rays not apparent; measurements; tibia I, 55 $\mu$; tarsus I, 115 $\mu$; pretarsus I, 29 $\mu$; tibia II, 54 $\mu$; tarsus II, 127 $\mu$; tibia IV, 112 $\mu$; tarsus IV, 186 $\mu$; length of legs (excluding coxae and pretarsi): I, 410 $\mu$; II, 405 $\mu$; III, 480 $\mu$; IV, 624 $\mu$. Chaetotaxy: without supernumerary setae; coxae I–IV, 4, 3, 2 tactile setae; trochanters I–IV, 1 tactile seta each; basifemora I–IV, 13, 13, 10, 5 tactile setae; telofemora I–IV, 7 tactile setae each; genua I–IV, 6, 6, 5, 6 tactile setae and respectively, 8, 5, 3, 4 attenuate sensory setae; tibia I, 10 tactile setae, 3 attenuate sensory setae, 1 peg, trichoboth; tibia II, 10 tactile setae, 1 blunt and 1 attenuate sensory seta, trichoboth; tibia III, 10 tactile setae, 1 attenuate sensory seta distal; tibia IV, 11 tactile setae, trichoboth at 4/9 length; tarsus I, 18 pilose ventral setae arranged in 2 rows, 1 dorsal and 7 lateral setae, 2 attenuate and 2 long, attenuate sensory setae, 1 peg, *dt* 1, nude, *dt* 2, 3, branched; tarsus II, 2 attenuate and 1 long, attenuate sensory seta; tarsi III–IV, trichoboth.

♂. Similar to ♀, although slightly smaller; length, including gnathosoma, about 800 $\mu$.




Figs. 1–5. *Bdellodes* (*Hoploscirus*) *gressitti* Atyeo, n. sp. 1, dorsal propodosomal shield; 2, posterior pseudostigma, enlarged; 3–5, ventral gnathosoma.

Holotype ♀ (DOMINION), Beeman Camp, 2–50 m, Campbell I., moss, 12–17.XII.1961, Gres-Gressitt. Allotype ♂, Courrejolles Peninsula, Campbell I., mollymawk nests, 14.XII.1961, sitt. Paratypes: 1♂, Beeman Hill, 100–180 m, yellow moss, 11–16.XII.1961; 1♂, Tucker Cove, 1–5 m, moss (Berlese), 21–25.XII.1961; 1♂, Beeman Beach, *Chrysobactron*, 11, 15.XII.1961; all Campbell, coll. Gressitt.

*Location of types*: The holotype is deposited in the Dominion Mus., Wellington; allotype and 1 paratype are deposited in the Bishop Museum, Honolulu and 2 paratypes are in my personal collection.

This new species is named after Dr. J. L. Gressitt, collector of the type series.

*Acknowledgement*: I wish to thank the University of Nebraska Research Council for funds to employ an artist to complete portions of the illustrations.

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