

ON *ODONTELLA* (*CLAVONTELLA*) *MACRONYCHIA* (PRABHOO) – A SOIL COLLEMBOLA FROM KERALA

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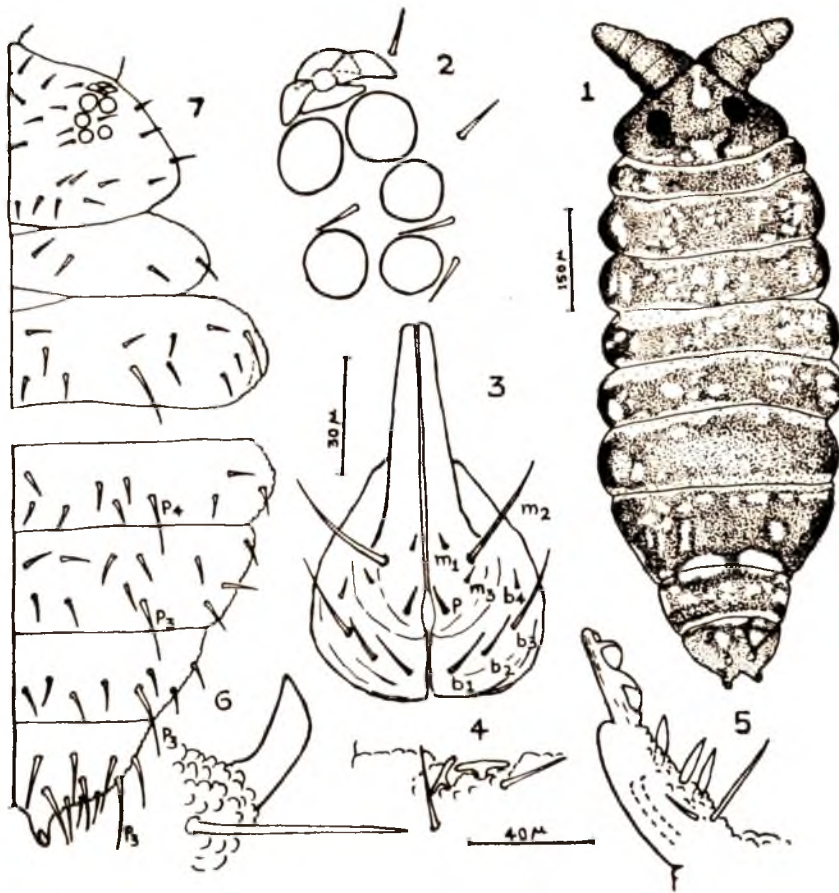
The subspecies *Odontella trispina macronychia* (PRABHOO) 1971 has been elevated to the species rank and named *Odontella* (*Clavontella*) *macronychia* based on the study of additional material. A complete redescription of the species is given.

In an earlier communication (PRABHOO 1971) the author described the subspecies *Odontella trispina macronychia* based on a single specimen collected from a tea field in the Ponmudi hills. The subspecies was created for the characteristically large anal spines different from those of *Odontella trispina* (SALMON). The description was however incomplete as the details of the chaetotaxy and buccal cone could not be studied from a rather ill preserved specimen. Subsequently a few examples of *Odontella* were collected from Kallar (Ponmudi hills) and Madathara lying at the foot of the Western ghats. Examination of these individuals suggested that they were identical to the form described earlier from Ponmudi and that these examples constituted a species which was distinct but closely related to the Malayasian and Nepalese species of *Odontella*. A complete redescription of the species, which has become necessary, is given below.

Odontella* (*Clavontella*) *macronychia
(PRABHOO) 1971 (Figs. 1–7) Syn: *Odontella trispina macronychia* PRABHOO 1971, p. 13.

Length up to 1 mm. Sky blue pigment distributed irregularly on the body and on the appendages except for the distal part of the furcula. Intersegmental areas more or

less clear. Ventral side lighter. Background colour yellowish. Integument coarsely granulated all over. Antennae slightly shorter than head. Segments related as 13:13:12:15. Ant. IV apically without retractile papillae but with 4 subapical sense rods on the outer side and 1 rod on the inner side, which are fairly well differentiated; ventrally there are numerous peg-like setae. Ant. III/IV with two 'T' shaped sense rods close to each other. Ocelli 5+5. Postantennal organ with four peripheral lobes and a central area. Buccal cone pointed and with the seta m_2 very long, m_1 and m_3 almost vestigial; basal area with four setae of which b_1 and b_2 are subequal, b_3 is longest and b_4 is shortest. Tibiotarsi without tenent hair. Claws with a pair of small basal lateral teeth and a prominent median tooth. Unguiculus absent. Ventral tube with 3+3 setae. Tenaculum with 3+3 dents on rami. Furcula short. Dens and mucro related as 8:5. Manubrium with 4+4 setae dorsally. Dens with 3 spines and 2 unequal setae. Mucro apically rounded with two large lamellae and a small basal lobe. Anal spines well developed, a little over half as much as the hind claw. Body chaetotaxy similar to that of *O. nepalica* YOSHI. The setae are smooth and sensory setae not



Figs. 1-7. *Odontella (Clavontella) macronychia* (PRABHOO) paratype. 1. Dorsal view; 2. Postantennal organ and ocelli; 3. Buccal cone, ventral view; 4. 'T' shaped sense rods of ant. III-IV; 5. Dens and mucro; 6. Anal spine; 7. Dorsal chaetotaxy of head, th. I-II and abd. III-VI, diagrammatic. Figs. 2, 4, 5 and 6 are drawn to the same scale.

much differentiated. Abdominal segments with not more than two rows of setae. On abd. V the two rows of setae are not well separated from each other. The setae a_5 on abd. IV and a_3 and p_4 on abd. V have been found to be fluctuating.

This species is closely related to *O. nepalica* Yosii (1971) and *O. trispina*

(SALMON) 1951, but the latter two species have only small inconspicuous anal spines. Extensive sampling of the tea fields and frequent examination of soil and litter samples from the forests revealed that this species showed a preference to forest soils than to tea soils although the latter also had a fairly good accumulation of organic matter.

Holotype : 1 example on slide, tea field of Merchiston estate, Ponmudi, 750 m, 13.v.1962.

Paratypes : 4 examples, forest, Madathara, 250 m, 22.ix.1974; 4 examples forest, Kallar (Ponmudi hills), 300 m, 25.iii.1975.

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