

***Setanodosa quinseta* SALMON, 1944, as a junior synonym of  
*Setanodosa tetrabrachta* SALMON, 1942 (Collembola:  
Brachystomellidae)**

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Abstract. A junior synonym for *Setanodosa tetrabrachta* SALMON, 1942 (Collembola: Brachystomellidae) is provided. Some comments on the original description are enclosed.

Key words: Collembola, Brachystomellidae, junior synonym.

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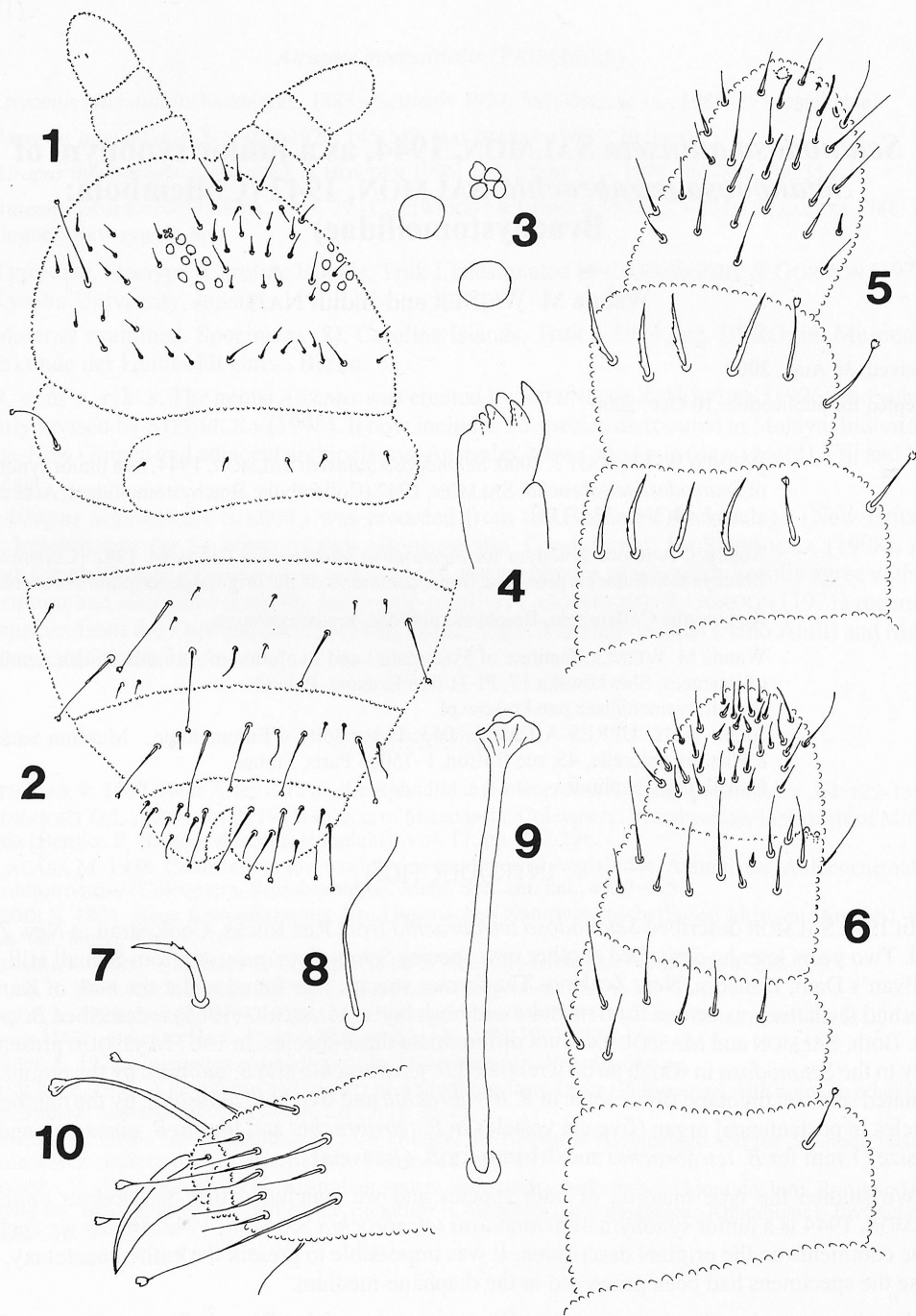
## INTRODUCTION

In 1942 SALMON described *Setanodosa tetrabrachta* from Red Rocks, Cook Strait in New Zealand. Two years later he described another new species *Setanodosa quinseta* from Signall Hill and Sullivan's Dam, Dunedin, New Zealand. The former species was found under the bark of Karaka trees and the latter was beaten from manuka and bush layer. MASSOUD (1965) redescribed *B. quinseta*. Both, SALMON and MASSOUD did not differentiate these species. In 1967 MASSOUD presented a key to the *Setanodosa* in which he differentiated *B. tetrabrachta* and *B. quinseta* by the number of capitated setae on tibiotarsi (three setae in *B. tetrabrachta* and five in *B. quinseta*), by the number of vesicles in postantennal organ (five-six vesicles in *B. tetrabrachta* and four in *B. quinseta*), and by the size (1 mm for *B. tetrabrachta* and 2.1 mm for *B. Quinseta*).

We studied the type material of both species and we concluded that *Setanodosa quinseta* SALMON, 1944 is a junior synonym of *Setanodosa tetrabrachta* SALMON, 1942. Below we enclose some comments on the original description. It was impossible to present the entire chaetotaxy, because the specimens had been preserved in the diaphane-medium.

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Figs 1 – 10. *Setanodosa tetrabrachta* SALMON, 1942. 1 – head and thoracic tergum I; 2 – abdominal terga IV–VI; 3 – postantennal organ, eyes A and B; 4 – maxillum; 5 – antennal segments I–IV dorsally; 6 – antennal segments I–IV ventrally; 7 – mesochaeta of abdominal tergum IV; 8 – seta of abdominal tergum V; 9 – macrochaeta of abdominal tergum V; 10 – tibiotarsus III.

*Setanodosa tetrabrachta* SALMON, 1942

(Figs 1-10)

*Setanodosa quinseta* SALMON, 1944 syn. nov.

Comments on the original description. Antennae shorter than head (about 3/4 of the length of head). Antennal segment I with 7 setae out of which three capitated, antennal segment II with 13 setae out of which two capitated. Antennae III and IV fused dorsally, ventral separation well marked. Sensory organ of antennal segment III consisting of: two small globular internal sensilla, two subcylindrical guard sensilla (dorsolateral sensillum slightly shorter than ventrolateral one) and two guard setae between them; ventral microsensillum present. Antennal segment IV with rather long ordinary setae, with indistinct subcylindrical sensilla; dorsoexternal microsensillum present, subapical organite present; simple apical vesicle in deep cavity, ventral side with few stout setae (Figs 5 and 6).

Postantennal organ (Fig. 3) as large as ocellus B, bearing four vesicles (unlike in SALMON 1942). Eyes 8+8. Buccal cone typical for the genus. Mandible absent, maxilla with six teeth (Fig. 4). Labral chaetotaxy 2/2334. Labium with papillate seta L.

Dorsal chaetotaxy (Figs 1 and 2) with serrated mesochaetae, long capitated macrochaetae and with sensory setae s (Figs 7, 8 and 9). Microsensilla on thoracic tergum II present. Head without seta a0. Thoracic tergum I with 3+3 setae with sometimes asymmetry 2+3 (not 4+4 as in MASSOUD 1965). Thoracic sterna without setae. Ventral tube with 3+3 setae (not 4+4 as in MASSOUD 1965).

Furca absent, furcal rudiment: small area with four microchaetae. Even anal valves with two setae hr each.

Tibiotarsi I, II and III with 19, 19 and 18 setae respectively; A1, A2, A7, B4 and B5 capitated; seta M present, seta B7 absent on tibiotarsus III. Femora I, II and III with 12, 11 and 11 setae; trochanters I, II and III with 6, 6, 5 setae; coxae I, II and III with 3, 5 and 5? setae respectively. Claw without teeth (Fig. 10). Empodial appendage absent.

Type material. Holotype (3/1171), paratypes (3/1172 and 3/1173) in the Museum of New Zealand.

Type locality. New Zealand, Cook Strait, Red Rocks, under the bark of Karaka trees, 30.vii.1941, coll. R. FORSTER.

Other material. New Zealand, Dunedin, Signall Hill, beaten from manuka, 20.ii.1943, coll. J. T. SALMON, 10 specimens (slides: 3/1493, 3/1494, 3/1495, 3/1497, 160, 161, 162); Sullivan's Dam, beaten from bush layer, 2.ii.1943, coll. J. T. SALMON, one specimen (slide: 3/1520); Homer Parks, beaten from beech trees, 1.i.1944, coll. J. T. SALMON, 4 specimens (slides: 159, 3/1573, 3/1614); in the Museum of New Zealand.

Discussion. In the type material studied of *Setanodosa tetrabrachta* SALMON, 1942 and *Setanodosa quinseta* SALMON, 1944 we found that the tibiotarsal capitated setae and the postantennal organ are the same in both species described by SALMON (1942, 1944). The length of specimens measured is as follows: for *Setanodosa tetrabrachta* – 1.16 mm (holotype, sex invisible) and 1.47 mm (paratype, sex invisible), for *Setanodosa quinseta* – 1.78 mm (holotype ♀), 1.33–2.12 mm (paratypes, sex invisible) and 1.45–2.08 mm (other material: ♀ juv., ♂ juv., ♀♀ and specimens with sex invisible). The above statements allow to confirm the above mentioned synonymy.

*Setanodosa tetrabrachta* SALMON, 1942 is closest to *Setanodosa capitata* (WOMERSLEY, 1933) described from South Africa and later reported from South Australia (WOMERSLEY, 1939). Both species possess capitated setae on the body, the same number of tibiotarsal capitated setae, the same number of vesicles in the postantennal organ (four) and indistinct sensilla on antennal segment IV. They differ by the shape of the apical vesicle (simple in *S. tetrabrachta* and trilobated in *S. capitata*), by the size of postantennal organ (as large as ocellus B in *S. tetrabrachta* and half as large as ocellus B in *S. capitata*) and by the number of teeth of maxilla (six in *S. tetrabrachta* and five in *S. capitata*).

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