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A new notoaturine genus from New Zealand (Acari: Hydrachnidia: Aturidae: Notoaturinae)

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The water mite subfamily Notoaturinae Besch has a typical Gondwanan distribution, with 9 genera in Australia, 3 genera in Chile, 2 genera in South Africa and one in East Africa (Cook 1986, 1988, 1998, Smit 2010). Remarkably, the genus is lacking in New Guinea and New Caledonia as both islands have a typical Australasian water mite fauna (Wiles 1997, Smit 2002, 2009, 2011, 2013). New Zealand has a very rich notoaturine water mite fauna. Thus far, the following 19 genera are known from New Zealand (Cook 1983, 1991, Pesic et al. 2010): *Abelaturus* Cook, 1983, *Bleptaturus* Cook, 1991, *Canterburaturus* Pesic & Smit, 2010, *Colobaturus* Cook, 1991, *Evidaturus* Cook, 1983, *Hestaturus* Cook, 1991, *Kritaturus* Cook, 1983, *Neotryssaturus* Cook, 1974, *Omegaturus* Cook, 1983, *Paratryssaturus* Imamura, 1979, *Pilosaturus* Cook, 1983, *Piotaturus* Cook, 1983, *Planaturus* Cook, 1983, *Pseudotryssaturus* Cook, 1983, *Taintaturus* Cook, 1983, *Tryssaturopsis* Cook, 1974, *Tryssaturus* Hopkins, 1967, *Uralbia* Hopkins, 1967 and *Zelandalbia* Imamura, 1978. The water mite fauna of streams in New Zealand consists for a large part of notoaturine water mites. Especially members of the genus *Pseudotryssaturus* Cook are abundant (Cook 1983).

In this paper a new genus and a new species are described, collected in the hyporheic of a stream on South Island, New Zealand.

Material and methods

The holotype is lodged in the Museum of New Zealand, Wellington. The material was collected with a groundwater pump as described by Boulton *et al.* (1992). The following abbreviations have been used: P1-P5 = palp segment 1-5; I-leg-4-6 = fourth-sixth segments of first leg; asl = above sea level. All measurements are in μm , measurements of palp and leg segments are of the dorsal margins. Coordinates were obtained with a GPS.

Systematic part

Family Aturidae Thor, 1900

Subfamily Notoaturinae Besch, 1964

Zelandaturus n. gen.

Diagnosis. Idiosoma rugose, anteriorly much wider than posteriorly. Posterior idiosoma split in a dorsal and ventral part, only visible in lateral view; lateral margin of ventral part fringed with stout setae. Dorsum with six dorsal plates; large anterior plate with a pair of postocularia, large posterior plate with two pairs of glandularia, anterolateral plates with one glandularium, posterolateral plates without glandularia; one glandularia platelet lying free between lateral and posterior plates. Posterior to posterior dorsal plates a small concavity with a petiole-like structure. Eyes absent. Coxal suture lines incomplete. Anterior to fourth leg sockets a rounded lateral extension. Near gonopore two ventral flaps, and split-like gonopore hidden under these flaps. Acetabula numerous. Posterior idiosoma margin ventrally with a median cleft. Fourth legs very heavy.

Type species. *Zelandaturus magnipes* n. sp.

Etymology. The name is derived from New Zealand and the family name Aturidae.

Remarks. The new genus is in having a posterior idiosoma extension somewhat similar to *Tryssaturopsis* Cook, but the latter genus lacks a free dorsal glandularia platelet while IV-leg-2 and -4 are modified. In Cook (1983) the new genus keys out as *Omegaturus* Cook, which has II-leg-2 also elongated and the presence of a free dorsal glandularia platelet. However, this genus has extremely elongated palpal segments, lacks a sexual modification of the legs and projections associated with the fourth legs are much more expanded. In the notoaturine species *Piotaturus alvecaudatus* Cook, 1983 and *Piotaturus bovalus* Cook, 1983 the male gonopore is hidden also by a flap.