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Wetapolipus jamiesoni gen. nov., spec. nov. (Acari: Podapolipidae), an ectoparasite of the mountain stone weta, *Hemideina maori* (Orthoptera: Anostostomatidae) from New Zealand

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Abstract

Wetapolipus jamiesoni gen. nov., spec. nov. (Acari: Podapolipidae), ectoparasitic on *Heimdeina maori* (Orthoptera: Anostostomatidae), is described from the Rock and Pillar and St. Mary's Ranges in New Zealand, and compared with other podapolipid mites. This unique genus shows no obvious relation with other genera and is distinguished from other genera by both apomorphic attributes (adult female with 3 pairs of legs, scaled idiosoma, no stigmata, no ambulacra II, III, no ambulacral claws, no idiosomal plates C, D or EF and male with 3 pairs of legs) and plesiomorphic attributes (adult females with prodorsal plate with a full complement of setae (3 pairs represented by sockets only), ventral gnathosomal setae, setae 3*a* present on coxae III, 3 femora I setae, 3 genua I setae, 2 femora II setae and males with a posterodorsal genital capsule and setae sc_1).

Key words: Acari, Podapolipidae, Orthoptera, ectoparasites, New Zealand, *Wetapolipus jamiesoni* new genus, new species

Introduction

Weta (in Mäori, with no plural form) are nocturnal, flightless orthopterans endemic to New Zealand, with some species among the largest insects in the world (Gibbs 1998; Field 2001). The tree weta genus *Hemideina* (in the true weta family Anostostomatidae, formerly Stenopelmatidae) comprises seven species (Johns 1997; Morgan-Richards & Gibbs 2001). Six species of this genus inhabit tree holes in forests, orchards and gardens, but the mountain stone weta, *Hemideina maori* (Pictet & Saussure), live above the tree line on a number of mountain ranges throughout New Zealand's South Island (Gibbs 1998; Leisnham & Jamieson 2002). It is a large species, with adults weighing up to 7 g, and is estimated to take 2-3 years to go through a maximum of 7 instars, with adults living for a

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