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A new species of *Opisthopatus* Purcell, 1899 (Onychophora: Peripatopsidae) from KwaZulu-Natal, South Africa

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Abstract

The South African Peripatopsidae comprise two genera: *Peripatopsis* Pocock, 1894 (eight described species) and *Opisthopatus* Purcell, 1899 (two described species, and three subspecies currently debated). Recent collecting in South Africa produced a new and unusual onychophoran, *Opisthopatus herbertorum* sp. nov., from Mt. Currie Nature Reserve, KwaZulu-Natal. The new species is characterised by 17 pairs of legs, 15 complete dorsal plical folds per body segment, a lack of body-pigmentation, and reduced eyes. A key to the three species of *Opisthopatus* is provided. Other species of white onychophorans have been identified in South Africa, Australia and Jamaica; some of these species are cave-dwellers. The discovery of *O. herbertorum* sp. nov. from a small, isolated forest patch means that this species may be threatened with extinction, mainly through fire or other stochastic events. The habitat contains species of myriapods typical of forests, which suggests that the fauna is relictual, and that small forest patches have high conservation value. The discovery of the new species also highlights the lack of knowledge about forest invertebrates in South Africa, and raises the possibility of a far greater onychophoran diversity in the country.

Key words: Onychophora, Peripatopsidae, *Opisthopatus herbertorum* sp. nov., South Africa, forest invertebrates, taxonomy, conservation

Introduction

While the recognition of an onychophoran poses no problem, and the two families (Peripatidae and Peripatopsidae) are distinctive, generic and specific level determination is often difficult (New 1995; Ruhberg 1985). At present about 200 extant species of Onychophora (= velvet worms) are known, but some of these are still undescribed.

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