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New species of ptyctimous mites (Acari, Oribatida) from Borneo and Sumatra

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Abstract

Twenty nine species of ptyctimous mites (Acari, Oribatida) were collected from Borneo, Sabah and Sarawak provinces (Malaysia) and Sumatra (Indonesia). Among them one species of Mesoplophoridae and six species of Phthiracaroidea, are described. They are: *Mesoplophora* (*Parplophora*) *brevicarinata* **sp. nov.**, *Plonaphacarus heterosetosus* **sp. nov.**, *Plonaphacarus longicarinatus* **sp. nov.**, *Hoplophthiracarus niahensis* **sp. nov.**, *Hoplophthiracarus mielcareki* **sp. nov.**, *Archiphthiracarus pachetos* **sp. nov.** and *Notophthiracarus abacus* **sp. nov.** Half of the species found are endemics and nearly half of them are widespread.

Key words: Mesoplophoridae, Phthiracaroidea, new species

Introduction

Ptyctimous mites are typical representatives of soil mites, living in decaying organic matter, leaf litter and decaying wood. In four samples collected from rain forest environments through Borneo (Sarawak, Sabah) and Sumatra I found several interesting endemic species of ptyctimous mites. Besides two representatives of the endemic genus *Sabahtritia* described by Mahunka (1987), the samples contained also representatives of seven new species. These new species belong to five genera rather abundantly represented in this region: *Mesoplophora* (*Parplophora*), represented by six species; *Plonaphacarus*, represented by nine species; *Hoplophthiracarus*, represented by 14 species; *Arphthicarus*, represented by eight species; and *Notophthiracarus*, represented by 13 species (Niedbała 2000). Description of these species is the purpose of the paper.

Material and methods

The material comes from four samples of litter and epiphytes of rainforest: three samples were collected in Malaysia (one each in Borneo, Sarawak and Sabah provinces) and one in Sumatra (Indonesia).

The terminology is based on that of Niedbała (2000, 2004). Drawings were made of specimens that had been cleared in lactic acid and examined under a phase-contrast microscope. All measurements are given in micrometers. For comparisons, the “complete” leg chaetome of Phthiracaroidea species (trochanter to tarsus, solenidia in parentheses) is: I: 1-4-2(2)-5(1)-17(3)-1, II: 1-3-2(1)-3(1)-12(2)-1, III: 2-2-1(1)-2(1)-10(0)-1, IV: 2-2-2(0)-2(1)-10(0)-1.

All types are deposited in ethanol at the Department of Animal Taxonomy and Ecology, Poznań, Poland.

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