Ptyctimous mites (Acari, Oribatida) from the Joint Russian-Vietnamese Biological Expedition (October 2013–April 2014)

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Abstract

An annotated checklist of ptyctimous mite taxa, collected from the Joint Russian-Vietnamese Biological expedition (October 2013–April 2014) in four forest zones (Dong Nai Biosphere Reserve, Dong Nai Culture and Nature Reserve, Bu Gia Map National Park, Bi Dup—Nui Ba National Park) is provided. It includes 28 species, 16 genera and six families. One new subgenus, Euphthiracarus (Parapocsia) Niedbala subgen. nov., and five new species, Acrotritia paragranulata Niedbala sp. nov., Hoplophthiracarus clavatus Niedbala sp. nov., Steganacarus (Rhacaplacarus) spinus Niedbala sp. nov., Euphthiracarus (Euphthiracarus) quasitakahashii Niedbala sp. nov. and Euphthiracarus (Parapocsia) medius Niedbala sp. nov., are described. Supplementary descriptions of Apoplophora minuscula Niedbala, 2013 (see Niedbala & Ermilov 2013), Arphthicarus parasentus Niedbala, 2000 and Atropacarus (Hoplophorella) stilifer (Hammer, 1961) are presented.

Key words: Oribatida, ptyctimous mites, checklist, new species, new subgenus, supplementary descriptions, southern Vietnam

Introduction

The present study is based on material collected during a six-month Joint Russian-Vietnamese Biological expedition in October 2013–April 2014 that aimed to explore ptyctimous mites (Acari, Oribatida) of Dong Nai Biosphere Reserve, Dong Nai Culture and Nature Reserve, Bu Gia Map National Park, Bi Dup—Nui Ba National Park in southern Vietnam. An annotated checklist of registered taxa is provided in Results section.

One new subgenus of the genus Euphthiracarus Ewing, 1917 (Euphthiracaridae) and five new species, belonging to the four genera, Acrotritia Jacot, 1923 (Euphthiracaridae), Hoplophthiracarus Jacot, 1933 (Pthiracaridae), Steganacarus (Rhacaplacarus) Niedbala, 1986 (Steganacaridae), Euphthiracarus (Euphthiracarus) Ewing, 1917 and Euphthiracarus (Parapocsia) subgen. nov. (both Euphthiracaridae), are described. The systematics, generic characters, identification keys and geographical distributions of species of these genera were presented earlier (Niedbala 2000, 2004, 2008).

Also, some remarks and supplementary descriptions of three known species, Apoplophora minuscula Niedbala, 2013 (Mesoplophoridae), Arphthicarus parasentus Niedbala, 2000 (Pthiracaridae) and Atropacarus (Hoplophorella) stilifer (Hammer, 1961) (Steganacaridae), are presented.

Material and methods

The ptyctimous mites were submerged in lactic acid and mounted on temporary cavity slides for the duration of the study. Body measurements are presented in micrometers. Length of the body setae was measured in lateral aspect. All types of new species are preserved in the Department of Animal Taxonomy and Ecology, Adam Mickiewicz University, Poznań, Poland.

Correction of description. Notogaster with eight pairs of setae of different shape. Setae c1, c2 and d1 similar in shape to lamellar, interlamellar and exobothridial setae, narrow, flexible covered with over a dozen cilia; setae c3 needleform, smooth; other setae long, large in proximal part and attenuate in distal part, covered with 30–40 cilia at one margin. Setae of row c remote from anterior border, setae c2 more than others. On Fig. 1 in description of holotype (Niedbala & Ermilov 2013) needleform seta c3 is absent and both setae e1 are drawn from two sides.

**Arphthicarus parasentus** Niedbala, 2000
(Fig. 6E)


Remarks. Two found specimens have notogastral setae not only attenuate, but longer and flexible. All other morphological characters the same as in holotype.

**Atropacarus (Hoplophorella) stilifer** (Hammer, 1961)
(Fig. 6F)


Remarks. The specimen from Vietnam is bigger than “syntype” (Niedbala 1992) and has slightly longer notogastral setae (c1/c1–d1=0.64) than in “syntype” (c1/c1–d1=0.52).

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References


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