



Three new species of Galumnidae (Acari: Oribatida) from Cat Tien National Park, southern Vietnam

SERGEY G. ERMILOV^{1,3} & ALEXANDER E. ANICHKIN²

¹Laboratory of Entomology, Center of Independent Examinations–NN, Gagarin 97, 603107 Nizhniy Novgorod, Russia.

E-mail: ermilovacari@yandex.ru

²Joint Russian-Vietnamese Research and Technological Center, Southern Branch, Dstr. 10, Str. 3/2, 3, Ho Chi Minh City, Vietnam; A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Lenin 33, Moscow, 119071 Russia

³Corresponding author

Abstract

Three new species of oribatid mites of the family Galumnidae, *Galumna acutirostrum* **sp. nov.**, *Galumna levisensilla* **sp. nov.**, *Neogalumna seniczaki* **sp. nov.**, are proposed and described. All three are from sandy soil in a dipterocarp forest of Cat Tien National Park (southern Vietnam). Diagnostic keys to the Vietnamese species of *Galumna* (*Galumna*) and known species of *Neogalumna* are presented.

Key words: oribatid mites, new species, Galumnidae, *Galumna*, *Neogalumna*, Cat Tien National Park, southern Vietnam

Introduction

The oribatid fauna of Vietnam was first studied by Balogh and Mahunka (1967). In the 1970–2000's investigation on oribatid fauna of Vietnam had been studied more actively, with the works of Rajski and Szudrowicz (1974), Vu and Nguyen (1982), Golosova (1984), Vu (1984), Vu *et al.* (1985, 1987), Jeleva and Vu (1987), Tsonev and Vu (1987), Vu and Jeleva (1987), Nguyen and Vu (1988), Mahunka (1987, 1988, 1989), Vu (1989, 1990, 1999), Vu and Cao (1990), Pavlichenko (1991), Starý (1992), Vu and Thi (1995), Krivolutskiy *et al.* (1997), Krivolutskiy (1998), Vu and Nguyen (2000). In the last years, studied have been done on the faunal composition, population densities, spatial and vertical distribution of soil oribatids in Vietnam (Vu & Lam 2005; Vu 2009). However these studies are still not enough for such very rich group of soil microarthropods, especially in the aspect of their species biodiversity. Vu (2007) introduced an oribatid fauna of Vietnam with 150 known species. It is a very small number in comparison with the real one of oribatid species that may exists in a diversified nature of the country.

In the course of faunistic studies of the oribatid fauna of Cat Tien National Park (southern Vietnam) we found representatives of three new species of the family Galumnidae: two species belonging to *Galumna* Heyden, 1826 and one species belonging to *Neogalumna* Hammer, 1973. The genus *Galumna* comprises seven subgenera and 173 species that collectively have a cosmopolitan distribution (Subías 2004). Both new species belong to the subgenus *Galumna* (*Galumna*). At present only six species from this subgenus have been recorded from Vietnam: *Galumna aba* Mahunka, 1989, *Galumna flabellifera* Hammer, 1958, *Galumna khoii* Mahunka, 1989, *Galumna lanceata* (Oudemans, 1900), *Galumna obvia* (Berlese, 1914) and *Galumna triquetra* Aoki, 1965 (Mahunka 1989; Subías 2004, Vu 2007). The genus *Neogalumna* comprises three species that collectively are nearly pantropical (not known from the Neotropical region) (Subías 2004). The species described herein is the first for the fauna of Vietnam.

The oribatid mites of Cat Tien National Park have not been studied previously. The park is located in the southern part of Vietnam, approximately 130 km north-east of Hochiminh City in Dong Nai Province (11°21' – 11°48'N, 107°10' – 107°34'E). The park has an undulating relief with elevations of 120–50 m