



***Vulgarogamasus sphecophilus* (Cooreman) comb. nov. (Acari: Mesostigmata: Parasitidae): a redescription and new hymenopteran association**

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Abstract

Eugamasus sphecophilus Cooreman is transferred to the genus *Vulgarogamasus*, redescribed (female, male and deutonymph), and proposed as a senior synonym of *Poecilochirus britannicus* Hyatt. The male and female deutonymph of the species are distinguished for the first time. *Vulgarogamasus sphecophilus* **comb. nov.** is recorded in association with the social wasp *Dolichovespula saxonica* for the first time, where it was observed causing significant egg mortality. As the result of the new synonymy, the geographical range of *V. sphecophilus* now includes the British Isles.

Key words: *Vulgarogamasus sphecophilus* **comb. nov.**, redescription, *Poecilochirus britannicus*, new synonymy, *Dolichovespula saxonica*, British Isles

Introduction

During the course of behavioural studies of the social wasp *Dolichovespula saxonica* (Fabricius) (Hymenoptera: Vespidae), one of us (KRF) observed mites in several nests that were apparently feeding on the occupants' eggs. The mites were identified as members of the genus *Vulgarogamasus* Tichomirov, 1969 (Mesostigmata: Parasitidae), and subsequently as conspecific with type material of *Eugamasus sphecophilus* Cooreman, 1945, and *Poecilochirus britannicus* Hyatt, 1986. There is little published information about either species. Previous geographical records for *Eugamasus sphecophilus* comprise its type locality near Brussels, Belgium (in a nest of *D. sylvestris* (Scopoli)) (Cooreman 1945) and a site near Moscow, Russia (in nests of *Vespa* Linnaeus and *Vespula* Thomson) (Bregetova 1977). It was not mentioned in Micherdziński (1969), the most comprehensive treatment of the Parasitidae published since Cooreman's description. The sole record for *Poecilochirus britannicus* is the type locality in South Yorkshire, England (in a nest of *D. sylvestris*) (Hyatt 1986, 1990).

In the present paper, *E. sphecophilus* is transferred to the genus *Vulgarogamasus* and redescribed, and its first association with *D. saxonica* recorded. *Vulgarogamasus sphecophilus* **comb. nov.** is considered a senior synonym of *Poecilochirus britannicus*, and, as a consequence of this new synonymy, the British Isles is now included in the geographical range of the species. The morphological account includes the first descriptions of the male and female deutonymph of this species.

Terminology follows Evans & Till (1979), apart from for the endogynium, opisthogastric setae and legs, which follows Witalinski & Borsuk (2002), Lindquist (1994) and Evans (1963) respectively. Notations for the poroids and gland pores are those of Athias-Henriot (1975). Measurements are given in micrometres (µm). The length of the fixed cheliceral digit is measured between the tip and the dorsal lyrifissure, and that of the movable digit between the tip and the proximal limit of the condyle. When the members of a setal pair differed in length, the measurement of the longer is given. A dash (–) indicates that a structure could not be measured because of its absence, incompleteness or distortion. In the accounts of the male and deutonymph,