



Description of sexuales of *Periphyllus singeri* (Börner) (Hemiptera, Aphidoidea: Chaitophorinae)

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Abstract

The oviparous female and male of the rare aphid, *Periphyllus singeri* (Börner), are described and illustrated for the first time. Notes on distribution and host plants are presented. Keys are provided to known oviparae and males of European species of *Periphyllus*.

Key words: Aphidoidea, Chaitophorinae, *Periphyllus singeri*, sexuales

Introduction

The genus *Periphyllus* van der Hoeven belongs to the subfamily Chaitophorinae and consists of approximately 50 monoecious and holocyclic species associated with *Acer* spp. (maples), or exceptionally with *Koelreuteria* spp. or *Aesculus* spp. (Blackman & Eastop, 1994). In Europe 14 species have been recorded: *P. acericola* (Walker), *P. aceris* (Linnaeus), *P. bulgaricus* Tashev, *P. californiensis* (Shinji), *P. coracinus* (Koch), *P. hirticornis* (Walker), *P. lyropictus* (Kessler), *P. minutus* Shaposhnikov, *P. obscurus* Mamontova, *P. rhenanus* (Börner), *P. singeri* (Börner), *P. steveni* Mamontova-Solukha, *P. testudinaceus* (Fernie), and *P. venetianus* Hille Ris Lambers. Among these species, *P. singeri* is regarded as extremely rare and sporadic in occurrence. The lack of records is interesting, because apterous viviparous females are rather large (2.40–3.40 mm long), reddish-brown and are monophagous on sycamore trees, *A. pseudoplatanus*. The life cycle of this species is without aestivating dimorphs (Szelegiewicz 1985). During an examination of aphids in the collection of the Zoological Museum, Natural History Museum of Denmark, Copenhagen, specimens of oviparous females and males of *P. singeri* were found. They were collected by O. E. Heie in 1993 but have never been described. The descriptions of these morphs are presented here, and notes are provided on distributions and host plants, together with keys to known sexuales of the European species of the genus *Periphyllus*.

Material and methods

The specimens were examined using the light microscope Nikon Eclipse 600. Drawings were made with a camera lucida. For each of the drawings a magnified view is provided. Measurements are given in mm (Table 1). The material studied is deposited in the Zoological Museum, Natural History Museum of Denmark, Copenhagen (ZMK).

Periphyllus singeri (Börner)

(Figs 1, 2)

Chaetophoria singeri Börner, 1952: 322

Chaetophorella helferi Quednau, 1954: 308–309