



Taxonomy and biology of European Heptamelini (Hymenoptera, Tenthredinidae, Selandriinae)

VELI VIKBERG¹ & ANDREW D. LISTON²

¹*Liinalammintie 11 as. 6, 14200 Turenki, Finland. E-mail: veli.vikberg@aina.net*

²*Senckenberg Deutsches Entomologisches Institut, Eberswalder Str. 90, 15374 Müncheberg, Germany.
E-mail: Andrew.Liston@senckenberg.de*

Abstract

Three European species are treated in this paper: two species of *Heptamelus* Haliday, 1855 and one *Pseudoheptamelus* Conde, 1932. Keys are provided for adults, and larvae as far as known. *Heptamelus dahlbomi* (Thomson, 1870) **sp. rev.** is re-described and compared with *H. ochroleucus* (Stephens, 1835). A neotype for *H. ochroleucus* is designated. Distribution in Western and Central Europe is similar, but *H. dahlbomi* is more frequent than *H. ochroleucus* on cultivated ferns. The species introduced to North America previously identified as *H. ochroleucus* is *H. dahlbomi*. *Heptamelus* larvae are endophytic in petioles of ferns. The larva of *Pseudoheptamelus runari* Conde, 1932, feeds exophytically on *Athyrium filix-femina*, favouring rachis and dead tissue of pinnae. Features of its morphology and behaviour are described.

Key words: fern-sawflies, taxonomy, distribution, behaviour, Europe, North America

Introduction

The sawfly tribe Heptamelini Benson, 1938 (Tenthredinidae, Selandriinae) contains 38 Old World species: *Heptamelus* Haliday, 1855 (36 species) and *Pseudoheptamelus* Conde, 1932 (2 species) which are at present considered to be valid (Taeger & Blank 2009). Most are distributed in the East Palaearctic and Oriental Regions. All probably use ferns as larval hosts, but published information exists only for the European species. *Heptamelus ochroleucus* (Stephens, 1835) and *H. runari* Conde, 1932 have until now been thought to be the only species which occur in the West Palaearctic (Taeger et al. 2006). An additional European species, *H. dahlbomi* (Thomson, 1870) has however previously been misidentified as *H. ochroleucus*, as shown below. The main aims of this paper are to enable the identification of the European species, to provide improved descriptions of larvae and to highlight interesting aspects of their biology. Adults and larvae of *Pseudoheptamelus runari* (exophytic larvae) differ in numerous morphological characters from *Heptamelus dahlbomi* (endophytic larvae). These genera are therefore treated here as distinct. Although the scope and nature of our study allows no definite conclusions to be drawn on the relationship of Heptamelini to other Selandriinae, the new data on biology and larval morphology should prove of value in future investigations on the phylogeny of the Tenthredinidae.

Material and methods

The following acronyms are used for collections where material examined is deposited, following Evenhuis (2008) for institutional collections: