



# Article

urn:lsid:zoobank.org:pub:2247D9E8-00C0-49E0-A4FC-C383E80F664C

## About *Macrophya parvula* and larvae of several Central European *Macrophya* (Hymenoptera: Tenthredinidae)

JAN MACEK

Department of Entomology, National Museum, Kunratic 1, CZ-148 00, Czech Republic; e-mail: macjan@seznam.cz

### Abstract

The adults of both sexes of *Macrophya parvula* (Konow, 1884) are described and illustrated, the male for the first time. The larvae of *Macrophya blanda* (Fabricius, 1775), *M. rufipes* (Linné, 1758), *M. diversipes* (Schrank, 1782), *M. parvula*, *M. recognata* Zombori, 1979 and *M. erythrocnema* Costa, 1859 are described and illustrated for the first time. The larvae of *M. annulata* (Geoffroy, 1785), *M. militaris* (Klug, 1817) and *M. montana* (Scopoli, 1763), which have been described previously, are diagnosed. New data on the biology of all these species, including host plants, are provided.

**Key words:** Sawflies, host plants, Czech Republic

### Introduction

As a result of continuing investigations into the sawfly fauna of the Czech Republic based on quantitative collecting methods (Malaise traps, yellow pan traps) as well as the rearing of larvae, interesting new data have been obtained about the occurrence, distribution and ecology of some little known or rare sawfly species (f. e. Macek 2006, 2008), including the discovery of an unnamed species described recently as *Pristiphora bohémica* Macek, 2012 (Macek 2012b). This paper is another contribution evaluating the accumulated material, allowing the first description or revised descriptions of the larvae of nine *Macrophya* species, and a revised description of adults of the little known *Macrophya parvula* Konow, 1884.

The genus *Macrophya* Dahlbom, 1835, with about 130 described species, is distributed in the Holarctic and Oriental Regions (Taeger et al. 2010). 34 species occur in Europe (Taeger et al. 2010) and 22 have been currently recorded in the Czech Republic. In the comprehensive work of Lorenz & Kraus (1957) larvae of 11 species of *Macrophya* were described and keyed with food plants included. Several later papers supplemented new data on ecology, behaviour and foodplants of further species (especially Chevin 1975, Kontuniemi 1960, Weiffenbach 1985, Pschorn-Walcher & Altenhofer 2006, Vikberg 2010). Of the species occurring in Central Europe, the larvae of three species—*M. blanda* (Fabricius, 1775), *M. parvula* (Konow, 1884) and *M. recognata* Zombori, 1979—remain completely unknown and those of three other species—*M. diversipes* (Schrank, 1782), *M. rufipes* (Linné, 1758), *M. erythrocnema* Costa, 1859—in spite of their familiar food plants, have not been described so far.

Lorenz & Kraus (1957) divided the larvae of *Macrophya* into two groups. The species in one group have a tuberculate cuticle (e.g. *M. diversipes* (Schrank, 1782), *M. blanda* (Fabricius, 1775), *M. montana* (Scopoli, 1763), *M. rufipes* (Linné, 1758) as described here) and the species in the second group have a granulose or smooth cuticle (e.g. *M. recognata* Zombori, 1979, *M. erythrocnema* Costa, 1859, and *M. parvula* as included here), respectively. Both groups also differ ecologically and behaviourally. The larvae of the first group are associated with Rosaceae, both herbs and shrubs, whilst those of the second group are associated with various plant species in Monocotyledon and Dicotyledon genera, most of them being oligophagous or even monophagous. Eonymphs of all *Macrophya* species spend a long time (four to six weeks) in a resting position with the body curled up in litter (larvae of the first group) or on the underside of leaves of surrounding vegetation before they burrow into the soil for hibernation.