



A new European species of *Drymeia* Meigen (Diptera: Muscidae) near *D. brumalis* (Rondani), with observations of a unique prestomal teeth structure

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Abstract

A new species of *Drymeia* Meigen, *D. pyrenaica* **sp. nov.** is described and distinguished from the very similar *D. brumalis* (Rondani) based on material from northern Spain and Portugal. It is argued that records of *D. brumalis* and possibly even *D. alpicola* (Rondani) from outside Europe are probably based on misidentifications. A previously unnoticed, unique prestomal teeth structure is reported from several species of *Drymeia*. Preliminary observations show a remarkable diversity in prestomal teeth structure among species of *Drymeia*. This is documented by images of flat mounted labella.

Key words: Diptera, Muscidae, *Drymeia*, new species, Europe, prestomal teeth

Introduction

During a routine identification of a big sample of muscoid flies from the Bavarian Alps (Germany), I came across three muscids of the genus *Drymeia* Meigen: *D. alpicola* (Rondani, 1871), *D. brumalis* (Rondani, 1866) and *D. hamata* (Fallén, 1823). This impelled a closer study of European material of *Drymeia* in the Diptera collections of the Natural History Museum of Denmark, University of Copenhagen (ZMUC) and made me realize that most of the specimens I had previously identified as *D. brumalis* actually belong to a different, apparently undescribed species. The material originates from several localities in the Spanish Pyrenees and one in northern Portugal.

Traditionally, the genus *Drymeia* Meigen included but a single species, *D. hamata* (Fallén), characterized by a curiously extended and bifid labellum, but Skidmore (1985) substantially widened the limits of the genus by downgrading several former genera, e.g. *Pogonomyia* Rondani and *Trichopticoides* Ringdahl, to subgenera of *Drymeia*. These were subsequently abandoned altogether by Pont (1986). See Savage & Wheeler (2004) for a full synonymy and general characterization of *Drymeia*.

The mainly Holarctic genus *Drymeia* consists of medium-sized, dark-coloured, abundantly setose muscid flies, most of them occurring at or above the tree line, in alpine or arctic heaths and meadows. The great majority are anthophilous flies feeding on both nectar and pollen, and they no doubt play a substantial role as pollinators of flowering plants growing in cold environments. Females of few species, notably *D. vicana*, are known as sweat-flies.

The number of described species referable to *Drymeia* as presently understood was relatively low until recently because the genus evidently has its greatest diversity in remote, inaccessible parts of the Central and East Asian mountains and high altitude plateaus. Already Pont (1981) noted the presence of several undescribed species in the collections from Central Asia and the Himalayas. Subsequently, the group has received considerable attention from Chinese muscid specialists, which has resulted in descriptions of numerous new species. In a recent regional treatment of a part of the Muscidae, Fan (2008) recognize no less than 69 species of *Drymeia* from China. Further 6 new species of *Drymeia* from China were described about the same time by Xue *et al.* (2008) and Xue *et al.* (2009). However, 5 species described in *Drymeia* in Xue & Chao (1992) were independently transferred to *Spi-logona* Schnabl by Fan (2008) and Xue *et al.* (2009).