

Abstract

This study is a monograph of the Sciomyzidae occurring in Denmark, Sweden, Norway, and Finland. A brief review of faunistic research in this area, a survey of the most important morphological terms used for adults and immature stages, and a comprehensive account of the bionomics and ecology of the species examined are given. The nordic species are analysed from the point-of-view of their zoogeographical affinities and are compared with the incidence of the other species in North and Central Europe.

In all, 83 species in 22 genera have been reliably recorded from Fennoscandia and Denmark. All taxa are keyed and briefly characterised, and distribution, biological and taxonomic notes are given for each species. In addition to the external characters, the male genitalia have been examined in detail and are illustrated for virtually all the species studied (except for *Antichaeta obliviosa* End. where only females have been available). A number of photographs illustrate the wing-patterns typical of many species, and these can be used as additional diagnostic characters. Several species which may eventually be found in the area treated here are also included in the keys. A catalogue recording the distribution of the species in the different biogeographic provinces of Fennoscandia and Denmark is given in the format customary in the series "Fauna entomologica scandinavica".

The nordic Sciomyzidae contain the following zoogeographical elements: Holarctic (23 spp.), Palaeartic-Oriental (2 spp.), Palaeartic (4 spp.), West Palaeartic (1 sp.), Eurasian (25 spp.), Eurosiberian (4 spp.), European (21 spp.), and Boreal (3 spp.). Three new species (*Colobaea nigroaristata* Rozk., *Pherbellia hackmani* Rozk. and *P. stylifera* Rozk.), one new name, nine new synonyms, some additional taxonomic notes as well as species new to Norway and Finland discovered during preparatory studies for this monograph have already been published in the form of preliminary communications (Elberg & Rozkošný, 1978; Greve & Rozkošný, 1981; Rozkošný, 1981a, 1981b, 1982, 1984). In this volume *Pherbellia griseicollis* (Beck.) is recorded for the first time from Norway; *Pherbellia stackelbergi* Elb. and *Limnia paludicola* Elb. are recorded as new to Denmark and Sweden; *Colobaea punctata* (Lundb.), *Pherbellia rozkosnyi* Verb. and *Tetanocera freyi* Stack. are recorded for the first time from Sweden.