## Atlas of the Lauxaniidae (Diptera, Brachycera) in Norway

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The distribution of the forty-three species of the family Lauxaniidae (Diptera, Brachycera) in Norway is presented on EIS grid maps. Supplementary information on the total distribution range of each species and on flight periods is given. This survey is based on a material of 43 species, a total of 11803 specimens. *Minettia tabidiventris* (Rondani, 1877) and *Sapromyza setiventris* (Zetterstedt, 1847) are recorded new to Norway, and *M. fasciata* (Fallén, 1826) is deleted from the Norwegian faunal list.

Key words: Lauxaniidae, Diptera, Brachycera, Norway, distribution.

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## Introduction

It is estimated that the fly family Lauxaniidae contains more than 1500 species world-wide (Papp & Shatalkin 1998), the number in the Palaearctic alone is probably higher than 300 species. Around 150 species have been recorded from the western Palaearctic region, still the knowledge of this family is partly fragmentary. In the later years some lauxaniid genera have been revised, and more work on several genera is going on. An excellent key to the European genera is presented by Merz (2002).

The Lauxaniidae are fairly small and mediumsized flies varying in colour. Most Norwegian species have clear wings, some have spotted and a few partly clouded wings. For further description see Papp & Shatalkin (1998). The larvae of this family, when described, are saprophagous or mycetophagous, and the larvae play an important role in the decomposition of leaf litter.

The Lauxaniidae are abundant acalyptrate Diptera in forest ecosystems in the temporate and tropical parts of the world, and can also be collected in open habitats like cornfield and meadows. Most adults Palaearctic lauxaniids are found in damp woods (Papp & Shatalkin 1998), and many also in herbage and scrubs boarding along edges of forests. Several species of the family Homoneurinae tolerate dry climate like sand dunes, sand beaches etc. Reddersen (1994, 1995) reports several species from cereal fields. Few have been collected in alpine areas, but at least two Norwegian species are distributed here, see below.

The aim of this paper is to update the knowledge of the distribution of the family in Norway. The major part of the material, 11803 specimens, has been collected or sorted out by the author in the last ten to fifteen years, and thus the dominating part of the material is deposited in Zoological Museum, University of Bergen. The oldest material from Norway, collected by J. Zetterstedt, is in the Naturhistoriska Museéet in Lund. Sweden, and this material has been examined. Some old material is in Zoological Museum, University of Oslo, see Siebke (1877). A small part of the material is in private collections. For some species only males can be determined, there is therefore a considerable material of females from the following species not included here: