

## Faunistic, ecological and taxonomic notes on Icelandic Diptera

By HUGO ANDERSSON

In 1962, an expedition from Lund University, Sweden, visited South-Eastern Iceland. The leader was Prof. Carl H. Lindroth (L). The other members of the team were Dr. A. Persson, botanist, Dr. H. Bødvarsson (B), Mr R. Charpentier (C), Mr P. Douwes (D), and the author (A), entomologists. 25 days were spent in the Skaftafell area. A survey of the invertebrate fauna and the flora was made as well as investigations on the climatic conditions in this isolated area near the margin of a large glacier (Lindroth, 1965, Persson, 1964). Lindroth gives complete lists of the invertebrates and the vascular plants in Skaftafell and Persson describes some of the plant communities. Insects were also collected in the birch forest and at the hot springs of Baejarstadarskogur near Skaftafell and in the Hornafjörður area (also visited in 1966), E of Vatasjökull.

The present paper deals with most of the dipterous material collected and gives faunistic and ecological notes of the species, of which 20 were new to Iceland. A few species new to Iceland have been added from material collected in the Vestmann Islands in 1965 and 1966. Some taxonomic problems are also discussed, especially concerning *Scatella thermarum* Coll. Many specialists have been of indispensable help during the work of identification. They are mentioned under the family concerned and I wish to express my sincere thanks to them. When not otherwise stated the author is the collector and responsible for the identifications.

For loan of type material I am indebted to Mr. J. E. Collin, Newmarket, Mr. P. I. Persson, Riksmuseum, Stockholm and Mr. H. W. Waldén, Naturhistoriska Museet, Göteborg. I also wish to thank Prof. Lindroth and the other members of the expedition for a very interesting and pleasant time in Iceland.

### Fam. *Trichoceridae* (det. Ch. Dahl)

*Trichocera hiemalis* De G. - Vestmann Islands, Ellidaey 21.VII.1965 2♂, Heimaey 22.VII.1965 3♂, 25.VII.1965 1♂ (L), 27.VII.1965 1♂, 28.VII.1965 1♂, 29.VII.1965 1♀ (L), 16.VI.1966 1♂ 1♀. Taken in cow shed, at farmstead, in ruderal places and on bird cliff. New to Iceland. Distribution: Europe, Greenland, North America.

### Fam. *Thaumaleidae* (det. Bo Tjeder)

*Thaumalea veralli* Edw. - Skaftafell 18.VII 1♂ 4♀ 2 larvae, 19.VII 1♂, 23.VII 1♂ 6♀, 2.VIII 1♂, 9.VIII 1♂ 2♀. - Baejarstadarskogur 3.VIII 1♂ 1♀,  
Opusc. Ent. 1967, XXXII: 1-2

Hornafjörður 11.VIII 1♀. In rich birch forests, on meadows and moist grassland. Known from all districts except C. Iceland.

*Leptocera (Spinotarsella) humida* Hal. - Skaftafell 7.VIII 1♂. Heath birch forest. New to Iceland.

*Leptocera (Limosina) crassimana* Meig. - Skaftafell 18.VII 1♀, 2.VIII 2♀, 3.VIII 1♀ (C). - Baejarstadaraskogur 3.VIII 1♀. Meadows. Known from N., S., and W. Iceland.

*Leptocera (Limosina) flavipes* Meig. - Skaftafell 25.VII 1♀ (D), 8.VIII 1♂ 4♀. On carrion. New to Iceland.

*Leptocera (Limosina) fungicola* Hal. Skaftafell 1♀ (B), 22-23.VII 1♀ (L), 8.VIII 1♀. On carrion. Known from N., S., and W. Iceland.

*Leptocera (Limosina) luteilabris* Rond. - Skaftafell 25.VII 1♀, 30.VII 1♂. In birch forest. Known from N., S., W., and C. Iceland.

*Leptocera (Limosina) rufilabris* Stenh. - Skaftafell 17.VII-2.VIII 23 ex. - Hornafjörður 12.VIII 1♀. Mostly in marsh and other moist biotopes. Known from N. S., and W. Iceland.

*Leptocera (Limosina) vitripennis* Zett. - Skaftafell 18.VII 1♀, 19.VII 1♂, 20.VII 4♂ 1♀ (L, A), 23.VII 1♂, 25.VII 2♂ (C, A). - Hornafjörður 10-13.VIII 1♀ (C). On meadows and in rich birch forest. Known from N., E., and S. Iceland.

*Leptocera (Trachyopella) ?bovilla* Coll. - Skaftafell 8.VIII 2♂. On carrion. Earlier recorded from N. Iceland.

#### Fam. Drosophilidae

*Parascaptomyza pallida* Zett. (*P. disticha* Duda; *Scaptomyza graminum* Fall., Duda in Lindroth, 1931). - Skaftafell 22.VII 1♀, 2.VIII 1962 2 ex. In farmyard. - W., Sudur Reykir. 4 newly hatched specimens, in compost, leg. Lindroth.

*Scaptomyza graminum* Fall. (*Scaptomyzella incana* Meig., Ringdahl in Lindroth, 1931). - Skaftafell 22.VII 1962 1 ex., 2.VIII 1962 1 ex. At farmyard. - E. Vopnafjörður 1 ex., - S., Skaftafell 1 ex., S., Seljaland 1 ex., S., Þórsmörk 1 ex., all leg. Lindroth.

Lindroth (1931) recorded these two distinct species from Iceland. Probably because of the nomenclatorial confusion in the literature and without examining the material, Nielsen et al. (1954) concluded that "there seems to be no doubt that all the icelandic specimens belong to the same species", *Scaptomyza graminum* Fall. Lindroth's statements of the biology of the species are correct. He collected *P. pallida* Zett. in compost. The larva of the species is known to develop in vegetable debris. *S. graminum* Fall. is leaf-mining on Caryophyllaceous plants, at least stated on *Stellaria media*. The four specimens from 1962 were all collected by sweeping around farmyards and near cow sheds, where *Stellaria media* and other weeds were abundant.

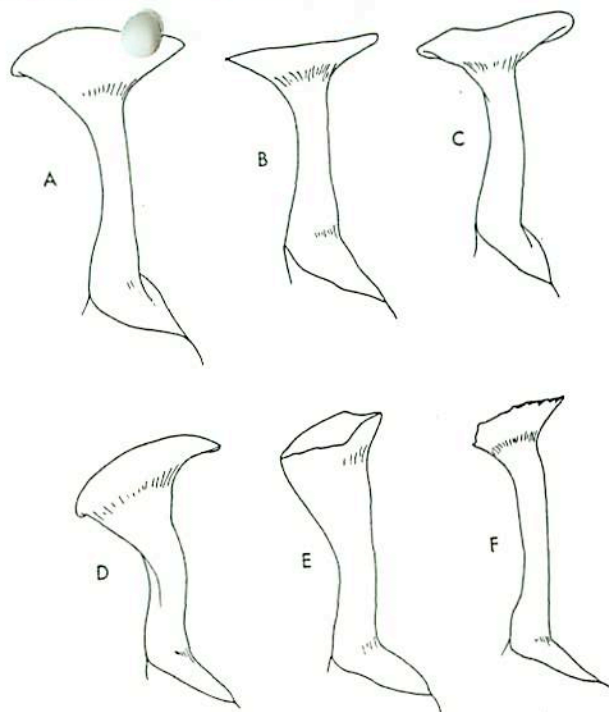


Fig. 6. Ejaculatory bulb sclerite of *Scatophaga litorea* Fall. from A) Iceland (*islandica*-type), B) British Isles, East Kent, C) Norway, Rogaland, D) Iceland (*litorea*-type), E) Sweden, Bohuslän, F) Sweden, Skåne.

#### Fam. Agromyzidae (det. G. C. D. Griffiths)

The material has been dealt with in detail by Griffiths (1964). Ten species, three of them new to Iceland.

#### Fam. Milichiidae

*Meoneura lamellata* Collin. - Skaftafell 18.VII 1♀, swept on rich meadow. New to Iceland. Distribution: British Isles, Germany, Leningrad area, Finland, Sweden, Norway, Iceland, Algeria.

#### Fam. Chloropidae

This family will be dealt with by me in a further publication.

#### Fam. Scatophagidae

*Scatophaga furcata* Say. - Skaftafell 18.VII 7 ex., 19.VII 1 ex., 22.VII 2 ex., 23.VII 4 ex., 25.VII 2 ex., 29.VII 4 ex., 7.VIII 1 ex., 8.VIII 3 ex. - Horna-