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Acalyprate flies (Diptera) from sifted materials in the Geneva Museum

by

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With 3 figures

ABSTRACT

132 species of eleven acalyprate families are recorded from the sifted materials in the Geneva Museum (2120 specimens in 556 vials). Flies were identified from 13 countries in the Palaearctic Region (almost all cantons of Switzerland, France, Czechoslovakia, Hungary, Spain, Italy, Yugoslavia, Greece, Cyprus, Morocco, Israel, Turkey and Iran). 58 species recorded as new for the fauna of Switzerland, 15 species for France and one to five species for Spain, Italy, Greece, Cyprus, Israel, Turkey and Iran. More extensive application of the sifting method for collecting dipterous flies is proposed. First of all the species of the family Sphaeroceridae are obtained by sifting and consequent funneling. 50 sphaerocecid species are recorded from Switzerland (33 for the first time), i.e. this is a contribution also to the better knowledge of the Swiss sphaerocerids.

INTRODUCTION

While studying cavernicolous flies in the Muséum d'Histoire naturelle, Genève (PAPP 1979, 1982), some dipterous material, which had been collected by the scientists of the Département d'entomologie (Dr. Claude Besuchet (conservateur) and Dr. Ivan Löbl), were also studied. That material proved to be surprisingly interesting: not only new species but new genera of Sphaeroceridae were found (PAPP 1979, etc.). At the beginning those dipterous materials were by-products of collectings for Coleoptera but discovering the effectiveness of the sifting method also for flies, Drs Besuchet and Löbl continued selecting out this groups too from their materials more intensively. Another study trip to the Geneva Museum was recently aimed at the identification of all those materials and this was resulting in the publication of the present paper.

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***Drosophila (Drosophila) limbata* von Roser, 1840**

Switzerland: Genève: Vers-Vaux près de Chancy, mousses près Rhône, 5.VIII.81 (Besuchet): 1 ♀. — A Palaearctic species, much rarer than the next one. The larvae develop in mushrooms. This specimen was sifted as pupa from the soil.

***Drosophila (Drosophila) transversa* (Fallén, 1823)**

Switzerland: Vaud: Marchairuz, 1350 m, lappiaz, 11.X.79 (Besuchet): 1 ♂. — A common Palaearctic species developing mass in fruiting bodies of fungi; it pupates in soil and just on soil surface below dead leaves.

MILICHIIDAE

***Neophyllomyza leanderi* Hendel, 1924**

Switzerland: Genève: Frontenex; Valais: Sapinhaut (Besuchet). Altitude range: to 1000 m. Data on habitats: pied chêne, vieille souche hêtre; 19.VI-10.VIII. Two females. — New for the fauna of Switzerland, hitherto known from Austria and Romania only. Its life-habits were completely unknown, so the above data seem important also in this respect.

***Phyllomyza donisthorpei* Schmitz, 1923**

Switzerland: Valais: Grône, Punta Fontana, 26.VI.80 (Besuchet): 2 ♀. — New to Switzerland. A rare species, which was reared from nests of *Lasius fuliginosus* — imagoes very seldom collected in forests.

***Phyllomyza melania* (Hendel, 1919)**

Switzerland: Genève: Frontenex, souche creuse, 30.V.79 (Besuchet): 1 ♂, 4 ♀. — New to Switzerland, hitherto known only from Austria and Hungary and no data on life-habits. A related species is to be described from Morocco.

***Desmometopa m-nigrum* (Zetterstedt, 1848)**

France: Hérault: Ganges, crue de l'Hérault, 21.XI.82 (Besuchet): 1 ♂, 1 ♀. — An almost cosmopolitan species owing to human activity; the larvae are probably polysaprophagous.

Madiza britannica Hennig, 1937

Switzerland: Canton de Valais, Val d'Aoste, orme creux, 22.VI.80 (Besuchet): 5 ♀. — New for the fauna of Switzerland. It is recorded and hitherto known from England. The type-specimens were reared from water. It is possible that we may suppose that it is seldom collected owing to its special habits.

CARNIDAE

Meoneura vagans (Fallén, 1823)

Switzerland: Canton de Valais, Val d'Aoste, Daubensee, sous pierre, 2200 m, 11.IX.80 (Besuchet): 1 ♀. — New to Switzerland. It is a Holarctic species, which may be polisaprophagous.

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