

Short communications

ODONTOMYIA ARGENTATA (FABRICIUS, 1794) (DIPT., STRATIOMYIDAE) NEW TO THE NORWEGIAN FAUNA

LITA GREVE AND FRED MIDTGAARD

Odontomyia argentata (Fabricius, 1794) is reported new to the Norwegian fauna, and a short description of the locality is given.

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In connection with a study of the insect fauna of Ostøya in the Oslofjord, a large material of several orders has been collected. Light-traps, Malaise-traps and window-traps have been used through-out the summer seasons 1983 and -84. In addition some material were collected with insect-nets on visits of the area.

On AK Bærum: Ostøya (EIS:28) one female of *Odontomyia argentata* (Fabricius, 1794) was collected with a net on 31 May 1984. The specimen was caught sweep-netting on a small grassy meadow, near Oust gård, surrounded by a rich vegetation of smaller trees and herbs. Ostøya was also visited on 2 June, but no more specimens were found.

O. argentata has not earlier been reported from Norway (Rozkošný 1973). The species seems rare, but widespread in Sweden northwards to Uppland and Värmland (Rozkošný 1982). Only two specimens are known from Finland, the Helsingfors area, and in Denmark the species has been reported as very rare from Zealand, Lolland and Falster (Lundbeck 1907; Rozkošný 1982). Rozkošný (1982) also map the European distribution of the species.

Among the six species of *Odontomyia* recorded from Fennoscandia (Rozkošný 1973); only *O. hydroleon* (L.) and *O. microleon* (L.) are known from south-eastern Norway. *O. hydroleon* has the abdomen marked with a pattern of black and yellow or green, *O. microleon* has a shining black abdomen with a light yellow lateral markings. *O. argentata* has a dull dorsal part of abdomen in both males and females. The male *O. argentata* has the dorsal abdomen covered with silvery hairs, the female has transverse stripes of golden-grey adpressed hairs. The genitalia of all the three species are figured in Rozkošný (1973, 1982).

O. argentata is an early summer species and therefore might have been overlooked. Lundbeck (1907) reports the female to be sluggish while the males were fast fliers. The species has been collected on *Berberis*, *Crataegus* and *Salix cinerea* (Rozkošný 1982). *Berberis vulgaris* L. and *Salix cinerea* L. are common on Ostøya. *S. cinerea* has a distinct south-eastern distribution in Fennoscandia (Hultén 1971). The two other plants are more widespread. The larvae

has been reported from floodrefuse and in moist, rotting alder tree (*Alnus*) (Rozkošný 1973).

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BAETIS DIGITATUS BENGTTSSON (EPHEMEROPTERA), A NEW MAYFLY SPECIES FOR NORWAY

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Abstract

The mayfly *Baetis digitatus* is recorded from Norway for the first time. The nymphs of this species have been collected at several localities in the large lowland river, Drammenselva, and two of its tributaries, Snarumselva and Bingselva, in south-eastern Norway.

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In connection with pollution monitoring studies of the Drammenselva watercourse in south-eastern Norway (59°50'N, 9°55'E) several nymphal specimens of the mayfly *Baetis digitatus* Bengtsson, 1912, were taken both in the main river, Drammenselva, and in two tributary rivers, Snarumselva and Bingselva.

The main river, Drammenselva, has a total catchment area of 17 096 km² and a mean discharge of 330 m³ sec⁻¹. The present localities are situated in the lowest part of the catchment (Drammenselva) along a 46 km stretch of river which falls 63 m before it enters the Oslofjord at Drammen. Snarum-

selva and Bingselva have mean discharges of 110 and 2 m³ sec⁻¹, respectively. All the localities have a moderately strong current and a stony substratum, sometimes with patches of aquatic mosses. The following values indicate the range in mean chemical composition at the localities: pH 6.7–7.0; conductivity 1.9–3.8 µS m⁻¹; total phosphorous 6.5–19.5 µgP l⁻¹.

The exact localities, and the number of nymphs collected are: Drammenselva at Vikersund (UTM ref.: NM557481), 6 nymphs; Drammenselva below Embretsfoss (UTM ref.: NM518409), 57 nymphs; Drammenselva below Døvikfoss (UTM ref.: NM510392), 3 nymphs; Drammenselva at Hokksund (UTM ref.: NM509270), 2 nymphs; Drammenselva at Nedre Eiker (UTM ref.: NM594248), 2 nymphs; Snarumselva (UTM ref.: NM527446), 13 nymphs and Bingselva (UTM ref.: NM492341), 78 nymphs. The nymphs were collected in the months of April, May, July, October, November and December during 1982, 1983 and 1984.

B. digitatus is closely related to *B. niger* and both species were recorded from several of the above localities. However, the hind margin of the last nymphal gill of *B. digitatus* is concave in contrast to that of *B. niger* which is convex. There are also other differences, such as the number of bristles on the tip of the glossa and in the antennae and cerci which can be used to distinguish the two species (Müller-Liebenau 1969). The two lighter patches on the abdominal terga are also characteristic in older nymphs. The adults are more difficult to separate (Müller-Liebenau 1969).

B. digitatus has a wide, but very patchy and generally eastern distribution throughout much of Europe from the Balkans to Fennoscandia (Müller-Liebenau 1969, Putz, 1978). It was initially described from central Sweden early this century (Bengtsson 1912). Subsequent records include Austria and England (in Müller-Liebenau 1969), France (Müller-Liebenau 1974) Poland (Sowa 1975, Keffermüller 1978), Italy (Belfiore 1979), Finland (Savolainen & Saaristo 1980) and Denmark (Jensen 1984).

On account of its rarity, *B. digitatus* is a poorly known species, although it has been collected in a range of habitats. It has been recorded from slow-flowing small streams and rivers rich in aquatic vegetation (Müller-Liebenau 1969, Sowa 1975) and from the sheltered parts of fast-flowing rivers (Savolainen & Saaristo 1980). In Denmark and Sweden it has been found in the lower parts of large rivers (Jensen 1984). Its disappearance from known localities in Denmark during the last 20–30 years indicates its susceptibility to human activity.

The wide range in nymphal size at any given time within the Norwegian material suggests a long emergence period and/or overlapping cohorts, which is typical of many *Baetis* species (Clifford 1982). Nymphs were also recorded throughout most of the year, although from the few mature nymphs collected the emergence period is probably between May and August.

Almost half the Norwegian mayfly fauna, 19 species, has been recorded from Drammenselva and its two tributary rivers Snarumselva and Bingselva. This area appears to be the western limit for a number of mayfly species which have reached Norway from the east. These include *Hepatitis joernensis* (Bengtsson), *Metretopus borealis* (Eaton) and *Ephemerella mucronata* (Bengtsson). *Baetis digitatus* may well belong to this faunal group, although its occurrence in south-western Sweden and Denmark make this uncertain.

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MACHIMUS INTERMEDIUS HOLMGREN IN ZETTERSTEDT, 1852 (DIPTERA, ASILIDAE) NEW TO NORWAY

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Machimus intermedius Holmgren in Zetterstedt, 1852 is reported new to the Norwegian fauna, and a short review of its present status, and distribution is given.

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