

Four new species of fungus gnats from Norway (Diptera, Mycetophilidae)

[Vier neue Pilzmückenarten aus Norwegen (Diptera, Mycetophilidae)]

by

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Summary

The following new taxa of Mycetophilidae are recorded from Norway: *Sciophila subbicuspidata* spec. nov., *Sciophila balderi* spec. nov., *Ectrepesthoneura tori* spec. nov., *Dynatosoma norwegiense* spec. nov. The descriptions of the new species with detailed illustrations are given.

Key words: Mycetophilidae, Norway, 4 new species

Zusammenfassung

Folgende neue Taxa aus der Familie Mycetophilidae werden aus Norwegen beschrieben: *Sciophila subbicuspidata* spec. nov., *Sciophila balderi* spec. nov., *Ectrepesthoneura tori* spec. nov., *Dynatosoma norwegiense* spec. nov.. Die Beschreibungen beinhalten detaillierte Darstellungen der Genitalien der Arten.

Stichwörter: Mycetophilidae, Norway, 4 neue Arten

Introduction

While studying Norwegian material of Mycetophilidae, four new unknown species of this family were found. The material has been collected by Malaise trap in June 1993 within a spruce forest in southern Norway.

Holotypes and part of paratypes of new species are preserved in the Norwegian Forest Research Institute (Ås, Norway)(NISK). Remainder specimens are preserved in the Institute of Evolutionary Animal Morphology and Ecology, Russian Academy of Sciences (Moscow, Russia) (IEAME).

Description of species

Sciophila subbicuspidata ZAITZEV et ØKLAND spec.nov. (Fig.1 a-c)

Material: Holotype ♂, Norway, Os, Ringebu: Hirkjolen, VI.1993, leg. ØKLAND (NISK). Paratypes: 2 ♂♂ with same data (NISK), 1 ♂, Norway, Os, Gausdal: Tjuruverket. VI.1993 (IEAME).

Male

Head: Mouthparts dark brown. Maxillar palps pale. Clypeus and posterior parts of head dark brown. Mid flagellar segments about 2x as long as broad. **Thorax:** Mesonotum shining dark brown to black. Scutellum brown with six long bristles. Mediotergite, pleurotergite and lateral sclerites of mesothorax brown. **Wings:** transparent with brown veins. Wing length about 2,5 mm. Wing membrane with macro- and microtrichia. Sc ending in C well beyond R4. Sc2 slightly proximal of R4. rm about 2x as long as stem of fork M1+M2. Halteres pale. **Legs:** Coxae, femora and tibiae yellow. Tarsal segments brown. Fore tibia about 1,2x length of fore basitarsus. Mid tibia with 3-5a, 3d, 1-2pd, 2p, 2v. Hind tibia with 4ad, 5-7d, 4pd. **Abdomen** uniformly darkbrown to black.

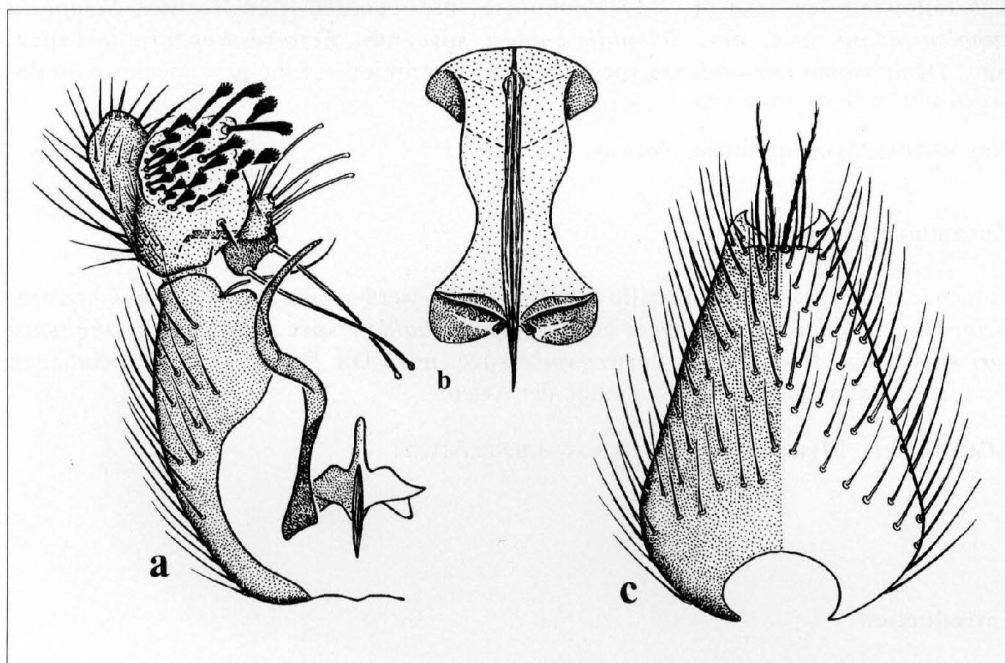


Fig.1 (a-c): Male genitalia of *Sciophila subbicuspidata* spec. nov.. a - male genitalia without tergite IX, b - aedeagus; c - tergite IX.

Genitalia dark brown. Tergite IX with two strong bristles in apical part (Fig.1a). Aedeagus with broad rounded apex (Fig.1b). Gonocoxite with only I bristle on medial margin (Fig.1c).

Female: unknown.

Remarks: *Sciophila subbicuspidata* spec. nov. is close to nearctic *S. cuspidata* ZAITZEV from which it is distinguished in the structure of tergite IX and gonocoxite.

***Sciophila balderi* ZAITZEV et ØKLAND spec.nov. (Fig. 2 a-c)**

Material: Holotype ♂, Norway, Os, Lunner: Skotjernfjell, VI.1993, leg. ØKLAND (NISK). Paratypes: 1 ♂ with same data (NISK); 3 ♂♂, Norway, HEn, Stor-Evdal: Tronkeberget, VI.1993, leg. ØKLAND (NISK, IEAME).

Male

Head: Mouthparts brown. 1 and 2 segments of maxillar palps dark brown, 3 and 4 pale brown. Clypeus and posterior parts of head dark brown. Antennae brown. Pedicel and base of first flagellar segment pale. Mid flagellar segments about 2x as long as broad.

Thorax: Mesonotum brown with paler points at the shoulders and 2 indistinct thin pale longitudinal stripes in the central part. Scutellum brown with six long bristles. Mediotergite, pleurotergite and lateral sclerites of mesonotum brown. **Wing** transparent with pale brown veins. Wing length about 3 mm. Wing membrane with macro- and microtichia. Sc ending in C well beyond R4. Sc2 just before Rs. Vein rm about 1,5x as long as stem of fork M1+M2. **Legs:** Coxae, femora and tibiae yellowish brown. Tarsal

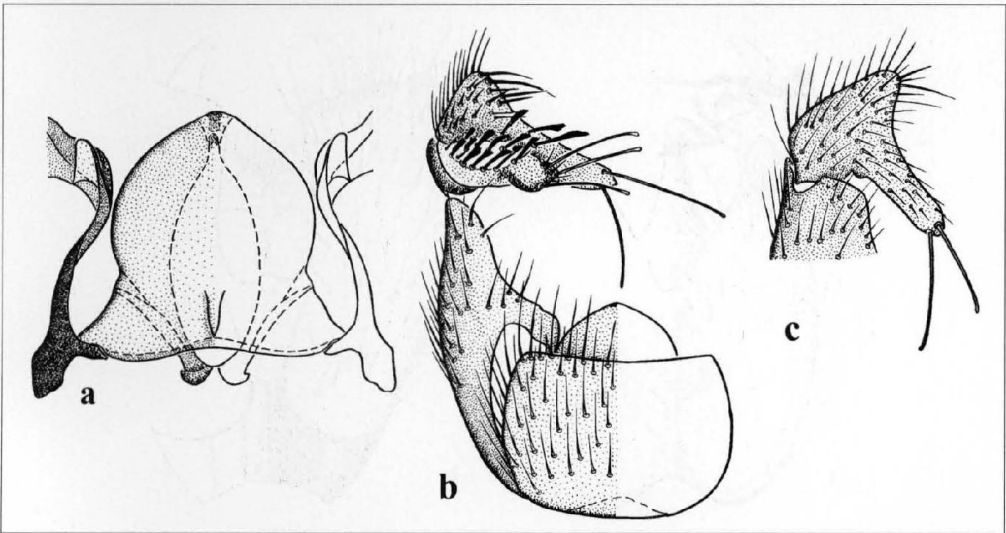


Fig. 2 (a-c): Male genitalia of *Sciophila balderi* spec. nov.. a - aedeagus; b - genitalia dorsal; c - gonostyle ventral.

segments darker brown. Fore tibia about 1,6 times as long as fore basitarsus. Mid tibia with 5-8a, 2-3d, 1-2p, 3-4pd, 1-2v; hind tibia with 5-7ad, 2-3d, 5-6pd, 4-5p. **Abdomen and genitalia** brown. Tergites I-V with paler hind margins. Aedeagus broad (Fig.2 a). Gonostyle without thick spines on ventral surface (Fig. 2 b, c).

Female: unknown.

Remarks: *Sciophila balderi* spec. nov. is close to *S. quadriterga* HUTSON from which it is distinguished in the structure of aedeagus and gonostyle.

***Ectrepesthoneura tori* ZAITZEV et ØKLAND spec.nov. (Fig.3 a, b)**

Material: Holotype ♂, Norway, HEn, Stor-Ewdal: Tronkeberget, VI.1993, leg. ØKLAND (NISK). Paratypes: 6 ♂♂ with same data (NISK); 1 ♂, Norway, Os, Lunner: Skotjernfjell, VI.1993, leg. ØKLAND (NISK); 2 ♂♂ with same data (IEAME).

Male

Head: Mouthparts light brown. Maxillar palps pale, except brown basal segment. Clypeus dark brown. Posterior parts of head dark brown to black. Antennae brown, scape dark brown, pedicel and base of first flagellar segment yellowish. Mid flagellar segments about 2x long as broad. **Thorax** black. Mesonotum grey dusted with pale bristles. Scutellum dark brown with six long bristles. **Wing** transparent. Wing length 2,5 mm. Costal and radial veins brown, other veins pale. Costa reaching about two third of distance between R5 and M1. Sc ending in R1 well before base of rm. Stem of fork M1+M2 about twice the length of rm. Base of M1 and M2 indistinct. Fork M3+4 + Cu1 with short but distinct

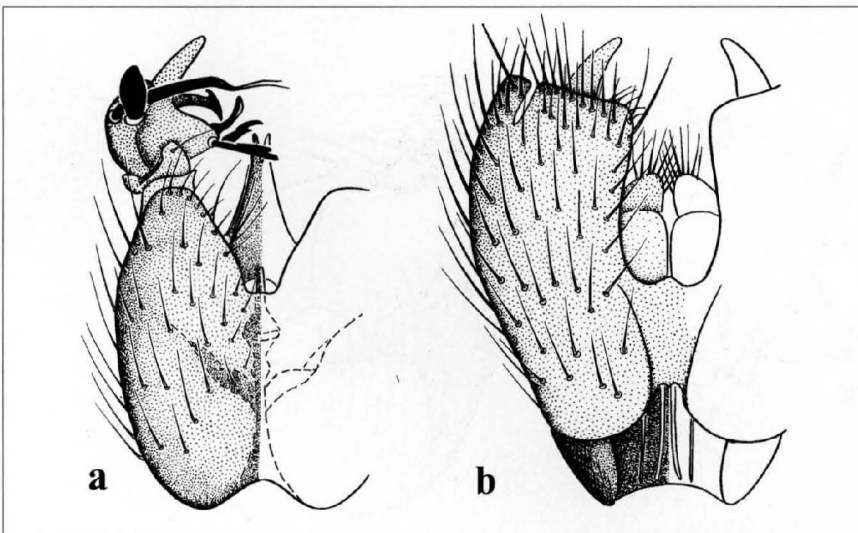


Fig. 3 (a, b): Male genitalia of *Ectrepesthoneura tori* spec. nov. a - genitalia ventral; b - genitalia dorsal.

stem. Halteres greish brown. **Legs:** Coxae yellow. Mid and hind coxae with brown basal and lateral parts. Femora with dark apex. Tibia and tarsi brown. Fore tibia about 1,5x length of fore basitarsus. Mid tibia with 5-6a, 2d, 3-4p, 3v. Hind tibia with 6-7 a, 15-20d, 5pd. Abdomen and genitalia dark brown. Tergite IX much broader than gonocoxites. Apical hollow in tergite IX deep and broad (Fig. 3b).

Female: unknown.

Remarks: *Ectrepesthoneura tori* spec. nov. is close to *E. pubescens* (ZETT.) from which it is distinguished in the form of tergite IX and aedeagus.

Dynatosoma norwegiense ZAITZEV et ØKLAND spec.nov. (Fig.4 a,b)

Material: Holotype, ♂, Norway, TEi, Notodden, Eferdalen, V.1993, leg.B.ØKLAND (NISK).
Paratypes: 1 ♂, Norway, Os, Gausdal: Ormetjernkampen, V.1993, leg. ØKLAND (NISK);
 1 ♂, Norway, HEn, Stor-Elvdal: Helvete, V.1993, leg.ØKLAND (IEAME)

Male

Head: Palps and other mouthparts yellow. Clypeus light brown. Posterior parts of head dark brown. Antennae brown, scape, pedicel and first flagellar segment yellow. Mid flagellar segments slightly longer than broad. **Thorax:** Mesonotum yellowish brown with two indistinct dark longitudinal stripes. Scutellum yellow, with 8 long setae. Mediotergite yellow. Lateral sclerites of thorax brownish or yellowish with brownish spots. **Legs:** Coxae and femora yellow. Mid and hind femora with darker apical parts. Tibiae yellow, with dark apex. Tarsi darkened. Fore tibia subequal in length to fore basitarsus, with 4-5 short ventral bristles. One of the spurs of fore tibia about 2,5x the length of the other.

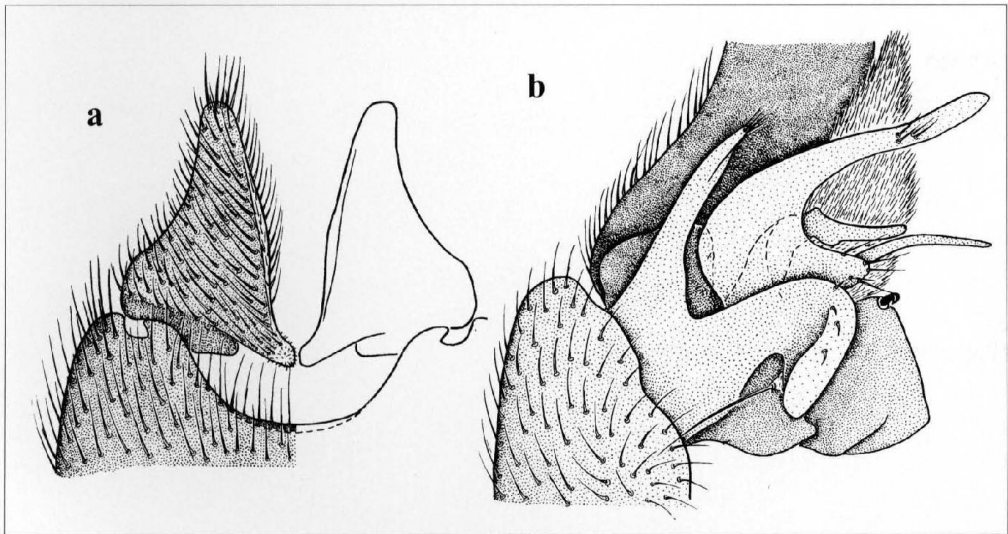


Fig. 4: Male genitalia of *Dynatosoma norwegiense* spec. nov.; a - genitalia ventral; b - gonostyle dorsal.

Mid tibia with 4-5ad, 3d, 4-5pd, 2-3v; hind tibia with 5-6ad, 4-5d, 5-7pd, 3v. **Wing** with dark spot on stem of fork M1+M2, rm and Rs. Apical third of the wing darkened, with more dark spot towards apex of R1 and R5. rm 1,5 times as long as stem of fork M1+M2. The base of fork M3+4 + Cu1 beyond that of the fork M1+M2. Halteres pale yellowish.

Abdomen: Tergites dark brown with narrow yellow posterior bands. Tergite I and II with indistinct lateral yellowish spots. **Genitalia** yellowish-brown (Fig.4 a,b).

Female: unknown.

Remarks: *Dynatosoma norwegiense* spec. nov. is close to *D. bukowskii* ZAITZEV and *D. thoracicum* (ZETT.) from which it is distinguished in the form of gonostyle and aedeagus.

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