

Phronia matilei n. sp., a new fungus gnat from caves in Switzerland (Diptera, Mycetophilidae)

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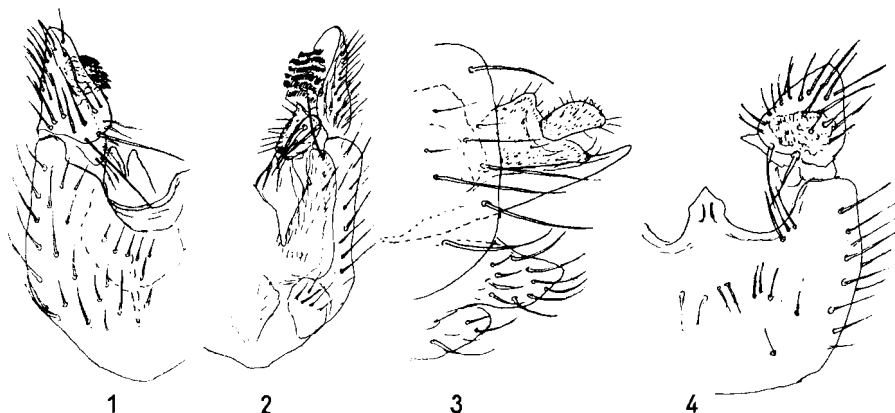
(Zoological Museum, SF-00100, Helsingfors)

A list of Diptera collected in caves in Switzerland by V. Aellen, C. Roth, P. Strinati and others was published by MATILE in 1962 and contained 15 species of fungus gnats. However, no species of *Phronia* was mentioned there and some years later Mr. L. Matile (Museum d'Histoire Naturelle, Paris) sent me some specimens of *Phronia* from the collection for identification. These specimens belong to a new species very close to *P. tiefii* Dziedzicki and I describe it below under the name *Phronia matilei* n. sp. The holotype will be deposited in the Museum in Geneva, Switzerland.

Phronia matilei n. sp.

♂ — Body length about 4.5 mm, wing length 4.2—4.5 mm. Slender and long-legged as *P. tiefii*. Head dark brown. Labrum dark but palpi and other mouthparts pale yellow. Of the two short basal joints of antenna the second is pale. The following joints are nearly three times as long as wide. Mesonotum brown, laterally paler but without distinct pale spots. Pilosity pale and chaetotaxy of usual type, as in *tiefii*. Scutellum brown with one pair of long marginal bristles and one pair of small bristles more basally on the margin. Pleura brown. One prominent propleural bristle and some small bristles on the katepimeron. Postnotum brown. Wings clear. Costa not produced beyond r_5 . The vein *rm* with 2—3 macrotrichia in its distal half (upper side of wing). Subcosta conspicuously long and straight. Forks of *m* and *cu* in the same position as in *tiefii*. Fore coxa paler than second and third. Hind femur dark above in the apical fourth. Legs long, tarsus of fore leg 2.6—2.8 mm. Leg ratio: (basitarsus: tibia, fore leg I, middle leg II, hind leg III) I: 1.05, II: 0.9, III: 0.75. Second tibia with small bristles in antero-dorsal, postero-dorsal and antero-lateral rows (3—4 in each row). Abdominal tergites brown, the three first ones paler. Hypopygium as in figs. 1—2, brown. Ventral stylomere rounded, not notched as in *tiefii*. Dorsal stylomere rather small.

♀ — Body length 4.5 mm, wing length 4.6 mm. Head, thorax and wings as in the male. Antennal joints from the third onwards shorter than in the male, but at least twice as long as wide. Legs in colour and chaetotaxy as in the male. Tarsus of fore leg 3.2 mm. Abdominal tergites I—VI brown, tergites II—IV with



Figs. 1—3. *Phronia matilei* n. sp., figs. 1—2 ventral and dorsal aspects of the right half of the male hypopygium (holotype), fig. 3 female terminalia, side view. Fig. 4. *P. exigua* Zetterstedt, left half of male hypopygium, ventral aspect (Finnish specimen).

a pale distal marginal fascia, which is broadly interrupted medially. The fasciae are not very distinct and there are traces of them on the fifth and sixth tergites also. The terminalia (fig. 3) are similar to those of *tiefii*.

In general appearance the male of *P. matilei* resembles *tiefii* but the abdomen is not so long and slender as in that species. The male genitalia differ distinctly from those of *tiefii* and from those of the rather close species *P. gracilis* Hackman and *spinigera* Hackman (cf. HACKMAN 1970). On the other hand, the stylus parts are rather like those of *exigua* Zetterstedt but the caudoventral margin of the genital capsule of *P. matilei* is without the median projection seen in *exigua* (fig. 4). The female is rather similar to that of *tiefii*, having blunt end joints of cerci, but the light pattern on the abdominal tergites is more restricted and less distinct than in *tiefii*.

Holotype, ♂, Switzerland: Vaud, Grande baume du Préx d'Aubonne 20. VI. 1960 (leg. P. Strinati). Paratypes: Vaud, Grotte des Dentaux, 1 ♂, 2 ♀♀ 6. IX. 1956 (Roth, Strinati & Aellen); Vaud, Grotte glacière de la Genolière, 1 ♂ 26. VII. 1960 (Aellen, Strinati).

References

- HACKMAN, W. 1970: New species of the genus *Phronia* Winnertz (Diptera, Mycetophilidae) from Eastern Fennoscandia and notes on the synonymies in this genus. *Notulae Entomol.* 50: 41—60.
 MATILE, L. 1962: Contribution à l'étude de la faune cavernicole de la Suisse. Diptères. — Bull. Soc. Entomol. Suisse 35: 124—130.