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New and remarkable species of Mycetophiloidea (Diptera, Nematocera) from the Mediterranean region*)

By Norbert Caspers

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Descriptions of adult males of six new species of the superfamily Mycetophiloidea (Diptera, Nematocera) from the Mediterranean region are presented: Orfelia persimilis, spec. nov. (family Keroplatidae) from Sardinia (Italy); Ectrepesthoneura chandleri, spec. nov. from Crete (Greece), Leia umbrosa, spec. nov. from Corsica (France), Anatella longiflagellata, spec. nov. and Phronia incisa spec. nov. from Turkey, Sceptonia curvisetosa, spec. nov. from Greece, last five belonging to the family Mycetophilidae sensu Malloch (1917). In addition, new findings of two remarkable and hitherto rarely found species of Mycetophiloidea (Sciophila kashmirensis Zaitzev, Phronia tyrrhenica Edwards) are presented.

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Introduction

Since the early seventies Dr. H. Malicky (Biological Station Lunz, Austria) has been performing many entomological field trips to Southern Europe, with the aim to clear up the systematics and the biogeographic distribution of the caddis flies (Trichoptera) of that previously rather neglected faunal region. Besides Trichoptera he also collected a comprehensive material of many other aquatic insect groups, which meanwhile has been worked upon and has been published by different authors. Among the "non-target-groups" of this study the portion of the fungus gnats (Mycetophiloidea) was relatively low as compared to all aquatic insect groups. The reasons for this were the following: The collecting methods used (light trapping and sweeping net technique) are not very effective for Mycetophiloidea. On the other hand, many of the collecting places surely were not optimal for fungus gnats whose species rather prefer dark, mouldy and wet edaphic places for their larval development. Higher altitude and wooded areas with deciduous and coniferous trees were not that much considered in Malicky's study.

In spite of these restricting factors, the fungus gnat samples were much more comprehensive than any other collections from the Mediterranean region known up till now (Edwards 1928; few and casual indications in Matile 1977 and Väisänen 1984).

In addition to Malicky's fungus gnats some small material was collected by myself (Turkey 1984). The results of both collections are going to be published stepwise: The present publication deals with the species new to science. A second paper shall present the complete species list and — as far as known — the biogeographic distribution of the species involved. This latter paper shall be published together with P. Chandler (England) who shall contribute his own even larger fungus

^{*)} Financial support of this study was provided by a grant from "Deutsche Forschungsgemeinschaft"

gnat collection assembled by several collectors and that of L. Matile (France) from the Mediterranean region.

In the present publication the higher classification of the superfamily Mycetophiloidea follows the proposal of Väisänen (1984):

Mycetophiloidea

Bolitophilidae
Diadocidiidae
Ditomyiidae
Keroplatidae (1)
Mycetophilidae (5)
Mycomyiinae
? Eudicraninae
Sciophilinae
Gnoristinae (1)
Metanepsiinae
Leiinae (1)
Mycetophilinae (3)
Manotinae

Sciaridae

The taxonomic units dealt with in this paper are spaced. The respective numbers of new species are indicated in brackets,

The holotypes of all new species will be deposited in the Zoological State Collection Munich, paratypes will be kept in the author's private collection.

I am indebted to Dr. P. Chandler for providing information about additional material of the new species, for useful discussions and for kindly reading the English manuscript.

Family Keroplatidae

Orfelia persimilis, spec. nov. Figs 1–4

Holotype of Satzu/Sardinia (ttaly), 240 m above sea level, 9.6.1981, leg. H. Malicky.

Additional material. 1 & Étang de Diana, Cateraggio (Corsica), woods on sand near sea, 22.4.1978, leg. A. E. Stubbs; 1 &, Route de Santa Manza (Corsica), 7.6.1972, leg. L. Matile, Muséum National d'Histoire Naturelle Paris (MNHN); 1 &, Isougan n Ouagouns (Tunisia), 8.1938, ? collector (MNHN).

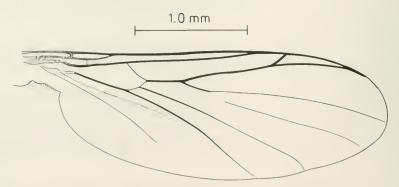
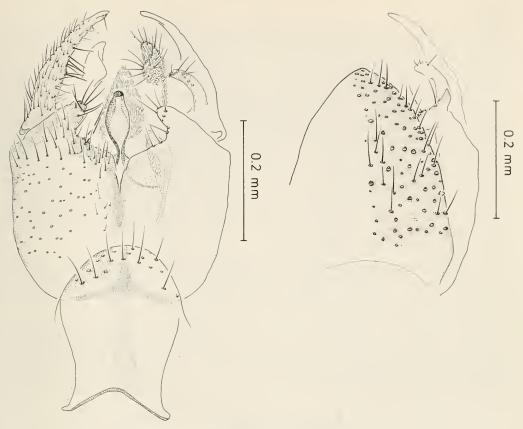


Fig. 1. Orfelia persimilis, spec. nov. Adult male. Wing.



Figs 2-3. Orfelia persimilis, spec. nov. Adult male. 2. Hypopygium (ventral view) – left; 3. Hypopygium (dorsal view) – right.

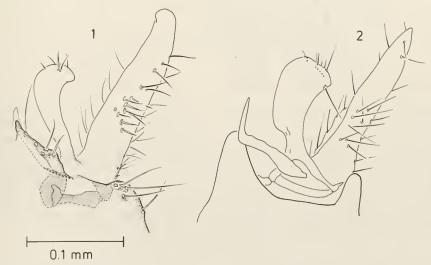


Fig. 4. Internal view of left clasper complex. 1. Orfelia persimilis, spec. nov. 2. Orfelia subdiscoloria (Matile, 1969); figure referring to Matile 1969, p. 241, fig. 2, without scale.

Holotype o.

Head. Dark brown, with black bristles on the occiput. Palpi dull yellow to brownish. Antennae dark brown; basal flagellar segment of about the same length as 2nd and 3rd together. Antennae not longer than head and thorax together.

Thorax. Thoracic dorsum uniformly yellow to orange brown, with mesoscutal stripes hardly visible. Black setae evenly distributed on mesoscutum. Scutellum brown, posterior margin yellow; with 8 black bristles posteriorly. Halteres dull yellow. Pleura brownish. Proepimeron with 4 setae.

Legs. Femora yellow, tibiae dull yellow, partly destroyed. Most tarsalia lacking in the holotype. Wings (Fig. 1). Uniformly yellowish fumose, unmarked. C surpasses the tip of vein R5 by about one third of the distance R5 – M1. Vein Sc short, ending in C distinctly before base of Rs. Sc2 present as well. R4 ending in C at about one third of the distance R1 – R5. M-fork and Cu-fork without any setulae. M2 reduced at its base. Vein An weak, not reaching the wing margin.

Abdomen. Tergite 1 entirely black, with the posterior margin indistinctly brighter. Tergites 2–6 with large yellow transverse bands posteriorly, all occupying one third to half tergal length, and sharply separated from basal black coloration of tergites. Hypopygium (Figs 2, 3) brownish yellow. Body length: 4.5 mm. Wing length: 3.5 mm.

One of the above-mentioned specimens from Corsica differs from the holotype by a yellow thorax with three well marked dark brown stripes; the second Corsican specimen has the thorax entirely blackish, the abdomen mainly dark with vaguely paler apices to the tergites. The Tunisian specimen has the body entirely black.

Orfelia persimilis, spec. nov. belongs to the same species group as Orfelia discoloria (Meigen), Orfelia unicolor (Staeger) and Orfelia subdiscoloria (Matile). The specific and differential characters of these latter three species have been summarized by Matile (1969). Most of all, the new species resembles Orfelia subdiscoloria from Iran, from which it can be best distinguished by subtle differences in the male genitalia (Fig. 4) and by the lack of a brown marking on the wings.

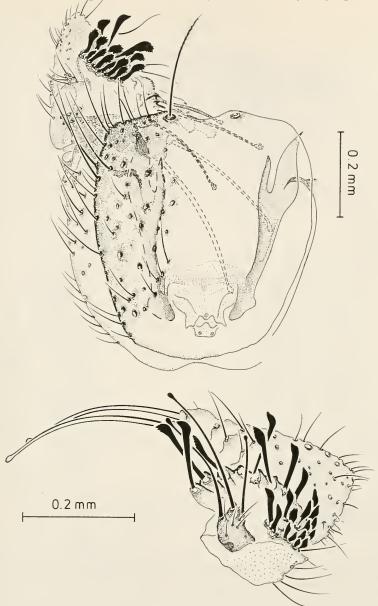
Family Mycetophilidae

Subfamily Sciophilinae

Sciophila kashmirensis Zaitzev, 1982 Figs 5, 6

Material examined. 107, Ierapetra Crete (Greece), at sea level, 18.4.1971, leg. H. Malicky.

The only specimen of this species known up till now has been found in North India. In his original description Zaitzev (1982) figured only part of the male genitalia. Nevertheless there is no doubt that the Greek specimen from Ierapetra is conspecific, even though there are some slight differences to the type specimen: the gnat from Crete is somewhat bigger than that from India (body length 3.5 mm resp. 2.8 mm; wing length 3.6 mm resp. 2.9 mm). The antennae are mainly dark brown (yellow in the holotype). Moreover the arrangement of setae on the hind tibia (4 ad, 4 d, 3 pd, 3 p) is slightly different from the Indian specimen (5 ad, 3 d, 4 pd, 3 p); the mid tibiae are missing in the Greek specimen. Finally there are only 21 characteristic truncate bristles on the inner lobe of the gonostyles (Fig. 6) as compared to 27 bristles in the holotype.



Figs 5-6. Sciophila kashmirensis Zaytsev, 1982. Adult male. 5. Hypopygium (dorsal view) – above; 6. Internal view of left clasper complex – below.

Subfamily Gnoristinae

Ectrepesthoneura chandleri, spec. nov. Figs 7–10

Holotype. O, Kakopetros/Crete (Greece), 490 m above sea level, 20.2.1982, leg. H. Malicky.

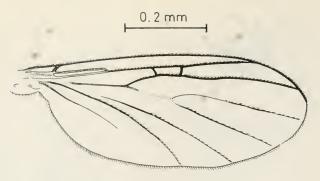
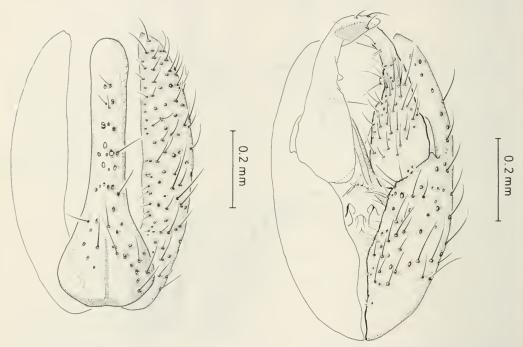


Fig. 7. Ectrepesthoneura chandleri, spec. nov. Adult male. Wing.



Figs 8-9. Ectrepesthoneura chandleri, spec. nov. Adult male. 8. Hypopygium (ventral view) – left; 9. Hypopygium (dorsal view) – right.

Additional material. ♂, 1 ♀ Prodhromus (Cyprus), pine forest, 3.5.1982, leg. A. E. Stubbs.

Holotype O.

Body mainly dark brown to blackish, with pale hairs and bristles.

Head. Palpi dull yellow with 3rd segment brownish at the tip. Antennae all dark brown except the yellow base of the 1st flagellomere. Flagellar segments 2 to 3 times as long as broad.

Thorax. Mesoscutum with bare stripes between bristle rows of acrostichals and dorsocentrals. One pair of long scutellars with one additional pair of weaker, outer scutellars. Laterotergites and mediotergite bare. Halteres yellow.

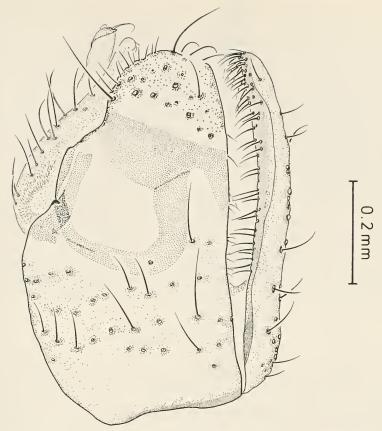


Fig. 10. Ectrepesthoneura chandleri, spec. nov. Adult male. Hypopygium (lateral view).

Legs. Including tibial spurs dull yellow, coxae and tarsalia brownish. Legs long – as in *E. gracilis* Edwards – with tibiae very slender. Mid tibia with 5 ad, 4 pd, 4 av and 3 very inconspicuous v. No sensory area on mid tibia; mid tibia not thickened apically. Hind tibia with 7 ad (plus 2 much weaker ad apically), 6 pd (plus 4 much weaker pd apically), 5 p (plus 5 weaker p apically, becoming rather pd near the apex of hind tibia).

Wings (Fig. 7). Clear, without any coloured patches. Venation very similar to *E. gracilis* (Chandler 1980: 37). Postradial veins faint and weak. C extending less than half distance from R5 to M1 (two thirds in *E. gracilis*). Macrotrichia present on all fork veins except on An.

Abdomen. Long and slender, dark brown. Hypopygium (Figs 8–10) highly modified and totally different from all other species of the genus; laterally compressed and rather elongated. 9th tergite very long and slender, with a dense set of strong setae ventrally. Stylomeres simple, inserting subapically and hardly extending beyond the posterior end of the broad and ovoid basimeres, which are markedly elongated dorsally. A second pair of processes, which are semilunar in shape, inserts on the inner surface of the posterior part of the basimeres.

Body length: 4.0 mm. Wing length: 3.8 mm.

The female of *Ectrepesthoneura chandleri*, spec. nov. from Cyprus is in poor condition with the ovipositor damaged, but agrees in most respects with the male.

This new species has only been tentatively placed in the genus *Ectrepesthoneura* Enderlein on the basis of the wing venation, which is close to the ground plan venation of the family Mycetophilidae sensu stricto, and may simply suggest symplesiomorphy. Indeed, one of the most characteristic features mentioned in the generic diagnosis (Chandler 1980 p. 30) is not realized in *Ectrepesthonera chandleri*, spec. nov.: there is no enlargement of the base of the mid tibia and no sensory pit in the male. Apart from this there is a high degree of conformity between *E. chandleri*, spec. nov. and *E. gracilis* Edwards with respect to most external morphological characters (except male genitalia). *E. gracilis* has a rather isolated position within the genus differing from all other known Palaearctic and eastern Nearctic species of the genus by its genital morphology and by its longer and more slender abdomen and legs. These characters of *E. gracilis* led Chandler (1980) to suppose a potential closer relationship to *Dziedzickia* Johannsen rather than to *Ectrepesthoneura*. Again, there are striking differences between *E. gracilis* and *E. chandleri*, spec. nov. with respect to their male hypopygia which really make it difficult to consider a closer relationship between these two species.

Moreover, the systematic position of the genus *Ectrepesthoneura* as a whole is under discussion as well. Whereas it was included in the tribe Leiini within the subfamily Sciophilinae by Edwards (1925) and most later authors, Väisänen (1986) transferred the genera *Tetragoneura* Winnertz and *Ectrepesthoneura* Enderlein to the Gnoristinae (= tribe Gnoristini sensu Edwards) which he regarded as a subfamily of the Mycetophilidae. Undoubtedly the infra and suprageneric position of the genus *Ectrepesthoneura* still raises a lot of questions whose answering is beyond the scope of the present publication, but which should be considered again in an urgently needed revision of the group.

Subfamily Leiinae

Leia umbrosa, spec. nov. Figs 11–13

Holotype. &, Creek near Corte/Corsica (France), 600 m above sea level, 16.6.1981, leg. H. Malicky.

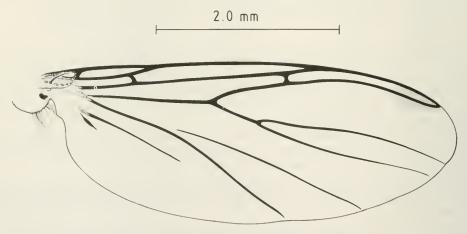


Fig. 11. Leia umbrosa, spec. nov. Adult male. Wing.

Holotype ♂.

Head. Head black. Frontoclypeus and palpi yellow. Antennae black; scape and pedicel yellow; also flagellomeres 1-4 with some yellow on underside.

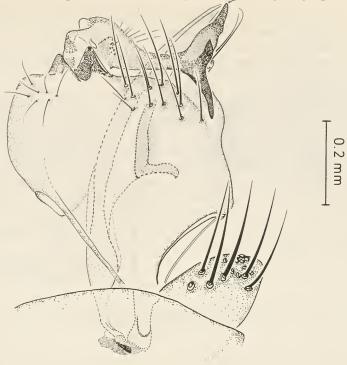


Fig. 12. Leia umbrosa, spec. nov. Adult male. Hypopygium (lateral view).

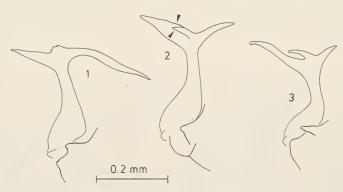


Fig. 13. Gonostyles. 1. Leia crucigera Zetterstedt. 2. Leia umbrosa, spec. nov. The arrows point at the median tooth of the tripartite style which is free only apically. 3. Leia subfasciata (Meigen).

Thorax. Black mesoscutal stripes confluent, sharply contrasted to yellow lateral part of mesoscutum. Scutellum, mediotergite and greater part of pleura black; pronotum and proepimeron yellow. Mesoscutal bristles pale yellow (smaller ones) or dull yellow (larger ones). A row of long pale bristles along the posterior border of the laterotergites. Halteres whitish.

Legs. Including coxae yellow, with one black streak underneath the basal part of all femora. Hind femora very narrowly black at the tip, on the upper side only. Tibiae dull yellow, tarsalia more or less intensively darkened. Tibial spurs of t I yellow, of t II brownish, of t III intensively dark brown.

Wings (Fig. 11). With a slight yellowish tinge and very dark veins. Preapical wing band reduced to a small and indistinct dark patch stretching downwards from the apical third of cell R1 to about one third of the distance to the anterior fork of M.

Abdomen. Uniformly black. Hypopygium (Fig. 12) black. Apex of styles tripartite, but median tooth free only apically (▶ in Fig. 13).

Body length: 5.0 mm. Wing length: 4.8 mm.

The tripartite styles of the new species show some resemblance to those of *Leia crucigera* Zetter-stedt and, even more, to *Leia subfasciata* (Meigen) (Fig. 13). Apart from these differences in the structure of the male hypopygia, the new species seems to be characterized quite well by its predominant dark colour, even though this feature may vary according to latitude and climate.

Only the female is known of another *Leia* species from Corsica described by Edwards (1928): *Leia fuscicalcar*. According to the original description the thorax and the abdomen of the only female are reddish, with a narrow median longitudinal dark line on tergites 1–3. The mesoscutal bristles are black. There is no black streak beneath the basal part of f I.

Even though the colour of the posterior tibial spurs is similar to *Leia umbrosa*, spec. nov., *Leia fuscicalcar* Edwards from Corsica does not seem to be conspecific.

Subfamily Mycetophilinae

Anatella longiflagellata, spec. nov. Figs 14–16

Holotype. O, Murtici/Western Taurus mountains (Turkey), about 600 m above sea level, 16.5.1984, leg. N. Caspers.

Additional material. 1 °C, Forêt de Sorba (Corsica), 16.6.1978, leg. S. Kelner-Pillault (MNHN); 3 °C, Forêt d'Aitone (Corsica), 1000 – 1200 m above sea level, 31.5.1972, leg. L. Matile (MNHN); 1 °C, Forêt de Vizzavona (Corsica), 3.6.1972, leg. L. Matile (MNHN); 1 °C, Col de Bavella (Corsica), 1260 m above sea level, 6.6.1972, leg. L. Matile (MNHN).



Figs 14=15. Anatella longiflagellata, spec. nov. Adult male. 14. Hypopygium (ventral view) – left. 15. Hypopygium (dorsal view) – right.

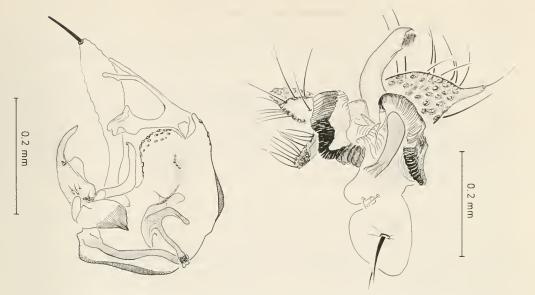


Fig. 16. Anatella longiflagellata, spec. nov. Adult male. Internal view of right clasper complex. Fig. 17. Phronia tyrrhenica Edwards, 1928. Adult male. Internal view of right clasper complex.

Holotype ♂.

Head. Dark brown. Palpi dull yellow. Antennae with basal joints and proximal part of 1st flagellomere yellowish, the rest intensively darkened. Flagellar segments 3-4 rather elongate, about 3 times as long as broad.

Thorax. More or less uniformly brown, the 3 mesoscutal stripes only indistinctly contrasting. Pleura pale brownish. Halteres pale yellow.

Legs. Yellow, tarsalia rather brownish. The holotype lacks one mid leg and one hind leg. Fore metatarsus slightly shorter than its corresponding tibia. Mid femoral fringes half as long as median femoral width. The outer spur of mid tibia lacking. Hind tibia with outer spur about three-quarters length of inner. No posterobasal seta on hind coxa present.

Wings. Partly destroyed in the holotype. All veins distinct, grey to brown in colour. C extending – as far as can be seen – beyond the tip of R5 at least half of the distance R5-M1. Cu-fork beginning just underneath base of M-fork.

Abdomen. Dark brown. Hypopygium (Figs 14-16) brownish yellow.

Body length: 3.6 mm. Wing length: about 3.1 mm.

The new species differs from all other *Anatella* species of the Western Palaearetic region by its highly specific genital characters and – referring to Chandler (1977) – at least from most *Anatella* species by its rather elongated flagellomeres.

For the moment it remains doubtful whether A. longiflagellata, spec. nov. is conspecific with A. maritima, described by Ostroverkhova (1979) from Eastern Siberia, but unfortunately insufficiently figured*.

^{*} According to Zaitzev (1960) A. maritima Ostroverkhova, 1979 is conspecific with A. lenis Dziedzicki, 1923, a species with a wide distribution in the Palaearctic region which indeed is well different from the above-described A. longiflagellata.

Phronia tyrrhenica Edwards, 1928 Fig. 17

Material examined. 2000 Stropones Euböa (Greece), 830 m above sea level, 24.5.1974, leg. H. Malicky.

Additional material. 40°0°, 1°Q Restonica Valley (Corsica), pinewoods, 25.–28.4.1978, leg. A. E. Stubbs; 30°0°, 1°Q Forêt d'Aitone (Corsica), pinewoods, 30.4.–4.5.1978, leg. A. E. Stubbs; 44°0°, 8°Q°Q, Forêt d'Aitone (Corsica), 31.5.1972, leg. L. Matile (MNHN); 5°0°, 1°Q, Forêt de Vizzavona (Corsica), 3.6.1972, leg. L. Matile (MNHN); 1°Q, Forêt de Zonza (Corsica), 750 m above sea level, 6.6.1972, leg. L. Matile (MNHN); 1°Q, Vizzavonne (Corsica), 9.6.1976, leg. S. Kelner-Pillault (MNHN); 1°0°, Prodhromus (Cyprus), pinewood, 3.5.1982, leg. A. E. Stubbs; 1°0°, Prodhromus (Cyprus), alders by stream, 4.5.1982, leg. A. E. Stubbs; 1°0°, Cedar Valley (Cyprus), 2.5.1972, leg. A. E. Stubbs; 1°0°, Aude, Escouloubre (France), 28.5.1971, leg. P. J. Chandler; 1°0°, Hérault, Forêt Domaniale de Roquet Escut (France), 750 m above sea level, 18.9.1977, leg. L. Matile (MNHN).

Edwards (1928) described this species from Corsica, giving it the name *Phronia forcipula var. tyrrhenica*. In his original description he pointed out the close resemblance to *P. forcipula* Winnertz which he also collected at the type locality. Later on *P. forcipula var. tyrrhenica* was raised to species rank by Gagné (1975). The separation of these two species is justified by several small, but constant differences between the telomeres of the male hypopygia (Figs 17, 18): the projection of the lateral part of the telomere is more rounded in *P. tyrrhenica*, whereas it is rather ovoid-elongated in *P. forcipula*. The lateral part of the telomere is apically elongated into a slender tip in *P. tyrrhenica*. In *P. forcipula* the same structure is more or less obtuse-angled. The other apparent differences between the figures 17 and 18 are due to a somewhat different position of the telomeres in preparations.

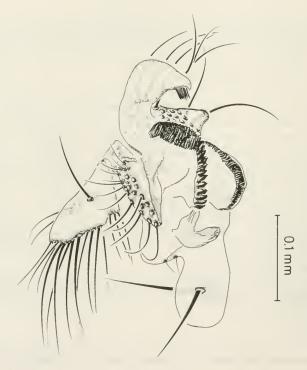


Fig. 18. Phrona forcipula Winnertz, 1863. Adult male. Internal view of right clasper complex.

Both species differ from the very similar species *Phronia humeralis* Winnertz by a relatively narrow median notch on the ventrocaudal border of the male hypopygium and by the lack of conspicuous wing cloudings. In the past *Phronia humeralis* Winnertz has been mixed up with *Phronia forcipula* Winnertz by many authors.

Phronia incisa, spec. nov. Figs 19–23

Holotype. O, Murtici/Western Taurus mountains (Turkey), about 600 m above sea level, 16.5.1984, leg. N. Caspers.

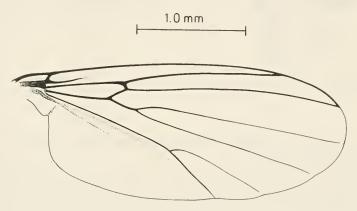
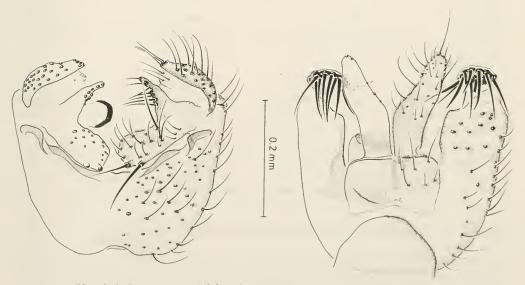
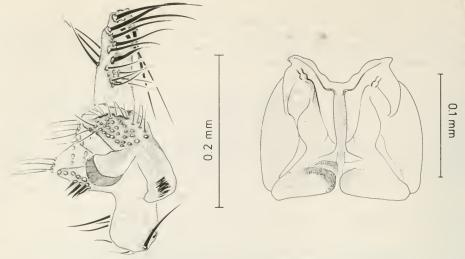


Fig. 19. Phronia incisa, spec. nov. Adult male. Wing.



Figs 20–21. *Phronia incisa*, spec. nov. Adult male. 20. Hypopygium (ventral view) – left. 21. Hypopygium (dorsal view) – right.



I-igs 22 = 23. *Phronia incisa*, spec. nov. Adult male. 22. Internal view of left clasper complex – left. 23. Aedeagus (dorsal view) – right.

Holotype O.

Head. Dark brown. Palpi brownish. Antennae with scape and pedicel and basal part of first flagellomere yellow, the rest brown.

Thorax. Mesoscutal stripes dark brown, separated by paler intervals. Humeral areas and lateral margin of mesoscutum indistinctly yellowish brown. Scutellum and mediotergite uniformly dark brown. Pleura medium brown. Pronotum and proepimeron with one large seta and one smaller hair each. Scutellum with 4 setae. Mesanepisternum with 2 setae along the dorsocaudal edge.

Legs. Yellow, tarsalia slightly darker. Mid and hind coxa brown with indistinct yellow patches. Mid tibial setae: 4a, 4d, 8p near the tip (very weak), 10 pv. Hind tibial setae: 6ad, 13d, 8 short p near the tip.

Wings (Fig. 19). Clear, without any clouds. Venation as in other species of the genus. Setulae on wing veins: R: 27, R1: 41, R5: 53, rm: 3, M1: 53, M2: 46, Cu-petiole: 17, Cu1: 22, Cu2: 18.

Abdomen. Tergites of abdomen dark brown. Hypopygium (Figs 20-23) brown.

Body length: 3.5 mm. Wing length: 3.3 mm.

The new species can easily be distinguished from other *Phronia* by a combination of the two following features: the male genitalia, especially the shape of the deeply incised lateral portion of the telomere, which lacks a basoventral projection; secondly, by the more or less quadratic aedeagus (Fig. 23) with very short, triangular caudal projections.

For the moment, *P. incisa*, spec. nov. cannot be associated with any of the known species groups of the genus.

Sceptonia curvisetosa, spec. nov.* Figs 24-29

Holotype. J. Portaria (Greece), 700 m above sea level, 15.6.1979, leg. H. Malicky.

After sending in this manuscript to "Spixiana", a paper of Plassmann & Schacht (1990) was published in which the above species was described under the name *Sceptonia intestata*, based on findings of two males from Spain (Province of Cadiz). I thank Dr. Bechev (Bulgaria) for the information on this synonymy which he found out working on a revision of the genus *Sceptonia*.

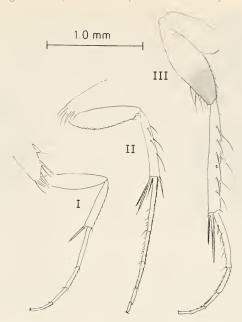


Fig. 24. Sceptonia curvisetosa, spec. nov. Adult male. Legs (left).

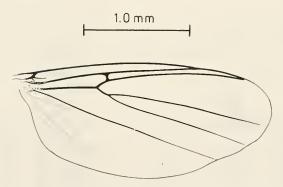


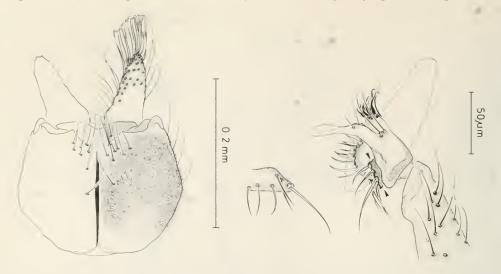
Fig. 25. Sceptonia curvisetosa, spec. nov. Adult male. Wing.

Additional material. 39 °C', 38 °C, some data; 1°C Fokis, Delphi, 5.5.1979, leg. A. E. Stubbs; 1°C, Corfu, Gastouri, 4.5.1980, leg. I. F. G. McLean; 2°C', 5°C, Corfu, dry gorge n. of Agios Deka, 11.5.1980, leg. I. F. G. McLean; 1°C, Corfu, Agios Deka-Benitses, 11.5.1980, leg. I. F. G. McLean; 1°C, Cephalonia, Kato Katelios, dry gorge, 16.5.1981, leg. I. F. G. McLean; 1°C, Cephalonia, Pastra, wooded stream gorge, 22.5.1981, leg. I. F. G. McLean.

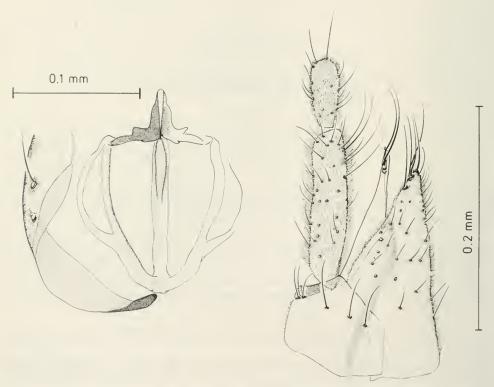
The following description refers to the holotype (\mathcal{O}). Obvious deviations of male paratypes (39 \mathcal{O}) are indicated in brackets.

Head. Brown. Palpi yellow. Antennae with basal joints and basal part of 1st flagellar segment yellowish brown, the rest darker brown.

Thorax. Mesoscutum with 3 dully shining black stripes, narrowly separated or – in most specimens – completely fused; median stripe reaches fore margin but broad humeral area, adjoining lateral



Figs 26–27. Sceptonia curvisetosa, spec. nov. Adult male. 26. Hypopygium (ventral view) – left. 27. Left clasper complex (dorsal view). The arrows point at a more or less lamellar genital structure (dorsal portion of telomere), figured from its front side. Its side view can be seen on the left side of figure 27 – right.



Figs 28-29. Sceptonia curvisetosa, spec. nov. 28. Adult male. Aedeagus (dorsal view) - left. 29. Adult female. Ovipositor (lateral view) - right.

margins and small hind margin of mesoscutum yellow. Scutellum, mediotergite and most of pleura dark brown; mesanepisternum yellowish brown. Pronotum and proepimeron yellow. Halteres white. Pubescence of mesoscutum strong and dense, evenly spaced. 4–6 particularly strong bristles along the hind margin of mesoscutum. 4 scutellars. Pronotum with some rather weak hairs; proepimeron with 3 strong setae and some weaker hairs. Mesanepisternum with (0–)1 seta on the anterodorsal border, 3 (–4) setae along the posterodorsal border. Mesokatepisternum with 3–4 strong setae along the dorsal margin. Laterotergite with 4–6 pale, long hairs along the caudal border.

Legs (Fig. 24). Coxae pale yellow. Hind coxa with a small posterobasal brown patch. Legs yellow, distal third of hind femora dark brown. Mid tibial setae: 2a, 3d, 1 very weak pv. Hind tibial setae: 6(-7)a, 3(-4)d, 0p, 0v; in most specimens, there is an additional small anterior seta in the dorsal row.

Wings (Fig. 25). With a faint yellow tinge. Setulae on wing veins of holotype: R: 21, R1: 19, R5: 31. No setulae on other wing veins.

Abdomen. Dark brown with sides of tergites 1-3 (-4) broadly yellow, on tergites 3 (-4) extended dorsally on fore margins. Tergites 5 and 6 entirely black. Hypopygium (Figs 26-28) small, brown. Body length: 2.6 mm. Wing length: 2.5 mm.

Female. Very similar in all external characters. Fore tarsalia not enlarged (as in the females of some other *Sceptonia* species). Yellow markings on abdomen usually more extended than in the male. Ovipositor (Fig. 29) yellowish.

The additional specimens of the new *Sceptonia* species from Delphi and Corfu all have the thorax black with broad yellow humeral areas, but the amount of yellow on the abdomen varies. Most have the anterior tergites only narrowly yellowish at the sides. The male from Cephalonia has the abdomen mainly yellow on these tergites.

The new species can easily be recognized by its distinct male genitalia. The Palaearctic *Sceptonia* species need to be studied more thoroughly before deciding whether they possess useful characters other than in the male genitalia for the delimitation of species.

References

- Chandler, P. J. 1977. Studies of some fungus gnats (Diptera: Mycetophilidae) including nine additions to the British list. Syst. Ent. 2: 67–93
- -- 1980. The European and eastern Nearctic fungus-gnats in the genus Ectrepesthoneura (Mycetophilidae). -- Syst. Ent. 5: 27-41
- Edwards, F. W. 1925. British Fungus Gnats (Diptera, Mycetophilidae) with a revised generic classification of the family. Trans. Ent. Soc. London 1924: 505–662
- -- 1928. The nematocerous Diptera of Corsica. Encyclopédie Entomologique (B2) Diptera 4: 157-189
- Gagné, R. J. 1975. A revision of the Nearctic species of the genus *Phronia* (Diptera: Mycetophilidae). Trans. Amer. Ent. Soc. 101: 227–318
- Malloch, J. R. 1917. A preliminary classification of Diptera, exclusive Pupipara, based upon larval and pupal characters, with keys to imagines in certain families. Part I. Bull. Illinois State Lab. Nat. Hist. 12: 161—410
- Matile, L. 1969. Contribution à la faune de l'Iran. 14. Diptères Mycetophilidae des Provinces Caspiennes. Ann. Soc. Ent. France (N. S.) 5: 239–250
- 1977. Catalogue provisoire des Diptères Mycetophilidae de la Faune de France.
 Bull. Mus. Nat. Hist. Nat. Paris 3 (456): 621–655
- Ostroverkhova, G. P. 1979. Fungus-Gnats (Diptera, Mycetophiloidea) of Siberia (Russian language). Izd. Tomsk Univ.: 307 p.
- Plassmann, E. & W. Schacht 1990. Ein Beitrag zur Pilzmückenfauna Spaniens mit Beschreibung zweier neuer Arten (Diptera, Nematocera, Mycetophilidae). Entomofauna 11: 141–151
- Väisänen, R. 1984. A monograph of the genus *Mycomya* Rondani in the Holarctic region (Diptera, Mycetophilidae). Acta Zool. Fenn. 177: 1–346

- --- 1986. The delimination of the Gnoristinae: criteria for the classification of recent European genera (Diptera, Mycetophilidae). Ann. Zool. Fenn. 23: 197–206
- Zaitzev, A. I. 1982. Gribnye komary roda *Sciophila* Meig. (Diptera, Mycetophilidae) Golartiki (Russian langvage).

 Publ. Inst. Morph. Evol. Ecol. Anim., Acad. Sciences U. S. S. R. Moscow, Nauka.: 76 p.
- 1990. A review of fungus gnats of the genus Anatella Winn. (Diptera, Mycetophilidae) of the USSR. English translation in Scripta Technica UDC 595.771 (47), 132—145, of a paper originally published in Entomologicheskoye Obozreniye (1989), 809—820

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