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The Identity of *Anthomyia melania* DUFOUR, 1839

(Diptera: Fanniidae)

During a visit to Paris in April, 1966, I was able to locate the syntypes of *Anthomyia melania* DUFOUR, a species that has not been recognised by modern authors (STEIN, 1907: 662; SÉGUY, 1937: 166; HENNIG, 1955: 38) but that has been thought to be related to *Homalomyia ciliata* STEIN, 1895. At the suggestion of Mr. E. A. FONSECA, this note on the identity of *melania* is now published, together with a redescription, so that the information can be included in the forth-coming volume on Muscidae in the series of Handbooks for the Identification of British Insects (FONSECA, in press).

Fannia melania DUFOUR, *stat. rev.*

Anthomyia melania DUFOUR, 1839: 35, figs. 46–56.

Lectotype male, FRANCE: Saint-Sauveur. In the Muséum National d'Histoire Naturelle, Paris.

Homalomyia ciliata STEIN, 1895: 44; *nov. syn.*

Syntypes lost.

Lectotype designation for *melania*: DUFOUR (op. cit.) found larvae of this species in rotting fungus, *Boletus edulis* FL. fr., collected in October 1838. In March 1839 he isolated four larvae from which two adults emerged in mid April and, two weeks later, a further two adults. In DUFOUR's collection in the Paris Museum there are 3 specimens (2 males and 1 female) under the label *Anthomyia melania* DUFOUR, and Dr. L. TSACAS kindly lent me these specimens for further study in February 1967. All are rather shrivelled and obviously reared, and I believe that they all belong to the original series reared by DUFOUR. None of them is in good condition, but they are clearly recognisable as the species hitherto known as *ciliata* STEIN. I have labelled, and designate herewith as lectotype, a male bearing a green label with the printed figure "562". A male, bearing a white label with the hand-written figure "3659", and a female without labels have been labelled by me as paralectotypes.

Syntypes of *ciliata*: STEIN (op. cit.) described this species from 2 males, one from Thuringia (leg. KRIEGHOFF) and one in LOEW's collection. Neither of these is now in the Zoologisches Museum der Humboldt-Universität zu Berlin, where they might be expected to be and where HENNIG (1955: 38) states them to be, nor are they in the Deutsches Entomologisches Institut, Eberswalde bei Berlin. KARL (1928: 56) mentions the KRIEGHOFF male, but it is not clear if he actually saw it. It is not in his collection, now in the Polish Academy of Sciences, Warsaw. Professor HENNIG (personal communication, 10 April 1967) and I are

unable to suggest where they might otherwise be and conclude that they are now lost.

STEIN's key and detailed description leave no doubt as to the identity of his species, and the male is in any case simply recognised by the leg chaetotaxy. It should be noted that in DUFOUR's paper (op. cit.) there is the legend for a figure 49 of the male hind leg of *melania*, but there is no figure 49 in the plates nor any figure of the male hind legs.

Diagnosis: Distinguished in the male sex from other species of the *scalaris*-group with a mid-coxal thorn by the dense bristling of hind tibia and the presence of dorsal setulae on hind tarsus, and from the other species with a fore-coxal thorn (*manicata* MEIGEN and *monilis* HALIDAY) by the absence of a posteroventral subapical tuft of setae on fore tibia.

Distinguished in the female sex from other species of the *scalaris*-group by the absence of an *ad* seta on fore tibia and the presence of 6–8 *av* setae on hind tibia.

Head: Frons in male at narrowest point twice diameter of anterior ocellus, hardly broadened towards vertex, more or less parallel-sided in upper 3/5; in female broad, at middle almost equal to an eye-width, not or slightly broadened towards lunula. Eyes virtually bare, with only the usual microscopic pubescence. Ocellar setae long and fine. Vertical setae fine in male; in female, the incurved *vti* strong, a little longer than the outcurved *vte*. Post-ocular setulae in male moderate, fine, usually with a complete or partial row below the upper row; in female normal, short, biserial from vertex. Viewed from above, parafrontalia in male brownish-grey pruinose on upper 3/5, silvery-white below; in female uniformly and densely brownish-grey pruinose. Interfrontalia, viewed from below, brownish-grey pruinose, black in ground-colour, sometimes red in female; in male distinct but partly linear between the *ori*; in female broad, at narrowest point (at or below lowest *ors*) broader than a parafrontale. Viewed from above, parafacialia silvery-white pruinose in male, grey to silvery-white pruinose in female. Genae black to reddish in ground-colour, brownish-grey dusted. Parafrontalia in male extremely slender throughout, at lunula a parafrontale outside the *ori* only a little over diameter of anterior ocellus; broad in female, at broadest point equal to 4 times diameter of anterior ocellus. In male, about 13 pairs of comparatively short uniform *ori*, with few interstitials, reaching almost to ocellar triangle; *ors* absent. In female, 7–8 pairs of inclinate *ori* on lower 3/4 of frons, only 3–4 of which are really strong; base of lower *ors* closer to eye-margin than to inner margin of parafrontale; parafrontal setulae irregularly uniserial, never descending on to parafacialia. Antennae and arista black; in male 3rd segment (lateral view) almost twice as long as broad, in frontal view falling short of epistoma by its own width; in female, antennae longer but of the same proportions, 3rd segment falling short of epistoma by much less than half its width. Arista very short pubescent, the longest individual hairs not as long as its basal diameter. Parafacialia absolutely bare; in male, very slender, at level of insertion of arista equal to diameter of anterior ocellus. Vibrissal angle behind anterior level of frons, quite sharply to smoothly turned up from peristoma. Genae very slender: the depth below lowest eye-margin half width of 3rd antennal segment. Posterior eye-margin in male hardly concave in lateral view, smoothly convex as usual in female. Proboscis of moderate size; mentum black, grey dusted. Palpi black, quite slender, longer than mentum, the longest setae less than palpal length.

Thorax: In male, deep black; humeri, notopleura and post-alar calli densely brownish-grey dusted, this dusting extending as a slender inconspicuous fascia mesad along suture almost to the *dc* rows; in caudal view, *prsc* area thinly brownish-grey dusted; otherwise mesonotum appearing matt black. In female, more uniformly greyish dusted, in dorso-lateral view appearing completely dusted and without vittae; in caudal view appearing weakly but conspicuously vittate; humeral and notopleural dusting light grey. Pleura thinly grey dusted in male, more densely so in female. Ground-setulae sparse, except laterally in male. *Prst* *acr* 3-serial, outer rows slightly closer to each other than to *dc* or, in some females, closer to *dc* than to each other; 3-serial behind suture; *prsc* pair behind transverse level of *prsc* *dc* and closer to each other than to the *dc*. *Pra* not distinct from the ground-setulae, 2–5 ground-setulae present in this area. 2 *prpl*. 1 auxiliary prostigmatal setula, very rarely with a fine short second. *Stpl* 1 + 1, auxiliary seta absent; simple in male. Thoracic chaetotaxy otherwise typical for the *scalaris*-group. Scutellum black; in male matt, hardly dusted in caudal view; in female appearing matt like the mesonotum. 1 pair of strong apical and sub-basal lateral setae. Disc sparsely setulose, bare on a small medio-basal patch. 0–2 setulae present on lateral margins just below the strong setae.

Legs: Black, trochanters rather brown; in male, fore knees and fore tibia on basal 2/5 to 1/2 yellow; in female, fore knees and at most basal 1/3 of fore tibia yellow. Fore coxa in male with a downwardly-directed thorn behind, consisting of two adpressed spines. Fore femur with the multiserial *p* setae as long as the *pe* row in male; normal

and short in female. Fore tibia without *ad* or *p* setae. Mid coxa in male with a short downwardly-directed spine, the apical part of which is flexed caudad; simple in female. Mid femur in male emarginate in apical third; *av* row quite sparse (about 10 setae), rather clustered at beginning of emargination, beyond this with a number of short setulae bordering the emargination; *pv* row sparse, but the setae longer and finer, and in apical half and alongside over half the emargination with a long patch of shorter stronger dense pluriserial setae; *p* row complete, the setae curled at tips and semi-decumbent, becoming stronger towards apex. Mid femur in female of normal shape, in basal half with a few short *av* and *pv* setae, *p* row confined to apical third. Mid tibia with 1 *ad* and 1 *pd* seta and, in both sexes, without ventral setae; in male, ventral surface smoothly emarginate in basal half, and covered here with short hairs, dilated smoothly in apical half and here covered with dense hairs, the longest of which do not equal tibial depth. Mid metatarsus without a ventral crest and not "ridged" in male. Hind coxa with a setulae on postero-apical margin. Hind femur without *pv* setae, though a few short setulae are present in basal half in male; *av* surface with 3 setae before apex, often with a weaker fourth, and in male with a few short setulae in basal half. Hind tibia with 0 *pv* setae; in male with several complete rows of long fine dense setae along most of length between *ad* and *av* surfaces, the *ad* and *av* ones longest; in female with a complete row of *ad* setae, of which 2–3 are much stronger, and a row of 6–8 *av* setae. Hind metatarsus in male with a row of dorsal setae that are longer than metatarsal depth, and the 4th and 5th segments in male with a few dorsal setae that exceed the length of the segments; tarsi normal in female.

Wings: Conspicuously and heavily smoky in male, paler in reared specimens, clear in females; veins dark brown in male, pale in female. Costal spine inconspicuous. Veins 3 and 4 markedly convergent towards apex. Hind cross-vein sinuous in male. Squamae brown in male, margins deep brown; yellow to creamy in female. margins deep yellow. Knob of halteres dark in male, yellow to infuscated in female. Lower squama well developed, projecting beyond upper.

Abdomen: Elongate in male. Black in ground-colour. In male, appearing very matt dark brown, the triangular markings difficult to see and only visible in extreme caudal view on tergites 3 and 4, the dusting brownish-grey, tergite 1+2 almost wholly dark brown, and tergite 5 dusted on all but a median line. In female rather uniformly grey dusted, varying in density according to point of view and abdomen thus usually appearing partially grey dusted and partially subshining at any one time. Lateral setulae long and dense in male.

Measurements: Length of body 5.0–5.5 mm. (male), 4.5–5.0 mm. (female). Length of wing 4.5–5.0 mm. (male), 4.0–4.5 mm. (female).

Biology: Several authors have reared this species or observed the larvae in fungi. Adults are not often collected, but have been found on *Angelica*, on *Solidago virgaurea*, and attracted to honeydew. For a summary of the available data, see HENNIG (1955: 39).

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Summary

Anthomyia melania DUFOUR, 1839, and *Homalomyia ciliata* STEIN, 1895, are shown to be synonyms, and the species is redescribed.

Zusammenfassung

Anthomyia melania DUFOUR, 1839, und *Homalomyia ciliata* STEIN, 1895, werden für Synonyme gehalten. Es erfolgt eine Redeskription dieser Art.

Резюме

Anthomyia melania DUFOUR, 1839, и *Homalomyia ciliata* STEIN, 1895, считаются синонимами. Дается редескрипция этого вида.

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