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A NEW SPECIES OF FANNIA ROBINEAU-DESVOIDY FROM THE ALPS (Ins., Diptera, Muscidae)

by

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Synopsis: Fannia alpina n. sp. is described from Obergurgl (2060 m, Ötztaler Alpen, Tyrol). It belongs to the serena-group; its affinities to these species and to F. atra (STEIN) are discussed.

Zusammenfassung: Eine neue Art der Gattung Fannia ROBINEAU-DESVOIDY aus den Alpen (Ins., Diptera, Muscidae).

Fannia alpina n. sp. wird aus der Umgebung von Obergurgl (2060 m, Ötztaler Alpen, Tirol) beschrieben; ihre Beziehungen zu den anderen Arten der serena-Gruppe und zu F. atra (STEIN) werden diskutiert.

During July and August 1969 I spent four weeks collecting Muscidae and other Diptera in the Austran Tyrol, and two of these weeks were spent at Obergurgl at the extreme southern end of the Oetz Valley in the western part of the Tyrol. It is planned to publish an account of the Muscidae of Obergurgl eventually, but in the course of indentifying the material in my collection a new species of the genus Fannia ROBINEAU-DESVOIDY was found and this is described in the present paper.

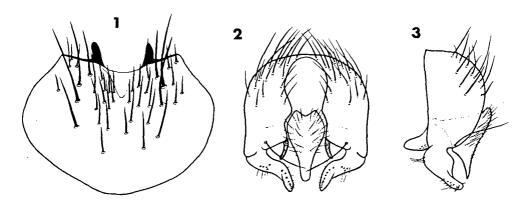
I am very grateful to Dr. Konrad THALER for making available to me the hospitality and research facilities of the Forschungsstelle Obergurgl der Universität Innsbruck, and to my wife for sharing with me the labour of collecting and pinning some 5100 Diptera.

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Fannia alpina sp. nov.

d. Head: Ground-colour black. Eyes shrunken, and frons consequently rather distorted; frons at narrowest point appearing to be twice diameter of anterior ocellus. Eves bare. Ocellar and vertical setae moderate, fine. Post-ocular setulae fine, uniserial on upper part of occiput. Parafrontalia and parafacialia silvery-white pruinose, genae light-grey pruinose. Parafrontalia narrow throughout, profrons not projecting, at lunula a parafrontale equal to half width of 3rd antennal segment. Interfrontalia reduced to a seam on upper three-fifths of frons. 9 pairs of inclinate ori, with a few fine interstitials below, extending from lunula almost to ocellar tubercle, decreasing in length and strength above; ors absent. Antennae black, 3rd segment about 1 1/2 times as long as broad. Arista very short pubescent, the longest hairs not as long as its basal diameter. Parafacialia absolutely bare. Vibrissal angle behind the level of profrons. Posterior eye-margin apparently straight in profile, not concave. Proboscis moderate, mentum dulled by dust. Palpi black, of normal shape, equal in length to mentum of proboscis, with short setulae. - Thorax: Ground-colour black. Mesonotum with a little brown dust around humeri, sides of suture, sa and ia setae, and post-alar calli, otherwise without any dusted pattern or markings, but appearing matt and not glossy. Pleura brownish-grey dusted. Thoracic ground-setulae sparse. Acr 3-serial, the outer rows stronger and, in front of suture, closer to each other than to the dc. 2 or 2 short pra, the anterior one strongest and almost half length of 2nd npl. Prosternum bare. Prostigmatal seta surrounded by 8-9 setulae. Stpl 1 + 1, the anterior one fine. Thoracic chaetotaxy otherwise typical for the serena-group. Scutellum undusted, matt, with strong pairs of sub-basal lateral and apical setae. Disc bare except for a few setulae before apex and at sides near base; lateral margins bare below the strong setae. - Legs: Black, including knees. Tarsi normal. Fore femur without av setae; with rows of fine setae on pd to p surfaces, and a simple pv row. Fore tibia without setae except for the d and pv apical setae. Mid femur of almost uniform width troughout except for a weak constriction in apical quarter, not sharply emarginate; av surface with a row of setae that are longer than femoral depth at base but become progressively shorter towards apex and terminate along apical third in a comb-like row of short strong setulae; pv surface with a similar row but the setae more even and not so short in apical third, and doubled on median third or so; p surface with a row of fine curled setae. Mid tibia with a smooth shallow ventral excavation in basal three-fifths on which there are a few very short hairs; apical two-fifths of normal width, with dense fine pubescence, the longest of which is slightly less than tibial depth; 1 ad and 1 pd seta in apical half. Mid metatarsus without a ventral crest. Hind coxa bare behind. Hind femur on pv surface with a multiserial row of setae on basal two-thirds, becoming gradually longer from base to apex, the longest ones equal to femoral depth, bare on apical third; av surface with a complete row of short av setae, only the apical 3 or 4 much stronger and equal to or exceeding femoral depth. Hind tibia with 1 submedian d seta, aligned with the d preapical seta, 1 shorter ad seta on the same level as the d, and 1 weak av seta slightly apicad of the ad and d. - Wings: Weakly but distinctly smoky, darker near base. Veins brown. Costal spinules uniformly developed along costa, costal spine inconspicuous. Hind cross-vein upright, weakly sinuous. Squamae dark brown, the lower one absolutely linear and without any indication of a lobe. Knob of halteres dark brown. - Abdomen: Black in ground-colour. In posterior view, densely brownish dusted with the usual triangular

undusted markings on tergites 3, 4 and 5 consicuous and well-developed. Tergite 1 + 2 black, undusted. — Genitalia: Figs. 1—3. — Measurements: Length of wing, 3.5 mm. Length of body, 4.0 mm.



Figs. 1-3: Fannia alpina (holotype), male genitalia: 1) 5th sternite, dorsal view. 2) Hypopygium, posterior view. 3) Hypopygium, lateral view (aedeagus omitted). — All figures drawn to the same scale.

Holotype &, AUSTRIA, Tyrol: Oetztal, Obergurgl, Brenner pine forest, 2060 m, on shrubs and rocks, 16. viii. 1969 (A. C. and B. PONT). In the British Museum (Natural History), London

The Brenner pine forest is at the limit of the trees around Obergurgl. The specimen was collected around midday on a wet day, when material was collected individually with the net and aspirator on rocks, on juniper shrubs and on the branch-tips of small pine trees.

Fannia alpina belongs to the serena-group in the sense of CHILLCOTT (1961), but cannot be assigned to any of the subgroups that are currently recognised as it is intermediate in several of its characters. It has the cercal plate apically rounded, as in the serena-subgroup, but not T-shaped as in serena (FALLEN), carbonella (STEIN) and some other species. The prst acr are 3-serial, as in the rondanii-subgroup. Sternite 5 is lobed, as in the sociella-subgroup. The bacilliform process is curved and not spiralled. The epistoma does not project beyond the profrons, the principal character of the mollissima-subgroup (PONT, 1965). The mid metatarsus lacks a basal ventral crest.

In HENNIG's key (1955: 24) this species runs to carbonella (STEIN), but differs from this species by the 3-serial prst acr setulae and by the structure of the male genitalia. From rondanii (STROBL), which possesses 3-serial prst acr setulae, it differs by the absence of a basal ventral crest on mid metatarsus and by the structure of the male genitalia.

The genitalia somewhat resemble those of atra (STEIN), which are illustrated by F NNIG (1955), CHILLCOTT (1961) and FONSECA (1968), but atra does not belong to the serena-group and differs from alpina by the large lower squama and by the presence of 2 ad and 2 pd setae on mid tibia.

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