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Matthew R. ORR*
University of California
Division of Insect Biology
201 Wellman Hall #3110
Berkeley, CA 94720-3110
U.S.A.
E-mail: morr@nature.berkeley.edu
*To whom correspondence should be addressed

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(Diptera, Carnidae)

[Zwei neue Arten der Gattung *Meoneura* RONDANI aus Spanien (Diptera, Carnidae)]

by

Miguel CARLES-TOLRÁ and Daniel VENTURA

Barcelona (Spain)

El Masnou (Spain)

Abstract	Two new carnid species of <i>Meoneura</i> RONDANI, namely <i>Meoneura alphabetica</i> spec. nov. and <i>Meoneura ungulata</i> spec. nov., are described from Spain.
Key words	Diptera, Carnidae, <i>Meoneura</i> , new species, Spain, Palaearctic Region
Zusammenfassung	Zwei neue Carniden Arten aus der Gattung <i>Meoneura</i> , nämlich <i>Meoneura alphabetica</i> spec. nov. und <i>Meoneura ungulata</i> spec. nov., werden aus Spanien beschrieben.
Stichwörter	Diptera, Carnidae, <i>Meoneura</i> , neue Arten, Spanien, Paläarktis

Introduction

Meoneura RONDANI (1856) species are very small black flies. All they have a very similar appearance so that only male specimens may be identified with certainty. It is a mainly Holarctic genus with over 50 species in the Palaearctic region (PAPP 1998). The Spanish fauna is very well known with 24 recorded species (CARLES-TOLRÁ 1992a, b, 1995, 2001; CARLES-TOLRÁ et al. 1993, 2000).

Systematic account

Meoneura alphabetica spec. nov.

(Figs 1-2)

Type material: Holotype: ♂, SPAIN: Gerona: Queralt, Núria (UTM 31TDG316938), 24-25.6.2000, beside Torrent de Font Negre, white water trap, 2120 m a.s.l., D. VENTURA leg. In the collection of the first author.

Paratypes: 2♂♂ with same data as holotype; 1♂ with the same data as holotype, but collected by a blue water trap. Type material preserved in alcohol. One paratype deposited in the collection of the first author, 2 paratypes in the collection of the second author. Total: 4♂♂.

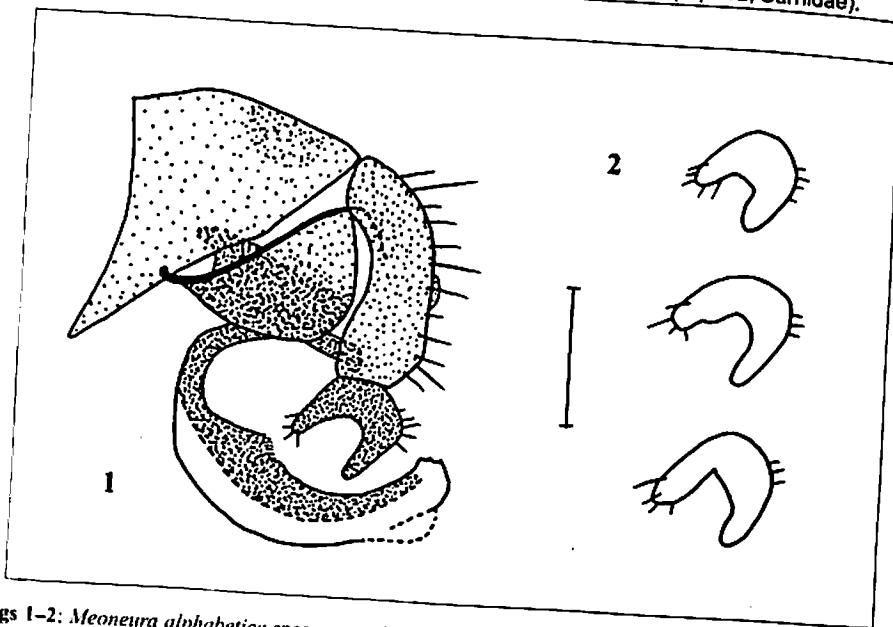
Male. Head dark brown. Frons completely dark brown. Frontal triangle broad, subshining, reaching only middle of frons. Eye (high) : gena (narrowest part) = almost 3.5. Genal edge with 3 strong vibrissae (the middle one shorter), gena with 2 well developed bristles (longer than vibrissae). 2 ocellar, 2 orbital, 1 pair of long anterior interfrontals, but shorter than orbital. Thorax dark brown. 1 long dc and 2 very short ones in front of it. Wing clear. Haltere brownish. Legs dark brown. Fore femur with 3 long anteroventral bristles. Mid metatarsus normal, without anteroventral row of long hairs.

Abdomen brown. **Genitalia** brown (Fig. 1). Epandrium narrow, curved, only with short hairs. Surstyli and lamella completely fused, C-shaped. Surstyli with few posterobasal minute hairs. Lamella as long as surstyli or slightly longer, with few minute apical hairs. Internal side of surstyli and lamella variable (Fig. 2).

Total body length: 1.5-1.8 mm.

Female. Unknown.

C. V. 2002



Figs 1-2: *Meoneura alphabeticus* spec. nov. - 1: Male genitalia in lateral view; - 2: Variability of lamella + surstyli in lateral view. Scale bar = 0.1 mm.

Discussion. *Meoneura alphabeticus* spec. nov. is closely related to *M. bicuspis* COLLIN, 1930, but clearly differ from it by: a) *bicuspidata* has a very long posteroventral hair in the epandrium, and b) the lamella is shorter than the surstyli in *bicuspidata* (cf. HENNIG 1937: 63, Fig. 55).

Biology. Unknown. The new species was collected by white and blue water traps at 2120 m above sea level in an alpine meadow dominated by *Festuca* spp. and close to a stream.

Distribution. Hitherto only known from northeastern Spain (Pyrenees).

Etymology. The name comes from the similarity of fused surstyli + lamella to two letters of the Latin alphabet: C or U.

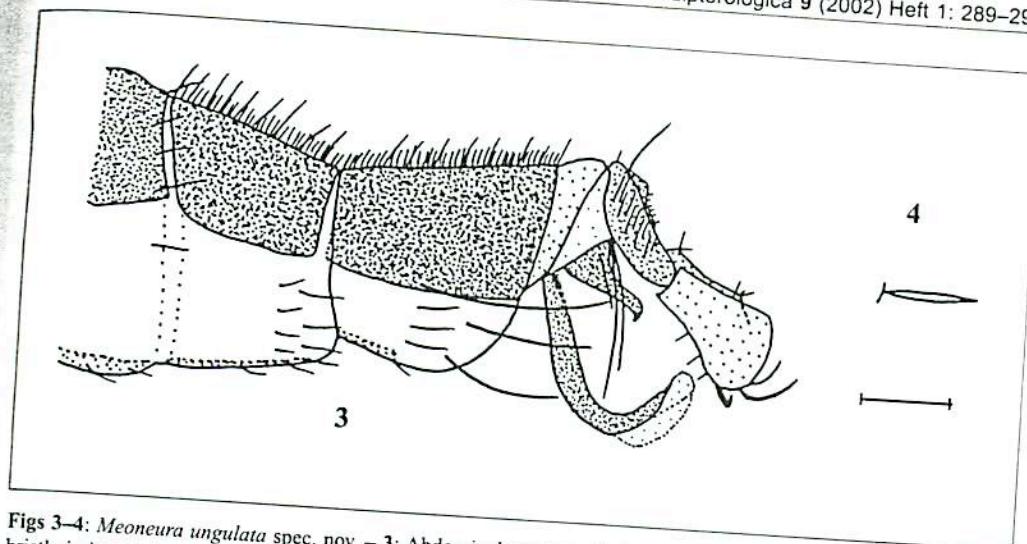
Meoneura unguis spec. nov. *S. Tolra, D. Ventura*

Type material: Holotype: ♂, SPAIN: Gerona: Queralbs, Núria (UTM 31TDG309941), 24–25.6.2000, pine forest near Pic de L'Aliga shelter, white water trap, 2140 m a.s.l., D. VENTURA leg.; in the collection of the first author. Paratypes: 1 ♂ with the same data as the holotype. Type material preserved in alcohol, paratype in the collection of the second author. Total: 2 ♂♂.

Head dark brown. Frons narrowly orangish anteriorly. Frontal triangle very short, almost indistinct. Eye (high):gena (narrowest part) = 2.5. Genal edge with 3 strong vibrissae, gena with 2 well developed bristles (as long as vibrissae). 2 ohs, 2 ori, 1 pair of long anterior interfrontals, but shorter than orbitals.

Thorax dark brown. 4 (1+3) strong, long dc. **Wing** brownish. **Haltere** brown. **Legs** dark brown. Fore femur with 2 long anteroventral bristles. Mid metatarsus with a distinct anteroventral row of apically curved long hairs, decreasing in length to the apex of mid metatarsus.

Abdomen brown, clearer anteriorly. Tergite 4 and 5 (Fig. 3) distinctly concave, concavity completely bordered by numerous short and long hairs more or less erected. Lateral margin of tergite 5 with an extremely long bristle in the middle (Fig. 3). Lateral membrane of segment 5



Figs 3–4: *Meoneura unguata* spec. nov. – 3: Abdominal segments 3–6 and genitalia in lateral view; – 4: Lamellar bristle in its maximum size. Scale bar = 0.1 mm

(Fig. 3) with 2 very long bristles. Genitalia brown (Fig. 3). Epandrium small, elongate, with dense bristles, dorsal one distinctly longer. Hipandrium basally with 3 pairs of bristles, 2 posterior ones very long. Parameres curved apically. Aedeagus narrow, long. Surstylus and lamella completely fused. Surstylus very reduced, with minute hairs. Lamella very well developed, large, distinctly dilated apically, anteriorly with some small hairs and anteroapically with 3 very special bristles: yellowish, curved backwards and clearly lanceolated (Fig. 4). Total body length: 1.5–1.8 mm.

Female. Unknown.

Discussion. *Meoneura unguata* spec. nov. is closely related to *M. minutissima* (ZETTERSTEDT, 1860) and *M. alpina* HENNIG, 1948: 4 dc, posterior tergites concave, metatarsus with long hairs. But according to the surstylus + lamella it is very similar to that of *alpina*. Nevertheless, apical dilatation and specially row of long lanceolated bristles, among other characters, distinguish both species very easily.

Biology. Unknown. The new species was collected by a white water trap at 2140 m above sea level in a forest of *Pinus mugo*.

Distribution. Hitherto only known from northeastern Spain (Pyrenees).

Etymology. The specific name comes from the Latin noun ‘*ungula*’ (= paw, claw) and refers to the paw-like lamella.

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