

A revised list of Phoridae (Diptera) from the Canary Islands, with habitat notes

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ABSTRACT: A revised list of 52 species of scuttle fly (Phoridae) is presented. The additions represent more than 40% of the list. Species from Tenerife are tabulated to indicate their habitat occurrences. The Laurel Forest remnants would appear to be the most species-rich habitat.

Key words: Diptera, Phoridae, Canary Islands.

RESUMEN: Se presenta en este artículo una lista de 52 especies de Fóridos (Phoridae), de las cuales más del 40% son nuevas adiciones. Las especies presentes en Tenerife son además referidas en una tabla en donde se indican sus respectivos hábitats. Los bosques de laurisilva o sus restos actuales han resultado ser el hábitat con mayor número de especies.

Palabras clave: Diptera, Phoridae, Islas Canarias.

SCHMITZ (1936) reviewed the Phoridae of the Canary Islands. He listed 31 species of scuttle fly (allowing for subsequent taxonomic revisions which, for example, have synonymised some of his species). As a result of collections in the 1970's and 1980's the list has been increased to 52 species. An annotated list is given below and habitat occurrences on Tenerife are tabulated.

REVISED CHECK LIST OF PHORIDAE WITH NOTES.

Only synonyms used by SCHMITZ (1936) are listed below. For full synonymies see DISNEY (1983, 1988 b-e). * = an addition to the list. Where localities are listed without dates the species has not been recorded since Schmitz.

Chonocephalus bentacaisei (Santos Abreu) - La Palma.

Conicera dauci (Meigen) - La Palma. Listed by Schmitz under synonym C. atra Meigen.

Conicera sobria Schmitz - Gran Canaria, Tenerife.

*Conicera tibialis Schmitz - Sima Robada cave, Tenerife, 12 December 1982 (coll. J.L. Martín). This is the infamous Coffin Fly.

*Diplonevra funebris (Meigen) - Volcán de Chinyero and Volcán de Fasnía, Tenerife, May 1984.

- Dohniphora cornuta (Bigot) - Tenerife, June 1973 and 1981. - Gran Canaria, Gomera, La Palma. Also recorded by Schmitz under synonym D. fulva Santos.
- *Megaselia abdita Schmitz - Lanzarote, La Palma and Tenerife, March-May, August, November, December 1982 and 1984-1986. It seems to be common in caves, but is not restricted to this habitat. In the Cueva de los Naturalistas, Lanzarote, in March and April 1985, larvae were obtained in a trap baited with cheese.
The recognition of this species has been clarified recently (DISNEY, 1987).
- Megaselia aequilateralis Schmitz - Gran Canaria.
- Megaselia albicaudata (Wood) - Tenerife.
- Megaselia apoazona Schmitz - Tenerife.
- *Megaselia ashmolei Disney - The holotype from Lanzarote (DISNEY, 1988 b) and a second male from Lanzarote (30 March-3 April, 1985, Plaitito) are the only specimens known so far.
- *Megaselia baezi Disney - only the type series from Tenerife (DISNEY, 1988 b) has been recorded so far.
- Megaselia basispinata (Lundbeck) - Tenerife, February, April and September, 1985. Gran Canaria.
- *Megaselia berndseni (Schmitz) - Tenerife, March-May and September, 1984 and 1986.
- Megaselia bistruncata Schmitz - La Palma and Tenerife, March-May, August, November, 1982, 1984 and 1986. Mainly in caves.
- *Megaselia brevicostalis (Wood) - Tenerife. March and June, 1981, 1983 and 1986.
- *Megaselia brevissima (Schmitz) - La Palma and Hierro. April and August, 1986 and 1987.
- *Megaselia brunneipennis (Costa) - Tenerife. 8 November 1985.
- *Megaselia canaryae Disney - Only the type series from La Palma and Hierro (DISNEY, 1988 b) has been recorded so far.
- *Megaselia coccyx Schmitz - Tenerife, Ijuana 8 November 1985. This distinctive species has previously only been recorded from Finland, Sweden and Scotland (DISNEY, 1984).
- Megaselia comosa (Santos Abreu) - Gran Canaria, La Palma, Tenerife.
- *Megaselia giraudii (Egger) - Tenerife, February, May, June and September, 1981, 1984 and 1985.
- Megaselia halterata (Wood) - La Palma.
- Megaselia hirsuta (Wood) - Gomera, Gran Canaria, La Palma.
- *Megaselia hirticrus (Schmitz) - Gomera, Tenerife, April and September, 1977, 1984 and 1985.
- *Megaselia latifrons (Wood) - Tenerife, March 1984.
- *Megaselia latior Schmitz - Tenerife, September-November, 1984.
- * Megaselia manicata (Wood) - Tenerife, April and June, 1981 and 1985.
- Megaselia meigeni (Becker) - Gomera, La Palma.
- Megaselia minor (Zetterstedt) - Gomera. Previously recorded under the synonym M. angustifrons (Wood).
- Megaselia nigra (Meigen) - Gomera and Tenerife, February-June, September-November, 1977, 1981, 1984 and 1985. La Palma. Previously recorded under the synonym M. albidohalteralis Felt.
- Megaselia nigrifemorata (Santos Abreu) - La Palma, Tenerife.
- Megaselia oxybelorum Schmitz - Hierro, April 1987. La Palma. Previously recorded under the synonym M. angustiatata Schmitz.
- Megaselia parumlevata Schmitz - Gran Canaria, Tenerife.
- Megaselia patula Schmitz - La Palma.
- Megaselia pleuralis (Wood) - Tenerife, August, 1981. Gran Canaria, La Palma.

- *Megaselia pseudobrevior Disney – Only the type series plus a further series from Lanzarote are known so far (DISNEY, 1988 e).
- Megaselia pulicaria (Fallén) – The new records are all M. pulicaria sensu stricto rather than other species of the species complex (see DISNEY, 1988 b). Gran Canaria, La Palma, February–June, August–November, 1973, 1981, 1984–1986. Also recorded previously under synonym M. angustina Schmitz, from Gomera and Tenerife, but the identity needs confirmation.
- Megaselia ruficornis (Wood) – Tenerife.
- Megaselia rufipes (Meigen) – La Palma, Tenerife, August and November, 1982 and 1986.
- Megaselia scalaris (Loew) – La Palma, Tenerife, August, 1983 and 1986. Gran Canaria.
- *Megaselia stenoterga Disney – Only the type series from Hierro is known so far (DISNEY, 1988 e).
- Megaselia stichata (Lundbeck) – La Palma, May 1984. Tenerife.
- *Megaselia subfuscipes Schmitz – Tenerife, February, April, June and September, 1981, 1984 and 1985.
- Megaselia umbrata (Schmitz) – Gran Canaria, Tenerife.
- Megaselia verralli (Wood) – The only records (Schmitz, 1936) may be a misidentification of M. ashmolei (see DISNEY 1988 b). (La Palma, Tenerife).
- *Metopina heselhausi Schmitz – SCHMITZ (1936) recorded "Metopina galeata Hal. (?)" from La Palma. The European species of Metopina were much confused before the publication of a key, based on a revision (DISNEY, 1979). Two females from Tenerife, Barranco de San Andrés, collected 9 March 1986, appear to be this species. The females of M. heselhausi and M. oligoneura (Mik) largely differ in the size and shape of the abdominal tergites. The specimens from Tenerife are closer to M. heselhausi, but differ slightly from British specimens. The procurement of males should resolve the element of doubt regarding the correctness of the identification.
- Phora atra (Meigen) – Gomera, La Palma, Tenerife. Listed by Schmitz under synonym P. aterrima Fabricius.
- Phora cilicrus Schmitz – Tenerife, March, 1981 and 1986. Gomera. La Palma.
- *Puliciphora borinquenensis Wheeler – Tenerife, Santa Cruz 8 August 1983.
- Puliciphora puerilis (Becker) – The identification of Old World species of Puliciphora is based primarily on the female sex (DISNEY, 1988 a). P. puerilis is only known in the male sex and it is possible that the female may prove to be currently known under a different name. La Palma.
- *Spiniphora punctipennis (Zetterstedt) – Newly recorded as a single, and first ever, male from Tenerife (DISNEY, 1988 b).

HABITAT OCCURRENCES ON TENERIFE

The largest number of recent records are from Tenerife. These are summarised in Table 1 in order to indicate habitat occurrences. The two species from domestic habitats (M. scalaris and P. borinquenensis) have both been transported around the world by man (DISNEY 1983, 1988d). So also has Dohrniphora cornuta. However its closest relative appears to be the Afrotropical D. fraudans (Beyer). It is possible, therefore, that D. cornuta is native to the Canary Islands or else has been very long established there, having originally been native to Africa. Table 1 suggests the surviving fragments of the native laurel forest support the richest scuttle fly fauna. However the apparently barren lava fields also produced a surprising number of species. Only quantified, comparable surveys will justify these impressions. The Table probably reflects uneven collecting effort partially masking patterns in nature.

TABLE 1. Scuttle Flies recorded from different habitats on Tenerife (1973-1987)

SPECIES	LAUREL FOREST	AGRIC- ULTURE	XERO- PHYTIC	LAVA FIELDS	CAVES	DOMESTIC
<u>Conicera tibialis</u>	-	-	-	-	+	-
<u>Diplonevra funebris</u>	-	-	-	+	-	-
<u>Dohrniphora cornuta</u>	-	+	+	-	-	-
<u>Megaselia abdita</u>	-	-	-	+	+	-
<u>Megaselia baezi</u>	+	-	-	-	-	-
<u>Megaselia basispinata</u>	+	-	-	-	-	-
<u>Megaselia berndseni</u>	-	-	-	+(+)	-	-
<u>Megaselia bistruncata</u>	-	-	-	+	+	-
<u>Megaselia brevicostalis</u>	-	+	-	-	-	-
<u>Megaselia brunneipennis</u>	+	-	-	-	-	-
<u>Megaselia coccyx</u>	+	-	-	-	-	-
<u>Megaselia giraudii</u>	+	+	-	+	-	-
<u>Megaselia hirticrus</u>	+	-	-	-	-	-
<u>Megaselia latifrons</u>	-	-	-	(+)	-	-
<u>Megaselia latior</u>	+	-	-	-	-	-
<u>Megaselia manicata</u>	+	-	-	-	-	-
<u>Megaselia nigra</u>	+	-	-	+	-	-
<u>Megaselia pleuralis</u>	+	-	-	-	-	-
<u>Megaselia pulicaria</u>	+	-	-	+(+)	-	-
<u>Megaselia rufipes</u>	-	-	-	-	+	-
<u>Megaselia scalaris</u>	-	-	-	-	-	+
<u>Megaselia subfuscipes</u>	+	-	-	-	-	-
<u>Metopina heselhausi</u>	-	+	-	-	-	-
<u>Phora cilicrus</u>	+	+	-	-	-	-
<u>Puliciphora borinquensis</u>	-	-	-	-	-	+
<u>Spiniphora punctipennis</u>	+	-	-	-	-	-

(+)= In young pine plantation on older lava, with shrubs such as Chamaecytisus proliiferus. M. pulicaria was also collected in subalpine scrub habitat.

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