

**Some Phoridae (Diptera) from Southern Spain
and Majorca, with descriptions of
two new species.**

By

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The material from Southern Spain was collected in 1960 by Dr. J. R. Vockeroth and in 1966 by Dr. Leif Lyneborg and his associates, and is kept in the Canadian National Collection, Ottawa, and in the Zoological Museum, Copenhagen, respectively. These collections comprise 58 species, of which 18 have been previously recorded from Spain, and 40 are new to the Spanish list. The results of a short collecting trip by the author in Majorca in 1967 are also summarized. This material comprises 29 species, 14 of which are represented in the material from Southern Spain, 11 are previously recorded from Spain, and an additional 10 are new to the Spanish list, making 50 additions in all. Two species new to science occur in the combined material, one from Southern Spain and one from Majorca, and are described. The species listed, with a few exceptions, are widely represented in the Palaearctic Region, but it is particularly noteworthy that several northern mountain species, some occurring as far north as the Arctic Circle, and as far west as Greenland, are represented from the Sierra Nevada area.

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1. SPECIES FROM SOUTHERN SPAIN

Megaselia (Aphiochaeta) affinis (Wood), 1909

Material. — ALMERIA: Almeria, 0—50 m, 1 ♂, 22 March 1966.

Distribution. — Europe. New to Spain.

Megaselia (Aphiochaeta) basispinata (Lundbeck), 1920

Material. — GRANADA: N. slope Veleta, Sierra Nevada, 2400 m, 1 ♂, 30 July 1960.

Distribution. — Europe, Canary Islands, Azores, Mexico, U.S.A. Previously recorded from Spain by Schmitz (1940, 1941).

Megaselia (Aphiochaeta) cirriventris Schmitz, 1929

Megaselia (Aphiochaeta) piliventris Schmitz, 1937, n.n. for *Megaselia (Aphiochaeta) pilifera* Schmitz, 1936, nec Brues, 1936.

Material. — GRANADA: Granada, 700 m, 1 ♂, 19 July 1960; N. slope Veleta, Sierra Nevada, 2550 m, 7 ♂, 25 July 1960.

Distribution. — Greenland, Swedish Lapland, Spain, Austria, Jugoslavia. Previously recorded from Spain by Schmitz (1958).

Megaselia (Aphiochaeta) hirticrus (Schmitz), 1918

Material. — GRANADA: N. slope Veleta, Sierra Nevada, 2800—3000 m, 1 ♂, 20 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Aphiochaeta) ignobilis (Schmitz), 1919

Material. — GRANADA: Maitena, 900 m, 1 ♂, 11 July 1960.

Distribution. — Finland, Holland, England. New to Spain.

Megaselia (Aphiochaeta) involuta (Wood), 1910

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 ♂, 2 April 1966; Granada, 700 m, 1 ♂ 6 ♀, 19 July 1960; Maitena, 900 m, 1 ♂, 10 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Aphiochaeta) manicata (Wood), 1910

Megaselia (Aphiochaeta) evecta Schmitz, 1957.

Material. — ALMERIA: Almeria, 0—50 m, 1 ♂, 27 March 1966. — GRANADA: Rio Lanjaron 9 km NW Orgiva, 1600 m, 1 ♀, 15 April 1966; Granada, 700 m, 1 ♀, 9 July 1960; N. slope Veleta, Sierra Nevada, 2300—2550 m, 1 ♀, 22 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Aphiochaeta) nasoni (Malloch), 1914*Aphiochaeta coaequalis* Schmitz, 1919.

Material. — GRANADA: Granada, 700 m, 3 ♀, 19 July 1960.

Distribution. — Europe, U.S.A. Previously recorded from Spain by Schmitz (1940, 1941).

Megaselia (Aphiochaeta) pusilla (Meigen), 1830*Phora clavipes* Wood, 1910.

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 3 ♂, 11—18 April 1966; Rio Lanjaron near Lanjaron, 600 m, 1 ♂, 26 April 1966; N. slope Veleta, Sierra Nevada, 2300—2550 m, 10 ♂ 1 ♀, 22—30 July 1960.

Distribution. — Europe, China, North Africa, U.S.A. New to Spain.

Megaselia (Aphiochaeta) sordida (Zetterstedt), 1838*Aphiochaeta alaskensis* Malloch, 1919.*Aphiochaeta scaura* Schmitz, 1921.

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 ♀, 11 April 1966; N. slope Veleta, Sierra Nevada, 2200 m, 1 ♂ 4 ♀, 30 July 1960.

Distribution. — Europe, Iceland, Faroe Islands, Siberia, U.S.A. New to Spain.

Megaselia (Aphiochaeta) verralli (Wood), 1910

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 ♂, 19 April 1966; Granada, 700 m, 3 ♂ 1 ♀, 19 July 1960.

Distribution. — Europe, Palestine. New to Spain.

Megaselia (Aphiochaeta) xanthozona (Strobl), 1892

Material. — GRANADA: Granada, 700 m, 1 ♂, 10 July 1960; Sierra Nevada Highway, 2800—3000 m, 1 ♀, 20 July 1960; N. slope Veleta, Sierra Nevada, 2300—3000 m, 1 ♂ 2 ♀, 20—22 July 1960.

Distribution. — Europe, Egypt, Tunis. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) albicaudata (Wood), 1908

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 ♂, 19 April 1966; Granada, 700 m, 1 ♀, 19 July 1960.

Distribution. — Europe, Canary Islands. New to Spain.

Megaselia (Megaselia) angusta (Wood), 1909

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 ♂,

11 April 1966; Pampineira, 900 m, 1 ♀, 9 April 1966; N. slope Veleta, Sierra Nevada, 2300—2550 m, 1 ♀, 22 July 1960.

Distribution. — Europe, Russia. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) angustina Schmitz, 1936

Material. — GRANADA: N. slope Veleta, Sierra Nevada, 2300—2550 m, 1 ♂, 22 July 1960.

Distribution. — Canary Islands, Madeira. New to Spain.

Megaselia (Megaselia) ardua Schmitz, 1940

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 ♂, 2 April 1966; N. slope Veleta, Sierra Nevada, 2300—2550 m, 1 ♀, 22 July 1960.

Distribution. — Azores, Madeira. New to Spain.

Megaselia (Megaselia) arquata Schmitz, 1935

Material. — GRANADA: Rio Lanjaron near Lanjaron, 600 m, 1 ♂, 15 April 1966; Granada, 700 m, 1 ♀, 19 July 1960.

Distribution. — Germany (Berlin), Saar. New to Spain.

Megaselia (Megaselia) berndseni (Schmitz), 1919

Megaselia (Megaselia) rieli Schmitz, 1937.

Material. — GRANADA: N. slope Veleta, Sierra Nevada, 2800—3000 m, 1 ♂, 20 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) brevicostalis (Wood), 1910

Aphiochaeta fuscopedunculata Malloch, 1912.

Megaselia (Megaselia) frequens Borgmeier, 1962.

Material. — GRANADA: Maitena, 900 m, 2 ♂ 1 ♀, 10—11 July 1960; N. slope Veleta, Sierra Nevada, 2300—2550 m, 1 ♂ 2 ♀, 22—26 July 1960; Sierra Nevada Highway, 1200 m, 1 ♀, 27 July 1960.

Distribution. — Europe, N. & S. America. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) brevior (Schmitz), 1924

Material. — ALMERIA: Rioja, 50—200 m, 3 ♀, 1—26 April 1966.

Distribution. — Azores, Germany, Austria. New to Spain.

Megaselia (Megaselia) coactanea Schmitz, 1929

Material. — GRANADA: Granada, 700 m, 1 ♂, 19 July 1960.

Distribution. — Finland, Austria. New to Spain.

Megaselia (Megaselia) collini (Wood), 1909

Material. — GRANADA: Granada, 700 m, 2 ♀, 19 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) curvivenia Schmitz, 1928

Material. — GRANADA: Granada, 700 m, 7 ♀, 19 July 1960.

Distribution. — Finland, England. New to Spain.

Megaselia (Megaselia) devia Schmitz, 1936

Material. — GRANADA: Granada, 700 m, 1 ♂, 9 July 1960.

Distribution. — Holland. New to Spain.

Megaselia (Megaselia) flavicans Schmitz, 1935

Material. — GRANADA: Granada, 700 m, 2 ♂ 6 ♀, 19 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) giraudii (Egger), 1862

Phora rata Wood, 1908.

Aphiochaeta dyari Malloch, 1912.

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 2 ♂, 11 April 1966; Granada, 700 m, 5 ♂ 8 ♀, 9—19 July 1960.

Distribution. — Europe, Iceland, U.S.S.R. (Sakhalin), N. America. New to Spain.

Megaselia (Megaselia) halterata (Wood), 1910

Aphiochaeta plurispinosa Lundbeck, 1920.

Material. — ALMERIA: Almeria, 0—50 m, 2 ♂, 27 March 1966.

Distribution. — Europe, Azores, Egypt. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) hybrida Schmitz, 1939

Material. — GRANADA: Granada, 700 m, 1 ♀, 19 July 1960; N. slope Veleta, Sierra Nevada, 2300—2550 m, 1 ♀, 22 July 1960.

Distribution. — Portugal. New to Spain.

Megaselia (Megaselia) intersecta Schmitz, 1935

Material. — ALMERIA: Almeria, 0—50 m, 1 ♀, 21—31 March 1966.

Distribution. — Palestine. New to Spain.

Megaselia (Megaselia) largifrontalis Schmitz, 1939

Material. — GRANADA: Granada, 700 m, 1 ♂ 1 ♀, 9—19 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) longiseta (Wood), 1909

Material. — GRANADA: Granada, 700 m, 1 ♂ 3 ♀, 19 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) melanocephala (v. Roser), 1840

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 1 ♂, 16 April 1966; Rio Lanjaron near Lanjaron, 600 m, 1 ♀, 26 April 1966.

Distribution. — Europe, N. Africa (Tunis). Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) minor (Zetterstedt), 1848 —
ssp. **politifrons** Schmitz, 1952

Material. — CADIZ: La Linea, 4 ♂ 6 ♀, 2 August 1960.

Distribution. — Europe, N. Africa (Tunis). New to Spain.

Megaselia (Megaselia) nigrescens (Wood), 1910

Material. — GRANADA: Granada, 700 m, 9 ♂ 13 ♀, 19 July 1960; Maitena, 900 m, 1 ♀, 11 July 1960; N. slope Veleta, Sierra Nevada, 1 ♀, 22 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) pallidizona (Lundbeck), 1920

Material. — ALMERIA: Almeria, 0—50 m, 2 ♂, 22 March 1966.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) picta (Lehmann), 1822

Phora interrupta Zetterstedt, 1838.

Megaselia calaniensis Brues, 1936.

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 ♀, 18 April 1966.

Distribution. — Europe, N. & S. America. New to Spain.

Megaselia (Megaselia) plurispinulosa (Zetterstedt), 1860

Phora giraudii auctt.

Aphiochaeta submeigeni Wood, 1914.

Material. — ALMERIA: Almeria, 0—50 m, 1 ♀, 21 March 1966;
GRANADA: Granada, 700 m, 1 ♀, 19 July 1960.

Distribution. — Europe, Russia, China. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) pygmaea (Zetterstedt), 1848

Phora brachyneura Egger, 1862.

Material. — GRANADA: Granada, 700 m, 1 ♀, 19 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) pygmaeoides (Lundbeck), 1921

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 ♀, 2 April 1966.

Distribution. — Europe, U.S.A. New to Spain.

Megaselia (Megaselia) rufipes (Meigen), 1804

Material. — ALMERIA: Almeria, 0—50 m, 1 ♀, 21—31 March 1966. — GRANADA: Granada, 700 m, 2 ♂, 10—19 July 1960.

Distribution. — World wide. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) rupestris Schmitz, 1934

Material. — GRANADA: Granada, 700 m, 1 ♂ 1 ♀, 19 July 1960; Maitena, 900 m, 1 ♂ 2 ♀, 11 July 1960.

Distribution. — Austria. New to Spain.

Megaselia (Megaselia) scutellaris (Wood), 1909

Material. — GRANADA: Granada, 700 m, 1 ♀, 19 July 1960.

Distribution. — Europe, Russia. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) spinicineta (Wood), 1910

Material. — GRANADA: Granada, 700 m, 4 ♂, 19 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) subtumida (Wood), 1909

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 ♂, 11 April 1966; Granada, 700 m, 1 ♂, 19 July 1960.

Distribution. — Europe. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) sulphuripes (Meigen), 1830

Phora minutissima Wood, 1910.

Aphiochaeta fuscohalterata Schmitz, 1919.

Material. — GRANADA: Granada, 700 m, 1 ♂ 1 ♀, 19 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) tarsalis (Wood), 1910

Material. — GRANADA: Maitena, 900 m, 1 ♀, 11 July 1960.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) tumida (Wood), 1909

Material. — GRANADA: Rio Lanjaron near Lanjaron, 600 m, 1 ♂, 26 April 1966; Pampineira, 900 m, 1 ♂, 9 April 1966.

Distribution. — Europe, Russia, N. Africa (Tunis). New to Spain.

Megaselia (Megaselia) verna Schmitz, 1932

Material. — GRANADA: Granada, 700 m, 1 ♂, 9 July 1960.

Distribution. — Europe. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) villicauda Schmitz, 1927

Material. — GRANADA: Rio Lanjaron near Lanjaron, 600 m, 1 ♂, 26 April 1966.

Distribution. — Scotland, England, Silesia, Tyrol. New to Spain.

Metopina nevadae Schmitz, 1957

Material. — GRANADA: Granada, 700 m, 2 ♂, 14 July 1960.

Distribution. — Spain, previously recorded by Schmitz (1957). Also England, in the author's collection.

Borophaga femorata (Meigen), 1830

Material. — GRANADA: N. slope Veleta, Sierra Nevada, 2400 m, 1 ♀, 25 July 1960.

Distribution. — Europe, N. Africa (Algiers), U.S.S.R. (Sakhalin). Previously recorded from Spain, Schmitz (1940, 1941).

Conicera (Tritoconicera) fallens Schmitz, 1948

Material. — GRANADA: Granada, 700 m, 1 ♂, 19 July 1960.

Distribution. — Europe, U.S.A. New to Spain.

Diplonevra nitidula (Meigen), 1830

Material. — GRANADA: Rio Lanjaron near Lanjaron, 600 m, 1 ♀, 26 April 1966.

Distribution. — Europe, U.S.A., Canada. Previously recorded from Spain, Schmitz (1940, 1941).

Diplonevra pilosella Schmitz, 1927

Material. — GRANADA: Sierra Nevada Highway, 1650 m, 1 ♂, 27 July 1960.

Distribution. — Europe. New to Spain.

Phora aterrima (Fabricius), 1794

Material. — GRANADA: Pampineira, 900 m, 1 ♀, 9 April 1966; Sierra Nevada near Padul, 1300 m, 1 ♂, 4 May 1966.

Distribution. — Europe, N. Africa (Algiers), Russia, U.S.A. Previously recorded from Spain, Schmitz (1940, 1941).

Phora holosericea Schmitz, 1920

Material. — GRANADA: Maitena, 900 m, 1 ♂, 11 July 1960.

Distribution. — Europe, N. America. New to Spain.

Phora limpida Schmitz, 1935

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 4 ♂, 20 April—5 May 1966.

Distribution. — France, Italy, Spain. Previously recorded from Spain, Schmitz (1940, 1941).

Spiniphora lyneborgi n. sp. (Figs. 1—4)

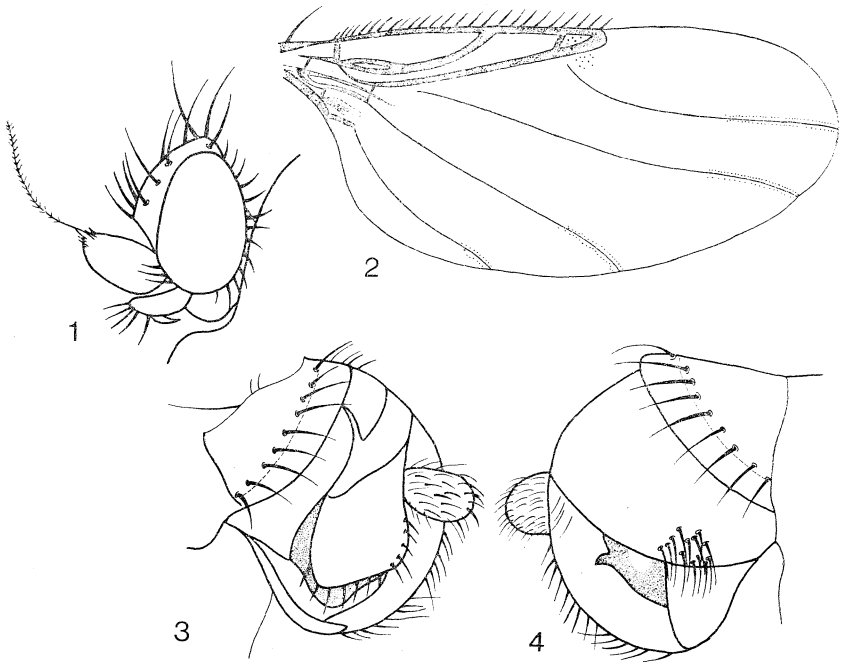
Material. — ALMERIA: Almeria, 0—50 m, 1 ♂ holotype, 22 March 1966. In Zoological Museum, Copenhagen, Denmark.

Description. Holotype, male. — Frons much wider than high (about 5:3), black with greyish-white dusting, dull, with reddish areas from the insertions of l_2 to l_3 widening posteriorly. The thinly scattered fine hairs only clearly evident at the anterior part of the frons. The row of bristles l_1 , po, po, l_1 strongly convex posteriorly. Frons strongly produced between the foveae, on the middle line about $\frac{7}{8}$ ths of the width of the frons. Third antennal segment (Fig. 1) large, lemon-shaped, basally clear reddish, darkened at the upper edge, and over the apical half; longer than half the height of the eye; antennal foveae deeply recessed, ex-

tending upward for rather more than half the height of the eye. Arista as long as the width of the frons, dorsally inserted near the apex, and clearly pubescent. Palpi (Fig. 1) yellow, about $\frac{2}{3}$ of the length of the third antennal segment, the greatest width about one third of the length of the palp; with five moderately strong black bristles of approximately equal length.

Thorax, including the scutellum, greyish-black, dull, the fine pubescence black; two pairs of dorsocentrals; the pleura somewhat brownish and less dull; a paler brownish-yellow patch around the anterior spiracle. Scutellar bristles strong, a little unequal, the anterior pair slightly shorter than the middle pair.

Abdomen narrowed posteriorly, blackish, dull. Tergites with pale greyish-white to yellowish hindmarginal seams; on I widened at the middle, on II—V narrow, on VI wider overall, and in the middle about as wide as $\frac{1}{5}$ th of the length of the tergite. Tergite I also with an anterior pale narrow seam. A row of long bristles at the lateral margins of tergite II and on the hind margin of VI,



Figs. 1—4. *Spiniphora lynebori* n. sp., holotype ♂. — 1. Head in profile; 2. Wing; 3. Hypopygium, left; 4. Hypopygium, right.

the latter at the sides more than half as long as the tergite. Venter greyish-black. Hypopygium (Figs. 3 & 4) paler than the abdomen, brownish-grey to reddish, the claspers paler. Anal tube short, reddish-yellow.

Legs greyish-brown, the fore coxae a little paler; t_1 with an anterodorsal bristle just above the middle; t_2 with the usual anterior and dorsal near the base, and an anteroventral at the apical fourth; and one long ventral spur; t_3 with an anterior at the basal third, an anteroventral at the middle, an anterior subapically, a long ventral and posteroventral spur; and one of the end-comb bristles posteriorly somewhat elongated to give the impression of a tiny posterior spur. The bristle s_3 of Schmitz (1941) is wanting.

Wings (Fig. 2) faintly greyish-tinged, with a very faint suggestion of a darker area in and just posterior to the fork. Costal index 0.55. Ratios of costal segments 40:23:12. Angle at fork relatively large, the anterior branch joining the costa at a fairly steep angle, and much shorter than the posterior branch. Costal cilia fairly short. Fourth vein arising just beyond the fork, origin obscured, and no indication of an S-curve; well curved in the first part, thereafter more or less straight and only slightly divergent from the fifth vein. Halteres pale.

Length, $2\frac{1}{4}$ mm.

Remarks. — In Schmitz' (1941) key, *lyneborgi* n. sp. would run down to Couplet No. 5. containing the Mediterranean species *brevipalpis* Schmitz, *punctipennis* Zetterstedt, and *signata* Schmitz, from all of which it differs, *inter alia*, in the relative size and shape of the palpi, the relative positions of the praeocellars and anterolaterals, and the characters of the hypopygium.

2. SPECIES FROM MAJORCA

Megaselia (Aphiochaeta) basispinata (Lundbeck), 1920

Material. — Formentor, 1 ♂, 6 May 1967.

Distribution. — Europe, Canary Islands, Azores, Mexico, U.S.A. Recorded from Southern Spain.

Megaselia (Aphiochaeta) brevipes (Lundbeck), 1920

Material. — Cala san Vicente, 1 ♂, 13 May 1967; Formentor, 2 ♂, 15 May 1967.

Distribution. — Denmark. New to Spain.

Megaselia (Aphiochaeta) involuta (Wood), 1910

Material. — Cala san Vicente, 1 ♀, 13 May 1967; Formentor, 2 ♀, 8—16 May 1967; Puerto de Pollensa, 2 ♂ 8 ♀, 7—17 May 1967.

Distribution. — Europe. Recorded from Southern Spain.

Megaselia (Aphiochaeta) manicata (Wood), 1910

Material. — Formentor, 2 ♂, 15—16 May 1967; Puerto de Pollensa, 2 ♂, 10—14 May 1967.

Distribution. — Europe. Recorded from Southern Spain.

Megaselia (Aphiochaeta) pleuralis (Wood), 1909

Material. — Lluc, 1500 m, 1 ♂, 11 May 1967.

Distribution. — Europe, Azores, Madeira, Canary Islands, China, U.S.S.R. (Sakhalin), Iceland, N. America. New to Spain.

Megaselia (Aphiochaeta) stichata (Lundbeck), 1920

Material. — Formentor, 1 ♂, 8 May 1967.

Distribution. — Europe, Faroe Islands, Canary Islands. New to Spain.

Megaselia (Aphiochaeta) xanthozona (Strobl), 1892

Material. — Cala san Vicente, 3 ♂ 1 ♀, 13 May 1967; Formentor, 4 ♂ 7 ♀, 8—16 May 1967; Puerto de Pollensa, 29 ♂, 17 ♀, 7—18 May 1967, Cala Boca, 1 ♂ 1 ♀, 9 May 1967; Lluc, 1500 m, 1 ♂, 11 May 1967; Porto Cristo, 1 ♀, 12 May 1967.

Distribution. — Europe, Egypt, N. Africa (Tunis). Recorded from Southern Spain.

Megaselia (Megaselia) brevicostalis (Wood), 1910

Material. — Formentor, 1 ♀, 6 May 1967; Puerto de Pollensa, 2 ♀, 10 May 1967.

Distribution. — Europe, N. & S. America. Recorded from Southern Spain.

Megaselia (Megaselia) discreta (Wood), 1909

Material. — Formentor, 1 ♀, 8 May 1967.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) giraudii (Egger), 1862

Material. — Cala san Vicente, 2 ♂ 3 ♀, 13 May 1967; Formentor, 1 ♂, 16 May 1967; Puerto de Pollensa, 1 ♀, 14 May 1967; Porto Cristo, 1 ♀, 12 May 1967.

Distribution. — Europe, Iceland, U.S.S.R. (Sakhalin), N. America. Recorded from Southern Spain.

Megaselia (Megaselia) halterata (Wood), 1910

Material. — Formentor, 3 ♂ 1 ♀, 8—15 May 1967; Puerto de Pollensa, 2 ♂, 10—14 May 1967.

Distribution. — Europe, Azores, Egypt. Recorded from Southern Spain.

Megaselia (Megaselia) hilaris Schmitz, 1927

Material. — Puerto de Pollensa, 1 ♂, 7 May 1967.

Distribution. — Europe. New to Spain.

Megaselia (Megaselia) impolluta (Schmitz), 1920

Megaselia (Megaselia) engelberti Schmitz, 1936.

Material. — Formentor, 1 ♀, 15 May 1967.

Distribution. — Europe, Russia. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) lata (Wood), 1910

Material. — Puerto de Pollensa, 1 ♀, 7 May 1967.

Distribution. — Europe, Madeira. New to Spain.

Megaselia (Megaselia) nigra (Meigen), 1830

Phora albidohalteris Felt, 1896.

Phora derasa Wood, 1909.

Material. — Formentor, 1 ♀, 16 May 1967.

Distribution. — Europe, Azores, Canary Islands, Madeira, Faroe Islands, Russia, U.S.A. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) pygmaca (Zetterstedt), 1848

Material. — Formentor, 1 ♂, 16 May 1967; Puerto de Pollensa, 3 ♂, 6 May 1967.

Distribution. — Europe. Recorded from Southern Spain.

Megaselia (Megaselia) pygmaeoides (Lundbeck), 1921

Material. — Puerto de Pollensa, 2 ♀, 7—14 May 1967.

Distribution. — Europe, U.S.A. Recorded from Southern Spain.

Megaselia (Megaselia) rufipes (Meigen), 1804

Material. — Formentor, 1 ♂, 15 May 1967; Puerto de Pollensa, 2 ♂ 2 ♀, 6—18 May 1967.

Distribution. — World wide. Recorded from Southern Spain.

Megaselia (Megaselia) scutellariformis (Schmitz), 1925

Material. — Formentor, 2 ♂ 1 ♀, 15 May 1967.

Distribution. — Europe. Previously recorded from Spain, Schmitz (1940, 1941).

Megaselia (Megaselia) spinicineta (Wood), 1910

Material. — Formentor, 1 ♀, 8 May 1967.

Distribution. — Europe. Recorded from Southern Spain.

Megaselia (Megaselia) sulphuripes (Meigen), 1830

Material. — Formentor, 3 ♂, 15 May 1967.

Distribution. — Europe. Recorded from Southern Spain.

Megaselia (Megaselia) sylvatica (Wood), 1910

Material. — Formentor, 2 ♀, 8—15 May 1967; Puerto de Pollensa, 1 ♂, 17 May 1967.

Distribution. — England, Portugal, Germany. New to Spain.

Megaselia (Megaselia) tarsalis (Wood), 1910

Material. — Formentor, 1 ♂ 4 ♀, 15 May 1967.

Distribution. — Europe. Recorded from Southern Spain.

Megaselia (Megaselia) tenebricola Schmitz, 1934

Material. — Puerto de Pollensa, 1 ♀, 7 May 1967.

Distribution. — England, Ireland, Belgium, Carinthia, Silesia. New to Spain.

Megaselia (Megaselia) verna Schmitz, 1932

Material. — Formentor, 1 ♀, 8 May 1967; Lluc, 1500 m, 2 ♀, 10 May 1966.

Distribution. — Europe. Recorded from Southern Spain.

Plastophora balearica n. sp. (Fig. 5)

Material. — Formentor, 1 ♀ holotype, 8 May 1967. In the author's collection.

Holotype, female. — Frons higher, at the middle line, than broad (about 6:5), black with faint greyish dusting and a weak shine; the fine hairs thickly distributed, somewhat thicker in the area of the supra-antennals. Frontal bristles, except the supra-antennals, very robust; antials set very much below the antero-laterals, and nearer to the upper supra-antennals, about midway

between the eye-margin and the middle line; antero-laterals near the eye-margin and much nearer to the anterior margin of the frons than to the medio-laterals. Supra-antennals very weak, the upper less than half the length of the antials, and much less stout; much closer together than the praeocellars; the lower minute, less than half the length of the upper, and a little closer together. Ocellar triangle somewhat raised. Antennae small, globose, dark brown; arista barely longer than the height of the frons at the median line, almost bare. Palpi short-oval, not much longer than wide (about 5:4), greyish-yellow, with five short, stout bristles, the longest, at the apex, barely longer than the width of the palp.

Thorax and dorsal pubescence black, shining; pleura dull greyish-black, except for shining areas on the lower half of the mesopleura, and most of the sternopleura. Mesopleura bare. Scutellum dull, greyish-black; two robust inner scutellar bristles and two outer fine hairs, about one quarter of the length of the inner bristles.

Abdomen dull greyish-black, with only a very faint suggestion of a shine on the posterior tergites; almost devoid of fine hairs, these only visible at the sides and ends of the hind margins of the tergites. Venter black. Tergites I—IV with a paler, brownish, hind-marginal seam. Tergites II and IV somewhat longer than III, V somewhat longer still, and VI about twice as long as IV, trapezoid, about half as wide at the posterior margin as at the anterior; VII membranous, brownish, dull; Segment VIII, long-tubular, with a narrow parallel-sided, chitinised, somewhat shining, tergite, and the ventral part with shining, chitinised, longitudinal strips; IX withdrawn, the apex dull black; cerci small, black, with a long apical hair.

Legs; fore coxae yellowish, femora, tibiae and tarsi smoky brown; tibiae with a row of clearly visible posterodorsal setulae; all segments of tarsi longer than wide, the apical the narrowest. Mid coxae dull greyish-black, femora, tibiae and tarsi blackish-brown; tibiae with a row of about 8 strong posterodorsal cilia, anterior hairs shaggy and erect, the anterodorsal rather stronger, setula-like. Hind coxae and legs shining with a fatty gloss, black, only the trochanters and extreme base of femora paler, brownish-yellow; femora very dilated, maximum width about three-eighths of the length, dorsal edge greatly curved, the ventral edge somewhat less; femora with 8—9 moderately long, strong basiventral

hairs, posteriorly curved and extending somewhat beyond the middle. Hind tibiae stout, well arched, the dorsal seam evenly curved; ten moderately long, strong posterodorsal cilia, of which three or four in the middle third rather longer than the remainder; metatarsus and two succeeding segments stout.

Wings (Fig. 5) narrow, maximum width to length about 2:5; heavily tinged with brownish-grey; veins brownish-grey, the thin veins well pigmented. Costal index 0.42—3; ratios of segments 26:15:10, i.e. 1 almost equal to 2 + 3; costal cilia short (0.061 mm), about 22—23 from humeral cross-vein onward, of which

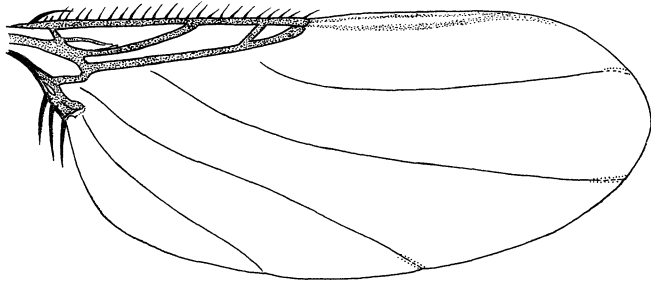


Fig. 5. *Plastophora balearica* n. sp., holotype, ♀, wing.

10 on 2 + 3. Fork somewhat acute, and longish, the outer branch barely curved. Vein 4 obliterated at origin, evenly curved throughout. Halteres black, but with pale yellowish margin and base, the peduncle dark dorsally and yellowish ventrally.

Length 1.8 mm.

The holotype was taken by the author, sweeping beneath pines close to the sea.

Remarks. — The new species shows very close affinities with *Megaselia* (*Megaselia*) *oblongifrons* Schmitz (1939), a species of the *angustifrons-minor* group, but with dark halteres. Schmitz, in his description of the female, states “Terminalia wahrscheinlich normal, aber kurz, bei der Holotype fast ganz eingezogen”, and makes no special comment about his probable male, so it is reasonable to assume that *oblongifrons* has been correctly assigned to *Megaselia*; whereas in the new species the ovipositor is clearly of the *Plastophora*-type, and it can be assumed that the male, when it is eventually recognised, will generally conform to the generic concept as outlined by the present writer (Colyer, 1957). The

species also differs from *oblongifrons* in its shorter costa, the relatively different location of the anterolaterals, the different relative lengths of the abdominal tergites, the greater number of basiventral hairs of f_3 , the more darkly tinged wings, and the greater number of costal cilia. Nevertheless the superficial resemblance is striking.

Since the publication of my key to world species of *Plastophora* (Colyer, 1957, *loc.cit.*), which dealt with some 17 species, a further 30 are now known to me, which, with the exception of one species I have not yet described, have been added to the list by Borgmeier, Beyer and myself. Of all these, the new species, *balearica*, comes nearest to *afra* Beyer (1959) which is a reddish-yellow species from Angola, Africa; (Beyer links *afra*, in his description, with *furcilla* Schmitz, 1956, and *elongata* (Wood), 1914, the latter evidently a *lapsus calami*; he clearly must have intended *emarginata* (Wood), 1908). From *afra* the new species differs, apart from the striking disparity in general coloration, by the closely-set upper supra-antennals, the relative position of the antials, dark antennae, shorter arista, oval shape of the palpi, stronger posterodorsal cilia of t_3 , darker wings, longer fork of vein 3, dark halteres, and the relative length of the abdominal tergites, especially VI.

Borgmeier (1963) considers that a satisfactory definition of the generic boundaries of *Plastophora* will not be possible until fresh material of the genotype *beirne* Brues, 1905, is forthcoming, the type material having been lost in the Hungarian revolution; and in this I quite follow him.

Phora aterrima (Fabricius), 1794

Material. — Cala san Vicente, 1 ♀, 13 May 1967.

Distribution. — Europe, N. Africa (Algiers), Russia, U.S.A. Recorded from Southern Spain.

Phora limpida Schmitz, 1935

Material. — Porto Cristo, 1 ♂, 12 May 1967.

Distribution. — France, Italy, Spain. Recorded from Southern Spain.

Spiniphora bergenstammi (Mik), 1864

Phora domestica Wood, 1906.

Material. — Puerto de Pollensa, 1 ♂, 14 May 1967.

Distribution. — Europe, Egypt, U.S.A., Uruguay. New to Spain.

Summary

58 species of Phoridae are listed from Southern Spain and 29 species from Majorca. A total of 50 species are new to the Spanish list. *Spiniphora lyneborgi* n. sp. from Almeria and *Plastophora balearica* n. sp. from Majorca are described.

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