Records of Tachinidae (incl. Rhinophorinae) and Oestridae (Diptera) from Southern Spain, with descriptions of two new species.

By

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The material reported upon was partly collected in 1966 by Dr. Leif Lyneborg and his assistents of the Zoological Museum, Copenhagen, and by Dr. W. Hackman of the Zoological Museum, Helsinki, and partly in 1960 by Dr. J. R. Vockeroth, Entomology Research Institute, Ottawa.

Exorista segregata Rondani, 1859

Material. — GRANADA: Sierra Nevada near Padul, 1300 m, 1 \bigcirc , 4 May 1966; N slope Veleta, Sierra Nevada, 2400 m, 1 \bigcirc , 25 July 1960 (J. R. Vockeroth).

Distribution. — Mediterranean. Recorded from Spain by Stein (1924: 115) as *Tricholyga segregata* Rond.

Exorista rustica Fallén, 1810

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 2 ♂, 3 May 1966.

Distribution. — Almost all parts of Europe. Recorded from Spain by Czerny & Strobl (1909: 213) as *Tachina rustica* Mg.

Spoggosia echinura Robineau-Desvoidy, 1830

Material. — GRANADA: Sierra de Contraviesa near Rabite, 1300 m, 1 ☉, 2 May 1966.

Distribution. — Central and southern Europe.

Spoggosia filipalpis Rondani, 1859

Material. — GRANADA: Salobreña 6 km W Motril, 0—50 m, 1 \bigcirc , 24 April 1966; Barranco de Miranda 8 km SW Orgiva, 300 m, 3 \bigcirc 3 \bigcirc , 16 and 23 April 1966; Sierra de Contraviesa 5 km SE Orgiva, 500 m, 2 \bigcirc , 18 April 1966; Rambla de Aculas 10 km E Orgiva, 400 m, 2 \bigcirc , 27 April 1966.

Distribution. — Southern Europe, local in warm and dry areas of central Europe. Recorded from Spain by Czerny & Strobl (1909: 214) as *Stomatomyia filipalpis* Rond.

Meigenia sp.

Material. — GRANADA: Rio Lanjaron near Lanjaron, 600 m, 1 \bigcirc , 28 April 1966.

Remarks. —Probably, the specimen is either *M. mutabilis* Fallén, 1810 or *M. pilosa* Baranoff, 1927, the females of which cannot be identified. Both species are widely distributed in Europe. This species-complex is recorded from Spain by Czerny & Strobl (1909: 212) as *M. bisignata* Mg. and *M. floralis* Mg.

Picconia incurva Zetterstedt, 1844

Material. — ALMERIA: Tabernas, 200—500 m, 1 ♂, 12 April 1966 (W. Hackman).

Distribution. — Southern Europe and warmer localities in central Europe. Recorded from Spain by Czerny & Strobl (1909: 221) as *Thryptocera incurva* Zett.

Ligeria angusticornis Loew, 1847

Material. — ALMERIA: 8 km N Tabernas, 200—500 m, 1 \bigcirc , 14 March 1966. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 1 \bigcirc 1 \bigcirc , 20 April and 5 May 1966; Rio Guadalfeo, Orgiva, 300 m, 1 \bigcirc , 3 April 1966; Sierra de Contraviesa near Rabite, 1300 m, 1 \bigcirc 1 \bigcirc , 2 May 1966.

Distribution. — Europe except Scandinavia, more common in the south. Recorded from Spain by Czerny & Strobl (1909: 220) as *Anachaetopsis ocypterina* Zett.

Erynniopsis rondanii Townsend, 1926

Material. — GRANADA: Granada, 700 m, 1 \bigcirc , 9 July 1960 (J. R. Vockeroth).

Distribution. — Southern Europe.

Compsilura concinnata Meigen, 1824

Material. — GRANADA: N slope Veleta, Sierra Nevada, 2200 m, 1 ♂, 30 July 1960 (J. R. Vockeroth).

Distribution. — Central and southern Europe. Recorded from Spain as a parasite of *Aglaope infausta* L. (Lep. Zygaenidae) by Benlloch & Cañizo (1934).

Gastrolepta anthracina Meigen, 1826

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 1 ♂, 16 April 1966; Sierra de Contraviesa near Rabite, 1300 m, 1 ♂, 2 May 1966.

Distribution. — Central and southern Europe. Recorded from Spain by Czerny & Strobl (1909: 229) as *Morinia anthracina* Mg.

Myiothyria benoisti Mesnil, 1959

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 2 \bigcirc , 16 and 20 April 1966.

Distribution. — The species was described from Morocco, and has also been found as a parasite of grasshoppers by Mr. J. C. Léonide in southern France. Czerny & Strobl (1909: 225) have recorded from Spain (Alicante and Escorial) a so-called variety of *Acemyia acuticornis* Meigen, which in the opinion of Villeneuve was a distinct species. The characters mentioned agree with *M. benoisti*.

Ethilla bisetosa Brauer & Bergenstamm, 1891

Material. — GRANADA: Sierra de Contraviesa near Rabite, 1300 m, 1 \bigcirc , 2 May 1966.

Distribution. — Southern Europe and warmer areas of central Europe.

Atylomyia loewi Brauer, 1898

Material. — ALMERIA: Cabo de Gata, 0—50 m, 1 ♂, 26 March 1966; 5 km W Alhama, 200—500 m, 1 ♂, 28 March 1966.

Distribution. — Southern Europe and warmer areas of central Europe. Recorded from Spain by Czerny & Strobl (1909: 222).

Nemorilla maculosa Meigen, 1824

Material. — GRANADA: Torrenueva E Motril, 0—50 m, 3 \circ , 12 and 17 April 1966; Salobreña 6 km W Motril, 0—50 m, 1 \circ , 24 April 1966; Sierra de Contraviesa 5 km SE Orgiva, 500 m, 1 \circ , 18 April 1966.

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Distribution. — Central and southern Europe. Recorded from Spain by Czerny & Strobl (1909: 213).

Aplomyia confinis Fallén, 1820

Material. — ALMERIA: 5 km W Alhama, 200—500 m, 2 \bigcirc , 19 and 21 March 1966. — GRANADA: Rio Lanjaron 9 km NW Orgiva, 1600 m, 1 \bigcirc , 7 May 1966; Maitena, 900 m, 11 July 1960 (J. R. Vockeroth).

Distribution. — Almost all parts of Europe. Recorded from Spain by Strobl (1906: 336) as *Exorista confinis* Fall.

Phryxe vulgaris Fallén, 1810

Material. — GRANADA: Rio Sucio 5 km NW Orgiva, 700 m, 1 ♂, 3 April 1966.

Distribution. — Almost everywhere in Europe.

Ceratochaetops triseta Villeneuve, 1922

Material. — GRANADA: Rio Lanjaron 9 km NW Orgiva, 1600 m, 2 \circlearrowleft , 6 April and 7 May 1966.

Distribution. — Southern Europe, rare. New for Spain.

Drino inconspicua Meigen, 1830

Material. — GRANADA: Granada, 700 m, 1 \bigcirc , 9 July 1960 (J. R. Vockeroth).

Distribution. — Central and southern Europe. Recorded from Spain as a parasite of *Diprion pini* L. by Ceballos & Zarco (1952).

Carcelia lucorum Meigen, 1824

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 $\stackrel{\bigcirc}{\rightarrow}$, 5 April 1966.

Distribution. — Central and southern Europe. Recorded from Spain by Strobl (1906: 336) as *Exorista cheloniae* Rond.

Zenillia pullata Meigen, 1824

Material. — GRANADA: Baranco de Miranda 8 km SW Orgiva, 300 m, 2 ♂, 20 April 1966; Sierra de Contraviesa near Rabite, 1300 m, 1 ♂, 2 May 1966.

Distribution. — Central and southern Europe. Recorded from Spain by Czerny & Strobl (1909: 213) as *Phorocera (Tritochaeta) pullata* Mg.

Pales pavida Meigen, 1824

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 3 O

1 ♀, 5—19 April 1966; Rio Lanjaron near Lanjaron, 600 m, 1 ♂, 28 April 1966.

Distribution. — Almost all parts of Europe. Recorded from Spain by Czerny & Strobl (1909: 213) as *Phorocera pavida* Mg.

Gonia ornata Meigen, 1826

Material. — GRANADA: Rio Lanjaron 9 km NW Orgiva, 1600 m, 6 \bigcirc 1 \bigcirc , 22 April and 7 May 1966.

Distribution. — Central and southern Europe. Recorded from Spain by Czerny & Strobl (1909: 214).

Gonia cilipeda Rondani, 1859

Material. — ALMERIA: Pechina, 50—200 m, 1 \bigcirc , 5 March 1966; Rio Andarax, Fondón, 600 m, 1 \bigcirc , 18 March 1966; Cabo de Gata, 0—50 m, 1 \bigcirc , 26 March 1966. GRANADA: Torrenueva E Motril, 0—50 m, 1 \bigcirc , 17 April 1966; Rio Guadalfeo, Orgiva, 300 m, 2 \bigcirc , 4 and 14 April 1966.

Distribution. — Localities with extreme Mediterranean climate. Recorded from Spain by Strobl (1899: 213).

Spallanzania alpestris Rondani, 1861

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 3 ♂, 16 and 21 April 1966; Rio Lanjaron near Lanjaron, 600 m, 1 ♂, 28 April 1966.

Distribution. — Southern Europe. Recorded from Spain by Mesnil (1944f: 552).

Spallanzania ? multisetosa Rondani, 1861

Material. — GRANADA: N slope Veleta, Sierra Nevada, 2200 m, 1 づ, 30 July 1960 (J. R. Vockeroth).

Remarks. — The specimen agrees in the chaetotaxy and pruinosity of the abdomen with the typical *multisetosa Rond*. from Italy, but the third antennal joint is longer than the second.

Baumhaueria goniaeformis Meigen, 1824.

Material. — GRANADA: Rio Mulhacén 5 km N Capileira, 1500 m, 1 \bigcirc , 9 April 1966.

Distribution. — Southern and central Europe. Recorded from Spain by Czerny & Strobl (1909: 214).

Rhacodineura pallipes Fallén, 1820

Material. — ALMERIA: 5 km W Alhama, 200—500 m, 1 \bigcirc , 17 March 1966.

Distribution. — Almost all parts of Europe. Recorded from Spain by Strobl (1899: 213) as *Roeselia antiqua* Mg.

Echinomyia fera Linnaeus, 1758

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 1 ♂ 1 ♀, 16 April 1966; Rio Guadalfeo, Orgiva, 300 m, 1 ♀, 21 April 1966.

Distribution. — Almost all parts of Europe. Recorded from Spain by Strobl (1906: 339).

Echinomyia magnicornis Zetterstedt, 1844

Material. — ALMERIA: 5 km W Alhama, 200—500 m, 3 \circlearrowleft , 17—19 March 1966. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 8 \circlearrowright , 16 and 21 April 1966; Rio Guadalfeo, Orgiva, 300 m, 1 \circlearrowright , 18 April 1966; Rio Lanjaron near Lanjaron, 600 m, 2 \circlearrowright , 26 April 1966; Rio Lanjaron 9 km NW Orgiva, 1600 m, 1 \circlearrowright , 15 April and 7 May 1966; Sierra Nevada near Padul, 1300 m, 2 \bigcirc , 4 May 1966.

Distribution. — Europe except the British Isles. Recorded from Spain by Strobl (1906: 339).

Echinomyia lurida Fabricius, 1781

Material. — GRANADA: Rio Lanjaron 9 km NW Orgiva, 1600 m, 2 ♂, 15 April 1966.

Distribution. — Europe except Scandinavia.

Peletieria nigricornis Meigen, 1838

Material. — ALMERIA: Cabo de Gata, 0—50 m, 1 \bigcirc 2 \bigcirc , 24 March 1966 (W. Hackman). — GRANADA: Torrenueva E Motril, 0—50 m, 2 \bigcirc , 10 April 1966; Barranco de Miranda 8 km SW Orgiva, 300 m, 8 \bigcirc 1 \bigcirc , 16—23 April 1966; Rio Guadalfeo, Orgiva, 300 m, 7 \bigcirc , 2—19 April and 3 May 1966; Rambla de Aculas 10 km E Orgiva, 400 m, 1 \bigcirc , 27 April 1966; Rio Lanjaron near Lanjaron, 600 m, 3 \bigcirc 1 \bigcirc , 26—28 April 1966; Rio Lanjaron 9 km NW Orgiva, 1600 m, 1 \bigcirc 2 \bigcirc , 6 April—7 May 1966; Rio Mulhacén 5 km N Capileira, 1500 m, 1 \bigcirc , 9 April 1966; Sierra Nevada near Padul, 1300 m, 1 \bigcirc 1 \bigcirc , 4 May 1966.

Distribution. — Southern Europe, warm and dry localities in central and even northern Europe. Recorded from Spain by Strobl (1906: 339) as *Echinomyia tessellata* Fbr.

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Linnaemyia soror Zimin, 1954

Material. — GRANADA: Torrenueva E Motril, 0—50 m, 2 \bigcirc 2 \bigcirc , 10—14 April 1966; Sierra de Contraviesa 5 km SE Orgiva, 500 m, 1 \bigcirc , 18 April 1966.

Distribution. — Localities with extreme Mediterranean climate.

Ernestia castellana Strobl, 1906

Material. — GRANADA: Rio Mulhacén 5 km N Capileira, 1500 m, 1 \bigcirc , 9 April 1966.

Distribution. — Described from Spain (Strobl, 1906: 338) as *Erigone castellana* n. sp.

Gymnochaeta viridis Fallén, 1810

Material. — GRANADA: Rio Lanjaron 9 km NW Orgiva, 1600 m, 4 \bigcirc 1 \bigcirc , 22 April and 7 May 1966.

Distribution. — Almost all parts of Europe. Recorded from Spain by Czerny & Strobl (1909: 212).

Zophomyia temula Scopoli, 1763

Material. — GRANADA: Rio Lanjaron near Lanjaron, 600 m, 1 \bigcirc , 28 April 1966.

Distribution. — Almost all parts of Europe. Recorded from Spain by Czerny & Strobl (1909: 212).

Macquartia brevicornis Macquart, 1838

Material. — ALMERIA: 8 km N Tabernas, 200—500 m, 7 \circ , 14 March 1966; 5 km W Alhama, 200—500 m, 2 \circ , 21 March 1966. — GRANADA: 4 km E Orgiva, 300 m, 1 \circ , 15 March 1966; Barranco de Miranda 8 km SW Orgiva, 300 m, 7 \circ , 16 April to 5 May 1966; Sierra de Contraviesa near Rabite, 1300 m, 4 \circ , 8 April and 2 May 1966; Rio Lanjaron near Lanjaron, 600 m, 1 \circ , 26 April 1966; Rio Sucio 5 km NW Orgiva, 700 m, 3 \circ , 3 April 1966; Rio Lanjaron 9 km NW Orgiva, 1600 m, 1 \circ , 22 April 1966; N slope Veleta, Sierra Nevada, 2200 and 2550 m, 2 \circ , 30 July 1960 (J. R. Vockeroth).

Distribution. — Southern Europe, local in warm areas of central Europe. Recorded from Spain by Strobl (1899: 213) as *Macquartia occlusa* Rond.

Macquartia chalconota Meigen, 1824

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 3 \circ 2 \circ , 16 and 20 April 1966; Rio Guadalfeo, Orgiva,

300 m, 8 ♂ 10 ♀, 2—21 April 1966; Rio Sucio 5 km NW Orgiva, 700 m, 1 ♂, 3 April 1966; Rio Lanjaron 9 km NW Orgiva, 1600 m, 3 ♀, 15 April and 7 May 1966.

Distribution. — Warmer parts of Europe, more common in the south. Recorded from Spain by Strobl (1906: 337).

Macquartia tenebricosa Meigen, 1824

Material. — GRANADA: Rio Lanjaron near Lanjaron, 600 m, 1 \bigcirc , 28 April 1966.

Distribution. — Almost all parts of Europe. Recorded from Spain by Czerny & Strobl (1909: 215) as *Macquartia chalconota* Mg. var. *nitida* Zett.

Macquartia dispar Fallén, 1820

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 2 ♂, 20 April 1966; Rio Guadalfeo, Orgiva, 300 m, 1 ♀, 4 April 1966; Rio Lanjaron near Lanjaron, 600 m, 1 ♀, 28 April 1966.

Distribution. — Most parts of Europe.

Macquartia viridana Robineau-Desvoidy, 1863

Material. — GRANADA: Rio Lanjaron 9 km NW Orgiva, 1600 m, 7 \circ 2 \circ , 15—22 April and 7 May 1966.

Distribution. — Southern and central Europe including southern England.

Remarks. — Described by Strobl (in Czerny & Strobl, 1909: 214) from Spain as *Macquartia maculifemur* n. sp. In another paper (Herting, 1968) the author has shown that *M. maculifemur* Strobl is only a melanic form of *M. flavipes* auct. (nec Meigen), the valid name of which is *M. viridana* R. D. (nov. syn.).

Macquartia praefica Meigen, 1824

Material. — GRANADA: Sierra de Contraviesa 5 km SE Orgiva, 500 m, 1 \bigcirc , 18 April 1966.

Distribution. — Central and southern Europe.

Digonochaeta setipennis Fallén, 1810

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 1 \bigcirc , 5 May 1966; Rio Guadalfeo, Orgiva, 300 m, 1 \bigcirc , 30 April 1966; Rio Lanjaron 9 km NW Orgiva, 1600 m, 1 \bigcirc , 7 May 1966.

Distribution. — Almost all parts of Europe.

Remarks. — The male from 1600 m has black palps, the other specimens yellow ones. The number of presutural dorsocentral bristles varies from two to three as it often does in this species. It may be different on the two sides of the same specimen.

Heraultia albipennis Villeneuve, 1920

Material. — GRANADA: Rio Lanjaron near Lanjaron, 600 m, 3 \bigcirc , 28 April 1966.

Distribution. — Recorded only from the Mediterranean part of France. New to Spain.

Graphogaster and alusiaca Strobl, 1909

Material. — ALMERIA: Almeria, 0—50 m, 2 \bigcirc , 4—10 March 1966; Albufera, 0—50 m, 2 \bigcirc , 29 March 1966; 10 km N Rioja, 200—500 m, 1 \bigcirc , 12 March 1966; 5 km W Alhama, 200—500 m, 1 \bigcirc , 21 March 1966. — GRANADA: Torrenueva E Motril, 0—50 m, 1 \bigcirc , 1 \bigcirc , 14 and 17 April 1966; Barranco de Algarrobo 12 km SW Orgiva, 300 m, 1 \bigcirc , 25 April 1966; Barranco de Miranda 8 km SW Orgiva, 300 m, 1 \bigcirc , 23 April 1966; Rio Guadalfeo, Orgiva, 300 m, 1 \bigcirc , 1 \bigcirc , 18—19 April 1966; Rio Lanjaron near Lanjaron, 600 m, 1 \bigcirc , 26 April 1966; Sierra Nevada Highway, 900 m, 1 \bigcirc , 27 July 1960 (J. R. Vockeroth).

Distribution. — Spain (Strobl & Czerny, 1909: 223).

Remarks. — G. andalusiaca is possibly only a geographic race of the Italian G. vestita Rondani, as suggested by Strobl. G. vestita was described from a single male, and I have not seen material from the terra typica. Specimens collected by Prof. J. de Beaumont at Mazzara, Sicily, differ from andalusiaca in the length of the third antennal joint and especially in the pruinosity of the female abdomen.

Siphona geniculata Degeer, 1776

Material. — GRANADA: Barranco de Algarrobo 12 km SW Orgiva, 300 m, 1 \bigcirc , 25 April 1966; Pampineira, 900 m, 1 \bigcirc , 9 April 1966; Granada, 700 m, 1 \bigcirc , 14 July 1960 (J. R. Vockeroth); N slope Veleta, Sierra Nevada, 2300—2550 m, 1 \bigcirc , 22 July 1960 (J. R. Vockeroth); Sierra Nevada Highway, 900 m, 1 \bigcirc , 27 July 1960 (J. R. Vockeroth).

Distribution. — Almost all parts of Europe. Recorded from Spain by Strobl (1899: 213).

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Siphona confusa Mesnil, 1961

Material. — ALMERIA: Almeria, Alcazaba, 0—50 m, 1 \bigcirc , 21 April 1966 (W. Hackman); Pechina, 50—200 m, 1 \bigcirc 6 \bigcirc , 5—9 March 1966; Rioja, 50—200 m, 1 \bigcirc 4 \bigcirc , 7—25 March 1966; 10 km N Rioja, 200—500 m, 1 \bigcirc , 12 March 1966; 8 km N Tabernas, 200—500 m, 1 \bigcirc , 14 March 1966; Alhama, 200—500 m, 3 \bigcirc , 22 March 1966; 5 km W Alhama, 200—500 m, 1 \bigcirc , 21 March 1966. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 \bigcirc , 19 April 1966; Rio Lanjaron near Lanjaron, 600 m, 1 \bigcirc , 26 April 1966; Rio Sucio 5 km NW Orgiva, 700 m, 1 \bigcirc , 3 April 1966.

Distribution. — Northern and central Europe. New to Spain.

Siphona rossica Mesnil, 1961

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 4 \bigcirc 3 \bigcirc , 2—11 April and 3 May 1966; Rio Lanjaron near Lanjaron, 600 m, 1 \bigcirc , 26 April 1966.

Distribution. — Described from the Leningrad area. I have seen specimens from southern Sweden and found it once near Visp in the Swiss Valais. New to Spain.

Strobliomyia apicalis Robineau-Desvoidy, 1863

Material. — GRANADA: N slope Veleta, Sierra Nevada, 2300—2550 m, 1 \bigcirc , 22 July 1960 (J. R. Vockeroth).

Distribution. — Central and southern Europe. New to Spain.

Remarks. — This species has only recently been recognized as distinct from the closely related *S. tibialis* R.D. (Herting, 1968).

Aphria longirostris Meigen, 1824

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 1 \bigcirc , 23 April 1966; Sierra de Contraviesa near Rabite, 1300 m, 1 \bigcirc , 2 May 1966; Rambla de Aculas 10 km NE Orgiva, 400 m, 1 \bigcirc , 27 April 1966; Sierra Nevada near Padul, 1300 m, 1 \bigcirc , 1 May 1966; N slope Veleta, Sierra Nevada, 2400 m, 1 \bigcirc , 25 July 1960 (J. R. Vockeroth).

Distribution. — Central and southern Europe.

Mintho rufiventris Fallén, 1816

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 2 \bigcirc 1 \bigcirc , 20—23 April 1966; Rambla de Aculas, 10 km E Orgiva, 1 \bigcirc , 27 April 1966.

Distribution. — Almost all parts of Europe, in rocky places and

near houses. Recorded from Spain by Strobl (1906: 337) as Mintho lacera Rond.

Billaea biserialis Portshinskii, 1882

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 2 \circ , 2 and 19 April 1966.

Distribution. — Southern Russia, Persia, Palestine, Turkey, Rhodes. Recorded from Spain by Czerny & Strobl (1909: 233) as *Myxodexia macronychia* B.B.

Rhamphina longirostris Strobl, 1909

Material. — GRANADA: Torrenueva E Motril, 0—50 m, 1 ♂, 17 April 1966; Mecina Bombarón, 800 m, 1 ♂, 8 May 1966.

Distribution. — Described as a new species, *Czernya longirostris*, from Spain by Strobl (in Czerny & Strobl, 1909: 217).

Wagneria alpina Villeneuve, 1910

Material. — GRANADA: N slope Veleta, Sierra Nevada, 2400 m, 1 \bigcirc , 25 July 1960 (J. R. Vockeroth).

Distribution. — Recorded so far from the Alps and Lappland. New to Spain.

Wagneria cunctans Meigen, 1824

Material. — GRANADA: Rio Lanjaron 9 km NW Orgiva, 1600 m, 1 \bigcirc 1 \bigcirc 1 \bigcirc , 15 April and 7 May 1966.

Distribution. — Southern Europe, rare in warm and dry localities in central Europe. Recorded from Spain by Czerny & Strobl (1909: 220) as *Phorichaeta lacrimans* Rond.

Wagneria nigrans Meigen, 1826

Material. — GRANADA: Rio Mulhacén 5 km N Capileira, 1500 m, 2 ♂, 9 April 1966.

Distribution. — Stony or sandy localities in various parts of Europe. Recorded from Spain by Strobl (1906: 345) as *Scopolia carbonaria* Pz. var. *fuliginaria* Rond.

Wagneria prunicia n. sp.

Material. — ALMERIA: Tabernas, 200—500 m, 1 \circlearrowleft , 14 March 1966 (W. Hackman); Alhama, 200—500 m, 1 \circlearrowright , 22 March 1966; 5 km W Alhama, 200—500 m, 1 \bigcirc , 17 March 1966. — GRANADA: Sierra de Contraviesa near Rabite, 1300 m, 8 \circlearrowright , 8 April and 2 May 1966; Rio Lanjaron near Lanjaron, 600 m, 1 \circlearrowright , 28 April 1966; Rio Lanjaron 9 km NW Orgiva, 1600 m, 3 \bigcirc , 15 April to 7 May 1966; Rio Chico 8 km NE Orgiva, 1800 m, 1 ♂, 7 April 1966; Rio Mulhacén 5 km N Capileira, 1500 m, 2 ♀, 9 April 1966.

Description. — The new species is very similar to *Wagneria* prunaria Rondani (carbonaria Meigen nec Panzer) and differs only in a few characters as follows:

Hind tibia with only two dorsal apical spurs. Height of peristome slightly more than one half of the vertical diameter of the eye. Frontal band not narrower than the parafrontalia. Third antennal joint of female at least three times as long as the second joint. First radial vein of the wing bare (typical form) or bristled

..... prunicia n. sp.

Hind tibia with three dorsal apical spurs. Peristome narrower than one half of the diameter of the eye. Frontal band behind lunula considerably narrower than the parafrontalia. Third antennal joint of female not much over two times as long as the second joint. First radial vein bristled prunaria Rond.

Holotype of *prunicia* (\bigcirc) from the Sierra de Contraviesa near Rabite, 8 April 1966, in the collection of the Zoological Museum, Copenhagen.

Remarks. — I have found several specimens of W. *prunicia* in a pine forest near Sierre (Swiss Valais), 14 and 17 May 1963. This Swiss population has, as a rule, the first radial vein bristled, but in one male collected at the same time and place, it is bare as it is in all the Spanish specimens.

Wagneria schnabli Brauer & Bergenstamm, 1891

Material. — GRANADA: Rio Lanjaron 9 km NW Orgiva, 1600 m, 1 °, 22 April 1966.

Distribution. — Brauer & Bergenstamm (1891: 356) mention Poland and Fiume as localities, but only the specimen from Fiume (Rijeka), which I have designated as lectotype, is present in the collection of the Vienna museum. *Periscepsia pyrenaica* Mesnil (1963: 50) from the French Pyrenees is the same species (nov. syn.).

Voria ruralis Fallén, 1810

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

Distribution. — Almost all parts of Europe. Recorded from .Spain by Strobl (1899: 213) as *Plagia ruralis* Fall.

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Cyrtophleba ruricola Meigen, 1824

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 1 \bigcirc , 21 April 1966; Rio Guadalfeo, Orgiva, 300 m, 1 \bigcirc , 4 April 1966; Rambla de Aculas 10 km E Orgiva, 400 m, 1 \bigcirc , 27 April 1966.

Distribution. — Southern and central Europe. Recorded from Spain by Czerny & Strobl (1909: 220).

Nanoplagia hilfi Strobl, 1902

Material. — GRANADA: Torrenueva E Motril, 0—50 m, 1 \bigcirc , 12 April 1966.

Distribution. — Macedonia, Algeria, Morocco. New to Spain.

Dufouria nigrita Fallén, 1810

Material. — GRANADA: Barranco de Algarrobo 12 km SW Orgiva, 300 m, 1 \bigcirc , 25 April 1966.

Distribution. — Most parts of Europe. Recorded from Spain by Strobl (1906: 337) as *Macquartia nigrita* Fall.

Rondania rubens n. sp.

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 1 \circ holotype, 20 April 1966. In Zoological Museum, Copenhagen.

Description. — This species is closely related to *Rondania fasciata* Macquart (*Graphogaster* auct.). The differences are as follows:

Antennae black; palps, halteres and calyptrae very dark brown. Abdomen reddish-yellow, each segment on hind margin with a black band which in the median line extends forwards over the entire length of the segment. Bend of median vein very broadly rounded so that only the tip of the apical cross-vein is straight and rectangular on r_{4+5} fasciata Macq. \bigcirc

The male of *rubens* shows the same coloration of antennae, palps, halteres and calyptrae as the female of *fasciata;* it is gyne-comorph in these characters. The conspicuous black markings of

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the abdomen, present in both sexes of *fasciata*, are much reduced in *rubens*. In structural characters both species are almost identical.

Pandelleia sexpunctata Pandellé, 1896

Material. — GRANADA: N slope Veleta, Sierra Nevada, 2500 m, $1 \circlearrowleft 1$, 25 and 30 July 1960 (J. R. Vockeroth).

Distribution. — Recorded from the Pyrenees, the Saar and Thuringia.

Heliozeta pellucens Fallén, 1820

Material. — GRANADA: Rambla de Aculas 10 km E Orgiva, 400 m, 1 ♂, 27 April 1966.

Distribution. — Most parts of Europe.

Phasia (Clytiophasia) mesnili Kugler, 1968

Material. — GRANADA: Sierra de Contraviesa near Rabite, 1300 m, 1 ♂, 2 May 1966.

Distribution. — Described from Israel. New to Spain.

Phasia oblonga Robineau-Desvoidy, 1830

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 \circ , 14 April 1966.

Distribution. — Southern Europe and warmer localities of central Europe.

Remarks. — This species has been confused with *P. crassipennis* Fabricius until Dupuis (1963: 112, under the name *Ectophasia rubra* Girschner) has shown its separate status and its distinctive characters. The specimen from Orgiva is a typical big male with entirely red abdomen.

Gymnosoma rotundatum Linnaeus, 1758

Material. — GRANADA: Rio Lanjaron near Lanjaron, 600 m, 1 ♂, 28 April 1966.

Distribution. — Most parts of Europe. Recorded from Spain by Strobl (1906: 340), but this record may include also the two following species which have only recently been recognized as distinct from *rotundatum*.

Gymnosoma verbekei Mesnil, 1952

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva, 300 m, 1 \bigcirc , 16 April 1966; Sierra de Contraviesa near Rabite, 1300 m, 1 \bigcirc , 8 April 1966; Maitena, 900 m, 1 \bigcirc , 11 July 1960 (J. R. Vockeroth).

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Distribution. — Southern and central Europe including southern Scandinavia.

Gymnosoma inornatum Zimin, 1966

Material. — ALMERIA: 5 km W Alhama, 200—500 m, 1 \circlearrowleft , 28 March 1966.

Distribution. — Described from the southern zone of the U.S.S.R. I have found it in the Tessin (southern Switzerland). New to Spain.

Gymnosoma nitens Meigen, 1824

Material. — GRANADA: Granada, 700 m, 1 \bigcirc 1 \bigcirc , 10 and 13 July 1960 (J. R. Vockeroth).

Distribution. — Southern Europe and drier areas of central Europe. Recorded from Spain by Czerny & Strobl (1909: 222) as *Stylogymnomyia nitens* Mg.

Alophora pusilla Meigen, 1824

Material. — ALMERIA: 5 km W Alhama, 200—500 m, 1 \circlearrowleft , 21 March 1966.

Distribution. — Most parts of Europe. Recorded from Spain by Strobl (1899: 217).

Leucostoma sp.

Material. — GRANADA: Salobreña 6 km W Motril, 0—50 m, 1 ♂, 24 April 1966.

Remarks. — This small specimen is similar to, or conspecific with, *Leucostoma engeddense* Kugler from Palestine. No material of the latter was available for comparison, so the question of identity remains open.

Labigaster forcipata Meigen, 1824

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 ♀, 4 April 1966.

Distribution. — Southern Europe and warmer localities in central Europe.

Clairvillia biguttata Meigen, 1824

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 1 \bigcirc , 3 April 1966.

Distribution. — Southern Europe and locally in warm and dry areas in central Europe.

Cylindromyia brassicaria Fabricius, 1775

Material. — GRANADA: Barranco de Miranda 8 km SW Orgiva,

300 m, 1 ♂, 23 April 1966; N slope Veleta, Sierra Nevada, 2400 m, 1 ♂, 25 July 1960 (J. R. Vockeroth).

Distribution. — Central and southern Europe. Recorded from Spain by Strobl (1906: 337) as Ocyptera brassicaria Fbr.

Cylindromyia brevicornis Loew, 1844

Material. — GRANADA: N slope Veleta, Sierra Nevada, 2550 m, 1 ♂, 20 July 1960 (J. R. Vockeroth).

Distribution. — Southern Europe.

Cylindromyia bicolor Olivier, 1811

Material. — GRANADA: Granada, 700 m, 1 \bigcirc , 14 July 1960 (J. R. Vockeroth).

Distribution. — Southern Europe. Recorded from Spain by Czerny & Strobl (1909: 216) as Ocyptera bicolor 0l.

Cylindromyia intermedia Meigen, 1824

Material. — ALMERIA: Almeria, 0—50 m, 1 \bigcirc , 1—10 April 1966 (W. Hackman); 5 km W Alhama, 200—500 m, 2 \bigcirc 1 \bigcirc , 17 and 19 March 1966.

Distribution. — Southern Europe, local in warm and dry places in central Europe. Recorded from Spain by Strobl (1906: 337) as *Ocyptera excisa* Loew.

Cylindromyia rufipes Meigen, 1824

Material. — CADIZ: La Linea, 1 \bigcirc , 2 August 1960 (J. R. Vockeroth).

Distribution. — Southern Europe, restricted to a typical Mediterranean climate. Recorded from Spain by Strobl (1906: 337) as *Ocyptera rufipes* Mg.

Cylindromyia pusilla Meigen, 1824

Material. — GRANADA: Pinus Puente 15 km NW GRANADA, 500—1000 m, 1 ♂, 27 April 1966; Granada, 700 m, 2 ♂, 15 July 1960 (J. R. Vockeroth).

Distribution. — Europe except for the northwestern and arctic regions. Recorded from Spain by Strobl (1906: 337) as *Ocypterula pusilla* Mg.

Besseria anthophila Loew, 1871

Material. — GRANADA: Torrenueva E Motril, 0—50 m, 3 \circlearrowleft , 14 and 17 April 1966; Barranco de Miranda 8 km SW Orgiva, 300 m, 1 \circlearrowright , 23 April 1966.

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Distribution. — Southern Europe, rarely found in warm and dry localities in central Europe.

RHINOPHORINAE

Hoplisa aterrima Strobl, 1899

Material. — ALMERIA: 5 km W Alhama, 200—500 m, 12 \bigcirc 4 \bigcirc , 17—28 March 1966; Rio Andarax, Fondón, 200—500 m, 18 March 1966. — GRANADA: Barranco de Algarrobo 12 km SW Orgiva, 300 m, 1 \bigcirc , 25 April 1966; Barranco de Miranda 8 km SW Orgiva, 300 m, 2 \bigcirc , 3 \bigcirc , 16 April 1966; Rio Guadalfeo, Orgiva, 300 m, 6 \bigcirc , 3 \bigcirc , 4—19 April 1966; Rio Lanjaron near Lanjaron, 600 m, 3 \bigcirc , 2 \bigcirc , 26 and 28 April 1966; Rio Sucio 5 km NW Orgiva, 700 m, 1 \bigcirc , 3 April 1966; Pinus Puente 15 km NW Granada, 500 —1000 m, 1 \bigcirc , 27 April 1966.

Distribution. — Described from southern Spain by Strobl (1899: 215) as a new species, *Melanomelia aterrima*.

Phyto melanocephala Meigen, 1824

Material. — GRANADA: Rio Guadalfeo, Orgiva, 300 m, 10 \bigcirc^{*} 1 \bigcirc , 3—21 April 1966.

Distribution. — Most parts of Europe. Recorded from Spain by Czerny & Strobl (1909: 224).

Phyto discrepans Pandellé, 1896

Material. — ALMERIA: El Alquian, 0—50 m, 1 \bigcirc , 3 March 1966.

Distribution. — Southwestern France to Morocco. Recorded from Spain by Czerny & Strobl (1909: 224).

Melanophora roralis Linnaeus, 1758

Material. — ALMERIA: Rioja, 50—200 m, 1 \bigcirc , 15 April 1966 (W. Hackman).

Distribution. — Almost all parts of Europe, often around houses and in gardens. Recorded from Spain by Czerny & Strobl (1909: 225).

OESTRIDAE

Oestrus ovis Linnaeus, 1758

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

Distribution. — Most parts of Europe.

Summary

Eighty-five species of Tachinidae (incl. Rhinophorinae) and one species of Oestridae are recorded from southern Spain (predominantly from the provinces Almeria and Granada) based on collections made in 1960 and 1966. Two species are described as new: *Wagneria prunicia* and *Rondania rubens*. Two new synonyms are established, and at least nine species are recorded from Spain for the first time.

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