

Superfamily HIPPOBOSCOIDEA

114. Family HIPPOBOSCIDAE

By T. C. Maa

Species of Hippoboscidae are commonly known as louse flies. Both sexes are blood-suckers and are obligate ectoparasites, chiefly on various kinds of birds. A number of species are parasitic on marsupials (in Australia), lemurs (in Madagascar), carnivores, equines, and artiodactyls. Reproduction is by pupiparity. The larvae are nurtured internally until fully developed, ready to pupate, and attaining the prepupa stage. At that time the female deposits the prepupae, singly, on the ground where they quickly harden and darken. Host specificity is generally moderately high and varies with different environmental factors and with different species of flies and hosts. Some species are often found parasitic on several kinds of unrelated birds that occupy the same habitats. One genus is wingless, 3 genera show wing reduction, and another 3 genera shed their wings after finding a suitable host mammal.

About 200 species in 21 genera and 3 subfamilies are known. They are predominantly tropical and subtropical in distribution. Only a small number of species have successfully spread to the Arctic area. The hippoboscid fauna of the Australasian/Oceanian area is fairly poor. The subfamilies Hippoboscinae and Lipopteninae, which are parasitic exclusively on mammals, are each represented by a single introduced species because there exist no suitable native host mammals. Among the species found on birds, only about a dozen species have been reported from the thousands of Oceanian islands, at least 3 of which are apparently recent introductions.

Refs.: Bequaert (1941, rev. Oceanian spp.), Maa (1969d, checklist world spp.).

Subfamily ORNITHOMYINAE

Genus AUSTROLFERSIA Bequaert

AUSTROLFERSIA Bequaert, 1953a: 49, fig. 14c. *Nomen nudum*.

AUSTROLFERSIA Bequaert, 1953b: 284. Type species: *Austrolfersia ferrisi* Bequaert, 1953, orig. des.

ferrisi Bequaert, 1953b: 284. Australia (Qld). [Proposed (incorrectly) as a n. n. for specimens

misidentified as *Orthofersia tasmanica* sensu Ferris (1924); name validated by bibliographic reference to Ferris (1924).]

tasmanica, Ferris, 1924, not Wesché, 1903, misid.

Genus ICOSTA Speiser

ICOSTA Speiser, 1905: 358. Type species: *Olfersia dioxyrhina* Speiser, 1904, orig. des.

LYNCHIA, authors, not Weyenbergh, 1881, misid.

Subgenus ARDMOECA Maa

ARDMOECA Maa, 1969b: 137. Type species: *Olfersia ardeae* Macquart, 1835, orig. des.

ardeae Macquart, 1835: 640 (*Olfersia*). Sicily; Australia (NT, Qld), Northern Marianas; almost cosmopol.

holoptera Lutz in Lutz *et al.*, 1915: 184 (*Olfersia*). Brazil; Indonesia (Irian Jaya), PNG (PNG); Nearctic, Neotrop., Oriental Regs.
 ssp. **omnisetosa** Maa, 1969b: 152. Indonesia (Irian Jaya); PNG (PNG); E Oriental Reg.
omnisetosa Maa, 1967: 269 (as sp.). *Nomen nudum*.

Subgenus ICOSTA Speiser

ICOSTA Speiser, 1905: 358 (as gen.). Type species: *Olfersia dioxyrhina* Speiser, 1904, orig. des.
acromialis Speiser, 1904a: 386 (*Olfersia*). PNG (PNG); Indonesia (Irian Jaya), PNG (Bismarck Arch), Solomon Is; Philippines.
chalcolampra Speiser, 1904b: 335 (*Olfersia*). PNG (PNG); Australia (Qld), Indonesia (Irian Jaya, Maluku), PNG (Bismarck Arch), Solomon Is; Oriental Reg.
pollicipes Ferris, 1927b: 228. Philippines.
diluta Maa, 1969b: 111. PNG (PNG).
diluta Maa, 1967: 269. *Nomen nudum*.
dioxyrhina Speiser, 1904a: 387 (*Olfersia*). PNG (PNG); Indonesia (Irian Jaya), PNG (Bismarck Arch), Solomon Is.
jactatrix Maa, 1969b: 101. Indonesia (Irian Jaya); PNG (PNG).
plana Walker, 1861b: 254 (*Ornithomyia*). Indonesia (Irian Jaya); PNG (PNG).
papuana Rondani, 1878: 162 (*Olfersia*). Indonesia (Irian Jaya).
samoana Ferris, 1927a: 17 (*Lynchia*). Western Samoa.

Subgenus ORNITHOPONUS Aldrich

ORNITHOPONUS Aldrich, 1923a: 77 (as gen.). Type species: *Feronia americana* Leach, 1817, orig. des.
antica Maa, 1969b: 200. PNG (PNG).
australica Paramonov, 1954b: 291 (*Ornithophila*). Australia (Qld).
nigra Perty, 1833: 190 (*Hippobosca*). Brazil; Hawaiian Is; Nearctic, Neotrop. Regs.
intertropica Walker, 1849: 1144 (*Ornithomyia*). Galapagos Is.
acarta Speiser, 1902b: 149 [1902c: 87] (*Olfersia*). Hawaiian Is.
parallelifrons Speiser, 1902a: 386 (*Olfersia*). PNG (PNG); Australia (NSW), Indonesia (Irian Jaya).
cacatuae Maa, 1967: 269. *Nomen nudum*.
paramonovi Maa, 1969b: 85. Australia (SA); Australia (NSW).
simplex Walker, 1861c: 263 (*Ornithomyia*). Indonesia (Sulawesi); Indonesia (Irian Jaya), PNG (PNG).
suvaensis Bequaert, 1941: 283 (*Lynchia*). Fiji.

Genus MYOPHTHIRIA Rondani

MYOPHTHIRIA Rondani, 1875b: 464. Type species: *Myophthiria reduvioides* Rondani, 1875, mon.
MYIOCORYZA Rondani, 1878: 155. Type species: *Myophthiria lygaeoides* Rondani, 1878, orig. des.
MYIOPHTHIRIA, error for *Myophthiria*.
fijiaram Maa, 1980: 851. Fiji.
lygaeoides Rondani, 1878: 155. Indonesia (Maluku); Indonesia (Irian Jaya), PNG (PNG); ?Indonesia (Nusa Tenggara).
neocaledonica Maa, 1980: 854. New Caledonia (New Caledonia).
neohebudarum Maa, 1980: 847. Vanuatu.
queenslandae Maa, 1980: 846. Australia (Qld).
reduvioides Rondani—not Australasian/Oceanian.
wilsoni Maa, 1980: 848. PNG (PNG).

Genus OLTERSIA Leach

FERONIA Leach, 1817a: 6 [1818a: 550, 557]. Type species: *Feronia spinifera* Leach, 1817, des. Speiser, 1899a: 202. [Preocc. Latreille, 1817.]

OLFERSIA Leach, 1817c: 162 (n. n. for *Feronia*).

PSEUDOLFERSIA Coquillett, 1899d: 336. Type species: *Pseudolfersia maculata* Coquillett, 1899 [= *Lynchia fumipennis* Sahlberg, 1886], mon.

ALFERSIA, error for *Olfersia*.

aenescens Thomson, 1869: 610. Cocos (Keeling) Is; pantrop. in Atlantic, Indian, Pacific oceans.

erythropsis Bigot, 1885l: 239. New Caledonia (New Caledonia).

fossulata Macquart, 1843: 434(277). Brazil; Indonesia (Maluku); Philippines, Neotrop. Reg.

spinifera Leach, 1817a: 11 [1818a: 552, 557] (*Feronia*). Hawaiian Is; pantrop.

Genus ORNITHOCTONA Speiser

ORNITHOCTONA Speiser, 1902a: 328. Type species: *Ornithomyia erythrocephala* Leach, 1817, orig. des.

australasiae Fabricius, 1805: 337 (*Hippobosca*). "in Insulis Oceani Pacifici" [original type locality], Indonesia (Java) [neotype locality]; Indonesia (Irian Jaya), PNG (PNG), Solomon Is, Vanuatu; widesp. Oriental Reg.

obscurata Walker, 1861c: 270 (*Ornithomyia*). Indonesia (Sulawesi).

hulahula Maa, 1969a: 17. Hawaiian Is.

plicata Olfers, 1816: 102 (*Ornithomyia*). Mauritius; American Samoa, widesp. Australia, Fiji, Indonesia (Irian Jaya, Maluku), Micronesia, New Caledonia (Loyalty Is, New Caledonia), PNG (Bismarck Arch, PNG), Solomon Is, Tonga, Vanuatu, Western Samoa; Oriental Reg.

nigricans Leach, 1817a: 12 [1818a: 558] (*Ornithomyia*). India.

australis Guérin-Méneville, 1831: pl. 21, fig. 12 (*Hippobosca*) [1838: 302 (*Ornithomyia*)]. Australia (NSW).

sitiens Boisduval, 1835: 667 (*Hippobosca*). Solomon Is.

viridipes Walker, 1858a: 235 (*Hippobosca*). Australia (NSW).

doreica Walker, 1861b: 254 (*Ornithomyia*). Indonesia (Irian Jaya).

batchianica Walker, 1861d: 300 (*Ornithomyia*). Indonesia (Maluku) [original type locality], PNG (PNG) [neotype locality].

hatamensis Rondani, 1878: 158 (*Ornithomyia*). Indonesia (Irian Jaya).

batchiana Rondani, 1878: 158 (*Ornithomyia*). Australia (NSW).

kanakorum Bigot, 1885l: 244 (*Ornithomyia*). New Caledonia (New Caledonia).

vitrina Speiser, 1904b: 343. Tonga.

Genus ORNITHOICA Rondani

ORNITHOICA Rondani, 1878: 159. Type species: *Ornithoica beccariina* Rondani, 1878, mon.

Subgenus LOBOLEPIS Maa

LOBOLEPIS Maa, 1966a: 97. Type species: *Ornithoica curvata* Maa, 1963, orig. des.

hirtisternum Maa, 1963: 153. Indonesia (Irian Jaya).

Subgenus ORNITHOICA Rondani

ORNITHOICA Rondani, 1878: 159 (as gen.). Type species: *Ornithoica beccariina* Rondani, 1878, mon.

aequisenta Maa, 1966a: 90. PNG (Bismarck Arch); Solomon Is, Vanuatu.

ssp. *aequisenta* s. str. PNG (Bismarck Arch); Solomon Is.

ssp. *hystricosa* Maa & Marshall, 1981: 216. Vanuatu.

beccariina Rondani, 1878: 160. Indonesia (Maluku); Australia (WA).

exilis Walker, 1861b: 254 (*Ornithomyia*). Indonesia (Irian Jaya); Australia (Qld), Fiji, Guam, Indonesia (Maluku), Micronesia, New Caledonia (Loyalty Is, New Caledonia), Northern Marianas, PNG (Bismarck Arch, PNG), Vanuatu, Western Samoa; Ryukyu Is, Oriental Reg.

simplicis Maa, 1966a: 68. Indonesia (Irian Jaya).

pusilla, authors, not Schiner, 1868, misid.

- podargi** Maa, 1966a: 87. PNG (PNG).
- punctatissima** Maa, 1966a: 92. Solomon Is.
- pusilla** Schiner, 1868: 374 (*Ornithomyia*). French Polynesia (Society Is); American Samoa, Belau, French Polynesia (Tuamotu Arch), Kiribati (Line Is, Phoenix Is), Marshall Is, Northern Marianas, Palmyra Atoll, Pitcairn Is, Tokelau, Western Samoa.
- stipituri** Schiner, 1868: 374 (*Ornithomyia*). Australia (NSW); Australia (Qld, Tas), Indonesia (Irian Jaya), NZ (Kermadec Is, NZ), PNG (Bismarck Arch, PNG), Solomon Is, Vanuatu; widesp. Oriental Reg.
- distenta* Speiser, 1902a: 332. PNG (PNG).
- vicina** Walker, 1849: 1144 (*Ornithomyia*). Jamaica; Hawaiian Is; Nearctic, Neotrop. Regs.
- peroneura* Speiser, 1902c: 91 (*confluenta* Say var.). Hawaiian Is.
- promiscua* Ferris & Cole, 1922: 203. USA.
- zamicra** Maa, 1966a: 47. Indonesia (Irian Jaya); PNG (PNG).

Genus ORNITHOMYA Latreille

- ORNITHOMYA** Latreille, 1802: 466. Type species: *Hippobosca avicularia* Linnaeus, 1758, mon.
- ORNITHOMYIA**, error for *Ornithomya*.
- apelta** Maa, 1969c: 246. PNG (PNG); Solomon Is, Vanuatu; Philippines.
- areolata** Maa, 1986: 85. Australia (Tas).
- avicularia** Linnaeus—not Australasian/Oceanian.
- biloba** Dufour—not Australasian/Oceanian.
- fuscipennis** Bigot, 1885l: 242. "Colombie," error [= Australia]; Australia (NSW, Qld, SA, Vic), Indonesia (Irian Jaya), PNG (PNG), Solomon Is; widesp. Oriental Reg.
- perfuga* Speiser, 1902a: 331. Australia (NSW).
- fringillina** Curtis—not Australasian/Oceanian.
- greeni** Maa, 1986: 90. Australia (Tas).
- nigricornis** Erichson, 1842: 274. Australia (Tas); Australia (NSW, Qld, Vic).
- tasmanensis* Macquart, 1851: 282(309). Australia (Tas).
- opposita** Walker, 1849: 1145. NZ (NZ). *Nomen dubium*.
- parva** Macquart—not Australasian/Oceanian.
- variegata** Bigot, 1885l: 245. NZ (NZ); Australia (Tas).
- opposita*, authors, not Walker, 1849, misid.

Nomen nudum in Ornithomya Latreille

- clarki** Maa, 1969d: 270.

Genus ORNITHOPHILA Rondani

- ORNITHOPHILA** Rondani, 1879: 11, 20. Type species: *Ornithophila vagans* Rondani, 1879 [= *Ornithomyia metallica* Schiner, 1862], orig. des.
- ORNITHEZA** Speiser, 1902a: 329. Type species: *Ornithomyia gestroi* Rondani, 1878, orig. des.
- metallica** Schiner, 1862c: 646 (*Ornithomyia*). Austria; American Samoa, Australia (NSW, Qld, SA, Tas), Fiji, Indonesia (Irian Jaya), New Caledonia (Loyalty Is, New Caledonia), PNG (Bismarck Arch, PNG), Solomon Is, Tonga, Vanuatu, Western Samoa; widesp. Old World.
- andajensis** Rondani, 1878: 155 (*Ornithomyia*). Indonesia (Irian Jaya).
- noumeana** Bigot, 1885l: 240 (*Olfersia*). New Caledonia (New Caledonia).
- aenescens** Bigot, 1885l: 244 (*Ornithomyia*). New Caledonia (New Caledonia).

Genus ORTHOLFERSIA Speiser

- ORTHOLFERSIA** Speiser, 1902b: 152. Type species: *Orthofersia phaneroneura* Speiser, 1902, mon.
- bequaerti** Maa, 1962b: 606. Australia (Qld).
- macleayi** Leach, 1817a: 12 [1818a: 558] (*Feronia*). "Australia"; Australia (NSW, Qld, Tas).

raveni Ferris, 1924: 4. Australia (NSW).
minuta Paramonov, 1954b: 290. Australia (Qld).
phaneroneura Speiser, 1902b: 153. Australia (NSW); Australia (Tas, Vic).
tasmanica Wesché, 1903: 385 (*Hippobosca*). Australia (Tas).

Genus PSEUDOLYNCHIA Bequaert

PSEUDOLYNCHIA Bequaert, 1926a: 271. Type species: *Olfersia maura* Bigot, 1885 [= *Olfersia canariensis* Macquart, 1839], orig. des.
LYNCHIA, authors, not Weyenbergh, 1881, misid.
canariensis Macquart, 1839a: 119 (*Olfersia*). Canary Is; Hawaiian Is; cosmopol. [in association with domestic pigeons].
maura Bigot, 1885l: 237 (*Olfersia*). Algeria.
mistula Maa, 1969c: 254. PNG (PNG).
serratipes Maa, 1966b: 127. PNG (PNG); Vanuatu.

Subfamily HIPPOBOSCINAE

Genus HIPPOBOSCA Linnaeus

HIPPOBOSCA Linnaeus, 1758: 344, 607. Type species: *Hippobosca equina* Linnaeus, 1758, des.
Latreille, 1810: 444.
HYPPOBOSCA, error for *Hippobosca*.
equina Linnaeus, 1758: 607. "Europa & America septentrionali"; ?Australia, Fiji, New Caledonia (Loyalty Is, New Caledonia), Vanuatu; widesp. Old World [in association with horses].

Subfamily LIPOPTENINAE

Genus MELOPHAGUS Latreille

MELOPHAGUS Latreille, 1802: 466. Type species: *Hippobosca ovina* Linnaeus, 1758, mon.
ovinus Linnaeus, 1758: 607 (*Hippobosca*). Not given [Europe]; Australia (NSW, Qld, SA, Tas), Hawaiian Is, NZ (NZ); almost cosmopol. [in association with sheep].