

APPENDIX I

ECTOPARASITES OF AUSTRALIAN, NEW ZEALAND AND ANTARCTIC BIRDS

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INTRODUCTION

This is the final unit of the checklist covering passerines. The format is the same as previously. Again, many lice have only been identified to genus, and some mites only to the nearest genus (*). Often only immature ticks infest passerines; such infestations are shown as larval (L) or nymphal (N).

Table 1 lists the genera of lice of the families of the passerines, covering the checklists of volumes 5–7 of HANZAB.

The birds in this checklist pose problems where they have extensive geographical distributions which influence the species of fleas, ticks and mites that may infest them.

Several species of birds have a close association with humans who become bitten by mites when fledglings leave nests in buildings. One common example of this is the problem caused by *Ornithonyssus bursa* when chicks of Common Starlings *Sturnus vulgaris* or Common Mynas *Acridotheres tristis* fledge. Other mites cause disease of both aviary and wild birds. *Sternostoma tracheacolum* causes respiratory problems in aviary Gouldian Finches *Erythrura gouldiae*; this disease also causes additional stress in already depleted wild populations of Gouldian Finches. *Knemidokoptes intermedius* infests the lower legs and feet of wild Pied Currawongs *Strepera graculina* and Forest Ravens *Corvus tasmanicus*.

Several of the passerines have been introduced to Aust. or NZ from Europe or elsewhere. Some lice species are absent because they were not on the birds originally introduced, a phenomenon referred to as 'missing the boat'. Thus, fewer species of lice are found on Rook *Corvus frugilegus*, Dunnock *Prunella modularis*, House Sparrow *Passer domesticus*, Common Blackbird *Turdus merula*, Song Thrush *Turdus philomelos* and Common Starling in NZ than on these birds in Europe.

There is an alarming decrease in the numbers of native passerines as land clearances continue, particularly in Aust.,

and the subsequent increasing predation by introduced pests. The future welfare of bird species is threatened, and their extinction means the extinction of some of their ectoparasites, as has been emphasized throughout this series. There is an urgent need to search birds for their ectoparasites before it is too late.

SELECTED BIBLIOGRAPHY

LICE

- Green, R.H., & R.L. Palma. 1991. *Rec. Queen Vict. Mus.* 100: 1–43.
 Mey, E. 2000. *Rudolstädter Naturhistorische Schriften* 10: 185–200.
 Palma, R.L. 1999. *Notornis* 46: 373–87.
 —, & R.D. Price. *NZ J. Zool.* 32: 111–5.
 —, & S.C. Barker. 1996. *Zool. Cat. Aust.* 26: 81–247.
 Mey, E. 2004. *Ornithol. Anzeiger* 43: 149–203.
 Paterson, A.M., et al. 1999. *Syst. Biol.* 48(1): 214–23.
 Pilgrim, R.L.C., & R.L. Palma. 1982. *Notornis* (Suppl.) 29: 32.
 Stranger, R.H., & R.L. Palma. 1998. *Rec. West. Aust. Mus.* 19: 169–86.

FLEAS

- Calder, A.A. 1996. *Zool. Cat. Aust.* 28: 136–97.
 Smit, F.G.A.M. 1979. *J. R. Soc. NZ* 9: 143–232.

LOUSE-FLIES

- Maa, T.C. 1966. *Pac. Insects Monogr.* 10: 1–148.
 — 1969. *Pac. Insects Monogr.* 20: 1–312.
 — 1986. *J. Taiwan Mus.* 39: 83–92.

MITES

- Bell, P.J. 1996. *Wildl. Res.* 23: 675–85.
 Bishop, D.M., & A.C.G. Heath. 1998. *Surveillance* 25: 13–31.
 Domrow, R. 1987. *Invert. Taxonomy* 1: 817–948.
 — 1991. *Invert. Taxonomy* 4: 1283–376.
 — 1992. *Invert. Taxonomy* 6: 1459–606.
 —, & L.N. Lester. 1985. *Aust. J. Zool. Suppl. Ser.* 114: 1–111.
 Jaensch, S.M., et al. 2003. *Aust. Vet. J.* 81: 411.
 Mason, R.W. 1988. *Aust. Vet. J.* 65: 260.
 Murray, M.D. 1966. *Aust. Vet. J.* 42: 262–4.
 Tidemann, S.C. 1996. *Bird Conserv. Int.* 6: 49–61.

TICKS

- Keirans, J.E. 1984. *US Dept. Agric. Misc. Publ.* 1438: 1785.
 Roberts, F.H.S. 1970. *Australian Ticks*. CSIRO Pubs, Melbourne.

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CHECKLIST OF ECTOPARASITES

Family DICRURIDAE

Monarcha melanopsis

- LICE: *Brueelia* sp.
 MITES: *Ptilonyssus terpsiphonei* Fain, 1956

Monarcha trivirgatus

- MITES: *Leptotrombidium nissani* (Dumbleton, 1947)
Ptilonyssus monarchae Domrow, 1969
Ptilonyssus terpsiphonei Fain, 1956
Ruandanyssus terpsiphonei Fain, 1957
Sternostoma cuculorum Fain, 1956

Monarcha leucotis

- MITES: *Ptilonyssus terpsiphonei* Fain, 1956

Arses telescopthalmus

- MITES: *Leptotrombidium nissani* (Dumbleton, 1947)

Arses kaupi

- MITES: *Ptilonyssus terpsiphonei* Fain, 1956
Sternostoma cuculorum Fain, 1956

Myiagra rubecula

- MITES: *Leptotrombidium nissani* (Dumbleton, 1947)
Ptilonyssus terpsiphonei Fain, 1956

- Ruandanyssus terpsiphonei* Fain, 1957
Sternostoma cuculorum Fain, 1956

Myiagra alecto

- MITES: *Ptilonyssus terpsiphonei* Fain, 1956

Myiagra inquieta

- MITES: *Ptilonyssus terpsiphonei* Fain, 1956

Grallina cyanoleuca

- LICE: *Myrsidea* sp.
Brueelia sp.
Philopterus sp.
 MITES: *Megninia acutipes* (Bonnet, 1924)
Neottalges grallinae Janssen Duijghuijsen, Lukoschus & Fain, 1979
Ornithocheyletia lichmerae Smiley, 1984
Ornithonyssus sylvianum (Canestrini & Fanzago, 1877)
Ptilonyssus grallinae Domrow, 1964

Rhipidura rufifrons

- MITES: *Ptilonyssus setosae* Domrow, 1969

Rhipidura fuliginosa

- LICE: *Menacanthus rhipidurae* Palma & Price, 2005
Ricinus mugimaki (Uchida, 1915)
Philopterus sp.

- LOUSE-FLIES: *Ornithoica stipituri stipituri* (Schiner, 1868)
Ornithomya areolata Maa, 1986
Ornithomya nigricornis Erichson, 1842
- MITES: *Ptilonyssus rhipidurae* Domrow, 1966
Anhemialges sp.*
Hemialges sp.
Ingrassiaella sp.
Pteronyssoides sp.
Trouessartia sp.
- Rhipidura rufiventris**
MITES: *Ptilonyssus setosae* Domrow, 1969
- Rhipidura leucophrys**
LICE: *Myrsidea* sp.
MITES: *Ptilonyssus macclurei* Fain, 1963
Sternostoma cuculorum Fain, 1956
- Dicrurus bracteatus**
MITES: *Ptilonyssus dicruri* Fain, 1956
- Family CAMPEPHAGIDAE
- Coracina novaehollandiae**
LICE: *Myrsidea* sp.
Brueelia sp.
Philoaterus goshikidori (Uchida, 1948)
MITES: *Leptotrombidium nissani* (Dumbleton, 1947)
Odontacarus australiensis (Hirst, 1925)
Ruandanyssus terpsiphonei Fain, 1957
- Coracina papuensis**
MITES: *Leptotrombidium nissani* (Dumbleton, 1947)
Ruandanyssus terpsiphonei Fain, 1957
- Lalage sueurii**
MITES: *Boyaia crassipes* (Berlese & Trouessart, 1889)
Ptilonyssus cractici Domrow, 1964
Ruandanyssus terpsiphonei Fain, 1957
- Family ORIOLIDAE
- Oriolus flavocinctus**
MITES: *Leptotrombidium nissani* (Dumbleton, 1947)
Leptotrombidium robustum (Gunther, 1941)
Ptilonyssus trouessarti (Hirst, 1921)
- Oriolus sagittatus**
MITES: *Neoschoengastia posekanyii* Wharton & Hardcastle, 1946
Ptilonyssus trouessarti (Hirst, 1921)
- Sphecotheses viridis**
LICE: *Columbicola paradoxus* Tendeiro, 1965
MITES: *Ptilonyssus sphecothesis* Domrow, 1964
- Family ARTAMIDAE
- Artamus personatus**
MITES: *Ruandanyssus terpsiphonei* Fain, 1957
- Artamus superciliosus**
MITES: *Artamacarus diacanthurus* Gaud & Atyeo, 1974
- Artamus cinereus**
MITES: *Ruandanyssus artami* Domrow, 1969
- Artamus cyanopterus**
LICE: *Menacanthus nelsoni* Price, 1976
MITES: *Artamacarus diacanthurus* Gaud & Atyeo, 1974
Neochelytiella artami Domrow, 1966
Ornithonyssus sylvianum (Canestrini & Fanzago, 1877)
- Artamus minor**
MITES: *Artamacarus diacanthurus* Gaud & Atyeo, 1974
Neoschoengastia americana (Hirst, 1921)
Ruandanyssus artami Domrow, 1969
- Cracticus quoyi**
MITES: *Leptotrombidium nissani* (Dumbleton, 1947)
Ptilonyssus cractici Domrow, 1964
Sternostoma thienpoti Fain, 1956
- Cracticus torquatus**
MITES: *Neoschoengastia posekanyii* Wharton & Hardcastle, 1946
Ptilonyssus cractici Domrow, 1964
TICKS: *Ixodes* sp. (L)
- Cracticus mentalis**
MITES: *Ptilonyssus cractici* Domrow, 1964
- Cracticus nigrogularis**
MITES: *Neoschoengastia posekanyii* Wharton & Hardcastle, 1946
Ptilonyssus cractici Domrow, 1964
Sternostoma thienpoti Fain, 1956
- TICKS: *Ixodes holocyclus* Neumann, 1899
- Strepera graculina**
LICE: *Myrsidea vincula* (Le Souëf & Bullen, 1902)
MITES: *Knemidokoptes intermedius* Fain & Macfarlane, 1967
Ptilonyssus cractici Domrow, 1964
- Strepera fuliginosa**
LICE: *Myrsidea* sp.
Brueelia sp.
Australophilopterus curvicornis Mey, 2004
LOUSE-FLIES: *Ornithomya nigricornis* Erichson, 1842
TICKS: *Ixodes* sp. (*auritulus* group)
Ixodes sp. (L)
- Strepera versicolor**
LICE: *Menacanthus dennisi* Price & Emerson, 1988
Myrsidea sp.
Australophilopterus strepericus Mey, 2004
Brueelia sp.
LOUSE-FLIES: *Ornithomya nigricornis* Erichson, 1842
- Gymnorhina tibicen**
LICE: *Picicola bimaculatus* (Piaget, 1885)
MITES: *Ornithonyssus bursa* (Berlese, 1888)
Ptilonyssus cractici Domrow, 1964
Pterodectes sp.
Sternostoma thienpoti Fain, 1956
Syringophilopsis sp. 4 Johnston & Kethley, 1973
- Gymnorhina tibicen tibicen, Gymnorhina tibicen dorsalis**
LICE: *Myrsidea* sp.
Brueelia semiannulata (Piaget, 1883)
Philoaterus sp.
FLEAS: *Echidnophaga gallinacea* (Westwood, 1875)
TICKS: *Ixodes holocyclus* Neumann, 1899
Haemaphysalis longicornis Neumann, 1901
- Gymnorhina tibicen hypoleuca**
LICE: *Myrsidea* sp.
Brueelia semiannulata (Piaget, 1883)
LOUSE-FLIES: *Ornithoica stipituri stipituri* (Schiner, 1868)
Ornithomya nigricornis Erichson, 1842
- Family CORVIDAE
- Corvus frugilegus**
LICE: *Colpocephalum fregili* Denny, 1842
MITES: *Analges* sp.
Gabucinia sp.
- Corvus coronoides**
LICE: *Colpocephalum fregili* Denny, 1842
Menacanthus gonophaeus (Burmeister, 1838)
Myrsidea australiensis australiensis Klockenhoff, 1971
Brueelia sp.
Philoaterus craigi Price & Hellenthal, 1998
TICKS: *Ixodes holocyclus* Neumann, 1899
- Corvus tasmanicus**
LICE: *Colpocephalum fregili* Denny, 1842
Menacanthus gonophaeus (Burmeister, 1838)
Myrsidea australiensis australiensis Klockenhoff, 1971
Philoaterus dalgleishi Price & Hellenthal, 1998
LOUSE-FLIES: *Ornithomya nigricornis* Erichson, 1842
MITES: *Knemidokoptes intermedius* Fain & Macfarlane, 1967
- Corvus mellori**
LICE: *Colpocephalum fregili* Denny, 1842
Menacanthus gonophaeus (Burmeister, 1838)
Myrsidea australiensis mellori Klockenhoff, 1973
LOUSE-FLIES: *Ornithomya nigricornis* Erichson, 1842
- Corvus bennetti**
LICE: *Colpocephalum fregili* Denny, 1842
Menacanthus gonophaeus (Burmeister, 1838)
Myrsidea australiensis bennetti Klockenhoff, 1971
Brueelia sp.
Philoaterus craigi Price & Hellenthal, 1998
- Corvus orru**
LICE: *Myrsidea ceciliae* Klockenhoff, 1972
Myrsidea schizotergum arafura Klockenhoff, 1972
Myrsidea schizotergum schizotergum Klockenhoff, 1972
- Family CORCORACIDAE
- Corcorax melanorhamphos**
LICE: *Menacanthus* sp.
Myrsidea sp.

- Brueelia* sp.
Corcorides inopinatus Mey, 2004
 Paraphilopterus styloideus Mey, 2004
 MITES: *Ptilonyssus corcoracis* Domrow, 1969
Struthidea cinerea
 LICE: *Myrsidea cinerea* (Thompson, 1939)
Myrsidea struthidea Thompson, 1939
Corcorides biocellatus Mey, 2004
 MITES: *Eutrombicula sarcina* (Womersley, 1944)
Leptotrombidium nissani (Dumbleton, 1947)
Neoschoengastia posekanyi Wharton & Hardcastle, 1946
Neoschoengastia americana (Hirst, 1921)
Odontacarus adelaideae (Womersley, 1944)
Ornithonyssus bursa (Berlese, 1888)
Ptilonyssus struthideae Domrow, 1969
Ruandanyssus terpsiphonei Fain, 1957

Family PTILONORHYNCHIDAE

Ailuroedus crassirostris

- MITES: *Neoschoengastia posekanyi* Wharton & Hardcastle, 1946
Ptilonyssus ailuroedi Domrow, 1964

Sericulus chrysocephalus

- LICE: *Brueelia hectica* (Nitzsch [in Giebel], 1866)
 MITES: *Proterothrix paradisiaca* (Trouessart, 1885)

Ptilonorhynchus violaceus

- LICE: *Myrsidea ptilonorhynchi* (Ponton, 1871)
Philopterus grandiceps (Giebel, 1874)
Picicola nitzschii (Ponton, 1871)

Chlamydera nuchalis

- MITES: *Ptilonyssus sphecotheris* Domrow, 1964

Family TURNAGRIDA

Turnagra capensis

- LICE: *Brueelia* sp.

Family CALLAEIDAE

Callaes cinerea**Callaes cinerea wilsoni, Callaes cinerea cinerea**

- LICE: *Brueelia* sp.
Philopterus novaezealandiae Palma & Price, 2000
 MITES: *Mesalges diaphanoxus* Bonnet, 1924

Philesturnus carunculatus

- LOUSE-FLIES: *Ornithomya variegata* Bigot, 1885

Philesturnus carunculatus carunculatus

- LICE: *Brueelia* sp.

Philesturnus carunculatus rufusater

- LICE: *Brueelia* sp.
 MITES: *Ornithonyssus bursa* (Berlese, 1888)

Heteralocha acutirostris

- LICE: *Rallicola (Huicola) extinctus* (Mey, 1990)

Family ALAUDIDAE

Mirafra javanica

- MITES: *Ptilonyssus capitatus* (Strandtmann, 1956)

Alauda arvensis

- LICE: *Menacanthus alaudae* (Schrank, 1776)
Brueelia sp.
Philopterus sp.
 MITES: *Analges* sp.
Proctophyllodes (?anthi) Vitzthum, 1922
Pterodectes sp.*
 TICKS: *Haemaphysalis longicornis* Neumann, 1901

Family PRUNELLIDAE

Prunella modularis

- LICE: *Philopterus* sp.
 FLEAS: *Ceratophyllus gallinae* (Schrank, 1803)
Parapsyllus struthophilus Smit, 1979
 LOUSE-FLIES: *Ornithomya variegata* Bigot, 1885
 MITES: *Analges* sp.
Ornithonyssus bursa (Berlese, 1888)
Proctophyllodes sp.

Family PASSERIDAE

Passer domesticus

- LICE: *Menacanthus eurysternus* (Burmeister, 1838)
Brueelia cyclothorax (Burmeister, 1838)

- FLEAS: *Ceratophyllus gallinae* (Schrank, 1803)
 LOUSE-FLIES: *Ornithoica stipituri stipituri* (Schiner, 1868)
Ornithomya areolata Maa, 1986
Ornithomya nigricornis Erichson, 1842
Ornithomya variegata Bigot, 1885

- MITES: *Analges* sp.
Androlaelaps casalis (Berlese, 1887)
Dermanyssus gallinae (De Geer, 1778)
Mesalges sp.
Ornithonyssus bursa (Berlese, 1888)
Ornithonyssus sylvianus (Canestrini & Fanzago, 1877)
Proctophyllodes truncatus Robin, 1877
Ptilonyssus hirsti (de Castro & Pereira, 1947)
 TICKS: *Haemaphysalis longicornis* Neumann, 1901

Family ESTRILDIDAE

Taeniopygia guttata

- MITES: *Neocnemidocoptes australiensis* Fain & Lukoschus, 1979
Pellonyssus reedi (Zumpt & Patterson, 1952)
Ptilonyssus astridae Fain, 1956
?Ptilonyssus conopophilae Fain & Lukoschus, 1979
Ptilonyssus motacillae Fain, 1956
Sternostoma sp.

Taeniopygia bichenovii

- MITES: *Pellonyssus reedi* (Zumpt & Patterson, 1952)
Ptilonyssus emberizae Fain, 1956

Poephila acuticauda

- MITES: *Bakericheyla chanayi* (Berlese & Trouessart, 1889)
Kytonyssus andrei Fain, 1960
Pellonyssus reedi (Zumpt & Patterson, 1952)
Ptilonyssus astridae Fain, 1956
Ptilonyssus neochmiae Domrow, 1969
Sternostoma paddae Fain, 1958

Poephila personata

- MITES: *Kytodites amandavae* Fain & Bafort, 1964
Ptilonyssus astridae Fain, 1956
Sternostoma paddae Fain, 1958
Sternostoma tracheacolum Lawrence, 1948

Neochmia phaeton

- MITES: *Ptilonyssus neochmiae* Domrow, 1969

Neochmia temporalis

- MITES: *Pellonyssus reedi* (Zumpt & Patterson, 1952)

Stagonopleura bella

- LICE: *Myrsidea* sp.
Brueelia sp.

Lonchura punctulata

- MITES: *Ptilonyssus motacillae* Fain, 1956

Lonchura castaneothorax

- MITES: *Ornithocheyletia lonchurae* Smiley, 1984
Pellonyssus reedi (Zumpt & Patterson, 1952)
Ptilonyssus astridae Fain, 1956

Heteromunia pectoralis

- MITES: *Ptilonyssus emberizae* Fain, 1956
Sternostoma tracheacolum Lawrence, 1948

Erythrura gouldiae

- LICE: *Machaerilaemus latifrons* Harrison, 1915
 MITES: *Androlaelaps casalis* (Berlese, 1887)
Bakericheyla chanayi (Berlese & Trouessart, 1889)
Eulaelaps oudemansi Turk, 1945
Ptilonyssus neochmiae Domrow, 1992 p.1605
Sternostoma paddae Fain, 1958
Sternostoma tracheacolum Lawrence, 1948

Family FRINGILLIDAE

Fringilla coelebs

- FLEAS: *Ceratophyllus gallinae* (Schrank, 1803)
 LOUSE-FLIES: *Ornithomya variegata* Bigot, 1885
 MITES: *Analges* sp.
Monojoubertia microphylla (Robin, 1877)
Pteronyssoides sp.*

Carduelis chloris chloris

- LICE: *Myrsidea serini* (Séguy, 1944)
Brueelia sp.
 FLEAS: *Ceratophyllus gallinae* (Schrank, 1803)

* Closest to genus

- MITES: *Analgés* sp.
Knemidokoptes jamaicensis (Turk, 1950)
Megninia sp.
Mesalgés sp.
Proctophyllodes sp.
- Carduelis carduelis carduelis**
LICE: *Myrsidea serini* (Séguy, 1944)
Brueelia sp.
- LOUSE-FLIES: *Ornithomya variegata* Bigot, 1885
MITES: *Knemidokoptes jamaicensis* (Turk, 1950)
- Carduelis flammea**
MITES: *Ornithonyssus sylvianum* (Canestrini & Fanzago, 1877)

Family MOTACILLIDAE

- Anthus novaeseelandiae**
LICE: *Menacanthus pusillus* (Nitzsch, 1866)
Penenirmus sp.
Philoaterus sp.
- MITES: *Ptilonyssus motacillae* Fain, 1956
- Anthus novaeseelandiae novaeseelandiae, Anthus novaeseelandiae steindachneri**
LICE: *Menacanthus eurysternus* (Burmeister, 1838)
Myrsidea sp.
Philoaterus sp.
- MITES: *Proctophyllodes* (?*anthi*) Vitzthum, 1922

Family EMBERIZIDAE

- Emberiza citrinella**
LICE: *Myrsidea serini* (Séguy, 1944)
Brueelia delicata (Nitzsch, 1866)
- LOUSE-FLIES: *Ornithomya avicularia* (Linnaeus, 1758)
Ornithomya variegata Bigot, 1885
- MITES: *Analgés* sp.
Proctophyllodes sp.
Ptilonyssus emberizae Fain, 1956

Family NECTARINIIDAE

- Nectarinia jugularis**
MITES: *Ptilonyssus cinnyris* Zumpt & Till, 1955

Family DICAIEIDAE

- Dicaeum hirundinaceum**
MITES: *Monojoubertia parvisecurigera* Atyeo, 1971
Monojoubertia securigera Atyeo, 1971
Ptilonyssus dicaei Domrow, 1966

Family HIRUNDINIDAE

- Cheramoeca leucosternus**
FLEAS: *Echidnophaga gallinacea* (Westwood, 1875)
MITES: *Mesolaelaps australiensis* (Hirst, 1926)
- Hirundo rustica**
LICE: *Myrsidea rustica* (Giebel, 1874)
Philoaterus excisus microsomaticus Tandan, 1955
- Hirundo neoxena**
LICE: *Myrsidea rustica* (Giebel, 1874)
Brueelia tenuis (Burmeister, 1838)
Philoaterus excisus microsomaticus Tandan, 1955
- LOUSE-FLIES: *Ornithomya greeni* Maa, 1986
Ornithomya nigricornis Erichson, 1842
- MITES: *Boyaia hirundoae* Fain, 1956
Ornithonyssus sylvianum (Canestrini & Fanzago, 1877)
Pteronyssus sp. [NZ record]
Ptilonyssus angrensis (de Castro, 1948)
Ptilonyssus echinatus Berlese & Trouessart, 1889
- Hirundo nigricans**
LICE: *Machaerilaemus malleus* (Burmeister, 1838)
MITES: *Ptilonyssus echinatus* Berlese & Trouessart, 1889
TICKS: *Ixodes* sp. (N)
- Hirundo ariel**
MITES: *Boyaia hirundoae* Fain, 1956
Cheletonella vespertilionis Womersley, 1941
Ornithonyssus bursa (Berlese, 1888)
Ornithonyssus sylvianum (Canestrini & Fanzago, 1877)
Ptilonyssus echinatus Berlese & Trouessart, 1889
TICKS: *Argas lagenoplastis* Froggatt, 1906

Family SYLVIIDAE

- Acrocephalus australis**
MITES: *Ptilonyssus acrocephali* Fain, 1964
- Megalurus gramineus**
MITES: *Ornithonyssus sylvianum* (Canestrini & Fanzago, 1877)
- Bowdleria punctata**
LICE: *Penenirmus* sp.
- FLEAS: *Notiopsylla peregrinus* Smit, 1979
Pagipsylla galliralli (Smit, 1965)
Parapsyllus lynnae lynnae Smit, 1965
- Cincloramphus mathewsi**
MITES: *Ptilonyssus bradypteri* (Fain, 1962)
- Cincloramphus cruralis**
LICE: *Brueelia* sp.

Family ZOSTEROPIDAE

- Zosterops lateralis**
LICE: *Menacanthus eurysternus* (Burmeister, 1838)
- FLEAS: *Ceratophyllus gallinae* (Schrank, 1803)
Pagipsylla galliralli (Smit, 1965)
- LOUSE-FLIES: *Ornithomya areolata* Maa, 1986
Ornithomya nigricornis Erichson, 1842
Ornithomya variegata Bigot, 1885
- MITES: *Boyaia zosteropis* Fain, 1963
Calcealgés (?*yunkerii*) Gaud, 1962
Ornithonyssus bursa (Berlese, 1888)
Ptilonyssus ruandae Fain, 1956
Sternostoma cuculorum Fain, 1956
Trouessartia megadisca Gaud, 1962
Trouessartia sp.

Family MUSCICAPIDAE

- Zoothera lunulata**
LICE: *Myrsidea* sp.
Brueelia daumae (Clay, 1936)
Philoaterus sp.**
- FLEAS: *Hoogstraalia vandiemeni* Smit, 1958
- MITES: *Sternostoma durenii* Fain, 1956
Sternostoma technaui Vitzthum, 1935

Family TURDIDAE

- Turdus merula merula**
LICE: *Menacanthus eurysternus* (Burmeister, 1838)
Myrsidea thoracica (Giebel, 1874)
Brueelia merulensis (Denny, 1842)
Brueelia ansel (Eichler, 1951)
Philoaterus turdi (Denny, 1842)
- FLEAS: *Ceratophyllus gallinae* (Schrank, 1803)
Pagipsylla galliralli (Smit, 1965)
Parapsyllus struthophilus Smit 1979
- LOUSE-FLIES: *Ornithoica stipituri stipituri* (Schiner, 1868)
Ornithomya nigricornis Erichson, 1842
- MITES: *Analgés* sp.
Androlaelaps casalis (Berlese, 1887)
Ornithonyssus bursa (Berlese, 1888)
Ornithonyssus sylvianum (Canestrini & Fanzago, 1877)***
Proctophyllodes sp.
Ptilonyssus eurotardi Fain & Hyland, 1963

Family TURDIDAE

- Turdus philomelos**
LICE: *Menacanthus eurysternus* (Burmeister, 1838)
Brueelia turdimulae Ansari, 1956
Philoaterus turdi (Denny, 1842)
- FLEAS: *Ceratophyllus gallinae* (Schrank, 1803)
- LOUSE-FLIES: *Ornithomya variegata* Bigot, 1885
- MITES: *Analgés* sp.
Ornithonyssus bursa (Berlese, 1888)
Ptilonyssus eurotardi Fain & Hyland, 1963

Family STURNIDAE

- Aplonis metallica**
MITES: *Ptilonyssus sturnopastoris* Fain, 1963

** The host species was reported as *Zoothera lunulata* in 1969 and later *Z. dauma* in 1992. They were collected from Wilsons Peak, NSW.

*** The original report of an intranasal habitat was withdrawn (Hogsette *et al.* 1991). This mite usually visits the host in the nest to obtain a blood meal.

Sturnus vulgaris

LICE: *Menacanthus eurysternus* (Burmeister, 1838)
Brueelia nebulosa (Burmeister, 1838)
Sturnidoecus sturni (Schrank, 1776)

FLEAS: *Ceratophyllus gallinae* (Schrank, 1803)

LOUSE-FLIES: *Ornithomya nigricornis* Erichson, 1842

MITES: *Analgopsis passerinus* (Linnaeus, 1758)
Boyardia sturni (Boyd, 1948)
Dermanyssus gallinae (De Geer, 1778)
Ornithonyssus bursa (Berlese, 1888)
Ornithonyssus sylvianum (Canestrini & Fanzago, 1877)
Proctophyllodes sp.

Pteronyssoides truncatus (Trouessart, 1885)
Trouessartia rosteri (Berlese, 1883)

TICKS: *Ixodes* sp. (N)

Acridotheres tristis

LICE: *Menacanthus eurysternus* (Burmeister, 1838)
Sturnidoecus sp.

MITES: *Analgopsis* sp.
Analgopsis (?*passerinus*) (Linnaeus, 1758)
Ornithonyssus sylvianum (Canestrini & Fanzago, 1877)
Proctophyllodes sp.
Pteronyssoides (?*truncatus*) (Trouessart, 1885)
Trouessartia (?*rosteri*) (Berlese, 1883)

Table 1. Genera of lice associated with families of birds.

SUB-ORDERS AND GENERA OF LICE

	Amblycera	Ischnocera
Passeriformes		
Acanthisittidae	<i>Menacanthus</i>	
Pittidae		<i>Picicola</i>
Menuridae	<i>Menacanthus</i>	<i>Brueelia</i>
Maluridae	<i>Myrsidea</i>	<i>Brueelia</i> , <i>Philopterus</i>
Meliphagidae	<i>Menacanthus</i> , <i>Myrsidea</i> , <i>Ricinus</i>	<i>Brueelia</i> , <i>Philopterus</i>
Pardalotidae	<i>Menacanthus</i> , <i>Myrsidea</i> , <i>Ricinus</i>	<i>Philopterus</i>
Petroicidae	<i>Menacanthus</i> , <i>Ricinus</i>	<i>Brueelia</i> , <i>Philopterus</i>
Pomatostomidae		<i>Brueelia</i>
Cinlosomatidae		<i>Brueelia</i> , <i>Philopterus</i>
Pachycephalidae	<i>Menacanthus</i> , <i>Myrsidea</i>	<i>Brueelia</i> , <i>Philopterus</i>
Dicruridae	<i>Menacanthus</i> , <i>Myrsidea</i> , <i>Ricinus</i>	<i>Brueelia</i> , <i>Philopterus</i>
Campephagidae	<i>Myrsidea</i>	<i>Brueelia</i> , <i>Philopterus</i>
Oriolidae		<i>Columbicola</i>
Artamidae	<i>Menacanthus</i> , <i>Myrsidea</i>	<i>Australophilopterus</i> , <i>Brueelia</i> , <i>Picicola</i>
Paradisaeidae	<i>Myrsidea</i>	
Corvidae	<i>Colpocephalum</i> , <i>Menacanthus</i> , <i>Myrsidea</i>	<i>Brueelia</i> , <i>Philopterus</i>
Corcoracidae	<i>Menacanthus</i> , <i>Myrsidea</i>	<i>Brueelia</i> , <i>Corcorides</i> , <i>Paraphilopterus</i>
Ptilonorhynchidae	<i>Myrsidea</i>	<i>Brueelia</i> , <i>Philopterus</i> , <i>Picicola</i>
Turnagridae		<i>Brueelia</i>
Callaeidae		<i>Brueelia</i> , <i>Philopterus</i> , <i>Rallicola</i>
Alaudidae	<i>Menacanthus</i>	<i>Brueelia</i> , <i>Philopterus</i>
Prunellidae		<i>Philopterus</i>
Passeridae	<i>Menacanthus</i>	<i>Brueelia</i>
Estrildidae	<i>Machaerilaemus</i> , <i>Myrsidea</i>	<i>Brueelia</i>
Fringillidae	<i>Myrsidea</i>	<i>Brueelia</i>
Motacillidae	<i>Menacanthus</i> , <i>Myrsidea</i>	<i>Penenirmus</i> , <i>Philopterus</i>
Emberizidae	<i>Myrsidea</i>	<i>Brueelia</i>
Hirundinidae	<i>Machaerilaemus</i> , <i>Myrsidea</i>	<i>Brueelia</i> , <i>Philopterus</i>
Sylviidae		<i>Brueelia</i> , <i>Penenirmus</i>
Zosteropidae	<i>Menacanthus</i>	
Muscicapidae	<i>Menacanthus</i> , <i>Myrsidea</i>	<i>Brueelia</i> , <i>Philopterus</i>
Sturnidae	<i>Menacanthus</i>	<i>Brueelia</i> , <i>Sturnidoecus</i>

APPENDIX II

ABORIGINAL NAMES

Compiled by J.M. Peter & M.B. Peter.

Aust. Aboriginal names were compiled from the following sources: AUST.-WIDE: Gould (1865), Sorenson (1920), Theiberger & McGregor (1994). CENTRAL AUST.: Nicholls (1924), Whitlock (1924). QLD: Gulf Country (Breen 1981); mouths of Mitchell R., sw. C. York Pen. (Alpher 1991); Gulf of Carpentaria to w. C. York Pen., C. York, and Cardwell to Townsville (Dixon & Blake 1983); Mer, Torres Str. (Ingram 1976); Waraber I., Torres Str. (Drake 1979); Bentinck Is (Evans 1992); Weipa, on w. C. York Pen., Tully to Herbert R., and Cunnamulla to central NSW (Dixon & Blake 1981); Cooktown area (Dixon & Blake 1979); Bloomfield R. (Jerrard 1931); Herberton district (Fulton 2001); Barron R. (Jackson 1909); Mt Isa-Cloncurry area (Blake 1979); Charleville area (Breen 1973); w. Qld (Breen 1990); S of Brisbane to Evans Head (Geytenbeek & Geytenbeek 1971). NSW:

Throughout (Campbell 1908); S of Brisbane to Evans Head (Geytenbeek & Geytenbeek 1971); Cunnamulla, Qld, to central NSW (Dixon & Blake 1981); Lower Darling R. (Hercus 1982); Sydney district (Anon. 1905). VIC.: Throughout (Hercus 1986); L. Tyers (Dixon & Blake 1981); w. Vic. (Dawson 1881; Brown 1950); nw. Vic. (Stone 1912, 1913). SA: Throughout (Condon 1955); The Coorong (Tindale 1938); Everard Ras (Goddard & Shurcliff 1986); w. coast (Sullivan 1928). WA: Throughout (Serventy & Whittell 1976); Pallinup R. estuary (Serventy 1926); Geraldton area to Shark Bay (Dixon & Blake 1981); Yandanooka district (Milligan 1905); Pilbara Region (Whitlock 1909); North-West Cape (Carter 1903); Kimberley Div. (Magglamarra *et al.* 1991). NT: Port Essington (Chisholm 1945); Alexandra district (Mathews 1909); nw. Arnhem Land (Goodfellow 2001); ne. and