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TYPE SPECIMENS OF LICE (INSECTA: PHTHIRAPTERA) HELD IN THE MUSEU DE ZOOLOGIA DA UNIVERSIDADE DE SÃO PAULO, BRAZIL

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ABSTRACT

The type specimens of 142 nominal species of chewing and sucking lice (Insecta: Phthiraptera: Amblycera, Ischnocera and Anoplura) held in the Museu de Zoologia da Universidade de São Paulo, Brazil (MZUSP) are listed. The list includes species in the families: Menoponidae and Gyropidae (Suborder Amblycera); Philopteridae (including species initially described in Heptapsogastridae) and Trichodectidae (Suborder Ischnocera); and Hoplopleuridae (Suborder Anoplura). The following type categories are represented in the collection: holotype, allotype, paratype, syntype, neotype, neoallotype, neoparatype and paralectotype. Information is taken from card data, and includes changes in nomenclatural status for each species since their original description. Two additional lists, one with updated scientific names for the lice (Appendix 1) and another with those for the host taxa (Appendix 2), are included.

KEYWORDS: Phthiraptera; Lice; Types; List; MZUSP; Menoponidae; Gyropidae; Philopteridae; Trichodectidae; Hoplopleuridae.

INTRODUCTION

Insect of the order Phthiraptera, commonly known as chewing and sucking lice, are permanent and obligatory ectoparasites of birds and mammals (Johnson & Clayton, 2003). This order currently includes four suborders: Amblycera, Ischnocera, Rhynchophthirina, and Anoplura. The suborder Anoplura (sucking lice) includes those species that are ectoparasites of eutherian mammals exclusively (Durden & Musser, 1994).

The card index of the Phthiraptera collection held in the Museu de Zoologia da Universidade de São Paulo, Brazil (MZUSP) comprises about 1,719 entries relating to specimens from many hosts around the world (*e.g.* Africa, Europe, Asia, Oceania and the

Americas), which are either slide-mounted (72% of them) or preserved in alcohol (28%). This collection originated in the mid-1940's through the efforts of Lindolpho Rocha Guimarães (1908-1998), a prominent Brazilian ectoparasitologist. His publications on chewing lice (Amblycera and Ischnocera) include the description of 84 new species, with 73 of them still recognized as valid (Price *et al.*, 2003), and on sucking lice (Anoplura) the only species described by him is valid (Durden & Musser, 1994).

In accordance with Recommendation 72F.4 of the *International Code of Zoological Nomenclature* (ICZN, 1999: 79), a list of the types of Phthiraptera held in the Museu de Zoologia da Universidade de São Paulo, Brazil (MZUSP) is presented hereby. During the last 15 years, similar lists of Phthiraptera type

specimens have been published for specimens housed: in the Centro de Zoologia do Instituto de Investigação Científica Tropical, Portugal (Mendes, 1993); in the Instituto Oswaldo Cruz, Brazil (Cardozo-de-Almeida *et al.*, 1999, 2003); in the United States National Museum of Natural History, U.S.A. (Durden & Adams, 2005); and in the Museo de La Plata, Argentina (Abrahamovich *et al.*, 2006).

The most recently published list of type specimens held in the MZUSP for an insect group was prepared by Scott-Santos *et al.* (2008) for the “poneromorph” ants (Hymenoptera, Formicidae); the format of which is largely followed in this publication.

MATERIAL AND METHODS

All type categories of Phthiraptera held in MZUSP are listed following the proposal made by Lavett Smith & Buerkli (1969). The information given for each species and specimen was taken from cards and confirmed and/or corrected with the original, published, descriptions.

The following data, when available, are provided for each type specimen: original species name, author, year of publication, page number in which the species name first appeared; and the category of the type specimen. In addition, the number of specimens in the type series, their respective sexes, the MZUSP (#) numbers, box ('b'), number of the box, and place inside the box (for slide-mounted specimens); or alcohol vial ('a'), large vial number, small vial number inside the large one (for specimens preserved in alcohol), a note (which includes information from register books), the host's scientific name, the number of bird skins in the MZUSP Ornithological Collection, from which the material was taken off (when applicable), the systematic order and family of the host, its locality, collection date, and collector, are also given. In cases where it was not possible to count the number of specimens in alcohol, they are cited as “few specimens”, according to the cards. Where necessary, changes to the taxonomic status of the species listed were indicated.

The nomenclature and classification used in this paper follow those presented in the world checklists by Price *et al.* (2003) for chewing lice (suborders Amblycera and Ischnocera), and by Durden & Musser (1994) for sucking lice (suborder Anoplura). Host names and their classification were updated following Dickinson (2003) for birds (Aves) and Wilson & Reeder (2005) for mammals (Mammalia). Host names are given throughout the text as in the original publications, with current names following within parentheses.

RESULTS

The present list includes types of 142 nominal species, of which 126 (89%) are still valid, while 16 (11%) are considered junior synonyms by previous authors and accepted by Price *et al.* (2003) or for Anoplura by Durden & Musser (1994). Those 142 nominal species are represented: nine by holotype only; 30 by holotype, allotype and paratypes; seven by holotype and paratypes; two by holotype and allotype; one by allotype and paratype; 77 by paratypes only; five by syntypes; one by paralectotype; one by neotype, neoallotype and neoparatypes; and three by neoparatypes only. Five nominal species represented in MZUSP collection, four only by allotypes and one by paratype, should not be considered as types. One specimen regarded as type, designed as ‘autohyle’ (for *Allobrueelia amsel*), also was not considered as having type value.

Phthiraptera

Suborder Amblycera

Family Menoponidae Mjöberg, 1910

Genus *Bucercolpocephalum* Elbel, 1967: 36

Bucercolpocephalum deigmani Elbel, 1967: 38. Paratypes: 1 male and 1 female; #47,230; b.13.95; Note 17,703. Ex *Carinatus galeritus carinatus* (= *Anorrhinus galeritus* (Temminck, 1831)) (Coraciiformes: Bucerotidae). Thailand, Trang, Muang, Lamo; 08.iii.1963; Elbel, R.E. col.

Bucercolpocephalum emersoni Elbel, 1967: 37. Paratypes: 1 male and 1 female; #47,231; b.13.96; Note 17,703. Ex *Prilolaemus tickelli austeni* (= *Anorrhinus austeni* Jerdon, 1872). Thailand, Loei, Dan Sai, Kok Sathon, Phu Lom Lo Mt.; .iii.1954; Elbel, R.E. col.

Genus *Ciconiphilus* Bedford, 1939: 141

Ciconiphilus melanolophi Price & Beer, 1965: 662. Paratypes: 1 male and 1 female; #47,235; b.13.100; Note 17,703. Ex *Gorsachius m. melanolophus* (= *Gorsachius melanolophus* (Raffles, 1822)) (Ciconiiformes: Ardeidae). Thailand, Khorat Sikiu, Musi Pu Khanun; 26.iv.1953; Elbel, R.E. col.

Remarks: Junior synonym of *Ciconiphilus butoridiphagus* (Price & Emerson, 1966: 432).

Genus *Clayia* Hopkins, 1941: 46

Clayia theresae Hopkins, 1941: 46. Paratypes: 1 male and 1 female; #45,399; b.3.42; Note 725. Ex *Numida meleagris major* (= *Numida meleagris meleagris* (Linnaeus, 1758)) (Galliformes: Numidae). Uganda, Teso, Soroti; no other data. Paratypes: 1 male and 1 female; #45,400; b.3.43; Note 725. Same data, except: Uganda, Buruli; no other data.

Genus *Colpocephalum* Nitzsch, 1818: 298

Colpocephalum occidentalis Price, 1967: 276. Paratype: male; #47,232; b.13.97; Note 17,703. Ex *Pelecanus occidentalis* Linnaeus, 1766 (Pelecaniformes: Pelecanidae). USA, Texas, Galveston Island; 19.vi.1946; Emerson, K.C. col.

Genus *Heterokodeia* Carriker, 1954: 161

Heterokodeia aratingae Price, 1968: 520. Holotype: male. #47,022; b.11.87; Paratype: female; #47,023; b.11.88; Note 17,685. Ex *Aratinga aurea* (Gmelin, 1788) (Psittaciformes: Psittacidae). No other data. Paratype: male; #46,804; b.9.69; Note 404. Same data, except: Brazil, São Paulo, Sant'ana do Parnaíba (previously in Mato Grosso); No other data.

Remarks: The reference to the original description was incorrectly cited by Price *et al.* (2003: 110) as "Price, 1969a: 520". The correct date for the revision of *Heterokodeia* by Price is "1968".

Heterokodeia auricapilli Price, 1968: 522. Holotype: male; #46,906; b.11.71; Paratype: male; #46,907; b.11.72; Paratype: female; #46,908; b.11.73; Paratype: female; #46,909; b.11.74; Note 1,391. Ex *Aratinga auricapilla* (Kuhl, 1820). Brazil, Espírito Santo, Rio Itaúnas, Conceição da Barra; .ix.1950, Dente, E. col.

Heterokodeia guimaraesi Price, 1968: 524. Holotype: female; #46,888; b.10.53; Note 892. Ex *Brotoogeris tirica* (Gmelin, 1788) (Psittaciformes: Psittacidae). Brazil, Bahia, Itabaunas; .vii.1919; Garbe, E. col.

Heterokodeia maracanae Price, 1968: 526. Holotype: female; #46,970; b.11.35; Note 17,676. Ex *Ara maracana* (= *Primolius maracana* (Vieillot, 1816)) (Psittaciformes: Psittacidae). Brazil,

Goiás, Rio Palmas, afl. Rio Paranã; no other data.

Heterokodeia severae Price, 1968: 526. Holotype: male; #47,011; b.11.76; Note 17,683. Ex *Ara severus* (Linnaeus, 1758) (Psittaciformes: Psittacidae). Brazil, Amazonas, Lago do Ayapuá, Rio Purus; .x.1932; no collector.

Genus *Heteromenopon* Carriker, 1954: 170

Heteromenopon (Heteromenopon) anodorhynchi Price, 1969b: 564. Holotype: male #46,919; b.10.84; Note 17,664. Ex *Anodorhynchus hyacinthinus* (Latham, 1790) (Psittaciformes: Psittacidae). No other data. Paratype: female; #46,920; b.10.85; Note 17,665. Same data, except: Brazil, Goiás, Arraias; No other data. Paratype: male; #46,921; b.10.86; Note 17,666. Same data, except: Brazil, Goiás, Rio Palmas, afl. Rio Paranã. No other data. Paratype: female; #46,922; b.10.87; Note 17,667. Same data, except: Brazil, Goiás, Córrego da Onça, afl. Rio Paranã. No other data. Paratype: female; #46,923; b.10.88; Note 17,668. Same data.

Heteromenopon (Heteromenopon) passerini Price, 1969b: 563. Holotype: male; #46,904; b.10.69; Paratype: female; #46,905; b.10.70; Note 896; Paratype: female; #46,854; b.10.19; Note 874; Paratypes: both sexes; #46,836; b.10.1; #46,837; b.10.2; #46,838; b.10.3; #46,839; b.10.4; #46,840; b.10.5; #46,841; b.10.6; #46,842; b.10.7; #46,843; b.10.8; #46,844; b.10.9; #46,837; b.10.2; Note 873. Ex *Forpus passerinus vividus* (= *Forpus passerinus deliciosus* (Ridgway, 1888)) (Psittaciformes: Psittacidae). Brazil, São Paulo, Monte Alegre do Sul; 28.vii.1946; Lima, J.L. col.

Genus *Holomenopon* Eichler, 1941: 125

Holomenopon clauseni Price, 1971: 637. Paratype: male; #47,234; b.13.99; Note 17,703. Ex *Aix sponsa* (Linnaeus, 1758) (Anseriformes: Anatidae). USA, New York, Rensselaerville, Albany Co.; 17.viii.1964; Dalgleish, R.C. col.

Genus *Menacanthus* Neumann, 1912: 353

Menacanthus campephili Price & Emerson, 1975: 782. Paratype: male; #47,229; b.13.94; Note 17,703.

Ex *Campephilus magellanicus* (King, 1828) (Piciformes: Picidae). Argentina, Ba. Buen Suceso, Staten Island; 23.iv.1971; no collector.

Genus *Microctenia* Kéler, 1939a: 251

Microctenia soaresi Guimarães, 1944c: 111. Holotype: female; #45,460; a.3.5; Note 608. Ex *Crypturellus noctivagus noctivagus* (Wied-Neuwied, 1820) (Tinamiformes: Tinamidae). Brazil, Espírito Santo, Rio São José, 24.ix.1942; Soares, B.M. col. Allotype: male; #45,461; a.3.6; Note 665. Same data, except: 13.ix.1942.

Microctenia tibialis heterocephala Guimarães, 1947b: 200. Holotype and allotype: female and male, respectively; #45,726; a.6.1; Paratype: female; #45,727; a.6.2; Note 735. Ex *Tinamus guttatus* Pelzeln, 1863 (Tinamiformes: Tinamidae); on skin #21,929. Brazil, Amazonas, Igarapé Grande, Alto Jurua; 23.i.1937; Olalla, A.M. col.

Remarks: Elevated to species by Price *et al.* (2003: 127).

Genus *Myrsidea* Waterston, 1915: 12

Myrsidea hopkinsi Bedford, 1939: 132. Paratypes: 1 male and 1 female; #45,406; b.3.49; Note 725. Ex *Corvultur albicollis* (= *Corvus albicollis* Latham, 1790) (Passeriformes: Corvidae). Uganda, Ubalá; no other data.

Genus *Pseudomenopon* Mjöberg, 1910: 50

Pseudomenopon phoenicuri Price, 1974: 79. Paratype: female; #47,233; b.13.98; Note 17,703. Ex *Amauronis phoenicurus* Pennant, 1769 (Gruiformes: Rallidae). Malaysia, Subang; 18.xii.1962; no collector.

Genus *Psittacobrosus* Carriker, 1954: 150

Psittacobrosus dalgleishi Price, 1969a: 394. Holotype: male; #46,801; b.9.66; Paratype: female; #46,802; b.9.67; Paratype: female; #46,803; b.9.69; Note 402. Ex *Tirica tirica* (= *Brotogeris tirica*). Brazil, São Paulo, Juquiá; .ix.1940; Lane, F. & Travassos Filho, L. cols.

Psittacobrosus molinae Price & Beer, 1968: 273. Paratype: male; #46,956; b.11.21; Note 17,669. Ex *Pyrrhura frontalis* (Vieillot, 1817) (Psittaciformes: Psittacidae). Brazil, Rio Grande do Sul; 22.v.1882; no collector.

Remarks: Price & Beer (1968) regarded the above specimen as a female, and they did not mention any further locality data other than "Brazil". Moreover, the specimen listed above was not regarded as paratype in original description of the species, and then it has no type value.

Psittacobrosus nandayi Price, 1969a: 393. Holotype: male; #47,015; b.11.80; Paratype: male; #47,016; b.11.81; Paratype: male; #47,017; b.11.82; Note 17,684. Ex *Nandayus nenday* (Vieillot, 1823) (Psittaciformes: Psittacidae). No other data. Paratype: male; #47,018; b.11.83. Same data, except: Brazil, Mato Grosso do Sul, Corumbá, Vila Mercedes; no other data.

Psittacobrosus versicoluri Price, 1969a: 394. Holotype: male; #46,879; b.10.44; Note 888. Ex *Tirica chiriri* (= *Brotogeris chiriri*). Brazil, São Paulo, Bata-tais; 11.xii.1943; Lima, J.L. col. Paratype: male; #46,878; b.10.43; Note 887. Same data, except: Brazil, Goiás, Cana Brava; 09.xii.1932; Blase col.

Family Gyropidae Kellogg, 1896

Genus *Abrocomophaga* Emerson & Price, 1976: 426

Abrocomophaga chilensis Emerson & Price, 1976: 426. Paratypes: 1 male and 1 female; #47,236; b.14.1; Paratypes: 1 male and 1 female; b.14.2; Note 17,703. Ex *Abrocoma bennettii* Waterhouse, 1837 (Rodentia: Abrocomidae). Chile, Santiago, Til Til; 02.xi.1974; no collector.

Genus *Glicicola* Mjöberg, 1910: 292

Glicicola handleyi Emerson & Price, 1975: 24. Paratypes: 1 male and 1 female; #47,223; b.13.88; Note 17,702. Ex *Proechimys hoplomyoides* (Tate, 1939) (Rodentia: Echimyidae). Venezuela, Bolívar, El Dorado, 9.vi.1966; no collector.

Glicicola mendezi Emerson & Price, 1975: 28. Paratypes: 1 male and 1 female; #47,217; b.13.82; Note 17,702. Ex *Proechimys semispinosus* (Tomes, 1860). Venezuela, Amazonas TF, Capi-baras; 20.iii.1975; no collector.

Remarks: Probably the correct name for this host species is *Proechimys guairae* Thomas, 1901 (see further discussion in Valim & Linardi, 2008).

Gliricola tiptoni Emerson & Price, 1975: 24. Paratype: 1 male. #47,218; b.13.83; Paratypes: 1 male and 1 female. #47,219; b.13.84; Note 17,702. Ex *Proechimys semispinosus*. Venezuela, Barinas, Altamira; 28.xii.1967 to 03.i.1968; no collector. Paratypes: 1 male and 1 female; #47,220; b.13.85; Note 17,702. Ex *Proechimys semispinosus*. Venezuela, Trujillo, Valera (Agua Santa); 23.viii.1965; no collector.

Remarks: Probably the correct name for this host species is *Proechimys guairae* Thomas, 1901 (see further discussion in Valim & Linardi, 2008).

Gliricola venezuelanus Emerson & Price, 1975: 18. Paratype: 1 female; #47,222; b.13.87; #17,702. Ex *Proechimys cayennensis* (Desmarest, 1817). Venezuela, Amazonas TF, Boca Mavaca; 13.iii.1967; no collector.

Genus *Gyropus* Nitzsch, 1818: 302

Gyropus wernecki Emerson & Price, 1975: 31. Paratypes: 2 females; #47,221; b.13.86; Note 17,702. Ex *Proechimys semispinosus*. Venezuela, Iaracuy, Urama; 12.xi.1965; no collector.

Remarks: The correct name for this host species is *Proechimys guairae* (see further discussion in Valim & Linardi, 2008).

Suborder Ischnocera

Family Heptapsogastridae Carriker, 1936 (= Philopteridae)

Genus *Discocorpus* Carriker, 1936: 147

Discocorpus cephalosus furculus Carriker, 1944: 191. Paratypes: 1 male and 1 female; #45,856; b.5.17; Note 1,222. Ex *Crypturellus boucardi boucardi* (Sclater, P. L., 1860). Mexico, Veracruz, Cerro Tuxtla; 28.iii.1940; Carriker, M.A. leg.

Remarks: Elevated to species by Price *et al.* (2003: 175).

Genus *Heptagoniodes* Carriker, 1936: 166 (= *Kelloggia*)

Heptagoniodes clayae Guimarães & Lane, 1937: 7. Allotype: female; #45,043; a.1.20; Note 77. Ex *Tinamus solitarius solitarius* (Vieillot, 1819). Brazil, São Paulo, Rio Paraná; no data; Lima, J.L. col. 'Allotype': female; #45,223; b.2.32; Note 164. Ex *T. solitarius*. Brazil, São Paulo; Lima, J.L. col.: Guimarães, L.R. det.

Remarks: Placed in *Kelloggia* by Hopkins & Clay (1952: 166). There are two specimens (one slide mounted and other in alcohol) regarded as 'allotype', Guimarães & Lane (1937: 9) only mentioned the holotype male and other males they studied. The specimen listed above was labeled as the 'allotype' after the original description of the species; it has no type value.

Heptagoniodes dimorphus Carriker, 1944: 210. Paratype: female; #45,851; b.5.34; Note 1,222. Ex *Tinamus tao kleei* (Tschudi, 1843). Bolivia, Palmar; 12.vii.1937; Carriker, M.A. leg.

Remarks: Placed in *Kelloggia* by Hopkins & Clay (1952: 166).

Genus *Heptarthrogaster* Carriker, 1936: 134 (= *Heptapsogaster*)

Heptarthrogaster keleri Guimarães, 1942a: 25. Holotype: male; #45,209; b.2.28; Note 188. Allotype: female; #45,210; b.2.29; Note 169. Paratype: female; #45,211; a.1.50; Note 169. Ex *Tinamus major major* (Gmelin, 1789). Brazil, Amazonas, Igarapé Anibá, Guimarães, L.R. col. Paratype: female; #45,212; b.2.30; Note 179. Paratype: female; #45,213; a.1.51; Note 179. Ex *Tinamus major serratus* (Spix, 1825). Brazil, Amazonas, Manacapurá; no data; Worostzow col.

Remarks: Placed in *Heptapsogaster* by Hopkins & Clay (1952: 171).

Genus *Hypocryptus* Carriker, 1936: 178 (= *Kelloggia*)

Hypocryptus coniceps heterurus Carriker, 1936: 179. Allotype: male; #45,818; b.5.59; Note 1,218. Ex *Crypturellus cinereus cinerascens* (= *Crypturellus*

cinereus (Gmelin, 1789)); skin #22,267. Brazil, Amazonas, Rio Jurua, Santa Cruz; 23.x.1936; Guimarães, L.R. col.

Remarks: This taxon was placed in various genera, as follows: with *Hypocrypturellus* by Carriker (1940: 298), in *Austrokelloggia* Carriker, 1936 by Hopkins & Clay (1952: 46), who also elevated it to full species, and in *Kelloggia* by Ward (1957: 338). The specimen listed above was labeled as the 'allotype' after the original description of the species; it has no type value.

Hypocryptus coniceps undulatus Carriker, 1936: 180. Allotype: female; #45,646; b.4.1; Note 461. Ex *Crypturellus undulatus undulatus* Temminck, 1815. Brazil, Mato Grosso do Sul, Salobra; no other data.

Remarks: This taxon was included in various genera, as follows: in *Hypocrypturellus* by Carriker (1940: 298), in *Austrokelloggia* Carriker, 1936 by Hopkins & Clay (1952: 46), who also elevated it to full species, and in *Kelloggia* by Ward (1957: 338). The specimen listed above was labeled as the 'allotype' after the original description of the species; it has no type value.

Genus *Hypocrypturellus* Carriker, 1940: 298
(= *Kelloggia*)

Hypocrypturellus ribeiroi Guimarães, 1953: 239. Holotype: male; Allotype: female; #45,809; b.5.55; Paratypes: 1 male and 1 female; #45,810; a.5.62; Paratypes: 1 male and 1 female; #45,930; b.5.56; Paratypes: 1 male and 1 female; #45,931; b.5.57; Note 1,163. Ex *Crypturellus obsoletus obsoletus* Temminck, 1815. Brazil, São Paulo, Boracéia; 13.x.1947; Travassos Filho, L. col. Paratype: female; #45,932; a.5.63; Note 451. Same host species. Brazil, São Paulo, Cantareira; 1955; Fonseca, F. col.

Remarks: Included in *Kelloggia* by Ward (1957: 338).

Hypocrypturellus coniceps latifrons Guimarães, 1953: 236. Holotype: male; Allotype: female; #45,801; b.5.50; Paratypes: 1 male and 1 female; #45,921; b.5.51; Paratypes: 1 male and 1 female; #45,807; a.5.54; Note 759. Paratypes: 1 male and 1 female; #45,808; a.5.55; Note 760. Paratype: female; #45,804; a.5.51; Note 733. Ex *Crypturellus noctivagus noctivagus*; from a skin s/n. Brazil, Minas Gerais, Rio Doce; no

data; Olalla, M.A. col. Paratypes: 1 male and 1 female; #45,806; a.5.53; Note 741. Paratype: male; #45,806; a.5.50; Note 665. Same host species. Brazil, Minas Gerais, Barra do Sussui, Rio Doce; 1940; Olalla, M.A. col. Paratype: male; #45,802; a.5.49; Note 608. Paratype: male; #45,803; a.5.50; Note 665. Same host species. Brazil, Espírito Santo, Rio São José; 1942; Soares, B.M. col.

Remarks: Included in *Kelloggia* by Ward (1957: 338) and elevated to species by Price *et al.* (2003: 193).

Hypocrypturellus caniceps strigulosus Guimarães, 1953: 236. Holotype: male; Allotype: female; #45,799; b.5.48; Note 1,214. Paratype: 1 male; #45,780; b.5.49; Note 1,214. Ex *Crypturellus strigulosus* Temminck, 1815. Brazil, Pará, Caxiricutuba; no data; Guimarães, L.R. col. Paratypes: 1 male and 1 female; #45,919; a.5.47; Note 1,213. Same host species; skin #22,214. Brazil, Amazonas, Lago do Batista; no data; Guimarães, L.R. col.

Remarks: Included in *Kelloggia* by Ward (1957: 338) and elevated to species by Price *et al.* (2003: 193).

Hypocrypturellus genitalis mendax Guimarães & Hopkins, 1949: 76. Holotype: male; Allotype: female; #45,745; b.4.73; Note 1,202. Paratypes: 1 male and 1 female; #45,812; b.4.74; Paratypes: 1 male and 1 female; #45,813; b.4.75; Paratypes: 1 male and 1 female; #45,814; b.4.76; Note 1,154. Paratypes: 1 male and 1 female; #45,815; b.4.77; Note 1,155. Paratypes: 1 male and 1 female; #45,816; b.4.78; Note 1,156. Paratypes: 1 male and 1 female; #45,893; a.5.19; Note 1,157. Paratypes: 1 male and 1 female; #45,817; b.4.79; Paratypes: 1 male and 1 female; #45,818; b.4.80; Note 865. Paratypes: 1 male and 1 female; #45,895; a.5.21; Note 1,153. Paratypes: 1 male and 1 female; #45,889; a.5.15; Note 1,154. Paratypes: few specimens; #45,885; a.5.11; Note 1,155. Ex *Crypturellus parvirostris* (Wagler, 1827). Brazil, São Paulo, Fazenda Santa Lima, Presidente Wenceslau; 20-28.xi.1947; Lima, J.L. col. Paratypes: 1 male and 1 female; #45,890; a.5.16; Note 458. Same host species. Brazil, Mato Grosso do Sul, Salobra; no other data. Paratypes: 1 male and 1 female; #45,890; a.5.16; Note 458. Same host species. Brazil, Mato Grosso do Sul, Fazenda Recreio, Coxim; 1937; Lima, J.L. col. Paratypes: 1 male and 1

female; #45,819; b.4.81; Note 204. Same host species; skin #26,072. Brazil, São Paulo, Ilha Seca; .ii.1940; Lima, J.L. col. Paratype: male; #45,891; a.5.17; Note 203. Same host species. Brazil, Pará, Santarém; 1935; Ollala, M.A. col. Paratypes: 1 male and 1 female; #45,898; a.5.24; Note 508. Same host species. Brazil, Goiás, Fazenda M. Peixoto; no data; Lima, J.L. col.

Remarks: Included in *Kelloggia* by Ward (1957: 338) and elevated to species by Price *et al.* (2003: 193). The paratypes (1 male and 1 female) #45,812 and b.4.74 were not found in MZUSP. This note had been written on the card by the hand of L.R. Guimarães.

Genus *Kelloggia* Carriker, 1903: 153

Kelloggia brevipes serrati Guimarães, 1942a: 22. Holotype: male; Allotype: female; #45,205; b.2.21; Paratype: male genitalia; #45,221; b.2.23; Paratypes: 1 male and 1 female; #45,220; b.2.22; Note 182. Ex *Tinamus major olivascens* Conover, 1937. Brazil, Pará, Caxiricatuba; 27.xii.1936; no collector. Paratypes: few specimens; #45,288; a.1.64; Note 179. Ex *Tinamus serratus serratus* (= *Tinamus major serratus*). Brazil, Amazonas, Manacapurú; no data; Worostzow col.

Remarks: Junior synonym of *Kelloggia brevipes* (Carriker, 1903) (Ward, 1957: 342).

Kelloggia brevipes ruficeps Carriker, 1944: 223. Paratype: male; #45,852; b.5.13; Note 1,222. Ex *Tinamus serratus ruficeps* (= *Tinamus major serratus*). Colombia, Sierra Perijá, El bosque; 14.vi.1941; Carriker, M.A. leg.

Remarks: Junior synonym of *Kelloggia brevipes* (Carriker, 1903) (Ward, 1957: 342).

Genus *Ornicholax* Carriker, 1903: 151

Ornicholax alienus carrikeri Guimarães, 1948: 169. Holotype: male; Allotype female; #45,234; b.2.43; Note 191. Ex *Tinamus tao tao* Temminck, 1815, skin #22,400. Brazil, Pará, Caxiricatuba; 15.xii.1936; Guimarães, L.R. col. Paratype: male genitalia; #45,233; b.2.42; Paratype: female; #45,232; b.2.41; Note 190. Same host species, skin #16,075. Brazil, Pará, Rio Tapajós; 07.ix.1935; Guimarães, L.R. col.

Remarks: Junior synonym of *Ornicholax alienus* (Giebel, 1874) (Ward, 1957: 342).

Ornicholax offersi Guimarães, 1942b: 159. Holotype: male; Allotype: female; #45,206; b.2.25; Note 175. Ex *Tinamus major major*; skin #22,166. Brazil, Amazonas, Santa Cruz Eirú; no other data. Paratype: male; #45,207; b.2.26; Note 176. Paratype: male genitalia; #45,208; b.2.27; Note 175. Same host species. Brazil, Amazonas, Rio Atabary; no other data.

Remarks: Specimen #45,208 is regarded as a paratype in the card. However, as it was not cited in the original description, it is not a paratype.

Ornicholax solitarius Guimarães & Lane, 1937: 3. Allotype: female; #45,208; b.2.24; Note 164. Ex *Tinamus solitarius solitarius*. Brazil, São Paulo; no data; Lima J. col. Paratype: male; #45,033; b.1.26; Paratype: female; #45,034; b.1.27; Paratype: female; #45,035; a.1.12; Note 76. Same host species. Brazil, São Paulo, Alto da Serra; .xi.1906; Luederwaldt, H. col. Paratype: male; #45,042; a.1.19; Note 77. Same host species. Brazil, São Paulo, Rio Paraná.

Remarks: Junior synonym of *Ornicholax alienus* (Guimarães, 1942b: 155-156).

Genus *Pectenosoma* Ewing, 1929: 191

Pectenosoma parva noctivagi Guimarães, 1950b: 255. Holotype: male; Allotype: female; #46,031; a.6.66; Paratypes: 1 male and 1 female; #46,032; b.5.88; Paratypes: 1 male and 1 female; #46,033; a.6.67; Note 662. Ex *Crypturellus noctivagus noctivagus*. Brazil, Espírito Santo, Rio São José; 15.ix.1942; Soares, B.M. col. Paratype: male; #46,036; b.5.90; Paratypes: 1 male and 1 female; #46,038; b.5.91; Paratypes: 1 male and 1 female; #46,037; a.6.69; Note 609. Paratypes: few specimens; #46,039; a.6.70; Note 608. Same data for holotype, except: 22.ix.1942. Paratype: male; #46,035; b.5.89; Paratype: male; #46,034; a.6.68; Note 759. Paratypes: few specimens; #46,041; a.7.12; Note 760. Same host species; from a skin s/n. Brazil, Minas Gerais, Rio Doce; no other data. Paratype: few specimens; #46,040; a.7.1; Note 740. Same host species; skin #14,469. Brazil, Minas Gerais, Barra de Piracicaba (Rio Doce); 31.viii.1940; Olalla, M.A. col.

Remarks: Elevated to species by Price *et al.* (2003: 207).

Pectenosoma verrucosa salvini Guimarães, 1950b: 252. Paratype: male; #46,042; b.5.92; Note 17,261. Ex *Crypturellus variegatus salvini* (= *Crypturellus variegatus* (Gmelin, 1789)). Ecuador; no other data.

Remarks: Elevated to species by Price *et al.* (2003: 207).

Pectenosoma verrucosa subparva Guimarães & Hopkins, 1949: 72. Holotype: male; Allotype: female; #45,744; b.4.82; Paratypes: 1 male and 1 female; #45,820; b.4.83; Paratypes: 1 male and 1 female; #45,821; b.4.84; Paratypes: 1 male and 1 female; #45,822; b.4.85; Note 1,153. Paratypes: few specimens; #45,893; a.5.19; Note 1,157. Paratypes: few specimens; #45,894; a.5.20; Paratypes: few specimens; #45,895; a.5.21; Note 1,154. Ex *Crypturellus parvirostris*. Brazil, São Paulo, Presidente Wenceslau (Fazenda Santa Lima); 20-28.xi.1947; Lima, J.L. col. Paratypes: 1 male and 1 female; #45,823; b.4.86; Paratypes: 1 male and 1 female; #45,896; a.5.22; Note 865. Same host species. Brazil, São Paulo, Assis (Fazenda Palmira); 31.ix.1943; Lima, J.L. col. Paratypes: 1 male and 1 female; #45,825; b.4.87; Paratypes: 1 male and 1 female; #45,826; b.4.88; Paratypes: 1 male and 1 female; #45,827; b.4.89; Paratypes: 1 male and 1 female; #45,828; b.4.90; Paratypes: 1 male and 1 female; #45,829; b.4.91; Paratypes: 1 male and 1 female; #45,830; b.4.92; Paratypes: 1 male and 1 female; #45,900; a.5.26; Note 165. Same host species. Brazil, Mato Grosso, Coxim (Fazenda Recreio); 14.viii.1937; Lima, J.L. col. Paratypes: few specimens; #45,897; a.5.23; Note 508. Same host species. Brazil, Goiás, Fazenda M. Peixoto; no data; Lima, J.L. col.

Remarks: Elevated to species by Price *et al.* (2003: 207).

Genus *Rhopaloceras* Taschenberg, 1882: 46

Rhopalocerus almeidai Guimarães, 1946: 211. Holotype: male genitalia; #45,483; b.3.64; Holotype: male; Allotype: female; #45,481; a.5.7; Paratype: female; #45,482; a.3.26; Note 459. Ex *Crypturellus noctivagus noctivagus*. Brasil, Minas Gerais, Rio Doce; no data; Olalla, A.M. col.

Rhopaloceras heterogenitalis Carriker, 1944: 136. Paratypes: 1 male and 1 female; #45,857; b.5.18; Note 1,222. Ex *Crypturellus boucardi boucardi*. Mexico, Cerro Tuxtla, 28.iii.1940; Carriker, M.A. leg.

Genus *Rhynchothura* Carriker, 1936: 127 (= *Heptapsogaster*)

Rhynchothura andinae Carriker, 1944: 173. Paratypes: 1 male and 1 female; #45,867; b.5.28; Note 1,222. Ex *Tinamotis pentlandii* Vigors, 1837 (Tinamiformes: Tinamidae). Bolivia, Potosi; 23.i.1938; Carriker, M.A. leg.

Remarks: Included in *Heptapsogaster* by Hopkins & Clay (1952: 323).

Rhynchothura chacoensis Carriker, 1944: 171. Paratypes: 1 male and 1 female; #45,870; b.5.31; Note 1,222. Ex *Nothoprocta cinerascens* (Burmeister, 1860) (Tinamiformes: Tinamidae). Bolivia, Villa Montes, no data; Carriker, M.A. leg.

Remarks: Included in *Heptapsogaster* by Hopkins & Clay (1952: 323).

Genus *Strongylocotes* Taschenberg, 1882: 54

Strongylocotes angulocapitis carrikeri Guimarães, 1948: 166. Holotype: male; Allotype: female; #45,736; b.3.82; Paratypes: 1 male and 1 female; #45,735; b.3.72; Paratypes: 1 male, 1 female and 1 immature; #45,746; a.5.31; Note 187. Paratypes: 1 male and 1 female; #45,747; a.5.32; Note 186. Ex *Tinamus tao tao*. Brazil, Pará, Caxiricatuba; no data; Ollala, M.A. col.

Remarks: Junior synonym of *Strongylocotes taoi* Carriker, 1944 (Ward, 1957: 342)

Strongylocotes (Lepidophorus) coniceps Taschenberg, 1882: 63. Allotype: female; #45,798; b.5.47; Note 211. Ex *Crypturellus variegatus variegatus*; skin #22,039. Brazil, Pará, Caxiricatuba; 01.vii.1935; Guimarães, L.R. col.

Remarks: Included in *Hypocryptus* by Carriker (1936: 178), in *Hypocrypturellus* by Carriker (1940: 298), in *Austrokelloggia* by Hopkins & Clay (1952: 175), and finally transferred to *Kelloggia* by Ward (1957: 338). The specimen listed above was re-

garded as the 'allotype' after the original description of the species; it has no type value.

Strongylocotes wernecki Guimarães & Lane, 1937: 17. Paratype: female; #45,036; a.1.14; Note 76. Ex *Tinamus solitarius*. Brasil, São Paulo, Alto da Serra; 1906; Luederwaldt, H. col.

Genus *Tinamicola* Carriker, 1936: 158
(= *Heptapsogaster*)

Tinamicola latithorax Carriker, 1936: 159. Paratype: male; #45,866; b.5.27; Note 1,222. Ex *Rhynchotus rufescens rufescens* (Temminck, 1815) (Tinamiformes: Tinamidae). Bolivia, Charatona; 28.ix.1934; Carriker, M.A. leg.

Remarks: Included in *Heptapsogaster* by Hopkins & Clay (1952: 348).

Family Philopteridae Burmeister, 1838

Genus *Acidoproctus* Piaget, 1878: 178

Acidoproctus taschenbergi Hopkins, 1938: 196. Paratype: female; #45,402; b.3.45; Paratype: male; #45,403; b.3.46; Note 125. Ex *Alopochen aegyptiacus* Linnaeus, 1766 (Anseriformes: Anatidae). Uganda, Lake Victoria; no other data. Paratypes: 1 male and 1 female; #45,404; b.3.47; Note 125. Same host species. Uganda, Toro, Native; no other data.

Genus *Acutifrons* Guimarães, 1942c: 235

Acutifrons vieirai Guimarães, 1942c: 236. Holotype: male; Allotype: female; #45,365; a.2.36; Note 433. Ex *Hypomorphus urubitinga urubitinga* (= *Buteogallus urubitinga* (Gmelin, 1788)) (Falconiformes: Accipitridae). Brazil, São Paulo, Ilha do Cardoso; no data; Vieira, C.O.C. col. Paratype: male; #46,366; a.2.37; Note 432. Ex *Milvago chimachima* (Vieillot, 1816) (Falconiformes: Falconidae). Brazil, Mato Grosso, Aquidauana; no other data. Paratypes: 1 male and 1 female; #47,367; a.2.38; Note 511. Ex *Rupornis magnirostris magniplumis* (= *Buteo magnirostris magniplumis* (Bertoni, 1901)) (Falconiformes: Accipitridae). Brazil, São Paulo, Ubatuba; no other data.

Genus *Alcedoffula* Clay & Meinertzhagen, 1939: 161

Alcedoffula ceycis Tendeiro, 1967: 246. Paratype: male; #47,248; b.14.13; Note 17,703. Ex *Ceyx erithaca* (Linnaeus, 1758) (Coraciiformes: Alcedinidae). Malaysia, Meru; 4.ii.1963; no collector.

Genus *Allobrueelia* Eichler, 1951: 36

Allobrueelia amsel Eichler, 1951: 37. "Autohyle": female; #47,289; b.14.54; No note. Ex *Turdus merula* Linnaeus, 1758 (Passeriformes: Turdidae). No other data.

Remarks: Included in *Brueelia* by Hopkins & Clay (1952: 434). The term "Autohyle" is not approved by the ICZN, the slide at MZUSP has a white label written in green, as all slides donated by W. Eichler. It is prudent to not consider this specimen as type at all.

Genus *Brueelia* Kéler, 1936: 257

Brueelia jacobii Eichler, 1951: 38. Paratypoid (= allotype): female; #47,288; b.14.53; Note 17,704. Ex *Turdus merula*. No other data.

Genus *Buceroemersonia* Elbel, 1977b: 798

Buceroemersonia brelihi Elbel, 1977b: 802. Paratypes: 1 male and 1 female; #47,247; b.14.12; Note 17,703. Ex *Tockus deckeni* (Cabanis, 1869) (Coraciiformes: Bucerotidae). Kenya, Childs Friek, Tana River, 16.viii.1912; no collector.

Genus *Buceronirmus* Hopkins, 1941: 43

Buceronirmus deignani Elbel, 1977a: 413. Paratype: male; #47,246; b.14.11; Note 17,703. Ex *Aceros undulatus* (Shaw, 1811) (Coraciiformes: Bucerotidae). Myanmar (former Burma), Tenasserim, Talek Krang; 14.ii.1904; Abbott, W.L. col.

Buceronirmus longicuneatus Hopkins, 1941: 44. Paratypes: 1 male and 1 female; #45,390; b.3.33; Note 725. Ex *Bycanistes subcylindricus subquadratus* (= *Bycanistes subcylindricus* (P.L. Sclater, 1871)) (Coraciiformes: Bucerotidae). Uganda, Kampala; no other data.

Genus *Degeeriella* Neumann, 1906: 60

Degeeriella guimaraesi Clay, 1958: 2. Paratypes: 1 male and 1 female; #46,317; b.8.1; Paratype: female; #46,318; b.8.2; Paratype: female; #46,319; b.8.3; Paratype: female; #46,320; b.8.4; Note 513. Ex *Elanoides forficatus yetapa* (Vieillot, 1818) (Falconiformes: Accipitridae). Brazil, São Paulo, Ubatuba; no data; Pessôa, S.B. & Correia, C. cols.

Degeeriella meinertzhageni Clay, 1958: 4. Paratype: male; #46,316; b.7.100; Note 17,372. Ex *Chelictinia riocourii* (Vieillot, 1822) (Falconiformes: Accipitridae). Ethiopia, Shoa; no data; Clay, T. leg.

Degeeriella odontopleuron Guimaraes, 1944a: 73. Holotype: male; Allotype: female; #45,462; a.11.7; Paratypes: 1 male and 1 female; #45,463; a.11.8; Paratypes: 1 male and 1 female; #45,464; a.11.9; Paratypes: 1 male and 1 female; #45,465; a.11.10; Note 656. Ex *Trogonurus aurantius* (= *Trogon surrucura aurantius* Spix, 1824) (Trogoniformes: Trogonidae). Brazil, Espírito Santo, Rio São José; 21.ix.1942; Soares B.M. col.

Remarks: Included in *Trogoninirmus* by Price *et al.* (2003: 245).

Degeeriella storeri Elbel & Price, 1973: 97. Paratype: female; #47,239; b.14.4; Note 17,703. Ex *Accipiter trivirgatus indicus* (Hodgson, 1836) (Falconiformes: Accipitridae). Thailand, Trang; 1896-1899; Abbott, W.L. col.

Degeeriella traylori Elbel & Price, 1973: 99. Paratype: male; #47,240; b.14.5; Note 17,703. Ex *Spizaetus cirrhatus limnaeetus* (Horsfield, 1821) (Falconiformes: Accipitridae). Thailand, Trang, Ley Song Long; 7.ix.1896; Abbott, W.L. col.

Genus *Echinophlopterus* Ewing, 1927: 92

Echinophlopterus brygooi Guimaraes, 1980: 146. Paratypes: 1 male and 1 female; #47,721; b.17.26; Paratypes: 1 male and 1 female; #47,722; b.17.27; Note 17,920. Ex *Coracopsis vasa* (Shaw, 1812) (Psittaciformes: Psittacidae). Madagascar, Andrambovato; 10.i.1952; Rakota & Tipton, V.E. cols.

Echinophlopterus inko Uchida, 1948: 314. Paralectotypes: 1 male and 1 female; #47,712; b.17.17; Paralectotype: male; #47,713; b.17.18; Note 17,921. Ex "Captive parrot". Japan, Tokyo; no data; Hirashima, Y. leg.

Remarks: Junior synonym of *Echinophlopterus chapini* Ewing, 1927 (Guimaraes, 1980: 129).

Echinophlopterus clayae Guimaraes, 1980: 140. Paratypes: 1 male and 1 female; #47,716; b.17.21; Note 17,924. Paratypes: 1 male and 1 female; #47,717; b.17.22; Note 17,925. Ex *Prioniturus montanus waterstradti* Rothschild, 1904 (Psittaciformes: Psittacidae). Philippines, McKinley Wt E Slope, Mindanao; 9.viii.1946; Hoogstraal, H.G. col. Paratypes: 1 male and 1 female; #47,718; b.17.23; Note 17,926. Ex *Prioniturus montanus malindangensis* Mearns, 1909 (Psittaciformes: Psittacidae). Philippines, Mutya, Masawan; 20.xii.1961; Rabor, D.S. & Gonzales, R.B. cols.

Genus *Esthiopterus* Harrison, 1916: 26

Esthiopterus constrictiventris Pessôa & Guimaraes, 1935a: 313. Holotype: male; #47,404; b.14.83; Note 17,724. No host species. Brazil, São Paulo, Guarujá; no data; Pessôa, S.B. col.

Remarks: Junior synonym of *Halipeurus diversus* (Kelllogg, 1896) (Hopkins & Clay, 1952: 163)

Esthiopterus macrogenitalis Monteiro de Barros, 1933: 43. Holotype: male; #47,403; b.14.82; Note 17,723. Ex *Crypturellus adpersus vermiculatus* (= *Crypturellus undulatus adpersus* Temminck, 1815). Brazil; no data; Camargo, C. col.

Remarks: Included in *Pseudolipeurus* by Clay (1937: 133).

Esthiopterus plumbeus Pessôa & Guimaraes, 1935b: 105. Holotype: female; #47,402; b.14.81; Note 17,722. Ex *Columba plumbea*, error (= *Crypturellus tataupa tataupa* (Temminck, 1815). Brazil, São Paulo; São Paulo; 1928; Pessôa, S.B. col.

Remarks: Included in *Pseudolipeurus* by Hopkins & Clay (1952: 301).

Esthiopterus theristicus Pessôa & Guimaraes, 1935a: 311. Paratype: male; #45,064; b.1.37; Paratype: female; #45,065; b.1.38; Note 94. Ex *Theristicus caudatus* (Boddaert, 1783) (Ciconiiformes: Threskiornithidae). Brazil, Mato Grosso do Sul, Aquidauana; no data; Camargo, C. col.

Remarks: Included in *Ardeicola* by Hopkins & Clay (1952: 41).

Genus *Falcolipeurus* Bedford, 1931: 290

Falcolipeurus josephi Tandan & Dhanda, 1963: 634. Paratype: male; #45,289; b.7.73; No note. Ex *Polyborus plancus brasiliensis* (= *Caracara plancus* (Miller, J. F., 1777)) (Falconiformes: Falconidae). Brazil, São Paulo, Ibirapuera, São Paulo; 17.xi.1947; Barroso Filho, J. col.

Genus *Forficuloecus* Conci, 1941: 126

Forficuloecus greeni Guimarães, 1985b: 44. Paratypes: 1 male and 1 female; #47,723; b.17.28; Note 17,930. Ex *Neophema chrysostoma* (Kuhl, 1820) (Psittaciformes: Psittacidae). Tasmania, Exter; 11.viii.1967; Green, R.H. col.

Forficuloecus palmae Guimarães, 1985b: 46. Paratypes: 1 male and 1 female; #47,724; b.17.29; Note 17,931. Ex *Barnardius zonarius* (Shaw, 1805) (Psittaciformes: Psittacidae). Australia; no data; Mus, J.R.J.C. col.

Forficuloecus pilgrimi Guimarães, 1985b: 43. Paratypes: 1 male and 1 female; #47,725; b.17.30; Note 17,932. Ex *Cyanoramphus novaezelandiae hochsteteri* (Reischek, 1889) (Psittaciformes: Psittacidae). New Zealand, Antipodes Is., Hut Cove; 4.xii.1978; Horning, D.S. col. Paratype: male; #47,726; b.17.31; Note 17,933. Same host species. New Zealand, Antipodes Is.; 03.ii.1969; Johns, P. col. Paratypes: 1 male and 1 female; #47,727; b.17.32; Note 17,934. Ex *Cyanoramphus novaezelandiae novaezelandiae* (Sparman, 1787). New Zealand, Great Is., 3 Kings Is.; 01.xi.1970; N.Z. Ent. Exp. & D.S.I.R.NZ. col. Paratypes: 1 male and 1 female; #47,728; b.17.33; Note 17,935. Ex *Cyanoramphus novaezelandiae chathamensis* Oliver, 1930. New Zealand, Chatam Is., Little Mangere Is., Wildlife Dpt.; no other data. Paratypes: 1 male and 1 female; #47,729; b.17.34; Note 17,936. Ex *Cyanoramphus unicolor* (Lear, 1831). New Zealand, Chatam Is., Little Mangere Is., Wildlife Dpt.; no other data.

Genus *Fulicoffula* Clay & Meinertzhagen, 1938b: 279

Fulicoffula personata Emerson & Price, 1967: 163. Paratypes: 1 male and 1 female; #47,250;

b.14.15; Note 17,703. Ex *Heliopais personatus* Gray, G. R., 1849 (Gruiformes: Heliornithidae). Thailand, Ban Saen Tung, Chanthaburi; 23.iv.1966; no collector.

Genus *Goniocotes* Burmeister, 1838: 431

Goniocotes verrucosus Taschenberg, 1882: 94. Neotype: male; Neallotype: female; #45,611; b.3.91; Note 212. Neoparatype: male; #45,619; a.4.19; Note 213. Neoparatype: female; #45,621; a.4.20; Note 214. Ex *Crypturellus variegatus variegatus*. Brazil, Pará, Caxiracatuba; no other data. Neoparatype: 1 male and 1 female; #45,612; a.4.14; Note 1,220. Same host species. Brazil, Bahia, Ilhéus; no other data.

Remarks: Included in *Pectenosoma* by Ewing (1929: 191).

Genus *Gonicotacanthus* Guimarães, 1936: 225 (= *Physconelloides*)

Gonicotacanthus mattogrossensis Guimarães, 1936: 226. Cotype (= syntype): male; #45,069; b.1.42; Cotype (= syntype): female; #45,070; b.1.43; Note 97. Ex *Columbigallina minuta minuta* (= *Columbina minuta* (Linnaeus, 1766)) (Columbiformes: Columbidae). Brazil, Mato Grosso, Foz do Taquary; 1931; Camargo, C. col.

Remarks: Junior synonym of *Physconelloides eurysema* (Carriker, 1903) (Price *et al.* 1999: 202).

Genus *Goniodes* Nitzsch, 1818: 293

Goniodes bonasus Emerson, 1948: 92. Paratype: female; #45,880; b.5.42; Note 1,223. Ex *Bonasa umbellus umbelloides* (Douglas, 1829) (Galliformes: Phasianidae). USA, Montana, Ravali Co.; no data; Emerson, K.C. col.

Goniodes merriamanus Packard, 1873: 731. Neoparatype: female; #45,881; b.5.43; Note 1,223. Ex *Dendragapus obscurus richardsonii* (Douglas, 1829) (Galliformes: Phasianidae). USA, Montana, Missoula Co.; Emerson, K.C. col.

Goniodes sinensis Emerson & Stojanovich, 1964: 256. Paratypes: 1 male and 1 female; #47,245; b.14.10; Note 17,703; Ex *Syrmaticus mikado*

(Ogilvie-Grant, 1906) (Galliformes: Phasianidae). Taiwan, Wu sheh; 3.x.1961; no collector.

Goniodes spinicornis blythii Eichler, 1950b: 4. Paratypoid (= syntype): female; #47,279; b.14.44; Note 17,704. Ex *Tragopan blythii* (Jerdon, 1870). No other data.

Remarks: Junior synonym of *Goniodes spinicornis* (Nitzsch [in Giebel], 1866) (Hopkins & Clay, 1952: 151).

Genus *Lipeurus* Nitzsch, 1818: 292

Lipeurus deignani Emerson & Elbel, 1957a: 237. Paratype: female; #47,243; b.14.8; Note 17, 703. Ex *Lophura diardi* (Bonaparte, 1856) (Galliformes: Phasianidae). Thailand, Loei Sawan mt.; 23.xi.1953; Elbel, R.E. col.

Genus *Naubates* Bedford, 1930: 167

Naubates (Micronaubates) garbei Pessoa & Guimarães, 1935b: 109. Paratype: male; #45,030; b.1.23; Paratype: female; #45,031; b.1.24; Paratypes: few specimens; #45,102; a.1.35; Note 75. Ex *Sula leucogaster* (Boddaert, 1783) (Pelecaniformes: Sulidae). Brazil, São Paulo, Ilha de São Sebastião; 1915; Garbe, E. col. Paratypes: imatures; #45,032; b.1.25; Note 76. No other data. Paratypes: few specimens; #45,102; a.1.35.

Remarks: Included in *Pectinopygus* by Clay (1940: 310).

Genus *Neodocophorus* Kéler, 1939b: 53 (= *Strigiphilus*)

Neodocophorus hopkinsi Eichler, 1949: 14. Paratypoid (= syntype): male; #47,285; b.14.50; Note 17,704. Ex *Bubo bubo* Linnaeus, 1758 (Strigiformes: Strigidae). No other data.

Remarks: Junior synonym of *Strigiphilus strigis* (Pon-toppidan, 1763) (Hopkins & Clay, 1952: 339).

Genus *Neophilopterus* Cummings, 1916a: 660

Neophilopterus travassosi Pessoa & Guimarães, 1938: 385. Paratype: male; #45,062; a.1.32; Note

91. Ex *Tantalus americanus* (= *Mycteria americana* Linnaeus, 1758) (Ciconiiformes: Ciconiidae). Brazil, São Paulo, Ipiranga; no data; Guimarães, L.R. col. This male genitalia is in b.1.36.

Remarks: Junior synonym and designed neoparatype of *Neophilopterus heteropygus* (Nitzsch [in Giebel], 1874) (Guimarães, 1950c: 340).

Neophilopterus orfilai Guimarães, 1943: 433. Holotype: female; #45,318; a.2.17; Allotype: male; #45,319; a.2.18; Paratype: male genitalia; #45,380; b.3.23; Note 233. Ex *Ajaia ajaja* Linnaeus, 1758 (Ciconiiformes: Threskiornithidae). Brazil, Rio Grande do Sul, Itaguay; no data; Guimarães, L.R. col. Paratype: male genitalia; #45,379; b.3.22; Paratype: male genitalia; #45,381; b.3.24; Paratypes: few specimens; #45,320; a.2.19; Note 232. Same host species. Argentina; no data; Orfila, R.N. col.

Remarks: Junior synonym of *Neophilopterus subincompletus* (Nitzsch [in Giebel], 1866) (Hopkins & Clay, 1952: 236).

Genus *Neopsittaconirmus* Conci, 1942: 37

Neopsittaconirmus lybartola difficilis Guimarães, 1974b: 141. Paratypes: 1 male and 1 female; #47,737; b.17.42; Paratypes: 1 male and 1 female; #47,738; b.17.43; Note 17,944. Ex *Psittacula alexandri fasciata* (Statius Muller, 1776) (Psittaciformes: Psittacidae). Thailand, Pang Nan Un, Wan yuan, Nam; 19.i.1953; Elbel, R.E. & Deigman, H.G. cols. Paratypes: 1 male and 1 female; #47,739; b.17.44; Note 17,945. Same host species. Thailand, Khlong Khlung, Kamphaeng Pher; 22.iv.1953; Elbel, R.E. & Deigman, H.G. cols. Paratypes: 1 male and 1 female; #47,740; b.17.45; Paratypes: 1 male and 1 female; #47,741; b.17.46; Paratypes: 1 male and 1 female; #47,742; b.17.47; Note 17,946. Same host species. Thailand, Phu Lambo Wt., Kok Sathan, Dan Sai, Loei; 16.ii.1955; Elbel, R.E. & Deigman, H.G. cols.

Remarks: Elevated to species by Price *et al.* (2003: 200).

Neopsittaconirmus emersoni Guimarães, 1974b: 161. Paratype: male; #47,749; b.17.54; Paratypes: 1 male and 1 female; #47,750; b.17.55; Note

17,952. Paratypes: 1 male and 1 female; #47,751; b.17.56; Note 17,953. Ex *Kakatoe haematuropygia* (= *Cacatua haematuropygia* (Statius Muller, 1776)) (Psittaciformes: Psittacidae). Philippines, Calamianes, Culion, San Pedro; 27.iii.1947; Hoogstraal, H.G. col.

Neopsittaconirmus hoogstraali Guimarães, 1974b: 148. Paratype: male; #47,744; b.17.49; Paratypes: 1 male and 1 female; #47,745; b.17.50; Note 17,948. Ex *Tanygnathus lucionensis paraguayensis* (= *Tanygnathus lucionensis salvadorii* Ogilvie-Grant, 1896) (Psittaciformes: Psittacidae). Philippines, Palawan Is., Puerto Princesa; 09.iii.1947; Hoogastraal, H. & Werner, F.G. cols. Paratypes: 1 male and 1 female; #47,746; b.17.51; Note 17,979. Same host species. Philippines, Calamianes, Culion, San Pedro; 27.iii.1947; Hoogastraal, H. col. Paratypes: 1 male and 1 female; #47,747; b.17.52; Note 17,950. Same host species. Philippines, Palawan Is.; .ix.1947; no collector. Paratypes: 1 male and 1 female; #47,748; b.17.53; Note 17,951. Ex *Tanygnathus lucionensis* spp. Philippines, Balabac Is.; 03.iv.1962; Thompson, M. col.

Neopsittaconirmus shanahani Price & Emerson, 1978: 35. Paratype: female; #47,760; b.17.65; Note 17,959. Ex *Cacatua ducorspii* Pucheran, 1853. Solomon Islands; 18.viii.1964; Shanahan, P. col.

Neopsittaconirmus wardi Guimarães, 1974b: 151. Paratypes: 1 male and 1 female; #47,758; b.17.63; Note 17,957. Ex *Prioniturus discurus platenae* (= *Prioniturus platenae* W. Blasius, 1888). Thailand, Calamianes, Culion, San Pedro; 27.iii.1947; Hoogastraal, H. col.

Genus *Opisthocomiella* Guimarães, 1940b: 286
(= *Osculotes* Kéler, 1939: 175)

Opisthocomiella macropoda Guimarães, 1940b: 287. Holotype: female; #45,001; a.1.1; Note 60; Allotype: male; #45,002; a.1.2; Note 61. Ex *Opisthocomus boazini* (Statius Muller, 1776) (Opisthocomiformes: Opisthocomidae). Brazil, Amazonas, Foz do Rio Juruá; no data; Guimarães, L.R. col. Paratype: male; #45,003; a.1.3; Note 59 (its genitalia in b.1.1). Same host species. Brazil, Amazonas, Lago do Serpa; no data; Guimarães, L.R. col.

Remarks: Included in *Osculotes* by Hopkins & Clay (1952: 251).

Genus *Otidocetus* Bedford, 1931: 285

Otidocetus neotidis Hopkins, 1940: 427. Paratype: female; #45,391; b.3.34; Note 725. Ex *Neotis caffra jacksoni* (= *Neotis denhami jacksoni* Bannerman, 1930) (Gruiformes: Otididae). Uganda, Gulu; no other data.

Genus *Oxylipeurus* Mjöberg, 1910: 91

Oxylipeurus annamensis Emerson & Elbel, 1957a: 238. Paratype: female; #47,244; b.14.9; Note 17,703. Ex *Lophura diardi*. Thailand, Ban Sang Khoz, Khokphu, Sakon Nakkhen; 07.ii.1954; Elbel, R.E. col.

Genus *Paragoniocotes* Cummings, 1916b: 101

Paragoniocotes anomalus Guimarães, 1947a: 298. Holotype: female; #45,718; b.4.40; Paratype: female; #45,756; b.4.41; Note 1,021. Paratype: female; #46,989; b.11.53; Note 17,678. Ex *Psittacara acuticaudata hemorrhous* Spix, 1824 (Psittaciformes: Psittacidae). Brazil, Goiás; no data; Costa-Lima, A.M. col.

Paragoniocotes aratingae Guimarães, 1947a: 289. Holotype: male; #45,714; b.4.29; Note 404. Allotype: female; #45,715; b.4.31; Paratype: male; #45,716; b.4.32; Note 1,201. Ex *Aratinga aurea*. Brazil, São Paulo, Sant'ana do Parnaíba (previously in Mato Grosso); no other data. Paratype: male; #47,027; b.11.92; Note 92. Same host species. Brazil, Minas Gerais, Brejo Januária (Rio São Francisco); 12.vii.1926; no collector. Paratype: female; #47,031; b.11.96; Note 17,685. Same host species. Brazil, Goiás; no other data. Paratype: male; #47,032; b.11.97; Note 17,685. Same host species. Brazil, Goiás; no other data. Paratype: male; #47,041; b.12.6; Note 17,687. Ex *Aratinga cactorum* (Kuhl, 1820). Brazil, Minas Gerais, Rio São Francisco; no other data.

Paragoniocotes costalimai Guimarães, 1947a: 257. Holotype: male; Allotype: female; Paratype: female; #45,695; b.4.13; Paratype: male; #45,696; b.4.14; Paratype: female; #45,738; b.4.19; Note 872. Ex *Pionus maximiliani siy* Souancé, 1856 (Psittaciformes: Psittacidae). Brazil, Mato Grosso do Sul (previously part of Mato Grosso State), Salobra; no data; Carvalho, J.C. col.

Paragoniocotes grandis Guimarães, 1947a: 272. Holotype: male; #45,705; b.4.23; Allotype: female;

- #45,706; b.4.23; Paratypes: 1 male and 1 female; #45,749; b.4.24; Paratypes: few specimens; #45,707; a.5.12; Note 268. Ex *Amazona rhodocorytha* (Salvadori, 1890); no other data; Meira, S. leg. Paratype: female; #45,073; b.12.38; Paratype: female; #45,074; b.12.39; Paratype: male; #45,072; b.12.37; Note 17,691. Ex *Amazona farinosa*. No other data. Paratype: male; #47,064; b.12.29; Paratype: male; #47,065; b.12.30; Paratype: male; #47,066; b.12.31; Note 17,691. Ex *Amazona amazonica* (Linnaeus, 1766). No other data. Paratype: female; #45,708; a.5.16; Note 268. Ex *Amazona farinosa*. Brazil, Espírito Santo, Rio São José; 1942; Soares, B.M. col.
- Paragoniocotes intermedius* Guimarães, 1947a: 265. Holotype: male; Allotype: female; #45,699; b.4.18; Paratypes: few specimens; #45,700; a.5.11; Note 265. Ex *Amazona xanthops* (Spix, 1824). Brazil, Mato Grosso, Coxim (Fazenda Recreio); no data; Lima, J.L. col.
- Paragoniocotes limai* Guimarães, 1947a: 261. Holotype: male; Allotype: female; #45,697; b.4.15; Paratype: male; #45,746; b.5.16; Paratype: male genitalia; #45,747; b.5.17; Paratype: male; #45,698; a.5.14; Note 559. Ex *Pionopsitta pileata* (Scopoli, 1769) (Psittaciformes: Psittacidae). Brazil, São Paulo, Ipiranga; .viii.1942; Lima, J.L. col.
- Paragoniocotes nanus* Guimarães, 1947a: 255. Holotype: male; #47,081; b.12.46; Note 17,693. Ex *Ara macao* (Linnaeus, 1758). Brazil, Amazonas, Juary; no other data.
- Paragoniocotes neivai* Guimarães, 1940a: 370. Holotype: female; #45,116; b.1.63; Paratype female; #45,117; a.1.49; Note 120. Ex *Forpus passerinus vividus* (= *F. p. deliciosus*). Brazil, São Paulo, Itatiba; .vii.1946; Lima, J.L. col. Allotype: male; Paratype female; #45,717; b.4.38; Note 873. Same host species. Brazil, São Paulo, Monte Alegre; .no data; Lima, J.L. col.
- Paragoniocotes nirmoides* Guimarães, 1947a: 300. Holotype: male; #45,419; b.4.42; Allotype: female; #45,420; b.4.42; No note. Ex *Tirica chiriri* (= *Brotogeris chiriri*); on skin #12,299. Brazil, São Paulo, Silvania; .xii.1930; Pinto, O. col. Paratype: female; #45,723; a.5.21; Note 676. Same host species. Brazil, São Paulo, Ilha do Cardoso; 17.iv.1940; Camargo C. col. Paratypes: 1 male and 1 female; #45,721; a.5.18; Note 871. Same host species. Brazil, São Paulo, Batatais; 11.xii.1943; Lima, J.L. col.
- Paragoniocotes pyrrhurae* Guimarães, 1947a: 284. Holotype: male; #45,709; b.4.33; Allotype: female; #45,710; b.4.34; Paratype: female; #45,712; b.4.36; Note 1,201. Ex *Pyrrhura frontalis chiripepe* (Vicillot, 1817). Brazil, Rio Grande do Sul, Dois Irmãos (Hamburgo Velho); no data; Costa-Lima, A.M. leg. Paratype: male; #45,713; b.4.37; Note 881. Ex *Pyrrhura frontalis*. Brazil, São Paulo, Icatú; 07.vii.1928; Lima, J.L. col. Paratype: female; #46,945; b.11.10; Note 17,669. Ex *Pyrrhura vittata* (= *Pyrrhura frontalis*). No other data; except for Holt, E.G. col. Paratype: male; #46,946; b.11.11; Note 17,669. Ex *Pyrrhura vittata* (= *Pyrrhura frontalis*). Brazil, Minas Gerais, Mariana, Fazenda Taveira; no other data. Paratype: male; #46,948; b.11.13; Note 17,669. Ex *Pyrrhura vittata* (= *Pyrrhura frontalis*). Brazil, Minas Gerais, Rio Novo; .vi.1928; no collector. Paratype: male; #46,952; b.11.17; Note 17,669. Ex *Pyrrhura vittata* (= *Pyrrhura frontalis*). Brazil, Santa Catarina, São Bento; 05.vii.1928; no collector. Paratype: male; #46,957; b.11.22; Note 17,669. Ex *Pyrrhura vittata* (= *Pyrrhura frontalis*). Brazil, Rio Grande do Sul; 22.v.1882; no collector. Paratype: male; #46,966; b.11.31; Paratype: male; #46,967; b.11.32; Note 17,673. Ex *Pyrrhura molinae* (Massena & Souance, 1854). Brazil, Mato Grosso do Sul, Corumbá (previously in Mato Grosso); 17.xi.1926; no collector. Paratypes: 1 male and 1 female; #45,711; b.4.35; Note 1,201. Same host species. Same other data, except; 21.xi.1936; Costa-Lima, A.M. col. Paratype: male; #46,968; b.11.33. No other data. Paratype: male; #46,969; b.11.34; Note 17,675. Ex *Pyrrhura cruentata* (Wied, 1820). Brazil, Espírito Santo, Sant'Ana (Lagoa Japurana); 16.x.1925; no collector.
- Paragoniocotes rotundus* Guimarães, 1947a: 250. Holotype: male; Allotype: female; #45,693; b.4.12; Paratypes: 1 male and 1 female; #45,694, a.5.15; Note 692. Ex *Amazona farinosa farinosa*. Brazil, Espírito Santo, Rio São José; 22.ix.1942; Soares, B.M. col.
- Paragoniocotes cummingsi* Guimarães, 1947a: 268. Holotype: male; #45,701; b.4.19; Allotype: female; #45,702; b.4.20; Paratypes: 1 male and 1 female; #45,703; b.4.21; Paratype: female; #45,704; b.4.43; Note 1,201. Ex *Amazona aestiva aestiva* (Linnaeus, 1758). Brazil, São Paulo; no data; Costa-Lima, A.M. col. Paratypes: 1 male and 1 female; #47,047; b.12.12; Paratypes: 1 male and 1 female; #47,048; b.12.13; Paratypes: 1 male and 1 female; #47,049; b.12.14;

Paratypes: 1 male and 1 female; #47,050; b.12.15; Paratypes: 1 male and 1 female; #47,051; b.12.16; Paratypes: 1 male and 1 female; #47,052; b.12.17; Paratypes: 1 male and 1 female; #47,053; b.12.18; Paratypes: 1 male and 1 female; #47,054; b.12.19; Paratypes: 1 male and 1 female; #47,055; b.12.20; Note 17,689. Same host species. No other data.

Remarks: Junior synonym of *Paragoniocotes semicingulatus* (Piaget, 1890) (Guimarães, 1975: 258).

Genus *Pectinopygus* Mjöberg, 1910: 95

Pectinopygus tordoffi Elbel & Emerson, 1956: 173. Paratype: male; #47,242; b.14.7; Note 17,703. Ex *Pelecanus erythrorhynchos* Gmelin, 1789. USA, Kansas, Lawrence; .xii.1954; Tardoff, M.B. col.

Genus *Penenirmus* Clay & Meinertzhagen, 1938a: 73

Penenirmus fiebrigi Eichler, 1953: 240. Paratypoid (= holotype): male; #47,268; b.14.33; Paratypoid (= allotype): female; #47,267; b.14.32; Note 17,704. Ex *Colaptes campestris* (Vieillot, 1818) (Piciformes: Picidae). Paraguay, San Bernardino; no data; Fiebrig, C.

Remarks: Junior synonym of *Penenirmus auritus* (Scopoli, 1763) (Dalglish, 1972: 90).

Penenirmus campephili Eichler, 1953: 239. Paratypoid (= syntype): male; #47,269; b.14.34; Paratypoid (= syntype): female; #47,270; b.14.35; Note 17,704. Ex *Campephilus magellanicus*. Chile, Loncoche; no other data.

Genus *Physconelloides* Ewing, 1927: 94

Physconelloides passerinae Emerson, 1957: 37. Paratypes: 1 male and 1 female; #47,241; b.14.6; Note 1,703. Ex *Columbina passerina passerina* (Linnaeus, 1758). Jamaica, Cayman Is., Cayman Brac. BWI; 09.ii.1930; Peters, H.S. col.

Remarks: Junior synonym of *Physconelloides eurysema* (Price *et al.* 1999: 202).

Genus *Pseudolipeurus* Carriker, 1936: 68

Pseudolipeurus conspicuus Guimarães, 1942d: 282. Holotype: male; Allotype: female; #45,217; b.2.87; Paratype: female; #45,218; a.1.69; Note 205. Ex *Crypturellus obsoletus griseiventris* (Salvadori, 1895); on skin #22,504. Brazil, Pará, Caxiracatuba; no data; Guimarães, L.R. col.

Pseudolipeurus subsimilis dubius Guimarães, 1942d: 280. Holotype: male; Allotype: female; #45,214; a.1.67; Holotype: male genitalia; #45,215; c.2.86; Paratype: female; #45,216; a.1.68; Note 206. Ex *Crypturellus soui soui* (Hermann, 1783); on skin #22,550. Brazil, Pará, Piquiatuba; no data; Guimarães, L.R. col.

Pseudolipeurus megaceros Guimarães, 1944b: 209. Holotype: male; #45,469; a.3.14; Note 665. Paratype: female; #45,473; a.3.18; Note 608. Ex *Crypturellus noctivagus noctivagus*. Brazil, Espírito Santo, Rio Doce; 15.ix.1942; Soares, B.M. col. Allotype: female; #45,470; a.3.17; Note 608; Paratype: male; #45,471; a.3.15; Note 665. Same host species. Brazil, Espírito Santo, Rio São José; 24.ix.1942; Soares, B.M. col. Paratype: female; #45,472; a.3.16; Note 733. Brazil, Espírito Santo, Rio Doce; no data; Olalla, M.A. col.

Pseudolipeurus sanctaemartae Carriker, 1944: 98. Paratypes: 1 male and 1 female; #45,858; b.5.19; Note 1,222. Ex *Crypturellus idoneus* (= *Crypturellus erythropus idoneus* (Todd, 1919)). Colombia, Sierra Perijá, El Bosque; 14.vi.1941; Carriker, M.A. col.

Pseudolipeurus theresae Guimarães, 1950c: 335. Paratype: female; #46,045; b.5.93; Note 213. Ex *Crypturellus variegatus variegatus*; on skin #22,447. Brazil, Pará, Caxiracatuba; no other data. Paratypes: few specimens; #46,044; a.7.4; Note 1,343. Same host species; on skin #22,509. Brazil, Pará, Caxiracatuba; 04.i.1936; no collector. Paratypes: few specimens; #46,043; a.7.3; Note 1,220. Same host species; on skin #32,324. Brazil, Bahia, Ilhéus; no other data.

Genus *Pseudophilopterus* Carriker, 1936: 73

Pseudophilopterus noctivagus Guimarães, 1944b: 214. Holotype: male; Allotype: female; #45,474; a.3.19; Paratypes: 1 male and 1 female; #45,475; a.3.20; Note 608. Paratypes: 1 male and 1 female; #45,476; a.3.22; Note 609. Paratype: female; #45,477; a.3.23; Note 665. Ex *Crypturellus noctivagus noctivagus*. Brazil, Espírito Santo, Rio São José; no data; Soares, B.M. col.

Genus *Psittoecus* Conci, 1942: 40

Psittoecus hoogstraali Guimarães, 1974a: 171. Paratypes: 1 male and 1 female; #47,761; b.17.66; Note 17,960. Ex *Kakatoe haematuropygia* (= *Cacatua haematuropygia*). Philippines, Calamianes, Culion, San Pedro; 27.iii.1947; Hoogstraal, H.G. col.

Genus *Rallicola* Johnston & Harrison, 1911: 324

Rallicola indicus Emerson & Elbel, 1961: 130. Paratypes: 1 male and 1 female; #47,238; b.14.3; Note 17,703. Ex *Metopidius indicus* (Latham, 1790) (Charadriiformes: Jacanidae). Thailand, Chaiyaphum, Phukhice Bam Lat; 15.xii.1964; Elbel, R.E. col.

Rallicola parani Eichler, 1954: 45. Paratypoid (= paratype): male; #47,271; b.14.36; Note 17, 704. No other data.

Genus *Rhynonirmus* Thompson, 1935: 281

Rhynonirmus kingi Emerson & Price, 1968: 184. Paratypes: 1 male and 1 female; #47,249; b.14.14; Note 17,703. Ex *Carpococcyx renauldi* Oustalet, 1896 (Cuculiformes: Cuculidae). Thailand, Chanthaburi, Khao Sei Dao-Tai; 24.iii.1966; no collector.

Genus *Strigiphilus* Mjöberg, 1910: 132

Strigiphilus acadicus Emerson & Price, 1973: 45. Paratypes: 1 male and 1 female; #47,252; b.14.17; Note 17,703. Ex *Aegolius acadicus* (Gmelin, 1788) (Strigiformes: Strigidae). Canada, Ontario, Toronto Is., York co.; 18.vii.1971; Woods, J.G. col.

Strigiphilus ketupaei Emerson & Elbel, 1957b: 196. Paratypes: 1 male and 1 female; #47,253; b.14.18; Note 17, 703. Ex *Ketupa zeylonensis leschenaultii* (Temminck, 1820) (Strigiformes: Strigidae). Thailand, Huai Yang, Prachuap Khiri Khan; 26.xii.1952; Elbel, R.E. & Deignan, H.G. cols.

Strigiphilus macrogenitalis Emerson & Elbel, 1957b: 197. Paratypes: 1 male and 1 female; #47,251; b.14.16; Note 17,703. Ex *Glaucidium cuculoides bruegeli* (Parrot, 1908) (Strigiformes: Strigidae). Thailand, Huaigang, Prachuap Khiri

Khan; 26.xii.1952; Elbel, R.E. & Deignan, H.G. cols.

Genus *Struthiolipeurus* Cummings, 1916a: 679

Struthiolipeurus nandu Eichler, 1950a: 259. Paratypoid (= syntype): male; #47,255; b. 14.20; Paratypoid (= syntype): female; #47,256; b. 14.21; Note 17,704. Ex *Rhea americana* (Linnaeus, 1758) (Struthioniformes: Rheidae). No other data.

Genus *Theresiella* Guimarães, 1971: 213

Theresiella clayae Guimarães, 1985a: 37. Paratypes: 1 male and 1 female; #47,734; b.17.39; Note 17,941. Ex *Psittacella madaraszii* Meyer, 1886 (Psittaciformes: Psittacidae). New Guinea, Knarotali; no data; Wilson, N. col.

Theresiella hitchcocki Guimarães, 1971: 214. Paratypes: 1 male and 1 female; #47,733, b.17.38; Note 17,940. Ex *Psittacella brehmii* Schlegel, 1871. New Guinea, Kubos Range; 23.vii.1963; Hitchcock, W.B. col.

Family Trichodectidae Kellogg, 1896**Genus *Felicola* Ewing, 1929: 122**

Parafelicola africanus Emerson & Price, 1966: 233. Paratype: 1 female. #47,226; b.13.91; Note 17,702. Ex *Genetta genetta senegalensis* J. B. Fischer, 1829 (Carnivora: Viverridae). Egypt, Bebel Elba; 11.iii.1954; Hoogstraal, H.G. & Kaiser, M.N. cols.

Remarks: Included in *Felicola* (*Paradoxuroecus*) by Lyal (1985: 321).

Felicola rahmi Emerson & Stojanovich, 1966: 313. Paratypes: 1 male and 1 female; #47,227; b.13.92; Note 17,702. Ex *Atilax paludinosus* (Cuvier, 1829) (Carnivora: Herpestidae). Congo, Tshibati; 13.x.1962; no collector.

Genus *Geomydoecus* Ewing, 1929: 193

Geomydoecus merriami Price & Emerson, 1971: 255. Paratype: 1 female. #47,213; b.13.79; Note

17,702. Ex *Pappogeomys m. merriami* (= *Cratogeomys m. merriami* Thomas, 1894) (Rodentia: Geomyidae). Mexico, Toluca, Nevado de Toluca; 10.iii.1963; no collector.

Geomydoecus mobilensis Price, 1975: 64. Paratype: 1 female. #47,211; b.13.76; Note 17,702. Ex *Geomys pinetis mobilensis* (= *Geomys pinetis floridanus* Audubon & Bachman, 1853) (Rodentia: Geomyidae). USA, Alabama, Point Clear; 7.i.1934; Komarek, E.V. col.

Geomydoecus panamensis panamensis Price & Emerson, 1971: 251. Paratypes: 1 male and 1 female. #47,214; b.13.79; Paratype: 1 female. #47,215; b.13.80; Note 17,702. Ex *Macrogeomys cavator* (= *Orthogeomys (Macrogeomys) cavator* (Bangs, 1902)) (Rodentia: Geomyidae). Panama, Chiriqué, Boquete Trail, 13.iii.1962; Tipton, V.E. col.

Geomydoecus traubi Price & Emerson, 1971: 257. Paratype: 1 female. #47,212; b.13.77; Note 17,702. Ex *Pappogeomys m. merriami* (= *Cratogeomys m. merriami*). Mexico, La Piedra, Lagunas de Zempoala; 26.iii.1963; no collector.

Genus *Neotrichodectes* Ewing, 1929: 194

Neotrichodectes semistriatus Emerson & Price, 1975: 41. Paratypes: 1 male and 1 female. #47,216; b.13.81; Note 17,702. Ex *Conepatus semistriatus* (Boddaert, 1785) (Carnivora: Mephitidae). Venezuela, Monagas, Mata de Bejuco, 02.viii.1966; no collector.

Genus *Procavicola* Bedford, 1932: 711

Procavicola musebecki Emerson & Price, 1969: 336. Paratype: 1 male and 1 female; #47,228; b.13.93; 17,702. Ex *Dendrohyrax dorsalis* (Fraser, 1854) (Hyracoidea: Procaviidae). Nigeria, Midwest Region, Benin City; 01.i.1966; no collector.

Remarks: Included in *Procaviphilus (Meganarionoides)* by Lyal (1985: 279).

Genus *Trichodectes* Nitzsch, 1818: 294

Trichodectes emeryi Emerson & Price, 1974: 77. Paratype: 1 female. #47,224; b.13.89. Note 17,702.

Ex *Martes flavigula* Boddaert, 1785 (Carnivora: Mustelidae). Nepal, Sankhuwa Sabha; 08.ii.1973; no collector.

Remarks: Included in *Trichodectes (Stachiella)* by Lyal (1985: 301) and in *Stachiella* by Price *et al.* (2003: 271).

Trichodectes kuntzi Emerson, 1964: 196. Paratypes: 1 male and 1 female; #47,225; b.13.90; Note 17,702. Ex *Melogale moschata* Gray, 1831 (Carnivora: Mustelidae). Taiwan, Shih Pa-jen; 18.iii.1962; no collector.

Suborder Anoplura

Family Hoplopleuridae Ewing, 1929

Genus *Pterophthirus* Ewing, 1923: 147

Pterophthirus wernecki Guimarães, 1950a: 83. Holotype: male; #46,016; b.5.77; Allotype: female; #46,017; b.5.78; Paratypes: 1 male and 1 female; #46,024; b.5.85; Paratypes: 1 male and 1 female; #46,025; b.5.86; Paratypes: 1 male and 1 female; #46,026; b.5.87; Paratypes: 1 male and 1 female; Paratypes: specimens of both sexes; #46,027; a.6.62; #46,028; a.6.63; #46,029; a.6.64; #46,030; a.6.65; Note 1,297. Ex *Proechimys i. iheringi* (= *Trinomys iheringi* (Thomas, 1911)) (Rodentia: Echimyidae). Brazil, São Paulo, Boracéia, 16.viii.1948; Travassos Filho, L. & Fonseca, O. cols.

Family Pediculidae Leach, 1817

Genus *Pediculus* Linnaeus, 1758: 610

Pediculus bassani Fabricius O., 1780: 218. Neoparatypes: 1 male and 1 female; #45,785; b.4.67; Note 1,202. Ex *Morus bassanus* (Linnaeus, 1758) (Pelecaniformes: Sulidae). Orkney Is.; Hoy; 05.viii.1938; Hopkins, G.H.E. leg.

Remarks: Included in *Pectinopygus* by Harrison (1916: 143). This genus is included in suborder Ischnocera, family Philopteridae.

Pediculus diomedea Fabricius J.C., 1775: 808. Neoparatypes: 1 male and 1 female; #45,786; b.4.68; Note 1,202. Ex *Diomedea melanophrys*

(= *Thalassarche melanophris* (Temminck, 1828)) (Procellariiformes: Diomededae). Brazil, São Paulo, Santos; no other data.

Remarks: Included in *Esthiopterum* by Harrison (1916: 13), in *Perineus* Harrison [in Thompson], 1936 by Clay (1940: 299), and finally transferred to *Paraclisis* Timmermann, 1965 by Timmermann (1965: 100). All these genera are included in suborder Ischnocera, family Philopteridae.

RESUMO

Os espécimes tipo de 142 espécies de malófagos e anopluros (Insecta: Phthiraptera: Amblycera, Ischnocera e Anoplura) mantidos no Museu de Zoologia da Universidade de São Paulo, Brazil (MZUSP) são listados. Essa lista inclui espécies das famílias: Menoponidae e Gyropidae (subordem Amblycera); Philopteridae (incluindo as espécies inicialmente descritas em Heptapsogastridae) e Trichodectidae (subordem Ischnocera); e Hoplopleuridae (subordem Anoplura). As seguintes categorias de tipos estão representadas na coleção: holótipo, alótipo, parátipo, sintipo, neótipo, neoalótipo, neoparátipo e paralectótipo. As informações foram extraídas das fichas de depósito e incluem mudanças na nomenclatura para cada espécie desde sua descrição original. Duas listas adicionais, uma com os nomes científicos atualizados para os parasitos (Apêndice 1) e outra com os nomes dos hospedeiros (Apêndice 2), são incluídas.

PALAVRAS-CHAVE: Phthiraptera, Piolhos, Tipos, Lista, MZUSP, Menoponidae, Gyropidae, Philopteridae, Trichodectidae, Hoplopleuridae

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APPENDIX I

List of the original names given to the species of Phthiraptera listed in this paper followed by their current valid names (*sensu* Price *et al.*, 2003 for Amblycera and Ischnocera)

Amblycera: Menoponidae

Ciconiphilus melanolophi – *Ciconiphilus butoridiphagus*
Microctenia tibialis heterocephala – *Microctenia heterocephalus*

Ischnocera: Philopteridae

Allobruelia amsel – *Bruelia amsel*
Degeeriella odontopleuron – *Trogoninirmus odontopleuron*
Discocorpus cephalosus furculus – *Discocorpus cephalosus*
Esthiopterum constrictiventris – *Halipeurus diversus*
Esthiopterum macrogenitalis – *Pseudolipeurus macrogenitalis*
Esthiopterum plumbeum – *Pseudolipeurus plumbeus*
Esthiopterum theristicus – *Ardeicola theristicus*
Heptagoniodes clayi – *Kelloggia clayae*
Heptagoniodes dimorphus – *Kelloggia dimorphus*
Heptarthrogaster keleri – *Heptapsogaster keleri*
Hypocrypturellus heterurus – *Kelloggia heterurus*
Hypocrypturellus ribeiroi – *Kelloggia ribeiroi*
Hypocrypturellus c. coniceps – *Kelloggia coniceps*
Hypocrypturellus coniceps latifrons – *Kelloggia latifrons*
Hypocrypturellus coniceps strigulosus – *Kelloggia strigulosus*
Hypocrypturellus coniceps undulatus – *Kelloggia undulatus*
Hypocrypturellus genitalis mendax – *Kelloggia mendax*
Kelloggia brevipes ruficeps – *Kelloggia brevipes*
Kelloggia brevipes serrati – *Kelloggia brevipes*
Naubates (Micronaubates) garbei – *Pectinopygus garbei*
Neodocophorus hopkinsi – *Strigiphilus ceblebrachys*
Neophilopterus orfilai – *Neophilopterus subincompletus*
Neophilopterus travassosi – *Neophilopterus heteropygus*

Neopsittaconirmus lybartola difficilis –
Neopsittaconirmus difficilis
Opisthocomiella macropoda – *Osculotes macropoda*
Ornicholax alienus carrikeri – *Ornicholax alienus*
Ornicholax solitarius – *Pterocotes solitarius*
Paragoniocotes cummingsi – *Paragoniocotes semicingulatus*
Pectenosoma parva noctivagi – *Pectenosoma noctivagi*
Pectenosoma verrucosa verrucosa – *Pectenosoma verrucosa*
Pectenosoma verrucosa salvini – *Pectenosoma salvini*
Pectenosoma verrucosa subparva – *Pectenosoma subparva*
Pectinopygus diomedea – *Paraclisis diomedea*
Pediculus bassani – *Pectinopygus bassani*
Pediculus diomedea – *Paraclisis diomedea*
Penenirmus fiebrigi – *Penenirmus auritus*
Physconelloides mattogrossensis – *Physconelloides eurysema*
Physconelloides passerinae – *Physconelloides eurysema*
Pseudolipeurus subsimilis dubius – *Pseudolipeurus dubius*
Rhynchotura andina – *Heptapsogaster andinae*
Rhynchotura chacoensis – *Heptapsogaster chacoensis*
Strongylocotes angulocapitis carrikeri – *Strongylocotes taoi*
Tinamicola latithorax – *Heptapsogaster latithorax*

Ischnocera: Trichodectidae

Parafelicola africanus – *Felicola (Paradoxuroecus) africanus*
Procavicola (Meganarionoides) musebecki –
Procaviphilus musebecki
Trichodectes emergi – *Stachiella emergi*

APPENDIX II

List of the original names of the hosts cited in the list of louse types followed by their current valid names (*sensu* Dickinson, 2003 for birds; *sensu* Wilson & Reeder, 2005 for mammals)

Birds

Aceros undulatus undulatus – *Aceros undulatus*
Ara maracana – *Primolius maracana*
Bycanistes subcylindricus subquadratus – *Bycanistes subcylindricus*
Carinatus anorrhinus galeritus – *Anorrhinus galeritus*
Columbigallina minuta minuta – *Columbina minuta*
Corvultur albicollis – *Corvus albicollis*
Crypturellus idoneus – *Crypturellus erythropus idoneus*
Crypturellus adspersus vermiculatus – *Crypturellus undulatus adspersus*
Crypturellus cinereus cinerascens – *Crypturellus cinereus*
Diomedea melanophrys – *Thalassarche melanophrys*
Forpus passerinus vividus – *Forpus passerinus deliciosus*
Gorsachius melanolophus melanolophus – *Gorsachius melanolophus*
Kakatoe haematuropygia – *Cacatua haematuropygia*
Macrogeomys cavator – *Orthogeomys (Macrogeomys) cavator*
Morus bassanus bassanus – *Morus bassanus*
Neotis caffra jacksoni – *Neotis denhami jacksoni*

Numida meleagris major – *Numida meleagris meleagris*
Pappogeomys merriami merriami – *Cratogeomys merriami merriami*
Polyborus plancus brasiliensis – *Caracara plancus*
Prioniturus discurus platenae – *Prioniturus platenae*
Ptilolaemus tickelli austeni – *Anorrhinus austeni*
Spizaetus cirrhatus limneatus – *Spizaetus cirrhatus*
Tantalus americanus – *Mycteria americana*
Tanygnathus lucionensis paraguayensis – *Tanygnathus lucionensis salvadorii*
Tinamus serratus serratus – *Tinamus major serratus*
Tinamus serratus ruficeps – *Tinamus major serratus*
Tirica chiriri – *Brotogeris chiriri*
Tirica tirica – *Brotogeris tirica*
Torgos tracheliotus tracheliotus – *Torgos tracheliotus*
Trogonurus aurantius – *Trogon surrucura*

Mammals

Geomys pinetis mobilensis – *Geomys pinetis floridanus*
Proechimys iheringi iheringi – *Trinomys iheringi*
Proechimys semispinosus – *Proechimys guairae*