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Type specimens of Thamnophilidae Swainson, 1824 (Chordata, Animalia) in the Bird Collection of the Natural History Museum Vienna

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Abstract

The annotated type list of Thamnophilidae (antbirds) in the Natural History Museum Vienna (NHMW) bird collection covers 52 taxa including 32 valid species, 18 subspecies and two taxa that are the basis of replacement names (nomina nova). 42 taxa are based on syntypes (including one uncertain case), eight on holotypes and one on paratypes. Among these, a majority is based on specimens collected by Johann Natterer from Brazil. Taxa represented by single specimens were collected by Friedrich Sellow, Wilhelm Hoffmanns, Henry George Watkins, Casimir Watkins, and George Flemming, respectively. Taxa and corresponding specimens, known to have been exchanged with or received from other institutions, are also documented.

Key words: Aves, antbirds, Brazil, replacement names

Zusammenfassung

Die kommentierte Typenliste der Thamnophiliden (Ameisenvögel) in der Vogelsammlung des Naturhistorischen Museums in Wien (NHMW) enthält 52 Taxa, das sind 32 valide Arten, 18 Unterarten und zwei Taxa, die gleichzeitig Typen von zwei Ersatznamen (nomina nova) sind. 42 Taxa basieren auf Syntypen (darunter eine unsichere), acht auf Holotypen, und eine auf zwei Paratypen. Die Mehrzahl der Taxa basiert auf Exemplaren, die Johann Natterer in Brasilien gesammelt hat, einzelne Taxa gehen auf Sammlungen von Friedrich Sellow, Wilhelm Hoffmanns, Henry George Watkins, Casimir Watkins and George Flemming zurück. Relevante Belegstücke, die im Tauschverkehr mit anderen Instituten oder Sammlern abgegeben oder erworben wurden, sind bestmöglich dokumentiert.

Introduction

PELZELN & LORENZ (1886, 1887, 1888a, b) compiled a first type catalogue of birds in the "k & k Hofmuseum", issued in three volumes. Volume number two (PELZELN & LORENZ 1887: 200–205) listed 60 taxa of Thamnophilidae. Besides new species and subspecies, the authors refer also to "authentic specimens" that are, according to their own definition (PELZELN & LORENZ 1886: 1), specimens that were correctly identified in a taxonomic work, but may not have been included in the first description of the species, and do not qualify as type specimens. Most type specimens were collected by Johann Natterer (1787–1843) between 1818 and 1835 in Brazil. Thirtyone [out of 55] antbird taxa based on Natterer's specimens are still valid species or subspecies today, following DICKINSON & CHRISTIDIS (2014) and the IOC World Bird List (GILL et al. 2022).

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August [Edler von] Pelzeln described 16 species and 15 subspecies; Philip Lutley Sclater described five species (two of these jointly with Osbert Salvin). Carl Eduard Hellmayr described three species and seven subspecies (one with Hans [Graf von] Berlepsch), Coenraad Jacob Temminck five species and Martin Hinrich Carl Lichtenstein left one species in the NHMW collection. Philip Lutley Sclater and Carl Eduard Hellmayer identified some of Pelzeln's taxa as synonymys or having preoccupied names, and the corresponding specimens of Natterer as the basis for two replacement names (nomina nova).

The earliest descriptions of antbirds in the NHMW are those by Coenraad Jacob Temminck in 1822 and Martin Hinrich Carl Lichtenstein in 1823, based (sometimes partly) on Natterer's specimens. Syntypes known to have been exchanged with other institutions are listed together with their present storage site, as far as it could be tracked down. We did not include some uncertain (syn)type specimens, e.g. those described by LICHT-ENSTEIN (1823) in his "Verzeichnis der Doubletten". We tried to locate missing type material in other collections as much as possible.

Material and methods

All information available from any inventories, documents, lists, and original sources, or available literature is assessed; Information on type specimens is presented and revised following the regulations and recommendations of the International Code of Zoological Nomenclature (ICZN 1999), especially for scientific names ICZN (1999) Art. 31.1.3., ICZN (1999) Art. 72.1.2 and 73.2.1 and type localities ICZN (1999) Art. 72.1.2). Nomina nova (replacement names) are valid following the regulations of ICZN (1999) Art.12.1: "To be available, every new name published before 1931 must satisfy the provisions of Article 11 and must be accompanied by a description or a definition of the taxon that it denotes, or by an indication", further Art. 12.2 concerning the term indication and Art. 12.2.3.: "the proposal of a new replacement name (nomen novum) for an available name, whether or not required by any provision of the Code". In the subsequent text, all restrictions, comments, and coordinates are placed into [square brackets] or "quotation marks". In some cases, synonyms, nomina nova, and manuscript names are mentioned if necessary to understand the type status of specimens in question. Current scientific names follow DICKINSON & CHRISTIDIS (2014), DICKINSON & REMSEN (2013). The order of taxa follows the IOC World Bird List (GILL et al. version 12.2; 2022). Dates of first descriptions are also based on DICKINSON et al. (2011).

We adopt the standardized entries of the type catalogue of Nonpasseres in the NHMW collection by SCHIFTER et al. (2007: 7–11). The original combination (in bold) is followed by the currently valid scientific name. Specimen data are literally transcribed from the original label or field label if available, in particular these include: inventory number(s), preparation (B = study skin, St. = mounted specimen, dem. St. = relaxed mount), sex, age (juvenile [juv.], adult [ad.]), as indicated on the original label, type locality as in the first description if provided, additionally from labels or other sources. The current name of type localities, their geographical coordinates, shipment, and arrival dates of Natterer's specimens in Europe (Vienna?) are optionally provided. Collector(s), collectors numbers, collecting data (date, locality, field number, origin, provenance, type of acquisition [purchase, exchange, or donation] year of acquisition, and acquisition

number) are completed if available. The abbreviation "Natterer MS" refers to manuscript names given by Johann Natterer in his catalogue. Inventory numbers are preceded by museum acronyms. Entry numbers in the NHMW acquisition book are tripartite (year of acquisition, page, running number) e.g., Acquisition no. 1815.III.177. Page numbers in [brackets] for TEMMINCK & LAUGIER (1820–1839) refer to the page counts provided in the volume of the Biodiversity Heritage Library (https://www.biodiversitylibrary.org/). They may not correspond to the original page numbers. Dating of plates in TEMMINCK & LAUGIER (1.c.) is taken from DICKINSON (2001).

Whenever possible, incomplete label data have been completed from the original entry in the inventory – respectively acquisition books and/or any other original documents like dated lists, correspondence, or literature. Types known to have been exchanged with or donated to other collections or institutions are presented with all available information. Type specimens (holo-, syn-, or paratypes) of antbirds have been found so far in the museums of Leiden, Berlin, Munich, London, Washington, and New York and are also expected to be in the collection of Paris. In several cases, not all syntype specimens could be traced in the NHMW collection, in type catalogues of other museums, respectively the literature. Additionally, some potential, but uncertain type specimens have been added to facilitate locating further type material in other bird collections.

Acronyms

AMNH	American Museum of Natural History, New York
BMNH	Historical Acronym of the NHMUK (see next entry)
NHMUK	British Museum of Natural History, Tring
MCZ	Museum of Comparative Zoology, Cambridge/Massachusetts
NHMW	Naturhistorisches Museum Wien
NMNH	National Museum of Natural History, Leiden; see also RMNH
RMNH	Rijksmuseum van Natuurlijke Historie, Leiden; now NMNH
USNM	United States National Museum, Washington
ZMB	Zoologisches Museum Berlin
ZSM	Zoologische Staatssammlung, München

Type material

Cercomacra ruficauda Pelzeln, 1868

Cercomacra ruficauda PELZELN, 1868: Orn. Bras. Abth. 2, p. 85, 158 (Marabitanas) = *Ammonastes pelzelni* (SCLATER, PL, 1890)

Syntypes. NHMW 15.476 (B), \mathcal{J} , 12.04.1831, Marabitanas, [Amazonas, Brazil, 58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 972, 11th shipment, arrived ?1835, NHMW 15.477 (dem. St.), \mathcal{J} , 09.03.1831, Marabitanas, [Amazonas, Brazil, 58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 972, 11th shipment, arrived ?1835, MNW 15.478 (dem. St.), \mathcal{Q} , 26.03.1831, Marabitanas, [Amazonas, Brazil, 58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 972, 11th shipment, arrived ?1835, MNW 15.478 (dem. St.), \mathcal{Q} , 26.03.1831, Marabitanas, [Amazonas, Brazil, 58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 972, 11th shipment, arrived ?1835, MNW 15.479 (B), \mathcal{Q} , 09.03.1831, Marabitanas, [Amazonas, Brazil, 58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 972, 11th shipment, arrived ?1835, MNW 15.479 (B), \mathcal{Q} , 09.03.1831, Marabitanas, [Amazonas, Brazil, 58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 972, 11th shipment, arrived ?1835, MNW 15.479 (B), \mathcal{Q} , 09.03.1831, Marabitanas, [Amazonas, Brazil, 58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 972, 11th shipment, arrived ?1835.

Notes. PELZELN (1868: 85) mentioned six specimens of *Cercomacra ruficauda* and provided a Latin description of the new species on pages 158–59. PELZELN & LORENZ (1887: 204) listed two male and two female specimens from Marabitanas as "Originale" [= syntypes]. Two specimens, 1 \Diamond , collected March 1831 and 1 \bigcirc collected 02.04.1830 were exchanged with Sclater in 1869.

Formicivora bicolor Pelzeln, 1868

Formicivora bicolor PELZELN, 1868: Orn. Bras. Abth. 2, p. 84, 156 (Engenho do Gama, Decastamento do Robeirao, Salto do Girao, Borba)

= Microrhopias quixensis bicolor (Pelzeln, 1868)

Syntypes. NHMW 15.296 (B), \bigcirc , 11.10.1829, Salto do Girao [(= Salto do Jiraú), Rondônia, Brazil, 09° S, 64°43' W], leg. Johann Natterer, coll J. Natterer no. 740, 10th shipment, arrived May 1831, NHMW 15.311 (B), \bigcirc , August 1826, Engenho do Capitao Gama, [Mato Grosso, Brazil, 09° S, 64°43' W], leg. Johann Natterer, coll. J. Natterer no. 740, 9th shipment, arrived September 1827, NHMW 15.312 (B), \bigcirc , 29.07.1830, unterer Rio Madeira, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 740, 11th shipment, arrived ?1835, NHMW 15.313 (B), \bigcirc , 08.10.1829, Salto do Girao [(= Salto do Jiraú), Rôndonia, Brazil, 09°20' S, 64°43' W], leg. Johann Natterer no. 740, 10th shipment, arrived May 1831, NHMW 15.314 (dem. St.), \bigcirc , 19.09.1829, Ribeirao, Rôndonia, Brazil, 10°15' S, 65°16' W, leg. Johann Natterer, coll. J. Natterer no. 740, 10th shipment, arrived May 1831.

Notes. PELZELN (1868: 84) listed six specimens collected by Natterer, no. 740, as basis for his new species. The author mentioned in footnote no. 2, that a specimen of "*Formicivora strigilata* (Prinz Neuwied) was acquired by Natterer from Bahia" [= *Myrmorchilus strigilatus* (WIED, 1831)] collected in Destacamento do Ribeirao]. Page 156 presents a Latin description, Natterer's manuscript name and detailed notes. PELZELN & LORENZ (1887: 203) mentioned five specimens as types: $3 \ Q \ and 2 \ C \ bar that constitute part of the type series. Natterer's card index states that a specimen from Salto do Girao, collected 13.10.1829 by Natterer was handed to the Sclater collection. This specimen was neither listed by WARREN & HARRISON (1971) nor by LECROY & SLOSS (2000).$

Xenops niger Pelzeln, 1859

Xenops niger PELZELN, 1859: Sitzungsber. K. Akad. Wiss. Wien 34, p. 111, 132 (Brasilia, Marabitanas) = *Neoctantes niger* (PELZELN, 1859)

Syntypes. NHMW 16.780, (dem. St.), ♂, 30. 04. 1831, Marabitanas, [Upper Rio Negro, Marabitanas, Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 978, 11th shipment, arrived ?1835, NHMW 16.781, (dem. St.), ♀, 04. 04. 1831, Marabitanas, [Upper Rio Negro, Marabitanas, Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 978, 11th shipment, arrived ?1835.

Formicivora leucophthalma PELZELN, 1868

Formicivora leucophthalma PELZELN, 1868: Orn. Bras. Abth. 2, p. 83, 155 (Salto do Girao) = Epinecrophylla leucophthalma leucophthalma (PELZELN, 1868)

Holotype. NHMW 15.308 (dem. St.), \bigcirc , 08.10.1829, Salto do Girao [= Salto do Jirau], Rôndonia, Brazil, 09°20' S, 64°43' W], leg. Johann Natterer, coll. J. Natterer no. 806, 10th shipment, arrived May 1831.

Notes. PELZELN (l.c.) based his new taxon on the single \bigcirc , listed as "Original" in PELZELN & LORENZ (1887: 203). HELLMAYR (1903: 213) transferred the taxon to the genus *Myrmotherula* and emphasized that the species had been "ignored by other authors". He provided a second description of the taxon, and all data of the type specimen: "Nr. 15.308".

Formicivora melanogaster Pelzeln, 1868

Formicivora melanogaster PELZELN, 1868: Orn. Bras. Abth. 2, p. 83, 154. (Cidade de Goiaz) = *Formicivora melanogaster melanogaster* PELZELN, 1868

Syntypes. NHMW 15.275 (dem. St.), \Diamond , 13.08.1823, Cidade de Goiaz, [Goiás, Brazil, 15°49' S, 49°50' W], leg. Johann Natterer, coll. J. Natterer no. 597, 8th shipment, arrived September 1827, NHMW 15.276 (dem. St.), \bigcirc , 22.08.1823, Cidade de Goiaz, [Goiás, Brazil,15°49' S, 49°50' W], leg. Johann Natterer, coll. J. Natterer no. 597, 8th shipment, arrived September 1827.

Notes. PELZELN (l.c.: 83) based his new species on two specimens. He cited Natterer's manuscript name: "*Myiothera superciliaris* PRINZ NEUWIED (nec. LICHTEN-STEIN) Beitr. III 1072 (Bahia Sertao)". Collection site Goiaz, August, two samples. After a short Latin diagnosis, PELZELN (1868: 154) cited Natterer's detailed German manuscript draft on pages 154–155. 1 \Im and 1 \Im collected by Natterer in Goyaz, Brazil was confirmed by PELZELN & LORENZ (1887: 203) as "Originalexemplare" [= syntypes].

Myrmotherula luctuosa Pelzeln, 1868

Myrmotherula luctuosa PELZELN, 1868: Orn. Bras. Abth. 2, p. 82, 153. (Bahia) = Myrmotherula luctuosa PELZELN, 1868

Syntypes. NHMW 15.230 (dem. St.), \mathcal{J} , date not provided, ?1831 Bahia, [Bahia, Brazil, 12°33' S, 41°32' W], leg. H. Sellow, ex coll. Johann Natterer, no. 1170 (coll. H. Kammerlacher no. 260), NHMW 15.231 (dem. St.), \mathcal{J} , date not provided, ?1831, Bahia, [Bahia, Brazil, 12°33' S, 41°32' W], leg. H. Sellow, ex coll. Natterer, no. 1170 (coll. H. Kammerlacher no. 260), NHMW 15.232 (dem. St.), \mathcal{J} , date not provided, ?1831, Bahia, Brazil, 12°33' S, 41°32' W], leg. H. Sellow, ex coll. Natterer, no. 1170 (coll. H. Kammerlacher no. 260), NHMW 15.232 (dem. St.), \mathcal{J} , date not provided, ?1831, Bahia, [Bahia, Brazil, 12°33' S, 41°32' W], leg. H. Sellow, ex coll. Natterer, no. 1170 (coll. H. Kammerlacher no. 260), NHMW 15.233 (dem. St.), \mathcal{Q} , date not provided, ?1831, Bahia, [Bahia, Brazil, 12°33' S, 41°32' W], leg. H. Sellow, ex coll. Natterer, no. 1170 (coll. H. Kammerlacher no. 260), NHMW 15.233 (dem. St.), \mathcal{Q} , date not provided, ?1831, Bahia, [Bahia, Brazil, 12°33' S, 41°32' W], leg. H. Sellow, ex coll. Natterer, no. 1170 (coll. H. Kammerlacher no. 260).

Notes. PELZELN (l.c.) based his new species on four specimens, $2 \Im \Im$ and $2 \Im \Im$ from Bahia and used Natterer's manuscript name "*Myiothera luctuosa* TEMMINCK, Catal Msc.". The Latin description (PELZELN 1868: 153) included male and female plumage characteristics, and Bahia as type locality. Kammerlachers no. 260 and Sellow as collector were listed. A discrepancy exists in Natterer's species numbers. These are correctly printed as 1170 under "Natterer's Notizen" in Pelzlen's description, coinciding with Natterer's card index and the NHMW inventory, but misprinted 1070 in Pelzeln's description. PELZELN & LORENZ (1887: 203) cited $2 \Im \Im$ and $2 \Im \Im$ as "Originale" [= syntypes] that constitute the type series. They were listed as collected by Sellow in Bahia and acquired from Kammerlacher's collection as in the description.

Myrmotherula longipennis PELZELN, 1868

Myrmotherula longipennis PELZELN, 1868: Orn.Bras. Abth. 2, p. 83, 153 (Rio Negro, Marabitanas) = *Myrmotherula longipennis longipennis* PELZELN, 1868

Syntypes. NHMW 15.225 (dem. St.), \mathcal{J} , 02.11.1830, Barra do Rio Negro [(= Manaus), Amazonas, Brazil, 03°07' S, 60°01' W], leg. Johann Natterer, coll. J. Natterer no. 805b, 11th shipment, arrived ?1835, NHMW 15.226 (B), \mathcal{J} , 14.03.1831, Marabitanas, [Amazonas, Brazil, 58° N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 805b, 11th shipment, arrived ?1835, NHMW 15.227 (B), \mathcal{Q} , 07.01.1831, Rio Negro, [Amazonas, Brazil, 11' S, 64°44' W] leg. Johann Natterer, coll. J. Natterer no. 805b, 11th shipment, arrived ?1835.

Notes. PELZELN (1868: 82) based his new species on three specimens and compared these with one specimen of each *M. urosticta* and *M. fuliginosa*, as explained in his footnote no. 3 (PELZELN 1868: 153). Two $\Im \Im$ and $1 \updownarrow$, collected by Natterer in Brazil, were also mentioned in PELZELN & LORENZ (1887: 203) as "Originale" [= syntypes].

Myrmotherula berlepschi HELLMAYR, 1903

Myrmotherula berlepschi HELLMAYR, 1903: Verh. K.k. Zool.-Bot. Ges. Wien, 53, p. 211 (Salto do Girao, Rio Madeira)

= Myrmotherula menetriesii berlepschi HELLMAYR, 1903

Syntypes. NHMW 15.228 (B), $\hat{\mathcal{S}}$, 08.10.1829, Salto do Girao [(= Salto do Jirau), Rondônia, Brazil, 09°20' S, 64°43' W], leg. Johann Natterer, coll. J. Natterer no. 805, 10th shipment, arrived May 1831, NHMW 15.224 (dem. St.), \mathcal{Q} , 08.10.1829, Salto do Girao [(= Salto do Jirau), Rondônia, Brazil, 09°20' S, 64°43' W], leg. Johann Natterer, coll. J. Natterer no. 805, 10th shipment, arrived May 1831, NHMW 15.223 (B), \mathcal{Q} , 19.09.1829, Ribeirao, [Rio Madeira, Rondônia, Brazil, 10°15' S, 65°16' W], 10th shipment, arrived May 1831.

Uncertain syntype: NHMW 15.222 (B), ♂, 11.10.1829, Salto do Girao [(= Salto do Jirau), Rondônia, Brazil, 09°20' S, 64°43' W], leg. Johann Natterer, coll. J. Natterer no. 805, 10th shipment, arrived May 1831.

Notes. HELLMAYR (l.c.) based his new species on three specimens (1 \checkmark and 2 \bigcirc females) and named Natterer as collector. \checkmark (NHMW 15.228) and \bigcirc (NHMW 15.224) were designated as "Typus", but collecting dates and localities were provided for another \bigcirc that coincides with NHMW 15.223. As the fourth specimen was not mentioned by Hellmayr, it is listed here as uncertain syntype.

Myrmotherula assimilis Pelzeln, 1868

Myrmotherula assimilis PELZELN, 1868: Orn. Bras. Anth. 2, p. 81, 152 (Borba, Rio Negro unterhalb Pojares, Rio Amajau)

= Myrmotherula assimilis assimilis PELZELN, 1868

Syntypes. NHMW 15.238 (B), \mathcal{J} , 17.09.1831, Rio Amajaú, [(= Río Paraná), Paraná, Brazil, 01°18' S, 61°55' W], leg. Johann Natterer, coll. J. Natterer no. 931 partim, 12th shipment, arrived 1836, NHMW 15.239 (dem. St.), \mathcal{J} , 17.09.1831, Rio Amajaú, [(= Río Paraná), Paraná, Brazil, 01°18' S, 61°55' W], leg. Johann Natterer, coll. J. Natterer no. 931 partim, 12th shipment, arrived 1836, NHMW 15.240 (dem. St.), \mathcal{Q} , 17.09.1831, Rio Amajaú, [(= Río Paraná), Paraná, Brazil, 01°18' S, 61°55' W], leg. Johann Natterer, coll. J. Natterer no. 931 partim, 12th shipment, arrived 1836, NHMW 15.240 (dem. St.), \mathcal{Q} , 17.09.1831, Rio Amajaú, [(= Río Paraná), Paraná, Brazil, 01°18' S, 61°55' W], leg. Johann Natterer, coll. J. Natterer no. 931 partim, 11th or 12th shipment, arrived 1836, NHMW 15.241 (dem. St.), \mathcal{Q} , 17.09.1831, Rio Amajaú, [(= Río Paraná), Paraná, Brazil, 01°18' S, 61°55' W], leg. Johann Natterer, coll. J. Natterer no. 931 partim, 11th or 12th shipment, arrived 1836, NHMW 15.241 (dem. St.), \mathcal{Q} , 17.09.1831, Rio Amajaú, [(= Río Paraná), Paraná, Brazil, 01°18' S, 61°55' W], leg. Johann Natterer, coll. 10 Amajaú, [(= Río Paraná), Paraná, Brazil, 01°18' S, 61°55' W], leg. Johann Natterer, coll. 10 Amajaú, [(= Río Paraná), Paraná, Brazil, 01°18' S, 61°55' W], leg. Johann Natterer, coll. 10 Amajaú, [(= Río Paraná), Paraná, Brazil, 01°18' S, 61°55' W], leg. Johann Natterer, coll. 10 Partim, 12th shipment, arrived 1836.

Notes. PELZELN (l.c.: 81) based his new species on six specimens. All were collected by Natterer at Borba in July, Rio Negro in November, and Rio Amajaú in September. PELZELN & LORENZ (1887: 203) listed 3 C and 3 Q C collected by Natterer at Rio Amajaú as "Originalexemplare" [= syntypes]. Only four specimens are found in the NHMW collection today. An adult C, BMNH Reg. No. 1889.9.20.217, collected by Natterer 25.11.1830 at Rio Negro, and 1 Q, BMNH

Reg. No 1889.9.20.218, coll. by Natterer 13.07.1836 at Borba, Rio Madeira, complete the type series.

Cyphorhinus (Microcerculus) cinctus Pelzeln, 1868

Cyphorhinus (Microcerculus) cinctus PELZELN, 1868: Orn. Bras. Abth. 2, p. 47, 65 (Borba, S. Joaquim) = *Dichrozona cincta* (PELZELN, 1868)

Syntypes. NHMW 16.350 (dem. St.), \Im , 28.07.1831, São Joãquim, [Amazonas, Brazil, 0°01' N, 67°15' W], leg. Johann Natterer, coll. J. Natterer no. 846, 11th shipment, arrived ?1835, NHMW 16.351 (B), \Im , 04.01.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 846, 10th shipment, arrived May 1831.

Notes. PELZELN (l.c.) based his new species on two specimens, as provided above. He cited Natterer's notes, his manuscript name "*Myioturdus cinctus*" and that 1°_{\circ} from São Joãquim was collected in July and 1°_{\circ} specimen from a pair in Borba in January. The Latin description referred only to the $^{\circ}_{\circ}$. The species was not mentioned by PELZELN & LORENZ (1887). HELLMAYR (1906: 348) identified *Hypocnemis stellata* SCLATER, PL & SALVIN, 1880, as an immature of *Dichrozona cincta* and *Dichrozona zononota* RIDGEWAY, 1888 as identical with Pelzeln's species and treated both as synonyms. He addressed the $^{\circ}_{\circ}$ bird as type and the $^{\circ}_{\circ}$ as cotype [= syntypes]. Hellmayr (in CORY & HELLMAYR 1924: 165) accepted the $^{\circ}_{\circ}$ bird only: "We designate as type: Vienna Museum No. 16.350, adult $^{\circ}_{\circ}$, S. Joaquim, Rio Negro, July 28, 1831, J. Natterer Coll., upon which the Latin diagnosis was evidently based, since the apical spots to the lesser wing coverts are described as white, which applies only to the S. Joaquim bird, while they are buff in the Borba $^{\circ}_{\circ}$. - C. E. H." Both specimens must be treated as syntypes, [buff lesser wing coverts are characteristics of the $^{\circ}_{\circ}$].

Thamnophilus saturninus Pelzeln, 1868

Thamnomanes saturninus PELZELN, 1868: Orn. Bras. Abth. 2, p. 77, 147 (Cayenne, Brasilia (Borba, Serra Carauman))

= Thamnomanes saturninus saturninus (PELZELN, 1868)

Syntypes. NHMW 16.824 (dem. St.), \Im , 06.05.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 867, 10th shipment, arrived May 1831, NHMW 16.825 (dem. St.), \Im , 06.1832, Serra Carauman, Rio Branco between Rio Tarinea and Mocajahi, Cayenne], no further information, NHMW 16.827 (dem. St.), \Im , 26.05.1830, Borba, Amazonas, Brazil, 04°23' S, 59°35' W, leg. Johann Natterer, coll. J. Natterer no. 867, 10th shipment, 7th journey, arrived May 1831, NHMW 16.828 (dem. St.), \Im , 02.03.1830, Borba, Amazonas, Brazil, 04°23' S, 59°35' W, leg. Johann Natterer, coll. J. Natterer no. 867, 10th shipment, 7th journey, arrived May 1831.

Notes. PELZELN (1868: 77) listed three specimens, collected in March and May in Borba and June in Serra Carauman. PELZELN (l.c.: 147–148), described plumage characteristics of the 3° and 9° but listed no specimen numbers. Pelzeln also cited Natterer's notes: "Weibchen (Borba rechtes Madeiraufer im Walde des Sitio des H. Collares, März)". Natterer also described its plumage and provided some measurements. PELZELN (1868: 148) referred to: "another 3° required by Becoeur was found in the older collection". This mounted specimen was not included in the first description. PELZELN & LORENZ (1887: 201) listed four specimens, 2 3° and 2 9° as "original examples" [= syntypes]. The Cayenne specimen, bought from H. Becouer, refers to NHMW 16.826, Acquisition no. 1815.XXXVII.177, that was identified as another species, *Dysithamnus ardesiacus obidensis* SNETHLAGE, 1914 (= *Thamnomanes ardesiacus obidensis* (SNETHLAGE, 1914)).

Myothera strictothorax TEMMINCK, 1823

Myothera strictothorax TEMMINCK, 1823: Pl. col. livr. 30, pl. 179, fig. 1, 2, p. [277–278] (Brésil) = *Dysithamnus stictothorax* (TEMMINCK, 1823)

Syntypes. NHMW 16.782 (St.), \Diamond , 1823 or before, [Bahia, Brazil, 12°34' S, 41°42' W], leg. Friedrich Sellow, coll. J. Natterer no. 1172, ex coll. Kammerlacher, no. 79, NHMW 16.805 (St.), \bigcirc , 1823 or before, [Bahia, Brazil, 12°34' S, 41°42' W], leg. Friedrich Sellow, coll. J. Natterer no. 1172, ex coll. Kammerlacher, no. 79.

Notes. TEMMINCK (l.c.) based his plate and description on an unknown number of specimens. He mentioned only specimens from the Museum in Vienna: "L'espèce vit au Brésil, et l'on voit, dans le Musée de Vienne, les sujets qui nous ont servi de modèles". DEKKER (2003: 79) remarked, that: "according to the original description the syntypes are in Vienna". A handwritten list (probably of Josef Natterer jun.) in the NHMW bird collection verifies that $1 \triangleleft^{\uparrow}$ and $1 \updownarrow$ of *Myothera strictothorax*, [Kammerlacher] collection no. 79, had arrived in the NHMW: "6te Sendung von Temmink, 4ter Tausch, zurück erhalten im May 1823".

Dysithamnus affinis Pelzeln, 1868

Dysithamnus affinis PELZELN, 1868: Orn. Bras. Abth. 2, p. 80, 149 (Villa Maria)

= Dysithamnus mentalis affinis PELZELN, 1868

Syntypes. NHMW 16.812 (B), \mathcal{J} , 26. 08. 1825, Vila Maria [(= Cáceres), Mato Grosso, Brazil, 16°04' S 57°14' W], leg. Johann Natterer, coll. J. Natterer no. 1169 (26 b), 9th shipment, arrived November 1830, NHMW 16.813 (B), \mathcal{Q} , 26.08.1825, Vila Maria [= (Cáceres), Mato Grosso, Brazil, 16°04' S 57°14' W], leg. Johann Natterer, coll. J. Natterer no. 1169 (26 b), 9th shipment, arrived November 1830.

Notes. PELZELN (l.c.) based his new taxon on two specimens collected August [1825] at Villa Maria, that constitute the type series. Pelzeln used Natterer's manuscript, who already realized the similarity with *Dysithamnus mentalis*. (TEMMINCK, 1823). PELZELN & LORENZ (1887: 202) listed $1 \triangleleft$ and $1 \updownarrow$ collected by Natterer in Brazil (Villa Maria) as "Originalexemplare" [= syntypes].

Myothera mentalis TEMMINCK, 1823

Myothera mentalis TEMMINCK, 1823: Pl. Col. Vol.2, pl.179, fig.3, [p. 278] (Brésil) = Dysithamnus mentalis mentalis (TEMMINCK, 1823) Holotype. NHMW 16.811 (dem. St.), ♂, 12.10.1820, Curytiba [(= Curitiba), Paraná, Brazil, 25°25' S, 49°15' W], leg. Johann Natterer, coll. J. Natterer no. 26, 4th shipment, arrived October 1821.

Notes. Temminck's short French text accompanying plate 179 did not specify how many specimens were the basis for his new species. The plate illustrated 1 $\stackrel{\frown}{O}$ bird and the text mentioned that $\stackrel{\bigcirc}{Q} \stackrel{\bigcirc}{Q}$ were not known to him: "On ne connait point encore la femelle" and further: "Cette espèce se trouve au Musée de Vienne où elle a été envoyée par M. Natterer." It remains uncertain how many specimens he used as the basis for his description. PELZELN (1868: 79): "Rio Janeiro December, Registo do Sai April, Curytiba [= Curitiba] October, Rio Paraná Mai, 5 (6?) Ex." PELZELN & LORENZ (1887: 202) listed only NHMW 16.811, the $\stackrel{\frown}{O}$ from Curytiba, as "Original and model for Temminck's plate". A handwritten list of (?) Joseph Natterer jun. confirms that *Myothera mentalis*, Natterer no. 26 was returned by Temminck in 1823: "6te Sendung von Temminck 7ter Tausch, erhalten im May 1823". A handwritten remark on the label of NHMW 16.811: "Exemplar von Temminck l.c. abgebildet" demonstrates that this specimen was seen by him. The specimen from Brazil, mentioned by SALVIN (1882: 346): "no.1701a. *Dysitham*nus mentalis (N.C. STRICKLAND) 1838", therefore is an uncertain paratype. DEKKER (2003: 79): "taxa of which the types do not exist, seem to be missing, or are known not to be present in the Leiden collection: *Myothera mentalis* TEM-MINCK, 1823: livr. 30, pl. 179, fig. 3 = Dysithamnus mentalis mentalis (TEM-MINCK, 1823). According to the original description the holotype is in Vienna". As TEMMINCK (1.c.) did not mention how many specimens he had seen, among which, several might be types.

Myothera pileata LICHTENSTEIN, 1823

Myothera pileata LICHTENSTEIN, 1823: Verz. Doubl., p. 44 (Bahia)

= Herpsilochmus pileatus (LICHTENSTEIN, 1823)

Syntype. NHMW 15.158 (B), ♂, no further dates, acquired by the NHMW in 1839 from Lichtenstein, Berlin Museum.

Notes. PELZELN & LORENZ (1887: 202): "A ♂ from Brazil, acquired from the Berlin Museum". Specimens NHMW 15.159 – NHMW 15.161 collected by Johann Natterer and handed to the NHMW by Kammerlacher may have no type status.

Herpsilochmus atricapillus Pelzeln, 1868

Herpsilochmus atricapillus PELZELN, 1868: Orn. Bras. 2, p. 150 (Porto do Rio Parana, Goiaz) = *Herpsilochmus atricapillus* PELZELN, 1868

Syntypes. NHMW 15.173 (dem. St.), \Diamond , April 1823, Porto do Rio Paraná, [Minas Gerais, Brazil, 19°59' S, 47°46' W], leg. Johann Natterer, coll. J. Natterer no. 549, 8th shipment, arrived September 1827, NHMW 15.174 (B), \heartsuit , 14.05.1823, Porto do Rio Paraná, [Minas Gerais, Brazil, 19°59' S, 47°46' W] leg. Johann Natterer, coll. J. Natterer no. 549, 8th shipment, arrived September 1827, NHMW 15.175 (dem. St.), \heartsuit , 21.04.1823, Porto do Rio Paraná, [Minas Gerais, Brazil, 19°59' S, 47°46' W], leg. Johann Natterer, coll. J. Natterer no. 549, 8th shipment, arrived September 1827, NHMW 15.176 (dem. St.), \heartsuit , 21.04.1823, Porto do Rio Paraná, [Minas Gerais, Brazil, 19°59' S, 47°46' W], leg. Johann Natterer, coll. J. Natterer no. 549, 8th shipment, arrived September 1827, NHMW 15.176 (B), \heartsuit , 05.09.1823, Goiaz, [(= Cidade de Goiás), Goiás, Brazil, 15°49' S, 49°50' W], leg. Johann Natterer, coll. J. Natterer, species no. 549, 8th shipment, arrived September 1827.

Notes. PELZELN (1868: 80) based his new species on five specimens, collected in "Porto do Rio Parana, am Ufer auf Gesträuch, ein Paar, April, Mai, Goiaz, September". The species is listed with all specimens in PELZELN & LORENZ (1887: 202) and SCLATER (1890: 246), who listed 1 \Im specimen of *Herpsilochmus atricapillus* from Goiás, Brazil, recognized by Natterer as "authentic specimen" [= syntype]. This fifth syntype, an adult \Im from Borba, July 1830, collected by J. Natterer in Goiás, is BMNH Reg. No. 1889.9.20.323. and completes the syntype series.

Herpsilochmus dorsimaculatus PELZELN, 1868

Herpsilochmus dorsimaculatus PELZELN, 1868: Orn. Bras., p. 80, 151 (Marabitanas, Rio Vaupé) = *Herpsilochmus dorsimaculatus* PELZELN, 1868

Syntypes. NHMW 15.162 (dem. St.), 3, 20.5.1831, Marabitanas, upper Rio Negro, [Amazonas, Brazil, 0°58' N, 66°51' W], J. Natterer, coll. Natterer no. 980, 11th shipment, arrived ?1835, NHMW 15.163 (dem. St.), 3, 20.7.1831, Rio Vaupe [(= Rio Uaupés), Amazonas, Brazil, 0°14' N, 68°29' W], J. Natterer, coll. Natterer no. 980, 11th shipment, arrived ?1835, NHMW 15.164 (B), 3, 20.05.1831, Marabitanas, upper Rio Negro, [Amazonas, Brazil, 0°58' N, 66°51' W], J. Natterer, coll. Natterer no. 980, 11th shipment, arrived ?1835, NHMW 15.165 (dem. St.), 9, 13.05.1831 Marabitanas, upper Rio Negro, [Amazonas, Brazil, 0°58' N, 66°51' W], J. Natterer, coll. Natterer no. 980, 11th shipment, arrived ?1835, NHMW 15.165 (dem. St.), 9, 13.05.1831 Marabitanas, upper Rio Negro, [Amazonas, Brazil, 0°58' N, 66°51' W], J. Natterer no. 980, 11th shipment, arrived ?1835, NHMW 15.166 (B), 9, 20.07.1831, Rio Vaupe [(= Rio Uaupés), Amazonas, Brazil, 0°14' N, 68°29' W], J. Natterer, coll. Natterer no. 980, 11th shipment, arrived ?1835, NHMW 15.166 (B), 9, 20.07.1831, Rio Vaupe [(= Rio Uaupés), Amazonas, Brazil, 0°14' N, 68°29' W], J. Natterer, coll. Natterer no. 980, 11th shipment, arrived ?1835.

Notes. PELZELN (1868: 80) based his new taxon on five specimens collected in Marabitanas in May and Rio Uaupés in July [1831], coinciding with the specimens listed above. He noted Natterer's manuscript name and his species no. 980. The Latin description (p.151) provided plumage patterns of \bigcirc and \bigcirc , some measurements, Natterer's manuscript name and type locality (= habitat). Natterer's German notes referred to moult and habitat of two specimens, 1 \bigcirc and 1 \bigcirc from Marabitanas, collected in May, without a year. PELZELN & LORENZ (1887: 203) cited 3 \bigcirc and 2 \bigcirc specimens as "Originalexemplare" [= syntypes] that constitute the type series.

Herpsilochmus longirostris Pelzeln, 1868

Herpsilochmus longirostris PELZELN, 1868: Orn. Bras. Abth. 2, p. 80, 150 (Porto do Rio Parana, Rio Araguay, Cuyaba, Rio Guaporé)

= Herpsilochmus longirostris longirostris PELZELN, 1868

Syntypes. NHMW 15.167 (B), \mathcal{J} , 04.11.1823, Rio Araguay [(= Rio Araguaia), Mato Grosso, Brazil, 15°14' S, 51°50' W], leg. Johann Natterer, coll. J. Natterer no. 554, 8th shipment, arrived September 1827, NHMW 15.168 (B), \mathcal{J} , 29.07.1824, Cuyaba [(= Cuiabá), Mato Grosso, Brazil, 15°36' S, 56°05' W], leg. Johann Natterer, coll. J. Natterer no. 554, 8th shipment, arrived September 1827, NHMW 15.169 (B), \mathcal{J} , 31.07.1829, Rio Guaporé, [Rôndonia, Brazil, 12°59' S, 62°44' W], leg. Johann Natterer, coll. J. Natterer no. 554, 8th shipment, arrived September 1827, NHMW 15.169 (B), \mathcal{J} , 31.07.1829, Rio Guaporé, [Rôndonia, Brazil, 12°59' S, 62°44' W], leg. Johann Natterer, coll. J. Natterer no. 554, 10th shipment, arrived May 1831, NHMW 15.170 (B), \mathcal{Q} , 04.11.1823, Rio Araguay [(= Rio Araguaia), Mato Grosso, Brazil, 15°44' S, 51°50' W] leg. Johann Natterer, coll. J. Natterer no. 554, 8th shipment, arrived September 1827, NHMW 15.171 (B), \mathcal{Q} , 24.08.1824, Cuyaba [(= Cuiabá), Mato Grosso, Brazil, 15°36' S, 56°05' W], leg. Johann Natterer, coll. J. Natterer no. 554, 8th shipment, arrived September 1827, NHMW 15.171 (B), \mathcal{Q} , 24.08.1824, Cuyaba [(= Cuiabá), Mato Grosso, Brazil, 15°36' S, 56°05' W], leg. Johann Natterer, coll. J. Natterer no. 554, 8th shipment, arrived September 1827, NHMW 15.172 (B), \mathcal{Q} , 24.04.1823, Porto do Rio Parana, [(= São Paulo, Brazil), 20°07' S, 47°58' W], leg. Johann Natterer, coll. J. Natterer no. 554, 8th shipment, arrived September 1827.

Thamnophilus Borbae Pelzeln, 1868

Thamnophilus Borbae PELZELN, 1868: Orn. Bras. Abth. 2, p. 75, 140 (Borba)

= Taraba major borbae (PELZELN, 1868)

Syntypes. NHMW 16.548 (B), 3, 25.06.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 580b, 10th shipment, arrived May 1831, NHMW 16.549 (dem. St.), 3, 22.04.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 580b, 10th shipment, arrived May 1831, NHMW 16.550 (B), 2, 22.04.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 580b, 10th shipment, arrived May 1831, NHMW 16.550 (B), 2, 22.04.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 580b, 10th shipment, arrived May 1831, NHMW 16.551 (dem. St.), 2, 03.03.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 580b, 10th shipment, arrived May 1831, NHMW 16.551 (dem. St.), 2, 03.03.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 580b, 10th shipment, arrived May 1831, NHMW 16.551 (dem. St.), 2, 03.03.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 580b, 10th shipment, arrived May 1831, NHMW 16.551 (dem. St.), 2, 03.03.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 580b, 10th shipment, arrived May 1831.

Notes. PELZELN (1868: 75) based his new species on $4 \ \cite{O} \ \cite{O}$ and $2 \ \cite{O} \ \cite{O}$ from Borba, collected in March, April, June, and July. \cite{O} and \cite{O} plumage characteristics and

some measurements were mentioned (PELZELN 1868: 140). He also cited Natterer's German manuscript text, that verified $4 \Im \Im$ and $2 \Im \Im$ collected in Borba, that are part of the syntype series. PELZELN & LORENZ (1887: 201) mentioned $2 \Im \Im$ and $2 \Im \Im$ collected by Natterer in Brazil (Borba) as "Originale" [= syntypes] as listed above. Four specimens are still stored in the NHMW today. SCLATER (1890: 186) listed 1 \Im from Borba, River Madeira in his collection. This "authentic specimen" collected July 1830 by Natterer is found in the BMNH London, Reg. No. 1889.9.20.27 as part of the type series (WARREN & HARRISON 1971: 71). The sixth specimen could not be traced.

Thamnophilus unduliger Pelzeln, 1868

Thamnophilus unduliger PELZELN, 1868: Orn. Bras. Abth 2, p. 75, 139 (Marabitanas, Rio Içanna) = *Frederickena unduliger unduliger* (PELZELN, 1868)

Syntypes. NHMW 16.508 (dem. St.), \mathcal{S} , 02.06.1831, Rio Icanna [(= Rio Içana), S. Boaventura, Amazonas, Brazil, 0°45' N, 67°29' W], leg. Johann Natterer, coll. J. Natterer no. 979, 11th shipment, arrived ?1835, NHMW 16.509 (B), \mathcal{S} , 02.05.1831, Marabitanas, [= upper Rio Negro, Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 979, 11th shipment, arrived ?1835, NHMW 16.510 (B), \mathcal{Q} , 30.04.1831, Marabitanas, [upper Rio Negro, Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 979, 11th shipment, arrived ?1835, NHMW 16.510 (B), \mathcal{Q} , 30.04.1831, Marabitanas, [upper Rio Negro, Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 979, 11th shipment, arrived ?1835, NHMW 16.511 (dem. St.), \mathcal{Q} , 02.06.1831, Rio Icanna [(= Rio Içana), S. Boaventura, Amazonas, Brazil, 0°45' N, 67°29' W], leg. Johann Natterer, coll. no. 979, 11th shipment, arrived ?1835.

Thamnophilus nigricristatus difficilis Hellmayr, 1903

Thamnophilus nigricristatus difficilis HELLMAYR, 1903: Verh. k.k. Zool.-Bot. Ges. Wien, 53, p. 216 (Rio Claro, Goyaz, Brasilien)

= Thamnophilus doliatus difficilis HELLMAYR, 1903*= Thamnophilus capistratus* (nec LESSON!) PELZELN, 1868; Orn. Brasil., p. 78 (a replacement name in there)

Syntypes. NHMW 16.739 (B), \Diamond , 30.09.1823, Rio Claro, Goiaz [(= Goiás), Brazil, 16° S, 51°12' W], leg. Johann Natterer, coll. J. Natterer no. 1151, 8th shipment, arrived September 1827, NHMW 16.740 (dem. St.), \wp , 10.10.1823, Rio Araguay, Goiaz [= (Goiás), Brazil, 15°44' S, 51°50' W], leg. Johann Natterer, coll. J. Natterer 1151, 8th shipment, arrived September 1827, NHMW 16.741 (B), \wp , 30.09.1823, Rio Claro, Goiaz, [= (Goiás), Brazil, 16° S, 51°12' W], leg. Johann Natterer, coll. J. Natterer no. 1151, 8th shipment, arrived September 1827, NHMW 16.741 (B), \wp , 30.09.1823, Rio Claro, Goiaz, [= (Goiás), Brazil, 16° S, 51°12' W], leg. Johann Natterer, coll. J. Natterer no. 1151, 8th shipment, arrived September 1827.

Notes. HELLMAYR (l.c.) based his new subspecies on three specimens, designating the 3° and 9° from Rio Claro (NHMW 16.739 and NHMW 16.741) as "types", but also mentioned Natterer's third specimen from Rio Araguay, Goiaz, 10. October 1823, (NHMW 16.740). Thus, all three specimens constitute the type series. Another juvenile 3° from Obidos, (NHMW 16.738) collected in 1834 by Natterer was not included, because Hellmayr was uncertain about its status and listed it as a colour and morphological variant: "hat viel kürzere schwarze Haube und etwas unterbrochene weiße Bindenzeichnung auf dem Rücken. Diese Unterschiede sind wohl individueller Natur." It was described as a new subspecies *Thamnophilus doliatus signatus* ZIMMER, 1933, a taxon not accepted by HOWARD & MOORE (2014) and neither by the IOC list vs 12.2.

Thamnophilus murinus Sclater, PL & Salvin, 1867

Thamnophilus murinus SCLATER, PL & SALVIN, 1867: Proc. Zool. Soc. London, pt. 3., p. 756 (Marabitanas et Barra do Rio Negro)

= Thamnophilus murinus murinus SCLATER, PL & SALVIN, 1867

Syntypes. NHMW 16.586 (dem. St.), \mathcal{Q} , 21.03.1831, Marabitanas, [Amazonas, Brazil, 0°58' N, 66°51'W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.588 (dem. St.), 3, 14.03.1831, Marabitanas, [Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.589 (dem. St.), 3, 14.03.1831, Marabitanas, [Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.590 (B), 3, 16.03.1831, Marabitanas, [Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.592 (B), J, 01.04.1831, Marabitanas, [Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.593 (B), ♂, 16.03.1831, Marabitanas, [Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th or 12th shipment, arrived ?1835 or 1836, NHMW 16.594 (B), 3, 18.05.1831, Marabitanas, [Amazonas, Brazill, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.595 (B), 3, 25.06.1831, Rio Icanna [(= Rio Icana), Amazonas, Brazil, 0°45' N, 67°29' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.596 (B), ♂, 25.06.1831, ♂, 25.06.1831, Rio Icanna [(= Rio Icana), Amazonas, Brazil, 0°45' N 67°29' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.597 (B), 3, 11.11.1830, Marabitanas, [Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.598 (B), 3, 19.07.1831, Rio Vaupé [(= Rio Uaupés), Amazonas, Brazil, 0°07' N, 67°57' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.599 (B), 3, 01.09.1831, Barcellos, [Amazonas, Brazil, 0°58' N, 62°55' W], leg. Johann Natterer, coll. J. Natterer no. 923, 12th shipment, arrived 1836, NHMW 16.600 (B), 3, 05.10.1830, Rio Negro [Marabitanas, Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.602 (B), ♀, 20.10. 1830, Barra do Rio Negro [(= Manaus), Amazonas, Brazil, 03°07' S, 60°01' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.603 (B), ♀, 14.03.1831, Upper Rio Negro, [Marabitanas, Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.604 (B), $\hat{\phi}$, 28.01.1831, Upper Rio Negro, [Marabitanas, Amazonas, Brazil, 0°58 N, 66°51' W] leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.605 (dem. St.), ♀, 24.03.1831, Upper Rio Negro [Marabitanas, Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.789 (B), ♀, 02.03.1831, Upper Rio Negro [Marabitanas, Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835, NHMW 16.790 (B), Q, 15.03.1831, Upper Rio Negro [Marabitanas, Amazonas, Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 923, 11th shipment, arrived ?1835.

Notes. SCLATER & SALVIN (l.c.) based their new species on an unknown number of specimens: "*Thamnophilus murinus*, Natt[erer] MS. sp. no. 923. Xeberos. Specimens of both sexes of this species, of which Sclater has three examples in his collection under Natterer's MS name" [= *Thamnophilus murinus*]. The authors shortly described the \mathcal{J} and \mathcal{Q} and mentioned Marabitanas et Barra do Rio Negro as habitat [= type locality] of Natterer's specimens, Cayenne for samples from "Mus. P.L. Sclater" [Sclater collection] and Xeberos for specimens from "Bartlett" [Bartlett collection]. PELZELN (1868: 77): *Thamnophilus murinus* Natterer N. 923. P.L. SCLATER, Proceed. Z.S. 1867: 756 (Cayenne, O. Peru, but he was uncertain about specimen numbers: "26 (23?)" [in the NHMW collection]. ["Barra do Rio Negro in October; Rio Negro in October and November; Marabitanas in January, March, April, and May; Rio Icanna in June; Rio Vaupe in July and Barcellos in December."]. PELZELN & LORENZ (1887: 201): "24 authentic specimens collected by Natterer in Brazil at the Rio Negro. The species description based on specimens

from Natterer as well as those from Cayenne (Sclater collection) and Peru (Bartlett collection)".

Nineteen specimens are found in the NHMW collection today. Two syntypes are stored in the British Museum, London: (WARREN & HARRISON 1971: 368): BMNH Reg. no. 1889.9.20.63, an adult 3° collected by Natterer 15. Oct.1830, and "a 9° syntype" without details. This specimen is registered in the BMNH database (retrieved 10.09.2021) BMNH Reg. no. 1889.9.20.64, collected at Barra do Rio Negro 15.08.1831. A handwritten entry in the NHMW inventory reports that 3° NHMW 16.591, collected 29.04.1831 at Marabitanas, was handed at an unknown date to the AMNH, New York. This specimen was not mentioned by LECROY & SLOSS (2000). Thus, the type series may be incomplete. BERLEPSCH & HARTERT (1902: 69) accepted only Barra do Rio Negro as the "typical habitat" [= type locality], following Natterer's manuscript, but this restriction contradicts [ICZN (1999) Art. 73.2.3], and all collection areas are type localit(ies).

Thamnophilus cinereoniger Pelzeln, 1868

Thamnophilus cinereoniger PELZELN, 1868: Orn. Bras. Abth. 2, p. 76, 143 (Rio Negro, Marabitanas, Rio Vaupé, Rio Amajau, Tapajoz)

= Thamnophilus nigrocinereus cinereoniger PELZELN, 1868

Syntypes. NHMW 16.571 (B), \mathcal{J} , 17.11.1830, Rio Negro, [Amazonas, Brazil, 0°11' S, 64°44' W], leg. Johann Natterer, coll. J. Natterer no. 928, 11th shipment, arrived ?1835, NHMW 16.573 (B), \mathcal{J} , 15.09.1831, Rio Amajau, [(= Rio Amajaú), Paraná, Brazil, 01°18' S, 61°55' W], leg. Johann Natterer, coll. J. Natterer no. 928, 12th shipment, arrived 1836, NHMW 16.576 (dem. St.), \mathcal{Q} , 26.04.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W), leg. Johann Natterer, coll. J. Natterer no. 928, 11th shipment, arrived ?1835, NHMW 16.582 (B), \mathcal{Q} , 15.09.1831, Rio Amajau, [(= Rio Amajaú), Paraná, Brazil, 01°18' S, 61°55' W], leg. Johann Natterer, coll. J. Natterer no. 928, 12th shipment, arrived 1836, NHMW 16.583 (B), \mathcal{Q} , 12.07.1831, Rio Vaupes, [(= Rio Uaupés) Amazonas, Brazil, 0°14' N, 68°29' W], leg. Johann Natterer, coll. J. Natterer no. 928, 11th shipment, arrived ?1835, NHMW 16.584 (dem. St.), \mathcal{Q} , 15.11.1830, Rio Negro, [Amazonas, Brazil, 0°11' S, 64°44' W], leg. Johann Natterer, coll. J. Natterer no. 928, 12th shipment, arrived ?1835, NHMW

Notes. Pelzeln's new species based on "13 (12) specimens" (PELZELN 1868: 76). The Latin description (PELZELN 1868: 143) provided detailed information on plumage characteristics, some measurements, and localities, but no details on specimen numbers. PELZELN (l.c.) also provided Natterer's German notes that mentioned 1 \mathcal{Q} [NHMW 16.584] collected at the upstream Rio Negro at Airao on 15th November 1830, an adult \mathcal{J} downriver of Rio Negro at Villa de Moura in November (no exact datum available [? NHMW 16.571]), and another \mathcal{Q} from the same locality. PEL-ZELN & LORENZ (1887: 201) mentioned nine specimens of Natterer as "Originale" [= syntypes]. Six specimens are still in the NHMW collection. WARREN & HAR-RISON (1971: 119) listed as syntype "Adult \mathcal{J} , BMNH Reg. no. 1889.9.20.51, Rio Amajau, Brazil 16. Sept. 1831." "This specimen and two others in the collection were addressed as "authentic specimens" by SCLATER (1890: 193)." The database of the BMNH London provided three syntypes: BMNH Reg. no. 1889.9.20.51, the \mathcal{J} mentioned above, leg. 16. 09.1831; BMNH Reg. no.1889.9.20.52, 1 \mathcal{Q} , leg. 09.12.1830 and an uncertain 3, BMNH Reg. no.1889.7.10. 89 leg. 09.12.1830. SALVIN (1882: 345): "1692. Thamnophilus cinereoniger" is an uncertain syntype because: "Evidently one of Mr. Wallace's specimens but without his label. The species, however, is not included in the list of Mr. Wallace's Amazon Collection (P. Z. S. 1867)." The whereabouts of the remaining [two or three] specimens are unknown.

Thamnophilus Tschudii Pelzeln, 1868

Thamnophilus Tschudii PELZELN, 1868: Orn. Bras. Abth. 2, p. 76, 141 (Borba) = Thamnophilus nigrocinereus tschudii PELZELN, 1868

Syntypes. NHMW 16.560 (B), \mathcal{J} , 19.08.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 862, 11th shipment, arrived ?1835, NHMW 16.561 (B), \mathcal{J} , 17.02.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 862, 10th shipment, arrived May 1831, NHMW 16.562 (dem. St.), \mathcal{J} , 14.07.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 862, 11th shipment, arrived ?1835, NHMW 16.563 (B), \mathcal{J} , 14.07.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 862, 11th shipment, arrived ?1835, NHMW 16.564 (B), \mathcal{J} , 14.07.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 862, 11th shipment, arrived ?1835, NHMW 16.565 (dem. St.), juv. \mathcal{J} , 19.08.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 862, 11th shipment, arrived ?1835, NHMW 16.565 (dem. St.), juv. \mathcal{J} , 19.08.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 862, 11th shipment, arrived ?1835, NHMW 16.566 (B), \mathcal{Q} , 14.07.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 862, 11th shipment, arrived ?1835, NHMW 16.566 (B), \mathcal{Q} , 14.07.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 862, 11th shipment, arrived ?1835, NHMW 16.567 (B), \mathcal{Q} , 18.02.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 862, 10th shipment, arrived May 1831.

Notes. PELZELN & LORENZ (1887: 201) mentioned 10 "Originale" [= syntypes]. Eight specimens are found in the NHMW collection today. Four "authentic specimens" are listed in SCLATER (1890: 191): "a \mathcal{J} and \mathcal{Q} from each the Sclater respectively the Salvin-Godman collection". WARREN & HARRISON (1971: 569) listed BMNH Reg.no. 1889.9.20.42, an adult 3° , collected by J. Natterer in Borba in July 1826 already as syntype and mentioned three other syntypes in the collection. These were retrieved from the online database as: BMNH Reg.no. 1889.9.20.43, adult \mathcal{Q} , coll. 20.02.1830 in Borba: BMNH Reg. no.1889.7.10.81, adult 3, coll. 21.02.1830 in Borba: BMNH Reg.no. 1889.07.10.80, adult \mathcal{Q} . Together with the eight specimens in the NHMW collection, they are part of the type series. Two specimens could not be traced. The designation of a lectotype (and paralectotypes) of *Thamnophilus* Tschudii PELZELN 1868 by DESFAYES (1994: 86) is invalid as the designated specimens were evidently no syntypes. They were collected in Peru and not in Brazil. Pelzeln's taxon was established on 10 specimens (syntypes), collected February, July, August 1830 in Borba, Brazil (PELZELN 1868: 141), Pelzeln's taxon is accepted by DICKINSON & CHRISTIDIS (2014: 84) and the IOC World Bird List vs. 12.2.

Thamnophilus stictocephalus Pelzeln, 1868

Thamnophilus stictocephalus PELZELN, 1868: Orn. Bras. Abth. 2, p. 77, 146 (Sao Vicente) = *Thamnophilus stictocephalus stictocephalus* PELZELN, 1868

Holotype. NHMW 16.618 (B), subad. ♂, December 1826, Sao Vicente, [(= São Vicente), Mato Grosso, Brazil, 14°20' S, 59°45' W], leg. Johann Natterer, coll. Natterer no. 1157, (22 b), 9th shipment, arrived 1830.

Notes. Pelzeln based his short Latin description on a single 3 specimen and mentioned that Natterer noted in his manuscript the specimen as *Thamnophilus* spec. PELZELN & LORENZ (1887: 201) provided the species as "Original" (= holotype), described from a single specimen of St. Vicente, Brazil. HELLMAYR (In CORY & HELLMAYR 1924: 92) regarded the taxon as "almost certainly an individual variant of *T. p. sticturus*" DICKINSON & CHRISTIDIS (2014: 82) and the IOC World Bird List v.12.1. accept the taxon as a valid species. *Thamnophilus sticturus* **P**ELZELN, **1868**; Orn. Bras. p. 76, 144. (Engenho do Cap Gama, Mato Grosso, Brazil)

Thamnophilus sticturus PELZELN, 1868: Orn. Bras. p. 76, 144. (Engenho do Cap Gama, Mato Grosso, Brazil)

= Thamnophilus sticturus PELZELN, 1868

Syntypes. NHMW 16.692 (dem. St.), \Diamond , 03.08.1826, Engenho do Capitao Gama, [(= Engenho do Capitão Gama), Mato Grosso, Brazil, 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 1153 (220, 516), 9th shipment, arrived November 1830, NHMW 16.693 (B), \Diamond , 19.07.1826, Engenho do Capitão Gama, [(= Engenho do Capitão Gama), Mato Grosso, Brazil, 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 1153 (220, 516), 9th shipment, arrived November 1830, NHMW 16.694 (dem. St.), \bigcirc , 30.07.1826, Engenho do Capitão Gama, [(= Engenho do Capitão Gama), Mato Grosso, Brazil 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 1153 (220, 516), 9th shipment, arrived November 1830, NHMW 16.694 (dem. St.), \bigcirc , 30.07.1826, Engenho do Capitão Gama, [(= Engenho do Capitão Gama), Mato Grosso, Brazil 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 1153 (220, 516), 9th shipment, arrived November 1830, Mato Grosso, Brazil 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 1153 (220, 516), 9th shipment, arrived November 1830, Mato Grosso, Brazil 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 1153 (220, 516), 9th shipment, arrived November 1830.

Notes. PELZELN (1868: 76) based his new species on three specimens collected by Natterer at Engenho do Cap[itão] Gama in July and August. He also mentioned another \Im specimen with Natterer's Catalog number, as "variety from Cidadae de Goiaz August". PELZELN'S (l.c., 144) Latin description provided Natterer's German notes: ["variety" from Goiaz; "this \Im seems to belong to a different species because of a different shape of its tail"]. PELZELN & LORENZ (1887: 201) listed 3 $\Im \Im$ and 1 \bigcirc collected by Natterer in Brazil (Goiaz, Engenho do Cpt. Gama) as "Originalexemplare" [= syntypes], including the variety from Goiás. The status of this "variety" is uncertain: it may belong to (*Thamnophilus punctatus pelzelni* HELLMAYR 1924: 96, footnote b). The IOC World Bird List v.12.2 and DICKINSON & CHRISTIDIS (2014: 82) accept *Thamnophilus punctatus, Th. stictocephalus, Th. sticturus* and *Th. pelzelni* as valid species.

Thamnophilus naevius var. gilvigaster Pelzeln, 1868

Thamnophilus naevius var. *gilvigaster* PELZELN, 1868: Orn. Bras. Abth. 2, p. 76, (Curytiba) = *Thamnophilus caerulescens gilvigaster* PELZELN, 1868

Syntypes. NHMW 16.636 (dem. St.), \mathcal{J} , 18.10.1820, Curytiba, [(= Curitiba), Paraná, Brazil, 25°25'S, 49°15' W], leg. Johann Natterer, coll. J. Natterer no. 274, 4th shipment, arrived October 1821, NHMW 16.637 (dem. St.), \mathcal{J} , 12.10.1820, Curytiba, [(= Curitiba), Paraná, Brazil, 25°25' S, 49°15' W], leg. Johann Natterer, coll. J. Natterer no. 274, 4th shipment, arrived October 1821, NHMW 16.638 (B), \mathcal{Q} , 19.10.1820, Curytiba, [(= Curitiba), Paraná, Brazil, 25°25' S, 49°15' W], leg. Johann Natterer, coll. J. Natterer no. 274, 4th shipment, arrived October 1821, NHMW 16.638 (B), \mathcal{Q} , 19.10.1820, Curytiba, [(= Curitiba), Paraná, Brazil, 25°25' S, 49°15' W], leg. Johann Natterer, coll. J. Natterer no. 274, 4th shipment, arrived October 1821, NHMW 16.639 (dem. St.), \mathcal{Q} , 18.10.1820, Curytiba, [(= Curitiba), Paraná, Brazil, 25°25' S, 49°15' W], leg. Johann Natterer, coll. J. Natterer no. 274, 4th shipment, arrived October 1821, NHMW 16.639 (dem. St.), \mathcal{Q} , 18.10.1820, Curytiba, [(= Curitiba), Paraná, Brazil, 25°25' S, 49°15' W], leg. Johann Natterer, coll. J. Natterer no. 274, 4th shipment, arrived October 1821, NHMW 16.639 (dem. St.), \mathcal{Q} , 18.10.1820, Curytiba, [(= Curitiba), Paraná, Brazil, 25°25' S, 49°15' W], leg. Johann Natterer, coll. J. Natterer no. 274, 4th shipment, arrived October 1821.

Notes. PELZELN (l.c.) based his description of the new "variety" on an unknown number of specimens and mentioned: "This variety was called *Thamnophilus gilvigaster* by Temminck". Within 12 specimens listed as *Thamnophilus naevius* (LATHAM, 1790: 81, no. 51.) N. 274: "some $\Im \Im$ especially from Ypanema have ochreous belly and tail coverts". Footnote no. 4: "2 $\Im \Im$ from Curytiba belong to the variety *gilvigaster*, 1 \Im from Ypanema has a yellowish trace on belly and undercoverts. No difference exists between $\Im \Im$ from Curytiba and Ypanema". "Other examples [specimens] in our museum [the NHMW bird collection] are 2 $\Im \Im$ from Cayenne from H. Becoeur, 1 \Im (with yellow belly) and 1 \Im from H. Pöppig from Brazil, lastly a yellow-bellied \Im exchanged from the Strassburg University Museum from Chile with longer black parts in the nape and darker underside.". Natterer further commented that this variety could be Sclater's *Thamnophilus naevius* (SCLATER 1855: 242). HELLMAYR (1906: 662): "*T. naevius* var. *gilvigaster* TEMM." He provided Paraná, Curitiba as type locality but no information on specimen numbers. CORY & HELLMAYR (1924: 102): " \Im differs from *T. c. caerulescens* by having the flanks and under tail coverts ochraceous buff; \Im generally with crown more rufous. Intermediates to *caerulescens* are not uncommon. -- C. E. H." The taxon was not included in PELZELN & LORENZ (1887). The subspecies is accepted by DICKINSON & CHRISTIDIS (2014: 82) and the IOC World Bird List (v.12.2), relying on ISLER et al. (1997) and LACERDA et al. (2007).

Thamnophilus polionotus Pelzeln, 1868

Thamnophilus polionotus PELZELN, 1868: Orn. Bras. Abth. 2, p. 77, 147 (Maribatanas, Barcellos) = *Thamnophilus aethiops polionotus* PELZELN, 1868

Syntypes. NHMW 16.606 (B), \mathcal{J} , April 1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W] leg. Johann Natterer no. 1160, 11th shipment, arrived ?1835, NHMW 16.607 (St.), \mathcal{J} , 06.04.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer no. 1160, 11th shipment, arrived ?1835, NHMW 16.608 (B), \mathcal{Q} , 30.11.1830, Barcelos [(= Barcellos) Amazonas, Brazil, 0°58' S, 62°55' W] leg. Johann Natterer no. 1160, 11th shipment, arrived ?1835.

Notes. PELZELN (1868: 77) based his new species on three specimens with Natterer's collection number 1160 that constitute the type series. Dates were provided as April for Marabitanas and November for Barcellos. PELZELN (1868: 147) listed Natterer's notes: "... a male from Marabitanas 06. April 1831. The bird from Barcellos 30. November 1830 belongs most probably as female to that species." Specimen MNW 16.606 was not explicitly addressed but also bears an original label of J. Natterer. PELZELN & LORENZ (1887: 201) listed: "two males and a female collected in Brazil (Marabitanas, Barcellos); Originale" [= syntypes].

Thamnophilus incertus Pelzeln, 1868

Thamnophilus incertus PELZELN, 1868: Orn. Bras. Abth. 2, p. 78, 149 (Pará) = Thamnophilus aethiops incertus PELZELN, 1868

Holotype. NHMW 16.609 (dem. St.), \bigcirc , 1834, Belem [(= Pará), Pará, Brazil, 01°27' S, 48°29' W], leg. Johann Natterer, coll. J. Natterer no. 538, 12th shipment, arrived ?1836.

Notes. PELZELN (1868: 78) based his taxon on a single \bigcirc but seemed to query its status as a new species and was uncertain of its collection number. In a footnote he made a remark that: "Natterer did neither receive Sclater's *Thamnophilus nigro – cinereus* (sic!) from Pará nor Swaison's *Th. Pileatus*." PELZELN (1868: 149) described the \bigcirc specimen shortly in Latin. A single \bigcirc from Pará was provided as "Original" [= holotype] in PELZELN & LORENZ (1887: 202). HELLMAYR (1929: 368) mentioned the \bigcirc type specimen in the NHMW collection "type in Vienna Museum; = \bigcirc ", and added the missing description of the \bigcirc : "Maranhao: Tury-assú, \bigcirc (first calendar year annual) Nov[ember] 14, 1913".

Thamnophilus aethiops kapouni Seilern, 1913

Thamnophilus aethiops kapouni SEILERN, 1913: Verhandl. Orn. Ges. Bayern, p. 277 (Yahuarmayo, Carabaya, S.O. Peru)

= Thamnophilus aethiops kapouni SEILERN, 1913

Holotype. NHMW 85.539 (B), ♂, 12.04.1912, Yahuarmayo, [Puno, Peru, 13°17′ S, 70°18′ W], leg. Watkins, H. & Watkins, C., coll. Watkins & Watkins no. 717, ex Museum Seilern, Lešna, no. 4560.

Notes. SEILERN (l.c.) based his new subspecies on a single almost adult ("vix adult") ♂ specimen. The type was housed "im Museum Seilern, Lešna: Nr.4560",

but acquired in 1986 by the bird collection of the NHMW with other collection material of Count Seilern (SCHIFTER 2000).

Thamnophilus punctuliger Pelzeln, 1868

Thamnophilus punctuliger PELZELN, 1868: Orn. Brasil. Abth. 2, p. 77, 146 (Borba) = *Thamnophilus aethiops punctuliger* PELZELN, 1868 **Holotype.** NHMW 16.610 (dem. St.), ♂, 16.12.1829, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 835, 11th shipment, arrived November 1831.

Notes. PELZELN (l.c.) based his elaborate Latin description on a single specimen. He mentioned Natterer's manuscript notes and listed: "*Thamnophilus* spec. A male bird, not moulting, was collected in woodland of Borba in December". PELZELN & LORENZ (1887: 201) considered the single \Im collected by Natterer as holotype (= Original). Also, HELLMAYR (1906a: 339) addressed the single \Im specimen as given above.

Thamnophilus cinereiceps Pelzeln, 1868

Thamnophilus cinereiceps PELZELN, 1868: Orn. Bras. Abth. 2, p. 77, 145 (Maribatanas)

= Thamnophilus amazonicus cinereiceps PELZELN, 1868

Syntypes. NHMW 16.671 (B), 3, 17.07.1831, Maribatanas, [Amazonas, Brazil, 0°14' N, 68°29' W], leg. Johann Natterer, coll. J. Natterer no. 1152 (515), 11th shipment, arrived ?1835, NHMW 16.672 (dem. St.), 3, 17.07.1831, Maribatanas, [Amazonas, Brazil, 0°14' N, 68°29' W], leg. Johann Natterer, coll. J. Natterer no. 1152 (515), 11th shipment, arrived ?1835, NHMW 16.673 (B), 3, 16.05.1831, Maribatanas, [Amazonas, Brazil, 0°14' N, 68°29' W], leg. Johann Natterer, coll. J. Natterer no. 1152 (515), 11th shipment, arrived ?1835, NHMW 16.674 (B), 3, 06.05.1831, Maribatanas, [Amazonas, Brazil, 0°14' N, 68°29' W], leg. Johann Natterer, coll. J. Natterer no. 1152 (515), 11th shipment, arrived ?1835, NHMW 16.675 (dem. St.), 9, 15.03.1831, Maribatanas, [Amazonas, Brazil, 0°14' N, 68°29' W], leg. Johann Natterer, coll. J. Natterer no. 1152 (515), 11th shipment, arrived ?1835, NHMW 16.675 (dem. St.), 9, 15.03.1831, Maribatanas, [Amazonas, Brazil, 0°14' N, 68°29' W], leg. Johann Natterer, coll. J. Natterer no. 1152 (515), 11th shipment, ar-

Notes. PELZELN (1868: 77) based his new species on six specimens, collected in Marabitanas in March, May and in Rio Vaupé in July (sic!). PELZELN (1.c.: 145) published a Latin description of \eth and \bigcirc plumage characteristics. Natterer's notes read: $[4 \oiint \circlearrowright , 1 \circlearrowright$ from Marabitanas 1831, 1 \circlearrowright from Rio Vaupé 13 June 1831 [were collected. They are] like no. 704 [= *Thamnophilus amazonicus* SCLATER 1858] but the \bigcirc differs, having white striped tail coverts]. PELZELN & LORENZ (1887: 201) considered 5 \oiint and 1 \bigcirc collected by Natterer in Brazil (Marabitanas, Rio Vaupé) as "Originale" [= syntypes]. Natterer mentioned in his notes 4 \oiint and 1 \bigcirc from Marabitanas and 1 \bigcirc from Rio Vaupé; a handwritten remark from PelzeIn therein reads "1 \circlearrowright in London" [on loan?]. It was not found in WARREN & HARRISON (1971). The sixth syntype (the \circlearrowright from Rio Vaupé (= Uaupés)) could not be traced.

Cercomacra brasiliana HELLMAYR, 1905

Cercomacra brasiliana HELLMAYR, 1905: Nov. Zool. 12, no. 2, p. 289 (S. E. Brazil, Para) = *Cercomacra brasiliana* HELLMAYR, 1905

Holotype. NHMW 59.854 (B), male, dates not provided, Rio Make, [probably Raiz da Serra, Rio de Janeiro, Southern Brazil], bought from Hellmayr's private collection in February 1905, Acquisition No. 1909.V.3.

Notes. HELLMAYR (1905: 289) compared six specimens from Brazil and designated the specimen in his own collection (see above) as type of "*C. brasiliana* nomen novum". TELLO et al. (2014: 555) wrote: "that the type series of *Cercomacra brasiliana* is the series used by SCLATER (1890: 264) to designate *C. caerulescens*, and

not the specimens HELLMAYR (1905) pointed out later". SCLATER (1890: 264) based his description on five specimens from southeast Brazil and Para. Molecular evidence (TELLO et al. 2014) placed *Cercomacra brasiliana* into the "*nigricans* clade". RAPOSO et al. (2015: 95) mentioned the NHMW as repository of the supposed type: "After his death part of Hellmayr's collection went to Munich but the holotype of *C. brasiliana* is not there and has been traced to Vienna (Marcus Unsöld pers. comm.). As a strategy to avoid future misunderstanding of such a complex case under the rules of ICZN. Art 70.3.2, the type species of the genus *Cercomacra* is here fixed as *Cercomacra brasiliana* HELLMAYR, 1905, misidentified in the original designation by SCLATER (1890) as *Myrmothera caerulescens*, a name now considered to be a potential senior synonym of *Willisornis poecilinotus* (CABANIS, 1847)".

Cercomacra carbonaria SCLATER, PL & SALVIN, 1873

Cercomacra carbonaria SCLATER, PL & SALVIN, 1873: Nomenclator Avium, 73, 161 = *Cercomacra carbonaria*. SCLATER, PL & SALVIN, 1873

Syntypes. NHMW 15.368 (St), 3, 22.12.1831, Forte do Rio Branco, [(= Fortaleza de São Joaquim do Rio Branco), Roraima, Brazil, 03°06' N, 60°27' W], leg. Johann Natterer, coll. J. Natterer no. 1009, shipment, and arrival dates uncertain, NHMW 15.369 (St), 9, 22.12.1831, Forte do Rio Branco, [(= Fortaleza de São Joaquim do Rio Branco), Roraima, Brazil, 03°06' N, 60°27' W], leg. Johann Natterer, coll. J. Natterer no. 1009, shipment, and arrival dates uncertain. [NHMW 85.575 (B), 3, no data, identifyed as *Cercomacra nigricans*, "Bogota", Columbia, ex collection Seilern has doubtful status].

Notes. SCLATER & SALVIN (l.c.) based their description on an unknown number of specimens. They used Natterer's manuscript name "*Formicivora carbonaria*", listed his collection number, and 22 specimens collected by Natterer at the riverbank of Rio Branco in November and December [1831]. HELLMAYR (1911): "so far it has been met with only by Natterer [sic], who obtained a large series at Forte do Joaquim, on the confines of British Guiana".

PELZELN (1868: 85): "Cercomacra nigricans SCLATER N. [Natterer] 1009. Formicivora carbonaria Natterer. Catal. Msc. Forte do Rio branco am waldigen Flussufer, November, Dezember, 22 Ex." In footnote 2 follows the German description of the male and female: "Unsere Männchen zeigen weisses campterium; das Weibchen ist oberhalb graubraun, Basis der Rückenfedern, Ränder der Flügeldecken, Spitzen der Schwanzfedern, Kehle und Bauchmitte weiss, Brust und ein grosser Theil des Bauches ockerfarb [sic], Seiten, Unterbauch und crissum olivengrau." The species was not listed by PELZEN & LORENZ (1887). HELLMAYR (in CORY & HELLMAYR 1924: 223) had examined Pelzeln's specimens in the NHMW. He synonymised "Cercomacra nigricans SCLATER N.1009" with F. carbonaria Natterer Catal. msc. and made Natterer's manuscript name available by indication.

SCLATER (1890: 284): "Types in the Sclater Collection"; WARREN & HARRISON (1971: 92) listed two specimens as syntypes: 3 1889.9.20.431, Rio Branco, Brazil, 22. Dec. 1831; and "a 9 syntype in the collection". One type specimen with original NHMW label was traced by Marcus Unsöld in the ZSM. The repositories of the remaining specimens are not known to us, the syntype series is incomplete.

Cercomacra approximans PELZELN, 1868

Cercomacra approximans PELZELN, 1868: Orn. Bras. Abth. 2, p. 85, 158. (Engenho do Gama, Matogrosso)

= Cercomacroides nigrescens approximans (PELZELN, 1868)

Syntypes. NHMW 15.359 (dem. St.), ♂, 16.08.1826, Engenho do Capitão Gama, [Mato Grosso, Brazil, 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 721, 9th shipment, arrived November 1830, NHMW 15.360 (dem. St.), 3, December 1826, Cidade de Matogrosso [(= Vila Bela), Mato Grosso, Brazil, 15° S, 59°56' W], leg, Johann Natterer, coll. J. Natterer no. 721, 9th shipment, arrived November 1830, NHMW 15.361 (B), 3, 03.09.1826, Engenho do Capitão Gama, [Mato Grosso, Brazil, 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 721, 9th shipment, arrived November 1830, NHMW 15.362 (B), 3, 25.12.1826, Cidade de Matogrosso [(= Vila Bela), Mato Grosso, Brazil, 15° S, 59°56' W], leg. Johann Natterer, coll. J. Natterer no. 721, 9th shipment, arrived November 1830, NHMW 15.363 (B), ♂, December 1826, Cidade de Matogrosso [(= Vila Bela), Mato Grosso, Brazil, 15°17' S, 59°56' W], leg, Johann Natterer, coll. J. Natterer no. 721, 9th shipment, arrived November 1830, NHMW 15.364 (B), S, 08.08.1826, Engengo do Capitão Gama, [Mato Grosso, Brazil, 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 721, 9th shipment, arrived November 1830, NHMW 15.365 (B), ♀, December 1826, Cidade de Matogrosso [(= Vila Bela), Mato Grosso, Brazil, 15° S, 59°56' W], leg. Johann Natterer, coll. J. Natterer no. 721, 9th shipment, arrived November 1830, NHMW 15.366 (B), \mathcal{Q} , 11.07.1826, Engenho do Capitão Gama, [Mato Grosso, Brazil, 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 721, 9th shipment, arrived November 1830, NHMW 15.367 (B), ♀, 03.09.1826, Engenho do Capitão Gama, [Mato Grosso, Brazil, 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 721, 9th shipment, arrived November 1830.

Notes. PELZELN (1868: 85) based his new species on 12 specimens, which constitute the type series. PELZELN & LORENZ (1887: 204) listed 10 specimens: $6 \stackrel{\frown}{\circ} \stackrel{\frown}{\circ}$ and $4 \stackrel{\bigcirc}{\circ} \stackrel{\bigcirc}{\circ}$ from Engenho do Gama, Matogrosso and considered these as "Originale". Nine syntypes are found in the NHMW collection today. One $\stackrel{\frown}{\circ}$ specimen from the Sclater collection (now BMNH London), sampled by J. Natterer in "Matto Grosso, Brazil, 23. Oct. 1826" is BMNH Reg. no. 1889.9.20.421, another syntype specimen is $\stackrel{\bigcirc}{\circ}$ BMNH Reg. no. 1889.9.20.422. (WARREN & HARRISON (1971: 32). Both are listed as "authentic specimens" in SCLATER (1890: 266). The whereabouts of one syntype are unknown.

Myrmeciza hemimelaena pallens Berlepsch & Hellmayr, 1905

Myrmeciza hemimelaena pallens BERLEPSCH & HELLMAYR, 1905: J. Ornithol. 53, 1, p. 32 (Matogrosso) = *Sciaphylax hemimelaena pallens* (BERLEPSCH & HELLMAYR, 1905)

Holotype. NHMW 15.310 (B), ♂, 08.10.1826, Vila Bela da Santissima Trinidade, [Mato Grosso, Brazil, 15°00' S, 59°56' W], leg. Johann Natterer, coll. J. Natterer no. 734, 9th shipment, arrived November 1830.

Notes. In an earlier publication, HELLMAYR (1903: 213) considered *Formicivora ruficauda* Natterer (in PELZELN, 1868) as a junior subjective synonym of *Myr*-*meciza hemimelaena* SCLATER, 1857, although he recognized a slight difference between subadult male birds from Brazil and those from SE Peru. Subsequently, BERLEPSCH & HELLMAYR (1905: 32) classified *M. hemimelaena* in two subspecies (*M. h. hemimelaena* and *M. h. pallens*). For their new taxon, *Myrmeciza hemimelaena pallens*, BERLEPSCH & HELLMAYR (1.c.) compared two males and one female from Brazil with an unknown number of specimens from SE Peru. They designated "Typus in Museo Vindob. asservatur: no. 15310, male ad. Mattogrosso, 3. Oct. 1826, Natterer coll."

Formicivora ruficauda Pelzeln, 1868

Formicivora ruficauda PELZELN, 1868: Orn. Bras. Abth. 2, p. 83, 155 (Engenho do Gama, Matogrosso, Brasilien)

= Sciaphylax hemimelaena pallens BERLEPSCH & HELLMAYR, 1905

Syntypes. NHMW 15.309 (dem. St.), ♂, 06.08.1826, Engenho do Capitao Gama, [Mato Grosso, Brazil, 15°00' S, 59°56' W], leg. Johann Natterer, no. 734, 9th shipment, arrived November 1830, NHMW 15.310 (B), ♂, 08.10.1826, Vila Bela da Santissima Trinidade, [Mato Grosso, Brazil, 15°17' S, 59°15' W], leg. Johann Natterer, no. 734, 9th shipment, arrived November 1830.

Notes. PELZELN (1868: 83) made Natterer's manuscript name available and based the new taxon on two male specimens, which must be considered as syntypes [ICZN (1999) Art. 73.2.]: "Engenho do Gama August, Mato Grosso October, 2 Ex." The Latin description (PELZELN 1868: 155) provided male plumage characteristics corresponding with NHMW 15.309, collected "6 Aug 826 Engenho do Cap. Gama". Both specimens, NHMW 15.309 and NHMW 15.310, collectively represent the name-bearing type for *Myrmeciza hemimelaena pallens* BERLEPSCH & HELLMAYR, 1905 [ICZN (1999) Art. 72.7.; see above]. PELZELN & LORENZ (1887: 203) listed 2 dad collected by Natterer with dates as given above, but did not mention their type status.

Hypocnemis flavescens, SCLATER, PL 1865

Hypocnemis flavescens, SCLATER, PL 1865: Proc. Zool. Soc. London, pt. 3, p. 609 (Marabitanas) = *Hypocnemis flavescens flavescens* SCLATER, PL, 1865

Syntypes. NHMW 15.498 (dem. St.), 3° , 05.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer, coll. J. Natterer no. 857, 11th shipment, arrived ?1835, NHMW 15.500 (B), 3° , 02.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer, coll. J. Natterer no. 857, 11th shipment, arrived ?1835, NHMW 15.501 (B), 3° , 18.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer, coll. J. Natterer no. 857, 11th shipment, arrived ?1835, NHMW 15.501 (B), 3° , 18.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer, coll. J. Natterer no. 857, 11th shipment, arrived ?1835, NHMW 15.501 (B), 3° , 18.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer, coll. J. Natterer no. 857, 11th shipment, arrived ?1835, NHMW 15.501 (B), 3° , 18.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer, coll. J. Natterer no. 857, 11th shipment, arrived ?1835, NHMW 15.501 (B), 3° , 18.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer, coll. J. Natterer no. 857, 11th shipment, arrived ?1835, NHMW 15.501 (B), 3° , 18.03.1831, Natterer no. 857, 11th shipment, arrived ?1835, NHMW 15.501 (B), 3° , 18.03.1831, NATABITANA, NATABIT

NHMW 15.502 (B), \Diamond , 23.06.1831, Rio Icana, [= Rio Içana, Amazonas, Brazil, 0°45' N, 67°29' W], leg. Johann Natterer, coll. J. Natterer no. 857, 11th shipment, arrived ?1835, NHMW 15.503 (B), \Diamond , 05.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer, coll. J. Natterer no. 857, 11th shipment, arrived ?1835, NHMW 15.504 (B), \wp , 02.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W] leg. Johann Natterer, coll. no. 857, 11th shipment, arrived ?1835, NHMW 15.505 (B), \wp , 25.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer coll. no. 857, 11th shipment, arrived ?1835, NHMW 15.506 (dem. St.), \wp , 22.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer, coll. no. 857, 11th shipment, arrived ?1835, NHMW 15.506 (dem. St.), \wp , 22.03.1831, Marabitanas, [Amazonas, Brazil, 0°57' N, 66°55' W], leg. Johann Natterer, coll. no. 857, 11th shipment, arrived ?1835.

Notes. SCLATER (1865: 609) based his new species on an unknown number of specimens and Natterer's manuscript name "Formicivora flavescens". SCLATER (l.c.): "This Ant-thrush, which is of the same form as, and nearly allied to, H. cantator (Pl. Enl. 700), was obtained by Natterer at Marabitanas, on the Rio Negro. The sexes are coloured alike". The last line of his description implies that he had seen more than one specimen. Already PELZELN (1868: 88) considered Sclater as author for the species. PELZELN & LORENZ (1887: 204) provided 10 specimens (5 33 and $5 \oplus \oplus$) from Marabitanas as "typische Exemplare" [= syntypes]. The Catalogue of Birds (SCLATER 1880: 286) mentioned 1 δ from Oyapoc, Cayenne without type status and 1 9 from Marabitanas, Rio Negro, Brazil (Natterer) as "Type of the species". WARREN & HARRISON (1971: 178) listed: "holotype: Adult (\mathcal{Q} , vide Sclater, Cat. Bds. Brit. Mus., 15 (1880: 286)). BMNH Reg. no. 1889.9.20.505. Marabitanas, Rio Negro, Brazil, May 1831. Collected by J. Natterer, Sclater Collection; obtained by Sclater in exchange with the Vienna Museum. Sclater used Natterer's manuscript name". As Sclater obviously relied on a series of Natterer's specimens they are treated here as syntypes.

Another type specimen is found in Washington, USNM 207909, adult \mathcal{E} , collected by Johann Natterer, Marabitanas, on the Rio Negro, State of Amazonas, Brazil, March 16, 1831, coll. no. 857. (DEIGNAN 1961: 254) wrote about this specimen: "Received from the U.S. Fish and Wildlife Service, which, probably through Albert K. Fisher, acquired it from the Naturhistorisches Museum, Vienna (where it was No. 15499). Hypocnemis flavescens is one of several birds described by Sclater, after a visit to Vienna, from which he brought back to London for his own collection examples of each of new forms. In no case is a definite specimen mentioned as the type, but in each description, excepting only that of *H. flavescens* (probably by oversight), he [Sclater] states that examples are in the Vienna and Sclater Collections....It is reasonable to believe that diagnoses were in fact based upon the entire Natterer series from the localities named, in which case the Sclater specimen now in the British Museum and the Marabitanas birds left behind in Vienna would be equivalent cotypes of *H. flavescens*. Our [type specimen] No. 207909 came to Washington from Vienna long after the date of Sclater's description and is therefore here considered one of the types."

The type series may be incomplete, as PELZELN (1868: 88) listed 11 specimens, but wrote in a footnote that "one specimen was collected by Bartlett at the Ucayale". SCLATER & SALVIN (1866: 567) mentioned "a single skin, agreeing with Sclater's type specimen, collected by Natterer in Marabitanas 1831", that agrees with the specimen in WARREN & HARRISON (l.c.).

Pithys griseiventris PELZELN, 1868

Pithys griseiventris PELZELN, 1868: Orn. Bras. Abth. 2, p. 89, 167 (Villa Maria, Engenho do Gama, Borba)

= Willisornis poecilinotus griseiventris (PELZELN, 1868)

Syntypes. NHMW 15.596 (B), \bigcirc , 02.01.1830, Borba, lower Rio Madeira, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 703, 10th shipment, arrived May 1831, NHMW 15.597 (B), \bigcirc , 03.03.1830, Borba, lower Rio Madeira, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 703, 10th shipment, arrived May 1831, NHMW 15.598 (dem. St.), \bigcirc , 02.09.1825, Villa Maria [(= Cáceres), Mato Grosso, Brazil, 16°04' S, 57°41' W], leg. Johann Natterer, coll. J. Natterer no. 703, 9th shipment, arrived November 1830, NHMW 15.599 (dem. St.), \bigcirc , July 1826, Engenho do Gama, [Matogrosso, Brazil, 15°07' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 703, 9th shipment, arrived November 1830.

Notes. PELZELN (1868: 90) based his new species on four specimens, relying on \bigcirc plumage patterns only. Their data coincide with the NHMW specimens given above. PELZELN & LORENZ (1887: 205) affirmed the status of the taxon as "Originalexemplare" [= syntypes] and listed 4 $\bigcirc \bigcirc$ collected by Natterer. HELLMAYR (in CORY & HELLMAYR 1924: 314) designated Pelzen's \bigcirc specimen no. 15.597 as "type", but all four specimens constitute the syntype series. HELLMAYR (in CORY & HELLMAYR 1924: 1.c.) added the missing description of the \bigcirc plumage.

Formicivora ochropyga Hellmayr, 1906

Formicivora ochropyga HELLMAYR, 1906: Abh. Math. – Physik. Kl. Königl. Bayer. Akad. Wiss., 22, p. 663 (Ypanema, Sao Paulo)

= Drymophila ochropyga (Hellmayr, 1906)

Syntypes. NHMW 15.290 (dem. St.), male, 02.09.1821, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 515 (12), 6th or 7th shipment, arrived March 1822 or March 1823, NHMW 15.292 (dem.St.), female, 29.07.1822, Ypanema, [São Paulo, Brazil,

23°26′ S, 47°36′ W], leg. Johann Natterer, coll. J. Natterer no. 515 (12), 6th or 7th shipment, arrived March 1822 or March 1823. NHMW 15.293 (dem. St.), juv. male, no dates, Acquisition. no. 1841. IV.4, Ostbrasilien, Bahia, [Bahia, Brazil, 12°33′ S, 41°32′ W], bought from Brandt, Hamburg, labelled *"Formicivora genei* DE FILIPPI".

Notes. HELLMAYR (1906: 663) considered Thamnophilus striatus SCLATER (1890: 252) (based obviously on five specimens from SE Brazil and one from Bahia) a misidentification and proposed: "Formicivora ochropyga nom nov. Als Typus lege ich Mus. Vindob. no. 15290 👌 ad. Ypanema, S. Paulo – coll. Natterer – zu Grunde". PELZELN (1868: 83) had originally identified Formicivora ochropyga Natterer Catal. Msc. as Formicivora Genei FILIPPI, 1847 (Footnote 1: "Ob Spix's Thamnophilus striatus t. 40 f.2. hierhergehört, erscheint mir noch zweifelhaft". [If Spix's *Thamnophilus striatus* t. 40 f.2. belongs here is vet doubtful]. Subsequently PELZELN (1874: 291) wrote: "Prof. Salvadori theilte mir bei seiner Anwesenheit in Wien mit, dass er den Typus der F. Genei wohl kenne und dass dieser mit F. ervthrocerca SCLATER (Proc. Z. S. 1858 p. 240 t. 42) identisch sei. Für die bisher (Zur Ornithologie Bras. 83 Natt. No. 115) F. Genei genannte Art wäre sodann der Name F. ochropyga Natterer anzuwenden" [Prof Salvadori informed me that he knew the type of \overline{F} . Genei and that it coincides with F. ervthrocerca SCLATER (1848. p. 240, t. 42). Therefore, the species with Natterer's number 115, named F. Genei in Pelzeln (1868: 83) should be named F. ochropyga Natterer]. Hellmayr (1906: 663) used Natterer's manuscript name for his new replacement name [ICZN (1999)] Art. 12.2.3.] and made it available by indication [ICZN (1999) art. 12.2.]: "Sclater 1890 uses Thamnophilus striatus SPIX (1825: 29, tab. XL, fig. 2) as synonym of Hypocnemis cantator BODDAERT (1783: 44) which are not identical as I was able to proof. Therefore, I propose as new name *Formicivora ochropyga* nomen novum for Formicivora striata (nec Thamnophilus striatus SPIX) SCLATER, (Cat. Birds Brit. Mus. XV (1890), p. 252."

Myothera malura TEMMINCK, 1825

Myothera malura ТЕММІNСК, 1825: Pl. Col. Livr. 59, t. 353, fig. 1,2, p. [271–272] (Ypanema, Brésil) *= Drymophila malura*, (ТЕММІNСК, 1825)

Syntypes. NHMW 15.294 (B), \mathcal{J} , 06.1819, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 376, 3th shipment, arrived January 1820, NHMW 15.295 (B), \mathcal{J} , juv., 18.07.1819, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 376, 3th shipment, arrived January 1820, NHMW 15.297 (dem. St.), \mathcal{Q} , 18.07.1819, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer no. 376, 3th shipment, arrived January 1820, NHMW 15.297 (dem. St.), \mathcal{Q} , 18.07.1819, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer no. 376, 3th shipment, arrived January 1820, NHMW 15.298 (dem. St.), 19.04.1819, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer no. 376, 3th shipment, arrived January 1820, NHMW 15.299 (B), \mathcal{J} , juv, 08.1821, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 376, 3th shipment, arrived January 1820, NHMW 15.299 (B), \mathcal{J} , juv, 08.1821, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 376, 3th shipment, arrived January 1820, NHMW 15.299 (B), \mathcal{J} , juv, 08.1821, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 376, 5th shipment, arrived January 1820, NHMW 15.299 (B), \mathcal{J} , juv, 08.1821, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 376, 6th, or 7th shipment, arrived March 1822 or March 1823.

Notes. Temminck's plate depicted \Im and \bigcirc (TEMMINCK 1825: 271–272, pl. 353, fig. 1,2). The description mentioned both Johann Natterer and Auguste de Saint-Hilaire as collectors of his new species. Temminck provided Ipanema as type locality and that "des individus font partie des Musées des Pays-Bas, de Vienne et de Paris" [specimens are found in the museums of [Leiden] Netherland, Vienna, and Paris]. PELZELN & LORENZ (1887: 203) listed five "authentische Exemplare" collected by Natterer in Brazil as shown above, but only four are potential syntypes, that constitute part of the syntype series. DEKKER (2003: 10): provided 2 \Im (RMNH 88797, RMNH 88798) collected by J. Natterer from Ipanema, as syntypes. Specimens from Auguste de Saint-Hilaire are expected to be found in Paris.

Phlegopsis paraensis Hellmayr, 1904

Phlegopsis paraensis HELLMAYR, 1904: Orn. Monatsber. 12, p. 53 (Belem, Pará)

= Phlegopsis nigromaculata paraensis HELLMAYR, 1904

Syntypes. NHMW 15.803 (B), \bigcirc , 1835, Belem [(= Pará), Pará, Brazil, 01°27' S, 48°29' W], leg. Johann Natterer, coll. Natterer, no. 836, shipment, and arrival dates not known, NHMW 16.432 (B), \eth , 11.09.1834, Belem [(= Pará), Pará, Brazil, 01°27' S, 48°29' W], leg. Johann Natterer, coll. Natterer no. 836, shipment, and arrival dates not known, NHMW 16.433 (B), \eth , 01.1835, Belem [(= Pará), Pará, Brazil, 01°27' S, 48°29' W], leg. Johann Natterer, coll. Natterer no. 836, shipment, and arrival dates not known, NHMW 16.433 (B), \eth , 01.1835, Belem [(= Pará), Pará, Brazil, 01°27' S, 48°29' W], leg. Johann Natterer, coll. J. Natterer no. 836, shipment, and arrival dates not known.

Notes. HELLMAYR (l.c.) based his description on three specimens: he designated $1 \stackrel{\bigcirc}{\rightarrow}$ NHMW 15.803 as "typus", but also listed specimens NHMW 16.432 and NHMW 16.433. These three specimens constitute the type series.

Pithys bicolor aequatorialis HELLMAYR, 1902

Pithys bicolor aequatorialis HELLMAYR, 1902: Orn. Monatsber. 10, p. 33 (Lita, N. Ecuador) = *Gymnopithys bicolor aequatorialis* (HELLMAYR, 1902)

Syntypes. NHMW 16.871 (B), \mathcal{J} , 17.07.1900, San Javier, [Pichincha, Ecuador, 09° N, 78°29′ W], leg. G. Flemming, via William F.H. Rosenberg, acquired 1902, Acquisition no. 1902.IV.1, NHMW 16.872 (B), juv. \mathcal{Q} , 26.04.1899, Tumbez, [(= Paramba), Imbabura, Ecuador, 49′ N, 78°21′ W], leg. R. Miketta, acquired 1902, Acquisition no. 1902.IV.1, NHMW 16.873 (B), \mathcal{J} , 04.10.1899, Lita, [North Ecuador, 52°39′ N, 78°28′ W], leg. G. Flemming, via William F. H. Rosenberg, acquired 1902, Acquisition no. 1902.IV.1, NHMW 16.884 (B), \mathcal{J} , 19.10.1899, Lita, [North Ecuador, [52°39′ N, 78°28′ W], leg. G. Flemming, via William F. H. Rosenberg, acquired 1902, Acquisition no. 1902.IV.1, NHMW 16.884 (B), \mathcal{J} , 19.10.1899, Lita, [North Ecuador, [52°39′ N, 78°28′ W], leg. G. Flemming, via William F. H. Rosenberg, acquired 1902, Acquisition no. 1902.IV.1, NHMW 16.885 (B), \mathcal{J} , 31.05.1900, San Javier, [Pichincha, Ecuador, 09° N, 78°29′ W], leg. G. Flemming, via F. H. Rosenberg, acquired 1902, Acquisition no. 1902.IV.1.

Notes. HELLMAYR (1902: 33) based his description of the new subspecies on 15 specimens from North-Ecuador. Only specimen NHMW 16.873 was provided as "Typus", but all 15 specimens constitute the type series: "untersucht wurden 15 Exemplare aus Nord-Ecuador (Rio Verde, Ventanas, S. Javier, Lita and Paramba), die alle obige Charaktere zur Schau tragen".

Five type specimens are found in the NHMW collection, four type specimens in Munich ZSM 09.5311 – ZSM 09.5314 (Unsöld, pers. com. 2022), six type specimens could not be traced. The subspecies was not mentioned by HARTERT (1920, 1922), DEIGNAN (1961), WARREN & HARRISON (1971) and LECROY & SLOSS (2000).

Pithys cristata Pelzeln, 1868

Pithys cristata PELZELN, 1868: Orn. Bras. Abth. 2, p. 89, 166 (Rio Vaupe, Sao Jeronimo an der Cochoeira Panorè)

= *Rhegmatorhina cristata* (PELZELN, 1869)

Syntypes. NHMW 15.600 (B), \mathcal{J} , 12.07.1831, Rio Vaupe, [(= Rio Uaupés), Amazonas, Brazil, 0°7' N, 67°57' W], leg. Johann Natterer, coll. J. Natterer no. 992, 11th shipment, arrived ?1835, NHMW 15.601 (B), \mathcal{Q} , 13.07.1831, Rio Vaupe, [(= Rio Uaupés), Amazonas, Brazil, 0°7' N, 67°57' W], leg. Johann Natterer, coll. J. Natterer no. 992, 11th, arrived ?1835.

Notes. PELZELN (1868: 89) based the description of his new species on two specimens from "Rio Vaupe, São Jeronimo an der Cachoeira Panorè, July". Pelzeln's description (l.c.) provided Natterer's unpublished manuscript and his proposed species name "*Myioturdus cristatus*". Natterer mentioned that both specimens were following ants. PELZELN & LORENZ (1887: 204) confirmed the status of the two specimens as syntypes ("Originale"), as did BERLEPSCH & HELLMAYR (1905: 33).

Hypocnemis maculicauda Pelzeln, 1868

Hypocnemis maculicauda PELZELN, 1868: Orn. Bras. Abth. 2, p. 89, 164 (Villa Maria, Engenho do Gama)

= Hypocnemoides maculicauda (PELZELN, 1868)

Syntypes. NHMW 15.556 (B), δ , 09.09.1825, Villa Maria [(= Cáceres), Mato Grosso, Brazil, 16°04' S, 57°41' W], leg. Johann Natterer, coll. J. Natterer no. 675, 9th shipment, arrived November 1830, NHMW 15.557 (B), 3, 28.07.1825, Villa Maria [(= Cáceres), Mato Grosso, Brazil, 16°04' S, 57°41' W]. leg. Johann Natterer, coll. J. Natterer no. 675, 9th shipment, arrived November 1830, NHMW 15.558 (dem. St.), 3, 22.08.1825, Villa Maria [(= Cáceres), Mato Grosso, Brazil, 16°04' S, 57°41' W], leg. Johann Natterer, coll. J. Natterer no. 675, 9th shipment, arrived November 1830, NHMW 15.559 (B), 3, 27.07.1825, Villa Maria [(= Cáceres), Mato Grosso, Brazil, 16°04' S, 57°41' W], leg. Johann Natterer, coll. J. Natterer no. 675, 9th shipment, arrived November 1830, NHMW 15.560 (B), 3, 28.07.1825, Villa Maria [(= Cáceres), Mato Grosso, Brazil, 16°04' S, 57°41' W], leg. Johann Natterer, coll. J. Natterer no. 675, 9th shipment, arrived November 1830, NHMW 15.561 (B), ♂, 18.08.1825, Villa Maria [(= Cáceres), Mato Grosso, Brazil, 16°04' S, 57°41' W], leg. Johann Natterer, coll. J. Natterer no. 675, 9th shipment, arrived November 1830, NHMW 15.562 (B), 3, 27.07.1825, Villa Maria [(= Cáceres), Mato Grosso, Brazil, 16°04' S, 57°41' W], leg. Johann Natterer, coll. J. Natterer no. 675, 9th shipment, arrived November 1830, NHMW 15.563 (B), \mathcal{Q} , 23.10.1826, Cidade de Mattogrosso [(=? Vila Bela da Santissima Trindade), Mato Grosso, Brazil, 15°04' S, 59°56' W], leg. Johann Natterer, coll. J. Natterer no. 675, 9th shipment, arrived November 1830, NHMW 15.564 (dem. St.), ♀, 23.10.1826, Engenho do Capitão Gama, [Mato Grosso, Brazil, 15°17' S, 59°15' W], leg. Johann Natterer, coll. J. Natterer no. 675, 9th shipment, arrived November 1830.

Notes. PELZELN (1868: 89) based his description on 11 specimens. He mentioned (PELZELN 1.c.: 164) Villa Maria and Engenho do Gama as type locality and provided Natterer's German notes and detailed description. Ten specimens are listed in PELZELN & LORENZ (1887: 204) as "types", nine are found in the NHMW collection today. One specimen, an adult \mathcal{E} , collected by Natterer in Matto Grosso, Brazil, is listed as "authentic specimen" [= Syntype] by SCLATER (1890: 291), but not mentioned in WARREN & HARRISON (1971). The type series provided here is incomplete.

Myrmecisa squamosa Pelzeln, 1868

Myrmecisa squamosa PELZELN, 1868: Orn. Bras. Abth. 2, p. 87, 162 (Mato Dentro, Ypanema) = *Myrmoderus squamosus* (PELZELN, 1868)

Syntypes. NHMW 15.458 (dem. St.), \mathcal{J} , December 1818, Mato Dentro, [São Paulo, Brazil, 2°59' S, 46°38' W], leg. Johann Natterer, coll. J. Natterer no. 1166 (211 b), 2nd shipment, arrived November 1819, NHMW 15.459 (B), \mathcal{J} , August 1821, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 1166 (211 b), 6th shipment, arrived March 1822, NHMW 15.460 (B), \mathcal{J} , 03.03.1819, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 1166 (211 b), 2nd shipment, arrived November 1819, NHMW 15.461 (dem. St.), juvenile \mathcal{J} , June 1821, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 1166 (211 b), 6th shipment, arrived November 1819, NHMW 15.461 (dem. St.), juvenile \mathcal{J} , June 1821, Ypanema, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 1166 (211 b), 6th shipment, arrived March 1822.

Notes. PELZELN (1868: 87) listed five specimens for his species description. PELZELN & LORENZ (1887: 204) mentioned only 4 3 as "Originale" [= syntypes]. One syntype specimen is listed in SALVIN (1882: 351) no.1726, as part of the Strickland collection.

Sclateria schistacea humaythae HELLMAYR, 1907

Sclateria schistacea humaythae HELLMAYR, 1907: Bull. BOC. 19, p. 51, (Humaytha) = *Myrmelastes humaythae* (HELLMAYR, 1907)

Paratypes. NHMW 59.990 (B), \bigcirc , 29.07.1906, Humaita [= Humaytha, Amazonas, Brazil, 07°31' S 63°01' W], leg. Wilhelm Hoffmanns, coll. W. Hoffmanns, no. 1014, donated by Baron Lionel Walter Rothschild, acquired 1907, Acquisition no. 1907.V.2, NHMW 59.991 (B), \circlearrowright , 12.07.1906, Humaita [= Humaytha, Amazonas, Brazil, 07°31 S, 63°01' W], leg. Wilhelm Hoffmanns, coll. W. Hoffmanns, no. 1077, donated by Baron Lionel Walter Rothschild, acquired 1907, Acquisition no. 12.1907. V.2.

Notes. HELLMAYR (l.c.) based his description on 13 specimens, 5 adult and 2 immat. $\Im \Im$ and $6 \heartsuit \heartsuit$, obtained in July, August, and September 1906 in Humaytha. He designated an adult \heartsuit , coll. 09.08.1906, leg. by Wilhelm Hoffmanns, coll. W. Hoffmanns no. 1067, as "type in the Tring Museum". HARTERT (1922: 394) listed in the Tring type catalogue only the \heartsuit collected 09.08.1906 as "type" and not the complete type series. LECROY & SLOSS (2000: 55) also mentioned that single \heartsuit (now AMNH 491436) but specified its status as holotype. The AMNH database (retrieved 30.09.2021) listed 11 specimens – 5 $\heartsuit \heartsuit$ and 6 $\Im \Im$ – from Humaytha. The "holotype" (AMNH 491436), 6 $\Im \Im$ (AMNH nos.: 481437 – 491442) and 5 $\heartsuit \heartsuit$ (AMNH nos.: 491443–491446). Together with the two paratype specimens in the NHMW collection they complete the type series.

Hypocnemis lugubris femininus Hellmayr, 1910

Hypocnemis lugubris femininus HELLMAYR, 1910: Rev. Franc. Orn. Tome 1, 2eme annee, nr.11, p.164–165 (Borba, Rio Madeira, Anavehana, Rio Negro)

= *Myrmoborus lugubris feminina* (HELLMAYR, 1910)

Syntypes. NHMW 15.545 (B), adult 3, 23.11.1829, Rio Madeira, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 826, 10th shipment, arrived 05.1831, NHMW 15.546 (B), adult 2, 23.11.1829, Rio Madeira, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 826, 10th shipment, arrived 05.1831, NHMW 15.547 (B), adult 3, date not provided, Anavehana, Rio Negro, [Anavilhanas, Rio Negro, Brazil, 02°41' S, 60°, 47' W], leg. Johann Natterer, coll. J. Natterer no. 826, 10th shipment, arrived 05.1831, NHMW 15.548 (B), juv. 3, 03.03.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 826, 10th shipment, arrived 05.1831, NHMW 15.548 (B), juv. 3, 03.03.1830, Borba, [Amazonas, Brazil, 04°23' S, 59°35' W], leg. Johann Natterer, coll. J. Natterer no. 826, 10th shipment, arrived 05.1831, NHMW 15.549 (B), 2, 13.07.1830, Borba, Rio Madeira, [Amazonas, Brazil, 04°23' S, 59°,35' W], leg. Johann Natterer, coll. J. Natterer no. 826, 10th shipment, arrived 05.1831, NHMW 15.549 (B), 4, 13.07.1830, Borba, Rio Madeira, [Amazonas, Brazil, 04°23' S, 59°,35' W], leg. Johann Natterer, coll. J. Natterer no. 826, 11th or 12th shipment, arrival dates uncertain.

Notes. HELLMAYR (l.c.) based his new species on a series of seven specimens. The \bigcirc NHMW 15.549 was provided as "type", but also the other specimens listed above are cited with their NHMW collection numbers. Two additional syntypes listed by Hellmayr are one \bigcirc from Borba, 17.02.1830, collected by Natterer (no. 826) then in the British Museum, London. Another syntype, a juvenile \bigcirc from Borba, collected by Hoffmanns, 20.11.1906, coll. no. 1369, came from the Tring collection (HELLMAYR l.c.: 165). Their repositories are unknown, i. e., not found in the type catalogues of LECROY & SLOSS (2000), HARTERT (1922) and WARREN & HARRISON (1971).

Percnostola leucostigma Pelzeln, 1868

Percnostola leucostigma PELZELN, 1868: Orn. Bras. Abth. 2, p. 86, 160 (Rio Negro) = Myrmelastes leucostigma leucostigma (PELZELN, 1868)

Syntypes. NHMW 15.436 (B), \mathcal{E} , date not provided, Rio Negro, [N-Brazil, 03°24' S, 65°51' W], leg. Johann Natterer, coll. J. Natterer no. 921, no shipment information available, NHMW 15.437 (B), \mathcal{Q} , 06.06.1833, Rio Negro, [N-Brazil, 03°24' S, 65°51' W], leg. Johann Natterer, coll. J. Nat-

terer, no. 921, 11th, or 12th shipment, arrived ?1835, NHMW 15.438 (B), \mathcal{J} , 05.10.1830, Rio Negro, [N-Brazil, 03°24' S, 65°51' W], leg. Johann Natterer, coll. J. Natterer, no. 921, 11th shipment, arrived ?1835, NHMW 15.439 (dem. St.), juv. \mathcal{J} , 15.03.1831, Marabitanas, upper Rio Negro, [Brazil, 0°58' N, 66°51' W], leg. Johann Natterer, coll. Natterer no. 921, 11th shipment, arrived ?1835, NHMW 15.440 (B), \mathcal{Q} , 15.07.1831, Rio Vaupe, [(= Rio Uaupés), Amazonas, Brazil, 0°14' N, 68°29' W], leg. Johann Natterer no. 921, shipment and arrival dates not known.

Notes. PELZELN (1868: 86) based his new species on five specimens, collected at the Rio Negro in October, at Marabitanas in March, Rio Vaupe in July, and Barra do Rio Negro in June and October. He provided the new species as "*Percnostola leucostigma* NATTERER et LAFRESNAYE no. 921". [= in the collection at Vienna and of Lafresnaye]. Footnote no. 2 reads: "a \Im from Cayenne, of H. Becoeur [NHMW 15.441] was found in the old collection." It is uncertain if it belongs to the type series. PELZELN & LORENZ (1887: 204) listed five specimens, 3 \Im and 2 \Im collected by Natterer in Brazil as "authentic specimens" [= syntypes], that constitute the type series. *Percnostola leucostigma* is the type species of *Schistocichla* gen. nov. TODD, (1927: 165), (see also ISLER et al. 2013).

Percnostola minor PELZELN, 1868

Percnostola minor PELZELN, 1868: Orn. Brasil. Abth. 2, p. 86, 159 (S. Izabel am Rio Negro, Marabitanas, Rio Xie)

= Percnostola rufifrons minor PELZELN, 1868

Syntypes. NHMW 15.423 (St), 3, 28.01.1831, Marabitanas, [Amazonas, Brazil, 58° N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 1173, 11th shipment, arrived ?1835, NHMW 15.424 (St), ♀, 17.03.1831, Marabitanas, [Amazonas, Brazil, 58° N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 1173, 11th shipment, arrived ?1835, NHMW 15.425 (B), 3, 21.01.1831, Marabitanas, [Amazonas, Brazil, 58° N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 1173, 11th shipment, arrived ?1835, NHMW 15.426 (dem. St.), 3, 11.03.1831, Marabitanas, [Amazonas, Brazil, 58° N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 1173, 11th shipment, arrived ?1835, NHMW 15.427 (B), 3, 04.03.1831, Marabitanas, [Amazonas, Brazil, 58° N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 1173, 11th shipment, arrived ?1835, NHMW 15.428 (B), 3, 06.05.1831, Marabitanas, [Amazonas, Brazil, 58° N, 66°51' W], leg. Johann Natterer, coll. J. Natterer no. 1173, 11th shipment, arrived ?1835, NHMW 15.429 (B), ♂, 16.12.1830, Santa Isabel do Rio Negro, [Amazonas, Brazil, 58° N, 66°51' W leg. Johann Natterer, coll. J. Natterer no. 1173, 11th shipment, arrived ?1835, NHMW 15.430 (B), d, 16.12.1830, Santa Isabel do Rio Negro, [Amazonas, Brazil, 58° N, 66°51' W leg. Johann Natterer, coll. J. Natterer no. 1173, 11th shipment, arrived ?1835, NHMW 15.431 (B), ♂, 01.06.1831, Rio Xie, [Amazonas, Brazil, 58° N, 66°51' W leg. Johann Natterer, coll. J. Natterer no. 1173, 11th shipment, arrived ?1835, NHMW 15.432 (B), ♀, 05.05.1831, Marabitanas, [Amazonas, Brazil, 58° N, 66°51' W] leg. Johann Natterer, coll. J. Natterer no. 1173, 11^{th} shipment, arrived ?1835, NHMW 15.433 (B), \mathcal{Q} , 20.01.1831, Marabitanas, [Amazonas, Brazil, 58° N, 66°51' W] leg. Johann Natterer, coll. J. Natterer no. 1173, 11th shipment, arrived ?1835.

Notes. PELZELN (l.c.) based his description on 15 specimens, that constitute the type series. He also relied on Natterer's manuscript. PELZELN & LORENZ (1887: 204) listed 11 specimens collected by Natterer in Marabitanas as "Originale" that we recognized as syntypes. HELLMAYR (1908: 143) wrote: "Typus (restrictus): Mus. Vindob. Nr. 15340 [sic! error for NHMW 15.430, see above]. \bigcirc ad. S. Izabel, Rio Negro, 16. Dezember 1830. J. Natterer coll. Nr. 1173". This restriction of the type locality to Santa Isabel do Rio Negro is invalid [ICZN (1999) Art. 73.2.3]. HELLMAYR (1908: 143) listed 13 specimens, seven adult and 1 subad. \bigcirc and 5 \bigcirc collected in Marabitanas, Santa Isabel and Rio Xie, "in the bird collections of NHMW, Brit. and H. von Berlepsch; 2 \bigcirc ad. S. Izabel, 1 ad. \bigcirc Rio Xie, in NHMW, all collected by Natterer. Also, a \bigcirc from Nauta, Peru, collected by Bartlett in the British

Museum". WARREN & HARRISON (1971: V) listed: "P.L. Sclater received several specimens in exchange with Vienna, and his collection was purchased by the [British] Museum between 1884 and 1890". WARREN & HARRISON (1971: 356) wrote BMNH Reg. no. 1889.7.10.606, adult ♂: "This specimen and three other syntypes in the collection were listed as "authentic specimens" by SCLATER, Cat. Bds. Brit. Mus. 15 (1890: 274)". Together with the NHMW specimens they constitute and complete the syntype series.

Percnostola rufifrons subcristata Hellmayr, 1908

Percnostola rufifrons subcristata HELLMAYR, 1908: Verh. Orn. Ges. Bayern 8, p. 142 (Barra do Rio Negro)

= Percnostola rufifrons subcristata HELLMAYR, 1908

Syntypes. NHMW 15.414 (B), \bigcirc , ad., 29.09.1830, Barra do Rio Negro, [Manáos, Amazonas, Brazil, 03°07' S, 60°01' W], leg. Johann Natterer, coll. J. Natterer no. 906, 11th shipment, arrived ?1835, NHMW 15.415 (B), \bigcirc , ad., 16.09.1830, Barra do Rio Negro, [Manáos, Amazonas, Brazil, 03°07' S, 60°01' W], leg. Johann Natterer, coll. J. Natterer no. 906, 11th shipment, arrived ?1835, NHMW 15.416 (B), \bigcirc , juv., 12.10.1830, Barra do Rio Negro, [Manáos, Amazonas, Brazil, 03°07' S, 60°01' W], leg. Johann Natterer no. 906, 11th shipment, arrived ?1835, NHMW 15.416 (B), \bigcirc , juv., 12.10.1830, Barra do Rio Negro, [Manáos, Amazonas, Brazil, 03°07' S, 60°01' W], leg. Johann Natterer, coll. J. Natterer no. 906, 11th shipment, arrived ?1835, NHMW 15.417 (B), \bigcirc , ad., 16.09.1830, Barra do Rio Negro, [Manáos, Amazonas, Brazil, 03°07' S, 60°01' W], leg. Johann Natterer, coll. J. Natterer no. 906, 11th shipment, arrived ?1835, MNW 15.418 (B), \bigcirc , ad., 24.05.1833, Barra do Rio Negro, [Manáos, Amazonas, Brazil, 03°07' S, 60°01' W], leg. Johann Natterer, coll. J. Natterer no. 906, 11th shipment, arrived ?1835, MNW 15.418 (B), \bigcirc , ad., 24.05.1833, Barra do Rio Negro, [Manáos, Amazonas, Brazil, 03°07' S, 60°01' W], leg. Johann Natterer, coll. J. Natterer no. 906, 11th shipment, arrived ?1835, MNW 15.418 (B), \bigcirc , ad., 24.05.1833, Barra do Rio Negro, [Manáos, Amazonas, Brazil, 03°07' S, 60°01' W], leg. Johann Natterer, coll. J. Natterer no. 906, 12th shipment, arrived 1836.

Notes. HELLMAYR (l.c.) based the description of his new subspecies on six specimens: "Die sechs Exemplare von *P. r. subcristata* wurden alle bei Barra do Rio Negro (= Manáos) in den Monaten September, Oktober (1830) und Mai (1833) erbeutet!" Four specimens [$2 \ Q \ Q$, one adult and a juvenile $\ Oktober$ from the NHMW and two specimens from the British Museum, London. All were collected by J. Natterer [species no. 906] at Barra do Rio Negro. The $\ Q$ specimens NHMW 15.417 and NHMW 15.418 were explicitly cited, the latter offeredas "Typus", but the whole series must be considered as syntypes. Also, CORY & HELLMAYR (1924: 251, footnote) listed 3 $\ Oktober \ Okto$

Specimens of uncertain type status

Herpsilochmus pectoralis SCLATER, PL 1857

Herpsilochmus pectoralis SCLATER, PL 1857: Proc. zool. Soc. Lond., p. 132

= Herpsilochmus pectoralis pectoralis SCLATER, PL 1857

Syntypes? NHMW 15.177 (B), ♂, no collecting dates, Acquisition no. 1844. I.137, "Bahia 1840", bought by Johann Natterer in Paris or London 1844, NHMW 15.178 (B), ♂, no collecting dates, Acquisition no. 1844. I.137, "Bahia 1840", bought by Johann Natterer in Paris or London 1844.

Notes: PELZELN (1868: 80) Footnote no. five: "two specimens of Sclater's *H. pec-toralis* from Bahia, were bought by Natterer for the collection [in 1844]". [See also *Herpsilochmus longirostris*]. WARREN & HARRISON (1971: 432): "Sclater mentioned two specimens, one in the Academy of Natural Sciences, Philadelphia, from the Massena Collection, and another unlocalized specimen in the British-Museum,

thought also to be from the Massena Collection. The latter syntype cannot now be traced in the collection. The Wucherer specimen from Bahia, listed as type by P.L. SCLATER, Cat. Bds. Brit. Mus., 15 (1890): 247, is not accepted as syntype".

Myothera rufimarginata TEMMINCK, 1822

Myothera rufimarginata TEMMINCK, 1822: Pl. col., livr. 22, pl. 132, fig. 1 & 2, [p. 273–274] (Brésil) = *Herpsilochmus rufimarginatus* (TEMMINCK, 1822)

Syntype? NHMW 15.182 (St), ♂, 08.07.1819, Ypanema, San Paulo, [São Paulo, Brazil, 23°26' S, 47°36' W], leg. Johann Natterer, coll. J. Natterer no. 213, 4th shipment, arrived February 1821.

Notes. TEMMINCK (1822: [273–274]) based his new species on an unknown number of specimens. Four syntypes are mentioned in DEKKER (2003): RMNH 88800, ad. \Diamond , Brazil; RMNH 888801, ad. \Diamond , Brazil (no further information) and two specimens RMNH 90672, skin, ad. \Diamond ; RMNH 90673, skin, ad. \Diamond , both ex Cabinet Temminck. His specimens are "found in many museums". PELZELN (1868: 80): "*Herpsilochmus rufimarginatus* (TEMMINCK) N. 213 (726). Rio de Janeiro May, Ypanema April, May, July, Engenho do Gama in high forest [canopy?] on small trees [in understore?], July, August, 5 specimens." The species was not mentioned by PELZELN & LORENZ (1887).

Myiothera ferruginea TEMMINCK, 1822

Myiothera ferruginea TEMMINCK, 1822: Nouv. Rec. de Planch. Color. D' Oiseaux, vol.2, liv.22, pl. 132, fig. 3, p. [274–275]

= Drymophila ferruginea (Теммінск, 1822)

Syntypes? NHMW: 15.278 (B) \bigcirc juv., June 1821, Ypanema, [São João de Ipanema, São Paulo, Brazil, 23°25' S, 47°36' W], leg. Johann Natterer, no. 423, 6th, or 7th shipment arrived March 1822 or March 1823, NHMW: 15.279 (B) \bigcirc , March 1819, Ypanema, [São João de Ipanema, São Paulo, Brazil, 23°25' S, 47°36' W], leg. Johann Natterer, no. 423, 2nd shipment, arrived January 1821, NHMW: 15.280 (B) \bigcirc , juv., March 1819, Ypanema, [São João de Ipanema, São Paulo, Brazil, 23°25' S, 47°36' W], leg. Johann Natterer, no. 423, 2nd shipment, arrived January 1821, NHMW: 15.280 (B) \bigcirc , juv., March 1819, Ypanema, [São João de Ipanema, São Paulo, Brazil, 23°25' S, 47°36' W], leg. Johann Natterer, no. 423, 2nd shipment, arrived January 1821, NHMW: 15.282 (St. D), \bigcirc , 13.11.1818, Capitao Mor, [São Paulo, Brazil, 22°35' S, 44°,42' W], leg. Johann Natterer, no. 423, 3nd shipment, arrived January 1821, NHMW: 15.283 (B) \bigcirc , June 1821, Ypanema, [São João de Ipanema, São Paulo, Brazil, 23°25' S, 47°36' W], leg. Johann Natterer, no. 423, 6th, or 7th shipment arrived March 1822 or March 1823, NHMW: 15.284 (B), \bigcirc , 04.12.1818, Mato Dentro, [São Paulo, Brazil, NHMW: 15.285 (B) \bigcirc , July 1821, Ypanema, [São João de Ipanema, São Paulo, Brazil, 23°25' S, 47°36' W], leg. Johann Natterer, no. 423, 6th, or 7th shipment arrived March 1822 or March 1823, NHMW: 15.286 (B) \bigcirc , 1821, Ypanema, [São João de Ipanema, São Paulo, Brazil, 23°25' S, 47°36' W], leg. Johann Natterer, no. 423, 6th, or 7th shipment arrived March 1822 or March 1823, NHMW: 15.286 (B) \bigcirc , 1821, Ypanema, [São João de Ipanema, São Paulo, Brazil, 23°25' S, 47°36' W], leg. Johann Natterer, no. 423, 6th, or 7th shipment arrived March 1822 or March 1823, NHMW: 15.286 (B) \bigcirc , 1821, Ypanema, [São João de Ipanema, São Paulo, Brazil, 23°25' S, 47°36' W], leg. Johann Natterer, no. 423, 6th, or 7th shipment arrived March 1822 or March 1823, NHMW: 15.286 (B) \bigcirc , 1821, Ypanema, [São João de Ipanema, São Paulo, Brazil, 23°25' S, 47°36' W], leg. Johann Nat

Notes. TEMMINCK (1822: 274) based his new species on an unknown number of specimens. The description ends: "Le Brésil est la patrie de cette espèce; les voyageurs qui ont parcouru ce pays ne nous appremennent rien des moeurs et des habitudes de notre Fourmillier. On le trouve dans plusieurs collections d' histoire naturelle". On \bigcirc of: "1715. *Formicivora ferruginea – Myiothera ferruginea* LICH-TENSTEIN, Verz. Doubl. P. 44" from Brazil is housed in the Strickland collection (SALVIN 1882: 349). Three \bigcirc syntypes are found in Leiden (DEKKER 2003: 10), RMNH 88794–88796), Brazil; no other details provided.

Fragilianifiga Voyal Simi & silver thereby A 236. Falso brackypter 18 Parto lin yinit bacome 342 Pipe chloris Patt Sufressiances 475 Vinc 172 Tas mis adall Pr Newow ya hinne') Myo Them Tucht Vonkehr mit & Termient Angulis hypopyaka Hilled. Anabates Haislatur Jam 56 1212 Pyrchula Diogo Time (Louis Collaria) Mit 481 Mat. Kabinet von demsellen 272 Musciapa gularis Nat. uleal 659. 42 cohalten hat. Hylaphyles bicalor (Syline bicalor Viellet) 157 Ryschale gutturelis Rehard Jaks 562 147 . 1818-1823 79 Mys there Harits thores Timm & sq. 26 - mentelis Tem Prins galeatus. 368. 133 Ken Tanagra silens.

Fig. 1, left: Documentation of loan between the NHMW and Temminck (Museum Amsterdam) from 1818 to 1823, right: Loaned specimens returned from Amsterdam to the NHMW: \Im and \Im of *Myothera strictothorax* TEMMINCK, 1823 (Natterer's coll. no. 79) and \Im of *M. mentalis* TEMMINCK, 1823 (Natterer's coll. no. 26). Photo credit: Alice Schumacher, NHMW.



Fig. 2: Plate 179 of TEMMINCK & LAUGIER, 1823; (1) \bigcirc , (2) \bigcirc of *Myothera strictothorax* TEMMINCK 1823; (3) \bigcirc of *Myothera mentalis* TEMMINCK, 1823. Photo credit: Alice Schumacher, NHMW.

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Fig. 3: Field diary and notes of Johann Natterer (with additions of other persons) concerning *Thamnophilus aethiops punctuliger* PELZELN, 1868 and *Cercomacra carbonaria* SCLATER & SALVIN, 1873 (on top). Photo credit: Alice Schumacher, NHMW.



Fig. 4: *Thamnophilus unduliger* PELZELN, 1868 (= *Friederikena unduliger unduliger* (PELZELN, 1868)), \Im NHMW 16.508 and \Im NHMW 16.511 with original lables of Johann Natterer and NHMW lables (in pink). Photo credit: Alice Schumacher, NHMW.



Fig. 5: Syntype of *Pithys bicolor aequatorialis* HELLMAYR, 1902 (= *Gymnopithys bicolor aequatorialis* (HELLMAYR, 1902)). Photo credit: Alice Schumacher, NHMW.



Fig. 6: *Thamnophilus cinereiceps* PELZELN, 1868 (= *Thamnophilus amazonicus cinereiceps* PELZELN, 1868)), Syntype & NHMW 16.672 with original labels of Johann Natterer and NHMW label (in pink). Photo credit: Alice Schumacher, NHMW.



Fig. 7: *Herpsilochmus rufimarginatus* (TEMMINCK, 1822); ♂ NHMW 15.182, an uncertain type specimen in the NHMW collection. Photo credit: Alice Schumacher, NHMW.

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References

- BERLEPSCH, H. [GRAF VON] & HARTERT, E. 1902: On the birds of the Orinoco Region. Novitates Zoologicae 9 (2): 1–135.
- BERLEPSCH, H. [GRAF VON] & HELLMAYR, C. E. 1905: Studien über wenig bekannte Typen neotropischer Vögel. Journal für Ornithologie 53 (1): 1–33.
- CASTELNAU, F. DE LA PORTE, 1850–1859: Animaux nouveaux ou rares recueillis pendant l' expédition dans les parties centrales de l'Amérique du Sud, de Rio de Janeiro à Lima, et de Lima au Para; exécutée par ordre du gouvernement Français pendent les années 1843 à 1847, sous la direction du Comte Francis Castelnau., 3 volumes, P. Bertrand, Paris.
- CORY, C.B. & HELLMAYR, C.E. 1924: Catalogue of Birds of the Americas, part III, Pteroptochidae Conopophagidae – Formicariidae. Field Museum, Chicago, 369 pp.
- DEIGNAN, H. G., 1961: Type specimens of birds in the United States National Museum. United States National Museum Bulletin 221, 714 pp.
- DEKKER, R. W. R. J., 2003: Type specimens of birds in the National Museum of Natural History, Leiden. Part 2. Passerines: Eurylamiidae – Eopsaltriidae (Peter's sequence). – NNM Technical Bulletin 6, 143 pp.
- DESFAYES, M. 1994: Catalogue of type specimens in the Neuchâtel Museum of Natural History (Switzerland), IV, Birds. – Bulletin de la Société Neuchâteloise des Sciences Naturelles 117: 79–95.
- DICKINSON, E.C. 2001: Systematic notes on Asian birds. 9. The Nouveau recueil de planches colories of Temminck & Laugier (1820–1839). – Zoologische Verhandelingen, Leiden 335: 7–53.
- DICKINSON, E.C. & REMSEN, J.V. Junior, 2013: The Howard & Moore complete checklist of birds of the world, vol. 1, 4th edition, Aves Press, Eastborn, U.K., 461 pp.
- DICKINSON, E.C. & CHRISTIDIS, L. 2014: The Howard & Moore complete checklist of birds of the world, vol. 2, 4th edition, Aves Press, Eastborn, U.K., 752 pp.
- DICKINSON, E.C., OVERSTREET, L. K., DOWSETT, R. J. & MURRAY, D.B. 2011: Priority! The Dating of scientific names in Ornithology. A directory to the literature and its reviewers. Aves Press, Northhampton, U.K., 319 pp.
- GILL, F., DONSKER, D. & RASMUSSEN, P. (eds.), 2022: IOC World Bird List (v12.2). DOI: 10.14344/ IOC.ML.12.1. (June 2022)
- HARTERT, E., 1920: Types of Birds in the Tring Museum; B. Types in the General Collection. Novitates Zoologicae 27: 425–50.
- HARTERT, E., 1922: Types of Birds in the Tring Museum; B. Types in the General Collection. Novitates Zoologicae 29 (2): 365–412.
- HELLMAYR, C.E., 1902: Zwei neue Formicariiden. Ornithologische Monatsberichte 10 (3): 33–35.

- HELLMAYR, C.E., 1903: Über neue und wenig bekannte südamerikanische Vögel.– Verhandlungen der K. K. zoologisch botanischen Gesellschaft, Wien. 53: 199–233.
- HELLMAYR, C.E., 1904: Beschreibung einer neuen *Phlegopsis*-Art aus Brasilien. Ornithologische Monatsberichte 12 (4): 53–55.
- HELLMAYR, C.E., 1905: Notes on a collection of birds made by Mons. A. Robert in the district of Pará, Brazil. Novitates Zoologicae 12: 269–306.
- HELLMAYR, C.E., 1906: Critical notes on types of neotropical birds. Novitates Zoologicae 13: 305–352.
- HELLMAYR, C.E., 1906a: Revision der Spix'schen Typen brasilianischer Vögel. Abhandlungen der Mathematisch-Physikalischen Klasse der Königlich Bayerischen Akademie der Wissenschaften 22: 561–726.
- HELLMAYR, C.E., 1906b: Notes on a second collection of birds from the district of Pará, Brasil. Novitates zoologicae 13: 353–385.
- HELLMAYR, C.E., 1907: Exhibition and description of six new species and subspecies from Brazil: – Sclateria schistacea humaythae, Anoplops hoffmannsi, Phlegopsis borbae, Synallaxis simoni, Phoetornis affinis ochraceiventris, and Nonnula sclateri. – Bulletin of the British Ornithologists' Club 19: 51–55.
- HELLMAYR, C.E., 1908: Übersicht der Formen der Gattung *Percnostola.* Verhandlungen der Ornithologischen Gesellschaft in Bayern 8: 142.
- HELLMAYR, C.E., 1910: Notes sur quelques oiseaux de l'Amerique tropicale. Revue française d' ornithologie Tome 1, 2eme annee, nr. 11. 1909–1910: 164–165.
- HELLMAYR, C.E. 1911: On the birds of Western Columbia. Proceedings of the Zoological Society of London (1911, 3–4): 1166–1167.
- HELLMAYR, C.E., 1921: Review of the birds collected by Alcide d' Orbigny in South America. Part I. –Novitates Zoologicae 28: 171–213.
- HELLMAYR, C.E., 1924: Catalogue of Birds of the Americas, Vol. 13, part 3: Pteroptochidae Conopophagidae – Formicariidae. – Field Museum of Natural History, publication 223, 369 pp.
- HOFFMANN, D., GELLER-GRIMM, F., 2013: A catalog of bird specimens associated with Prince Maximilian of Wied-Neuwied and potential type material in the natural history collection in Wiesbaden. – ZooKeys 353: 81–93.
- ISLER, M.L., BRAVO, G.A. & BRUMFIELD, R.T., 2013. Taxonomic revision of *Myrmeciza* (Aves: Passeriformes: Thamnophilidae) into 12 genera based on phylogenetic, morphological, behavioral, and ecological data. – Zootaxa, 3717 (4): 469–497.
- ISLER, M.L., ISLER, P.R. & WHITNEY, B.M., 1997. Biogeography and systematics of the *Thamnophilus punctatus* (Thamnophilidae) complex. – Ornithological Monographs, 48: 355–381.
- LACERDA, D.R., MARIONI, M.A. & SANTOS, F.R., 2007. Mitochondrial DNA corroborates the species distinctiveness of the Planalto (*Thamnophilus pelzelni* HELLMAYR, 1924) and the Sooretama (*T. ambiguous*) Slaty-antshrikes (Passeriformes: Thamnophilidae). – Brazilian Journal of Biologie 67(4, Suppl.): 873–882.
- LATHAM, J., 1790: Index Ornithologicus, Sive Systema Ornithologiae: Complectens Avium Divisionem in Classes, Ordines, Genera, Species, Ipsarumque Varietates vol. 1: 81.
- LECROY, M. & SLOSS, R., 2000: Type specimens of birds in the American Museum of Natural History. Part 3. Passeriformes: Eurylaimidae, Dendrocolaptidae, Furnariidae, Formicariidae, Conopophagidae, and Rhinocryptidae. – Bulletin of the American Museum of Natural History 257, 88 pp.

- LICHTENSTEIN, H., 1823: Verzeichnis der Doubletten des zoologischen Museums der königl. Universität zu Berlin nebst Beschreibung vieler bisher unbekannten Arten von Säugethieren, Vögeln, Amphibien und Fischen. – In Commission bei T. Trautwein, Berlin, 118 pp.
- LICHTENSTEIN, H., 1854: Nomenclator Avium Musei Zoologici Berolinensis. Druck Königliche Akademie der Wissenschaft, Berlin, 123 pp.
- NATTERER, J., 1833: Reisen in Brasilien von Johann Natterer. Isis von Oken 1833, Heft IV: 546–548.
- PELZELN, A., 1859: Über neue Arten der Gattungen Synallaxis, Anabates und Xenops in der kaiserlichen ornithologischen Sammlung.– Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften, Wien (34): 111–112, 132.
- PELZELN, A., 1868–1871: Zur Ornithologie Brasiliens. A. Pichlers Witwe & Sohn, Wien, 462+LIX pp.
- PELZELN, A., 1874: Verzeichniss einer an Dr. L.W. Schaufuss gelangten Sendung von Vögeln aus Neu-Freiburg in Brasilien. Nunquam Otiosus – Zoologische Mittheilungen von L. W. Schaufuss, Dresden 2: 291–292.
- PELZELN, A. & LORENZ, L., 1886: Typen der ornithologischen Sammlung des k. k. naturhistorischen Hofmuseums I. – Annalen des k. k. Naturhistorischen. Hofmuseums, Wien (1): 249–270.
- PELZELN, A. & LORENZ, L., 1887: Typen der ornithologischen Sammlung des k. k. naturhistorischen Hofmuseums II. – Annalen des k. k. Naturhistorischen. Hofmuseums, Wien (2): 191–216.
- PELZELN, A. & LORENZ, L., 1888a: Typen der ornithologischen Sammlung des k. k. naturhistorischen Hofmuseums III. – Annalen des k. k. Naturhistorischen. Hofmuseums, Wien (3): 339–352.
- PELZELN, A. & LORENZ, L., 1888b: Typen der ornithologischen Sammlung des k. k. naturhistorischen Hofmuseums IV. – Annalen des k. k. Naturhistorischen. Hofmuseums, Wien (4): 37–62.
- RAPOSO, M.A., TELLO, J.G., DICKINSON, E.C. & GUILHERME, R.R., 2015: Remarks on the name *Cercomacra* SCLATER, 1858 (Aves: Thamnophilidae). Zootaxa 3914: 94–96.
- SALVIN, O., 1882: A catalogue of the collection of birds formed by the late Hugh Edwin Strickland, M. A., – Cambridge University Press, 652 pp.
- SCHIFTER, H., 2000: A further specimen of the Fine-barred Piculet (*Picumnus subtilis*) in the Museum of Natural History, Vienna, Austria. – Ornitologia Neotropical 11 (3): 247–248.
- SCHIFTER, H., BAUERNFEIND, E. & SCHIFTER, TH, 2007: Die Typen der Vogelsammlung des Naturhistorischen Museums in Wien. Teil 1. Nonpasseres.–Kataloge der wissenschaftlichen Sammlungen des Naturhistorischen Museums in Wien 20, 376 pp.
- SLATER, P.L., 1858: Synopsis of the American Ant-Birds (Formicariidae). Part II. Containing the Formicivorinae or Ant-Wrens. – Proceedings of the Zoological Society of London 26: 232–254.
- SCLATER, P.L., 1865: Description of seven new species of birds discovered by the late Dr. John Natterer in Brazil. – Proceedings of the Zoological Society of London [for 1864]: 605–611.
- SCLATER, P.L., 1890: Catalogue of the Passeriformes, or perching birds, in the collection of the British Museum, part 15: Tracheophonae, of the families Dendrocolaptidae, Formicariidae, Conopophagidae, and Pteroptochidae, 493 pp.
- SCLATER, P.L., 1893: List of the Dates of Delivery of the Sheets of the "Proceedings" of the Zoological Society of London, from the commencements in 1830–1859. – Proceedings of the Zoological Society of London 1: 435–436.
- SCLATER, P.L.& SALVIN, O., 1866: On some additions to the Catalogue of Birds collected by Mr. E. Bartlett on the River Ucayali. – Proceedings of the Zoological Society of London: 567.

- SCLATER, P.L. & SALVIN, O., 1867: Catalogue of Birds collected by Mr. E. Bartlett on the River Huallaga, Eastern Peru, with Notes and Descriptions of New Species. – Proceedings of the Zoological Society of London, pt.3: 748–759.
- SCLATER, P.L. & SALVIN, O., 1873: Nomenclator Avium Neotropicalium, London, 163 pp.
- SCLATER, P.L. & SALVIN, O., 1880: On New Birds Collected by C. Buckley in Eastern Ecuador. Proceedings of the Zoological Society of London: 155–161.
- SEILERN, J. 1913 see Schifter, H. 2000.
- SNETHLAGE, E., 1914: Neue Vogelarten aus Amazonien. Ornithologische Monatsberichte 22 (3): 39–44.
- SPIX, J.H., 1825: Avium species novae, II, p.29, plate 40, f.2 79-3 (5): 45-67.
- TEMMINCK, C.J. & LAUGIER DE CHARTROUSE, M., 1820–1839: Nouveau recueil de planches coloriées d'oiseaux: pour servir de suite et de complement aux planches enluminées de Buffon, édition in-folio et in-4 de l'Imprimerie royale, 1770. – G. LEVRAULT, Paris, no pag. [see also DICKINSON 2001 for exact dates].
- TODD, W.E.C., 1927: New gnateaters and antbirds from tropical America, with revision of the genus *Myrmeciza* and its allies. – Proceedings of the Biological Society of Washington 40: 149–178.
- WARREN, R.L.M. & HARRISON, C.J.O., 1971: Type-specimens of birds in the British Museum (Natural History). Vol. 2 Passerines. – Trustees British Museum (Nat. Hist) London, 628 pp.
- WIED, M. (PRINZ MAX WIED ZU NEUWIED), 1831: Beyträge zur Naturgeschichte von Brasilien. 3. Bd. – Verlag des Landes-Industrie-Comptoirs, Weimar, 1277 pp.
- ZIMMER, J.T., 1933: Studies of Peruvian Birds X. The Formicarian Genus *Thamnophilus*. Part II. American Museum Novitates 647: 1–27.

websites (Accessed 2020–2022)

AVIBASE https://avibase.bsc-eoc.org

BIODIVERSITY HERITAGE LIBRARY https://www.biodiversitylibrary.org

BIRDLIFE INTERNATIONAL. 2018. Cercomacra carbonaria (amended version of 2017 assessment). The IUCN Red List of Threatened Species 2018: http://dx.doi.org/10.2305/IUCN.UK.2017-1.RLTS.T22701686A128257225.en

ZOONOMEN NOMENCLATURE RESOURCE PAGE: http://www.zoonomen.net

INTERNATIONAL CODE OF ZOOLOGICAL NOMENCLATURE https://www.iczn.org