

## Monograph



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# **ZOOTAXA**

5334

## Type specimens and type localities of birds (Aves) collected by Gustav Adolf Fischer (1848–1886) in East Africa

## SYLKE FRAHNERT<sup>1</sup>, DONALD A. TURNER<sup>2</sup> & CORDULA BRACKER<sup>3</sup>

<sup>1</sup>Museum für Naturkunde, Leibniz Institute for Evolution and Biodiversity Science, Invalidenstraße 43, D-10115 Berlin, Germany.

sylke.frahnert@mfn.berlin; https://orcid.org/0000-0001-8486-839X

<sup>2</sup> P.O. Box 1651, Naivasha 20117, Kenya.

don@originsafaris.info; https://orcid.org/0000-0001-5283-5729

Museum der Natur Hamburg, Zoologie, Leibniz Institute for the Analysis of Biodiversity Change, Martin-Luther-King-Platz 3, 20146 Hamburg, Germany.

c.bracker@leibniz-lib.de; https://orcid.org/0000-0002-8438-7104



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## **Table of Contents**

Abstract	
The collector G.A. Fischer	6
Expeditions	8
Collections and research	8
Systematic list	10
Phasianidae	10
Francolinus Altumi G.A. Fischer & Reichenow, 1884b: 179.	
Francolinus Fischeri Reichenow, 1887: 51.	
Pternistes [sic] rufopictus Reichenow, 1887: 52.	
Francolinus (Pternistes [sic]) leucoparaeus G.A. Fischer & Reichenow, 1884c: 263.	
Columbidae	
Turtur perspicillata G.A. Fischer & Reichenow, 1884b: 179	
Treron calva granviki Grote, 1924: 102.	
Apodidae	
Cypselus stictilaemus Reichenow, 1879b: 114.	
Cypselus Niansae Reichenow, 1887: 61.	
Cuculidae	
Centropus Fischeri Reichenow, 1887: 57	
Cuculus validus Reichenow, 1879c: 139.	
Musophagidae	
Corythaix Hartlaubi G.A. Fischer & Reichenow, 1884a: 52.	
Corythaix Reichenowi G.A. Fischer, 1880a: 174.	
Corythaix Cabanisi Reichenow, 1883: 221	
Corythaix Fischeri Reichenow, 1878a: 88.	
Charadriidae	
Charadrius venustus G.A. Fischer & Reichenow, 1884b: 178	
Stephanibyx melanopterus minor Zedlitz, 1908: 180.	15
Glareolidae	
Cursorius gracilis G.A. Fischer & Reichenow, 1884b: 178.	
Strigidae	
Scotopelia peli fischeri Zedlitz, 1908: 172, 173.	
Accipitridae	
Accipiter minullus tropicalis Reichenow, 1898: 139.	
Coliidae	
Colius leucocephalus Reichenow, 1879b: 114	
Coraciidae	. 17
Coracias naevius sharpei Reichenow, 1899b: 192	. 17
Coracias garrulus loquax Reichenow, 1899b: 191	18
Eurystomus afer suahelicus Neumann, 1905a: 186	18
Alcedinidae	
Halcyon semicaerulea hyacinthina Reichenow, 1900b: 249	19
Lybiidae	
Trachyphonus suahelicus Reichenow, 1887: 60.	19
Trachyphonus Böhmi G.A. Fischer & Reichenow, 1884b: 179–180.	19
Barbatula Fischeri Reichenow, 1880: 181 (in Fischer & Reichenow 1880b)	20
Barbatula affinis Reichenow, 1879b: 114	
Pogonorhynchus massaicus Reichenow, 1887: 59	
Lybius leucocephalus usukumae Neumann, 1908: 46.	
Picidae	
Dendromus nubicus Var. pallida Reichenow, 1902a: 179.	
Dendromus chrysurus suahelicus Reichenow, 1902a: 175	
Picus (Campothera [sic]) mombassicus G.A. Fischer & Reichenow, 1884c: 262	
Picus (Mesopicus) rhodeogaster G.A. Fischer & Reichenow, 1884b: 180.	
Falconidae	
Poliohierax [sic] semitorquatus deckeni Zedlitz, 1914: 675.	
Psittacidae	
Poeocephalus massaicus G.A. Fischer & Reichenow, 1884b: 179.	
Poeocephalus simplex Reichenow, 1887: 55.	
Agapornis personata Reichenow, 1887: 55.	
Vangidae	
Prionops poliolophus, G.A. Fischer & Reichenow, 1884b: 180.	
Platysteiridae.	
· <del></del>	. 20

Batis puella soror Reichenow, 1903b: 485.	
Batis molitor littoralis Neumann, 1907: 356	. 25
Batis minor suahelicus Neumann, 1907: 353.	. 26
Malaconotidae	
Telephonus reichenowi Neumann, 1900: 120.	26
Telephonus minor Reichenow, 1887: 64.	
Dryoscopus major mossambicus G.A. Fischer & Reichenow, 1880a:141	
Dryoscopus nigerrimus Reichenow, 1879b: 114.	
Laniarius cathemagmenus Reichenow, 1887: 63	. 27
Monarchidae	
Trochocercus bivittatus Reichenow, 1879a: 108.	. 28
Laniidae.	. 28
Urolestes aequatorialis Reichenow, 1887: 65	
Lanius affinis G.A. Fischer & Reichenow, 1884c: 261.	
Paridae	
Parus fringillinus G.A. Fischer & Reichenow, 1884a: 56.	
Alaudidae	
Coraphites leucopareia G.A. Fischer & Reichenow, 1884a: 55	. 29
Alauda poecilosterna Reichenow, 1879d: 155	
Megalophonus massaicus G.A. Fischer & Reichenow, 1884a: 55.	. 30
Mirafra intercedens Reichenow, 1895: 96.	
Spilocorydon Reichenow, 1879d: 155	
Spilocorydon hypermetrus Reichenow, 1879d: 155.	
Megalophonus Fischeri Reichenow, 1878 (in Fischer & Reichenow 1878): 266.	
Macrosphenidae	
Sylviella leucopsis Reichenow, 1879b: 114	
Sylviella fischeri Reichenow, 1900a: 22.	. 32
Cisticolidae	. 32
Tricholais occipitalis G.A. Fischer & Reichenow, 1884b: 181	. 32
Euprinodes Golzi G.A. Fischer & Reichenow, 1884b: 182.	
Apalis chariessa Reichenow, 1879: 114.	
Burnesia melanocephala G.A. Fischer & Reichenow, 1884a: 56.	
Calamonastes Fischeri Reichenow, 1884a: 57	
Camaroptera pileata Reichenow, 1891b: 66	
Cisticola nana G.A. Fischer & Reichenow, 1884c: 260.	
Acrocephalidae	
Chloropeta massaica G.A. Fischer & Reichenow, 1884a: 54	. 34
Acrocephalus baeticatus suahelicus Grote, 1926: 145.	
Phyllostrephus parvus G.A. Fischer & Reichenow, 1884c: 262.	
Turdirostris leptorhyncha Reichenow, 1879: 155.	
Hirundinidae	
Cotyle rufigula G.A. Fischer & Reichenow, 1884a: 53.	
Pycnonotidae	. 36
Andropadus insularis subalaris Reichenow, 1903a: 544.	. 36
Chlorocichla centralis Reichenow, 1887: 74.	
Chlorocichla flaviventris mombasae Shelley, 1896: 64.	
Phyllastrephus capensis suahelicus Reichenow, 1904b: 405.	
Criniger Fischeri Reichenow, 1879c: 139.	27
Criniger strepitans Reichenow, 1879c: 139.	
Xenocichla tenuirostris G.A. Fischer & Reichenow, 1884c: 262	
Zosteropidae	
Zosterops eurycricotus G.A. Fischer & Reichenow, 1884a: 55.	. 38
Leiothrichidae	. 38
Argya mentalis Reichenow, 1887: 75.	
Crateropus squamulatus Shelley, 1884: 45.	
Crateropus squamutatus Sheney, 1884. 43.  Crateropus hypoleucus rufuensis Neumann, 1906: 148.	
Sturnidae	
Speculipastor Reichenow, 1879a: 107–108.	
Speculipastor bicolor Reichenow, 1879a: 107–108.	. 39
<i>Cosmopsarus</i> Reichenow, 1879a: 107–108	. 39
Cosmopsarus regius Reichenow, 1879a: 107–108.	
Notauges Fischeri Reichenow, 1884a: 54	
Turdidae	
Pseudocossyphus G.A. Fischer & Reichenow, 1884a: 58.	
z seuweessyphus G.A. I isolici & Robicilow, 1004a. Jo	. +0

Pseudocossyphus rufus G.A. Fischer & Reichenow, 1884a: 58.	40
Turdus guttatus fischeri Hellmayr, 1901: 54.	
Muscicapidae	
Thamnobia quadrivirgata Reichenow, 1879b: 114.	41
Aëdon psammochroa Reichenow, 1879c: 139.	41
Erythropygia vulpina Reichenow, 1891b: 62	41
Erythropygia brunneiceps Reichenow, 1891b: 63	
Erythropygia brunneiceps soror Reichenow, 1904a: 95.	12
Erythropygia ruficauda iodomera Grote, 1927: 104	
Alseonax murina G.A. Fischer & Reichenow, 1884a: 54	
Bradyornis microrhyncha Reichenow, 1887: 62.	
Dioptrornis Reichenow, 1884a: 53.	43
Dioptrornis Fischeri Reichenow, 1884a: 53	43
Tarsiger orientalis G.A. Fischer & Reichenow, 1884a: 57	
Lusciola africana G.A. Fischer & Reichenow, 1884b: 182.	11
Thamnolaea subrufipennis Reichenow, 1887: 78.	
Inamouaea suorujipennis Reichenow, 1867: 78.	44
Myrmecocichla leucolaema G.A. Fischer & Reichenow, 1880b: 181.	
Saxicola Schalowi G.A. Fischer & Reichenow, 1884a: 57.	
Nectariniidae	
Cinnyris Fischeri Reichenow, 1880a (in Fischer & Reichenow 1880): 142.	45
Drepanorhynchus G.A. Fischer & Reichenow, 1884a: 56.	45
Drepanorhynchus Reichenowi G.A. Fischer, 1884 (in Fischer & Reichenow 1884a): 56.	
Nectarinia melanogastra G.A. Fischer & Reichenow, 1884b: 181.	
Cinnyris Falkensteini G.A. Fischer & Reichenow, 1884a: 56.	
Ploceidae	
Histurgops Reichenow, 1887: 67	47
Histurgops ruficauda Reichenow, 1887: 67.	47
Nigrita dorsalis Reichenow, 1887: 71	
Nigrita Cabanisi G.A. Fischer & Reichenow, 1884a: 54.	
Pyrenestes unicolor G.A. Fischer & Reichenow, 1878 (in Reichenow 1878a): 88.	
Euplectes diadematus G.A. Fischer & Reichenow, 1878 (in Reichenow 1878a): 88.	
Euplectes Friederichseni G.A. Fischer & Reichenow, 1884a: 54.	
Euplectes capensis litoris Neunzig, 1928: 114.	49
Urobrachya axillaris neumanni Neunzig, 1928: 118	50
Penthetria soror Reichenow, 1887: 70.	
Sycobrotus Reichenowi G.A. Fischer, 1884 (in Fischer & Reichenow 1884b): 180.	
Ploceus fischeri Reichenow, 1887: 69.	
Symplectes stictifrons G.A. Fischer & Reichenow, 1885 (in Reichenow 1885): 373	
Calyphantria erythrogenys G.A. Fischer & Reichenow, 1884b: 181	
Hyphantica aethiopica var. intermedia Reichenow, 1886a: 393.	52
Estrildidae	52
Pytilia melba grotei Reichenow, 1919: 227.	
Pytelia melba useguhae Neunzig, 1928: 109.	
Uraeginthus ianthinogaster Reichenow, 1879b: 114	
Pitylia caniceps Reichenow, 1879c: 139	
Viduidae	
Vidua splendens Reichenow, 1879b: 114	54
Linura Reichenow, 1882: 91.	54
Linura Fischeri Reichenow, 1882: 91.	54
Hypochera ultramarina var. orientalis. Reichenow, 1894: 188	
Hypochera purpurascens Reichenow, 1883: 221.	
Passeridae	
Passer rufocinctus G.A. Fischer & Reichenow, 1884a: 55.	
P[asser] g[riseus] ugandae Reichenow, 1904b: 231.	
Motacillidae	
Macronyx aurantiigula Reichenow, 1891a: 222.	
Fringillidae	
Crithagra dorsostriata Reichenow, 1887: 72.	
Spinus citrinelloides kikuyensis Neumann, 1905b: 356.	
	J
Spinus citrinelloides hypostictus Reichenow, 1904b: 275.	50
0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Spinus citrinelloides frontalis Reichenow, 1904b: 275.	59
Spinus citrinelloides frontalis Reichenow, 1904b: 275.  Acknowledgements.  References.	59 59

#### **Abstract**

Gustav Adolf Fischer (1848–1886) was an important German naturalist and ornithological collector in Africa. The extensive ornithological collections from his several expeditions were sent to at least two different museums (Zoological Museum Berlin and Zoological Museum Hamburg), and to a smaller extent, some private sales are assumed. Together with Anton Reichenow, Fischer described many species new to science, so the many types in the collections make them especially important. We located 616 bird specimens in the collections of the Museum für Naturkunde Berlin and the Museum der Natur Hamburg along with a few further specimens in the collections of the Museum Heineanum Halberstadt, the Naturalis Biodiversity Center Leiden, The Natural History Museum-UK (Tring), the American Museum of Natural History, New York and the National Museum of Natural History, Washington, D.C. Among these, type specimens for 133 species and subspecies of birds were traced. For all of them, an update of the collecting localities with particular emphasis on some previously unknown locations is provided. A taxonomic update of the described species is given and a designation of lectotypes for the following four taxa was necessary: *Francolinus Altumi* G.A. Fischer & Reichenow, 1884, *Accipiter minullus tropicalis* Reichenow, 1898, *Hypochera ultramarina var. orientalis* Reichenow, 1894 and *Spinus citrinelloides frontalis* Reichenow, 1904b.

Key words: Aves, nomenclature, taxonomy, type, Gustav A. Fischer, Tanzania, Kenya

#### The collector G.A. Fischer

Gustav Adolf Fischer (1848–1886)<sup>1</sup> was an important German naturalist and ornithological collector in Africa who brought back from his travels many birds new to European science. In addition to his studies in medicine and natural sciences in Bonn, Berlin and Würzburg, he was fascinated by Africa from an early age. After his studies and military service he went to Berlin in 1876 to prepare for undertaking fieldwork in Africa (see biographies in Reichenow 1886b; Friedrichsen 1886; Hantzsch 1904). He was introduced into the German Ornithologists' Society, gaining taxonomic insight into African birds at the Zoological Museum Berlin (ZMB), and in doing so developed a deep passion for ornithology. Also during this time he became acquainted with Anton Reichenow (1847–1941), the assistant of the ornithological collection in Berlin, who became a close colleague for the rest of his life. After these preparations, Fischer left Berlin at the end of 1876 to arrange an expedition with the Denhardt brothers (Friedrichsen 1886). Fischer settled in Zanzibar in East Africa, where he practiced as a medical doctor, and from his base on Zanzibar he undertook various visits and expeditions to the East African mainland over the next ten years. Most of these expeditions were organized by Fischer himself, although in 1878 he was a member of the Denhardt brothers' expedition through the Tana River region sponsored by the "Geographische Gesellschaft Hamburg" (Friedrichsen 1878, 1885, 1886; Mai 1957). Later (1882–1885) he was sponsored and supported by the Geographical Society of Hamburg (Friedrichsen 1885), by the family of Wilhelm Junker (Schiffers 1974) as well as other donors (Supan 1885a, b). During these expeditions, he extensively studied the avifauna of Africa and made several comprehensive collections supplemented by birds from Zanzibar and from collectors he sent to different regions of East Africa. During his years in Africa (1876–1886), Fischer maintained contact with German ornithologists, as well as the Geographical Society Hamburg, writing extensive reports (Fischer 1878a, 1880c, 1885b, c, d) and returning back to Germany between his expeditions, where he gave lectures on various occasions.

Fischer was described as a profound researcher and documentarian (Reichenow 1886b). He became well-known for his outstanding knowledge of the East African region, the people, their languages and local dialects as well as his excellent observational skills (Fischer 1878a, 1880c; Reichenow 1886b). He wrote letters (Fischer 1877a, b, c, 1878b, 1879), detailed travel reports and scientific articles (Fischer 1878a, 1880c, 1884, 1885a, b, c, d), and produced detailed and accurate geographical maps (Fischer 1885e, 1886). After each expedition, all collected ornithological material was evaluated by Fischer, mostly together with Professor Anton Reichenow (ZMB), who with his vast experience was able to compare the new material with other specimens housed in the ornithological collection in Berlin (Fischer 1884², 1885a; Fischer & Reichenow 1878, 1879, 1880a, 1884a, b, c). Fischer also provided precise and comprehensive details on all specimens that he collected, and while it appeared

<sup>1</sup> Gustav Adolf Fischer, also Dr. Gustav Adolf Fischer (GND ID <u>11750906X</u>; WIKIDATA ID: Q64309, ZOBODAT person ID: 7010)

<sup>2</sup> Fischer (1884) always means Fischer, G.A (1884)



## FIGURE 1:

- a: Fischer's Tower in Hell's Gate National Park, Naivasha, a 25-m high rocky tower (so-named following Fischer's departure through the area from the lake to the Mount Suswa side of the Rift Valley in Jun 1883). It was formed by semi-molten rock forced up through a fissure in the earth's surface, cooling and solidifying as it emerged. According to Masai oral tradition, the tower is a Masai girl who was turned into stone after disobeying the family before her wedding (photo courtesy D.A. Turner).
- b: Original collector's label (front/back) of G.A. Fischer for ZMB 49.320 (Fischer no. 6), *Halcyon leucocephala hyacinthina*, syntype for *Halcyon semicaerulea hyacinthina* Reichenow, 1900b (photo C. Radke, MfN).
- c: ZMB 24258 Granatina ianthinogaster syntype for Uraeginthus ianthinogaster Reichenow, 1879b, collected by G.A. Fischer with typical historical label for a scientific skin at the ZMB (photo H.J. Götz, MfN)
- d: Typical historical label for a scientific skin at the ZMB for ZMB 35597 (Fischer no. 293) *Eurystomus glaucurus suahelicus*, holotype of *Eurystomus afer suahelicus* Neumann, 1905; missing a ZMB number (photo C. Radke, MfN).
- e: Original collector's label (front) of G.A. Fischer for ZMB 2000.40044 (B 19019, Fischer no. 451), *Pogoniulus bilineatus fischeri*, holotype of *Barbatula Fischeri* Reichenow, 1880; notice change of the provisional determination after species description (photo C. Radke, MfN).
- f: Typical historical label for a scientific skin at the ZMH for ZMH 6911 (Fischer no. 925), *Muscicapa adusta murina*, syntype for *Alseonax murina* G.A. Fischer & Reichenow, 1884a (photo C. Bracker).

that he had identified new species in the field, all taxonomic data on birds was usually published together with Anton Reichenow or by Reichenow alone, with only three species being described solely by Fischer (*Corythaix reichenowi* Fischer, 1880; *Drepanorhynchus reichenowi* Fischer, 1884 and *Sycobrotus reichenowi* Fischer, 1884). In total, Fischer collected more than 479 bird species, 70 of which were immediately described as new (summary given in Fischer 1885a), and a total of 133 species and subspecies of birds have now been described based on his collections. He thus significantly influenced knowledge of the avifauna of East Africa.

Most of Fischer's travels took place during the pre-colonial era of "Deutsch-Ost-Afrika". Being interested in all aspects of natural history, especially research into geography, zoology and the ethnology of Africa, much information gathered from his expeditions helped in the establishment of a German colony in the region in 1884. Thus, his scientific endeavors were intertwined with political and economic interests in this region (see also Fischer 1885b, c, d, e, f, 1886; Seegers 2008). To our knowledge, however, Fischer himself did not engage in efforts to promote the colonization of the region. He was of the opinion that it was unsuitable for German settlement because of the climatic conditions in the fertile regions (Fischer 1885f).

## **Expeditions**

The collections of G.A. Fischer were obtained during four extended expeditions and several smaller excursions (see also Reichenow 1886b; Seegers 2008; Figure 1a). A detailed list of the expeditions below provides an insight into the regions where Fischer collected. His starting point for all expeditions was his residence on the island of Zanzibar (probably Zanzibar town, though no exact details are available):

- Expedition 1, from Jun–Dec 1877 to the coast of Kenya. This was Fischer's first expedition on the African mainland, and served as preparation for a later one with the Denhardt brothers (Fischer 1878b; Friedrichsen 1886). He moved along the coast in a northeast direction from Mombasa to Malindi and Kipini, and then to Witu in Lamu district.
- Expedition 2, from 23 May—Dec 1878 to the Kenyan coast and the lower Tana River (together with the Denhardt brothers; Denhardt 1881; Friedrichsen 1886). This expedition was designed to produce maps in order to support trade activities in the region. The group travelled northeast along the coast from Mombasa to Kipini, then inland by boat along the Osi, Belesoni and Tana rivers to Pokomoland, upstream to Massa (Masabubu). A map is published in Denhardt (1881).
- Several small excursions (3) on Zanzibar and the coastal mainland of Tanzania 1879–1882, e.g. Nguru Mountains (Fischer 1880b, Reichenow 1886b).
- Expedition 4, from 30 Dec 1882–14 Aug 1883 to the interior of Tanzania and Kenya (financed by the Geographical Society, Hamburg; Fischer 1885b, c, d, e; Friedrichsen 1886; Panning 1955). Fischer travelled from Pangani inland along the Pangani River Valley to Lake Jipe, Arusha Chini, past Mount Kilimanjaro to Masailand and the Nguruman Escarpment, and then further north to Lake Naivasha. Despite conflicts with local Masai groups when at Naivasha, Fischer returned with detailed information about 269 bird species collected, 36 of which were described as new (Fischer 1884; Pagenstecher 1884). A map is published in Fischer (1885e).
- Expedition 5, from 1 Aug 1885–14 Jun 1886 to the interior of Tanzania including the southern and southeastern part of Lake Victoria in the hope of finding Wilhelm Junker alive (privately funded by the brother of missing explorer W. Junker as well as other donors; Fischer 1886; Reichenow 1886b; Friedrichsen 1886; Wichmann & Fischer 1895). Fischer travelled from Pangani inland via Irangi, Ussure and Usukuma to Kagehi at Lake Victoria. He continued along the southeast shore of the lake to Ugaia country and Wanga (Mumias) but fell ill with a fever and was forced to return to the coast and back to Germany, where he died shortly after his arrival. As a result, he was not able to document or publish any details relating to this expedition. Thus, it was left to Anton Reichenow alone to curate and document all material gathered from the fifth expedition (Reichenow 1887). Maps were published in Fischer (1886) and Wichmann & Fischer (1895).

#### Collections and research

Fischer collected ethnological, zoological, botanical and geological objects (Fischer, J.G. 1884; Gerstaecker 1884; Karsch 1885; Pagenstecher 1884, 1885a, b), but above all, it was his ornithological material that has given

him scientific recognition to this day: skins, nests and eggs. For birds, Fischer diligently prepared labels with comprehensive and exact information about the collected bird (field number, species name, sex, locality, date, collector on one side; coloration of iris, bill and legs, measurements as well as sometimes stomach contents on the reverse; see Figure 1b). Although it is impossible to reconstruct the total number of specimens that Fischer collected, based on the field numbers given by him, there were at least 1,230.

The provenance of all Fischer's birds brought to Germany and the museums where they are stored today is not known in any detail, as no correspondence or shipping lists have been located to date. The documentation is also contradictory: Fischer (1884, 1885c) and Pagenstecher (1884) wrote that all the zoological material of the fourth expedition was integrated in the Zoological Museum Hamburg (ZMH) (due to the financial support from the Geographical Society of Hamburg it seems that Fischer was obligated to remit all collected material from that expedition to the Hamburg Geographical Society who transferred it to the ZMH), yet many specimens from the Fischer expeditions, including the fourth expedition, were inventoried at the ZMB about six months to a year after collection, which means directly after the shipments arrived in Germany. Thus, from the fourth expedition, 106 specimens were inventoried in 1884 at the ZMB (133 specimens of this expedition were available at the ZMB in 2020; see ZMB Aves Database). Today most of Fischer's bird specimens are in the ZMB and ZMH collections, and single specimens at the RMNH, MHH and USNM may have been sold from Fischer's private collection (see advertisements in the journal *Ornithologische Monatsberichte*) or exchanged with the ZMB or ZMH.

The original collector's labels were removed and replaced by museum labels (see Figure 1c, d) when the birds were integrated into the ZMB collection. Collector's labels that are still available show the information given by Fischer as well as information added by Reichenow (see Figure 1e, only genus name given by Fischer, species name added after or with description, and entry number added). Many specimens however have only very vague data (e.g., "Tanzania") and no date on museum labels. It would seem that many of the collector's labels with important information were lost, so the identification of type specimens is often complicated. On a few museum labels the information "Typ" is mentioned (see Figure 1c), while in others "ex originale", meaning type specimen, was given. Despite integration into the ZMB collection, only a small number of ornithological items were inventoried at the time.

After nearly 150 years of museum history, two world wars (World War II in particular led to severe damage to the collections) and the missing entry documents, it is impossible to reconstruct the total number of specimens sent to the ZMB. At least 578 skins and mounts (see ZMB Aves Database, 2023) are stored to this day, in addition to 58 nests, an unknown number (more than 200) of eggs, and one skeleton. Some of the birds were mounted in Berlin, and less than 15% of the known skins and mounts have historical inventory numbers today. At least 73 specimens have been lost, according to the historical collection catalogues.

At the ZMH, most of Fischer's birds were mounted and given museum labels (see Figure 1f), and some also lost their collector's labels. It is also not possible to determine the total number of Fischer's specimens originally kept there, as the Hamburg Museum was almost completely destroyed during World War II, along with all museum catalogues of the bird collection. Only around 4,000 scientifically important bird specimens were saved and are available today (Weidner 1968, 1993). Among them 38 of Fischer's birds, and all types mentioned by Pagenstecher (1884) are still available [though the types of six newly described species (out of 36, Fischer 1885c) are at the ZMB]. There was no indication as to why specimens from other expeditions and those from the fourth expedition were at the ZMH, though Fischer's early relationship with the Geographical Society in Hamburg, or an exchange between Berlin and Hamburg may explain that. A type list of the bird collection of the ZMH (Bolau 1898) only includes the types of Fischer in that collection and no specimens in other collections, nor does it explain what kind of type the specimens are.

In most descriptions and collection lists, Fischer's specimens are readily identified by their field number (Fischer no.). There are some duplicate numbers, later often marked by "a" and "b". Fischer numbered all specimens consecutively on all expeditions, until his fifth and last one (1885–1886), when he started anew with 1.

For all mentioned specimens we list the actual inventory number (usually ZMB or ZMH) as well as the collector's number (e.g. Fischer no., unless stated otherwise) if available. For the ZMB specimens the number of the entry catalogue (B-catalogue) is added along with the collecting data.

For all historical localities we additionally give a current equivalent [place, region, country, coordinates]. The spelling of toponyms follows geonames.org, unless otherwise stated. All localities are listed in Table 1 with the Fischer expedition number where applicable. Table 2 lists the full name for all collectors of the type specimens if

available. Nomenclatural issues follow the International Code of Zoological Nomenclature (ICZN 1999), while order and taxonomy follows del Hoyo & Collar (2014, 2016). For cases actually discussed a short description of the taxonomic status is given, but very often data are missing for concrete taxonomic decisions.

Museum acronyms are as follows: AMNH = American Museum of Natural History New York, United States; BMNH = The Natural History Museum-UK (Tring), United Kingdom; MfN = Museum für Naturkunde, Berlin, Germany, formerly Zoologisches Museum Berlin (ZMB); MHH = Museum Heineanum Halberstadt, Germany; NRM = Naturhistoriska Riksmuseet Stockholm, Sweden; RMNH = Rijksmuseum van Natuurlijke Historie (today Naturalis Biodiversity Center Leiden), Netherlands; SMF = Senckenberg Museum Frankfurt, Germany; SMNS = Staatliches Museum für Naturkunde Stuttgart, Germany; USNM = National Museum of Natural History, Washington, United States; ZMB = Zoologisches Museum Berlin, today Museum für Naturkunde, Berlin, Germany (MfN); ZMH = Zoologisches Museum Hamburg, today part of Museum der Natur Hamburg, Germany; ZSM = Zoologische Staatssammlung München, Germany. All additional information from literature, handwritten resources, etc. is given in square brackets.

#### Systematic list

#### Phasianidae

## Francolinus Altumi G.A. Fischer & Reichenow, 1884b: 179.

Now: Pternistis hildebrandti altumi (G.A. Fischer & Reichenow, 1884). See Reichenow (1901: 477); Peters (1934: 80), but see also Crowe et al. (1986) and Turner (2016).

**Lectotype** (herein designated, see below for explanation): ZMB 27402 (B 18682, Fischer no. 858), skin, former mount, male, collected at "Naiwascha", 11.06.[18]83.

Excluded Paralectotype: ZMH 8214 (Fischer no. 679), skin, former mount, male, collected at Maurui, 03.02.[18]83.

**Type locality**: "Naiwaschasee, Maeru Berg und an der Küste bei Maurui" (Lake Naivasha, Mount Meru and at the coast near Maurui) [North Tanzania/South Kenya from Lake Naivasha, to the coast]; from original description, and designated here as "Naiwascha" [Lake Naivasha, Nakuru County, Kenya], the locality of the lectotype.

**Remarks**: In the original description, no type was chosen nor are there inventory numbers for specimens listed, but measurements for more than one individual were given. Fischer (1884) listed two specimens as *Francolinus altumi* (Fischer nos. 679 and 858) and mentioned that he had also seen this species "in Groß-Aruscha am Maeru-Berge". Thus, ZMB 27402 and ZMH 8214 were both the basis for the description of this species and would seem to be syntypes. ZMH 8214 was also mentioned as a type specimen for this species in Bolau (1898).

In the same publication (Fischer 1884) two other specimens (females, Fischer nos. 857, 909) were designated as *Francolinus hildebrandti* (Cabanis), which means that females collected during that period were not considered to belong to *altumi* (see Turner 2016). Fischer no. 857 is now in Berlin (ZMB 27401), but no. 909 is missing. Neither belong to the type series of *altumi*.

As *P. h. altumi* has a restricted range in and west of the central Rift Valley, ZMH 8214 also represents the nominate form and must be excluded from the type series. Thus, we designate ZMB 27402 as lectotype for *Francolinus altumi*. Further we ascertain the type locality as "Naiwascha" [Lake Naivasha, Nakuru County, Kenya], the locality of the lectotype.

Treatment of the form *altumi* has long varied among authors. It is distinguishable only in females, in which mottling on the mantle and breast is most evident in birds from the central Rift Valley in Kenya around lakes Nakuru and Naivasha, this decreases substantially in birds further south. Reichenow (1901) appeared not to recognize its validity, instead treating *altumi* as a synonym of *hildebrandti*. Later Crowe et al. (1986) considered that any geographical variation in *hildebrandti* was clinal and not well defined by any subspecific division, and so recommended it be regarded as monotypic.

There is no justification for the recognition of *altumi*, named and described solely on the basis of two males (Turner 2016).

The name Francolinus altumi honors Bernard Altum (1824–1900), a well-known German ornithologist.

#### Francolinus Fischeri Reichenow, 1887: 51.

Now: Pternistis hildebrandti hildebrandti (Cabanis, 1878). See Reichenow (1901: 478); but see also Peters (1934: 81); Crowe et al. (2019).

**Holotype**: ZMB 30915 [Fischer no. 56, see Reichenow (1887: 51)], skin, female, former mount, collected on the "Weg nach Ussure" (Wembere floodplains on the way to Ussure), 04.10.[1885].

**Type locality**: "Weg nach Ussure" [Wembere floodplains on the way to Ussure (near Salanda), Singida Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: In the original description, no inventory number for the type specimen was given, but one specimen (no. 56) and the collecting data were mentioned. As only a female was described and the measurements for one individual were given, ZMB 30915 is regarded as the holotype.

#### Pternistes [sic] rufopictus Reichenow, 1887: 52.

**Now**: *Pternistis rufopictus* Reichenow, 1887. See Reichenow (1901: 464); Peters (1934: 84). **Holotype**: ZMB 30918 (Fischer no. 88), skin, former mount, male, collected in "Wembaere", 28.10.[1885].

**Type locality**: "Wembaere" [Wembere Plain, Singida Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: In the original description, no inventory number for the type specimen was given, but one specimen (no. 88) and the collecting data were mentioned. As measurements for one individual (male) were given, ZMB 30918 is regarded as the holotype.

## Francolinus (Pternistes [sic]) leucoparaeus G.A. Fischer & Reichenow, 1884c: 263.

Now: Pternistis afer leucoparaeus (G.A. Fischer & Reichenow, 1884). See Peters (1934: 86).

**Holotype**: ZMB 24393 (B 15730, Fischer no. 247), skin, former mount, female, collected at Kipini, 19.07.[1878]. **Type locality**: Kipini [Kipini, Tana River County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description, no type was chosen, and no inventory number was given. Only one specimen (female) was mentioned, together with a link to *Francolinus nudicollis* in Fischer & Reichenow (1879). Fischer & Reichenow (1879) listed only one specimen (no. 247), so ZMB 24393 is regarded as the holotype.

## Columbidae

#### Turtur perspicillata G.A. Fischer & Reichenow, 1884b: 179.

Now: Streptopelia decipiens perspicillata (G.A. Fischer & Reichenow, 1884). See Peters (1937: 94).

Syntype: ZMB 27403 (B 18676, Fischer no. 780), skin, former mount, male, collected in "Nguruman, Massailand", 21.04.[18]83.

Syntype: ZMH 8316 (Fischer no. 742), skin, former mount, male, collected on the "Ronga-Flüßchen", 27.03.[18]83.

**Type locality**: "Massailand (Nguruman)", from the original description, ascertained as Nguruman [Nguruman, Kajiado County, Kenya] and "Ronga-Flüßchen" [Ronga River, Arusha Region, Tanzania] as localities of the syntypes (compare Peters 1937: 94).

**Remarks**: In the original description no type was chosen, and no inventory numbers for specimens were provided, but measurements for more than one were given. The measurements are identical with those given in Fischer (1884) for the specimens nos. 742 and 780, so ZMB 27403 and ZMH 8316 are regarded as syntypes. Another Fischer specimen (ZMB 2000.10644) was collected in 1885, too late to have been included in the description, and so is not regarded as a type specimen. ZMB 27403 was inventoried in Mar 1884 with the note "ex originale" (exemplum

originale, type specimen). ZMH 8316 was mentioned as type specimen for this species in Bolau (1898). We ascertain the type locality as "Nguruman" [Nguruman, Kajiado County, Kenya] and "Ronga-Flüßchen" [Ronga River, Arusha Region, Tanzania], the localities of the syntypes. Peters (1937) incorrectly restricted the type locality to "Nguruman" [Nguruman, Kajado County, Kenya], by not including the locality of the second syntype.

## Treron calva granviki Grote, 1924: 102.

Now: Treron calvus gibberifrons (Madarász, 1915). See White (1965); but see also Peters (37: 21).

Holotype: ZMB 50.175 (Conrads no. 99), skin, male, collected by H.A. Conrads on Ukerewe Island, 27.06.[1908].

Paratype: ZMB 2000.13398 (Conrads no. 102), skin, female, collected by H.A. Conrads on Ukerewe Island, 30.06.[1908].

Paratype: ZMB 2000.13392 (Conrads no. 101), skin, male, collected by H.A. Conrads on Ukerewe Island, 30.06.[1908].

Paratype: ZMB 2002.369 (Conrads no. 72), skin, male, collected by H.A. Conrads on Ukerewe Island, 20.06.[1908].

Paratype: ZMB 2002.370 (Conrads no. 69), skin, male, collected by H.A. Conrads on Ukerewe Island, 20.06.[1908].

Paratype: ZMB 2002.371 (Conrads no. 71), skin, female, collected by H.A. Conrads on Ukerewe Island, 20.06.[1908].

Paratype: ZMB 2002.372 (Conrads no. 86), skin, male, collected by H.A. Conrads on Ukerewe Island, 24.06.[1908].

Paratype: ZMB 2002.373, skin, collected by H.A. Conrads on Ukerewe Island, 1908.

Paratype: ZMB 2002.374 skin, collected by H.A. Conrads on Ukerewe Island, 1908.

Paratype: ZMB 2002.375, skin, female, collected by W.L.H. von der Marwitz at Mkalama, 10.05.[1904].

Paratype: ZMB 2002.376, skin, female, collected by W.L.H. von der Marwitz on the "Wembere-Steppe" (Wembere Plain), [1903–1905].

Paratype: ZMB 2002.377 (Fischer no. 187), skin, male, collected by G.A. Fischer at "Kagehi", 06.12.[1885].

Type locality: "Ukerewe-Insel" [Ukerewe Island, Mara Region, Tanzania] as the locality of the holotype.

**Remarks**: In the original description, a holotype was chosen and characterized by the collecting data. The paratypes were given with collecting dates. Among the paratypes is one Fischer specimen. One of the specimens collected by Conrads was determined as *Treron calva brevicera* Hartert & Goodson ("Strichvogel aus dem Osten") by Grote (1924). As they all have the same locality and all are recognized as *gibberifrons* today it was not possible to identify that individual specimen. The name of the subspecies honors the Swedish collector Hugo Granvik (1889–1965) for his research on the East African avifauna.

#### **Apodidae**

#### Cypselus stictilaemus Reichenow, 1879b: 114.

**Now**: *Telacanthura ussheri stictilaema* (Reichenow, 1879). See Reichenow (1903b: 387); Peters (1940: 240). **Holotype**: ZMB 24265 (B 15715, Fischer no. 360), skin, former mount, male, collected at Ualimi, 22.10.[1878].

**Type locality**: "Ualimi (Ostafrica)" [Ualimi country, Tana River County, Kenya] from the original description as well as locality of the holotype.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for one specimen were given. Fischer & Reichenow (1879) listed for this species only one specimen (no. 360), whose measurements are identical to that in Reichenow (1879b), so ZMB 24265 is regarded as the holotype. It was inventoried in March 1884 with the note "ex originale".

## Cypselus Niansae Reichenow, 1887: 61.

**Now**: *Apus niansae niansae* (Reichenow, 1887). See Reichenow (1902a: 379); but see also Peters (1940: 247). **Holotype**: ZMB 49.331 (Fischer no. 126), skin, female, collected at "Kagehi", 16.11.[1885].

Type locality: "Kagehi" [Kayenzi, Mwanza Region, northern Tanzania] as the locality of the holotype.

**Remarks**: In the original description only one specimen (no. 126) was given, so ZMB 49.331 is regarded as the holotype. It was inventoried in 1949 with the notice "Typ" [type specimen].

#### Cuculidae

#### Centropus Fischeri Reichenow, 1887: 57.

Now: Centropus monachus fischeri Reichenow, 1887. See Peters (1940: 74); but see also Reichenow (1902a: 64).

**Syntype**: ZMB 50.78 (Fischer no. 244), skin, female, juvenile, collected at "Niakatschi", 05.03.[1886]. **Syntype**: ZMB 2002.310 (Fischer no. 227), skin, male, juvenile, collected at Kiniamongo, 30.01.[1886].

**Type locality**: "Niakatschi" and "Kiniamongo" as well as "Nassa am Speke Golf" [Nyashimo at Speke Gulf, Simiyu Region, Tanzania] are given in the original description. The type locality was ascertained as "Niakatschi" [Nyakach Bay, Kisumu County, Kenya] and Kiniamongo [Kiniamongo, Mara Region, Tanzania], the localities of the syntypes.

**Remarks**: In the original description, no type was chosen nor were inventory numbers for specimens given, but at least two individuals were cited in the description with the collecting data. As the collecting data of ZMB 50.78 and ZMB 2002.310 are identical to the data in the species description, these specimens are regarded as syntypes. ZMB 50.78 was inventoried in 1950 with the notice "Typ". "Nassa am Speke Golf" was included in the description as a locality of observation (Reichenow 1887).

#### Cuculus validus Reichenow, 1879c: 139.

Now: Pachycoccyx audebert validus (Reichenow, 1879). See Reichenow (1902a: 83); Peters (1940: 14).

**Holotype**: ZMB 24266 (B 15721, Fischer no. 330), skin, former mount, female, collected at "Muniuni, Ostafrika", 25.09.[1878].

**Type locality**: "Muniuni (Ostafrika)" [Munyuni, Tana River County, Kenya], from the original description and locality of the holotype.

**Remarks**: In the original description, no type was chosen nor were inventory numbers for specimens given, but measurements for one individual were mentioned. These measurements are identical to those for specimen no. 330 in Fischer & Reichenow (1879: 341). Thus, ZMB 24266 is regarded as the holotype.

#### Musophagidae

## Corythaix Hartlaubi G.A. Fischer & Reichenow, 1884a: 52.

Now: Tauraco hartlaubi (G.A. Fischer & Reichenow, 1884). See Reichenow (1902a: 42); Peters (1940: 7).

Syntype: ZMB 27399 (B 18666, Fischer no. 958), skin, former mount, female, collected at "Aruscha", [18.7.1883].

Syntype: ZMH 6875 (Fischer no. 959), skin, former mount, female, collected at "Groß Aruscha", 18.7.[18]83.

Syntype (missing): Fischer no. 939, male, collected at "Groß Aruscha", [15.7.1883].

**Type locality**: "Am Fusse des Maeru-Berg (Massai)" (at the foot of Mount Maeru (Massai)), from the original description (see Peters 1940: 7). We ascertain the type locality as Arusha [Arusha, Arusha Region, Tanzania], the locality of the syntypes.

**Remarks**: In the original description, no type was chosen nor were inventory numbers for specimens given, but measurements for one specimen and the locality "am Fusse des Maeru-Berg (Massai)" were mentioned. The measurements given agree with specimen no. 959 (Fischer 1884). As all the above-listed specimens were collected at the same time, fit the locus typicus and were identified as that species in Fischer (1884), they are regarded as syntypes. ZMB 27399 was inventoried in Mar 1884 with the note "ex originale". ZMH 6875 was also mentioned as type for this species in Bolau (1898). The whereabouts of specimen no. 939 are unknown. This species' name honors the German ornithologist Gustav Hartlaub (1814–1900).

## Corythaix Reichenowi G.A. Fischer, 1880a: 174.

**Now**: *Tauraco livingstonii reichenowi* (G.A. Fischer, 1880). See Reichenow (1902a: 53); but see also Peters (1940: 4). **Holotype**: ZMB 24919 (B 16557), skin, former mount, male, collected in "Nguru-Berge", [between 1877 and 1880].

**Type locality**: "Nguru-Berge, tropisches Ost-Afrika" [Nguru Mts, Morogoro Region, Tanzania], from the original description. It is also the locality of the holotype.

**Remarks**: In the original description no type was chosen, and no inventory numbers for specimens were provided, but measurements for one specimen and the locality "Nguru-Berge" were given. Therefore ZMB 24919, which lacks a collector's number, is regarded as the holotype, having been inventoried in 1880 with the note "ex originale". As Fischer & Reichenow (1880a) listed only one specimen of *Corythaix livingstoni* (no. 417) from "Nguru Berge" (Nguru Mountains), this may be that specimen. Fischer & Reichenow (1880a) gave no collecting date, but there are specimens from that region only from May–Jun 1879. ZMB 24919 was believed collected by a local collector for Fischer.

## Corythaix Cabanisi Reichenow, 1883: 221.

**Now**: *Tauraco livingstonii cabanisi* (Reichenow, 1883). See Reichenow (1902a: 51); Peters (1940: 4). **Holotype**: ZMB 26953 (B 18402, Fischer no. 457), skin, former mount, female, collected at "Bagamojo", [08.1879].

**Type locality**: "Bagamojo" [Bagamoyo, Pwani Region, Tanzania] and "Nguru-Berge" [Nguru Mts, Morogoro Region, Tanzania], from the original description, here ascertained as "Bagamojo" [Bagamoyo, Pwani Region, Tanzania] as being the locality of the holotype.

**Remarks**: In the original description no type was chosen, and no inventory numbers for specimens were provided, but measurements for one specimen and the localities "Bagamojo" and "Nguru-Berge" were given. As Fischer (1885a) includes no. 417 (possibly ZMB 24919, *Corythaix reichenowi*) from Nguru Mountains for this species and Reichenow (1894) states that this species is known from only one specimen collected in "Bagamojo", it is unclear whether a collected specimen of *cabanisi* exists from the Nguru Mountains. Thus, ZMB 26953 is regarded as the holotype. It was inventoried in 1883–1884 with the note "ex originale".

There is an additional Fischer specimen of this species in the collection in Berlin (ZMB 2000.24001). However, this specimen has only "Tanzania" as locality and no date, so it is not regarded as being a part of the type series. This species' name honors the German ornithologist and curator of the ornithological collection at the ZMB, Jean Louis Cabanis (1816–1906).

#### Corythaix Fischeri Reichenow, 1878a: 88.

Now: Tauraco fischeri (Reichenow, 1878). See Reichenow (1902a: 44); Peters (1940: 6). **Holotype**: ZMB 23372 (B 15062, Fischer no. 149), skin, former mount, collected in the Witu forest, 16.11.[1877].

**Type locality**: Wito [Witu forest, Lamu County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Wito" were given. Therefore, ZMB 23372 is regarded as the holotype. It was inventoried in 1878 with the note "ex originale". Two other Fischer specimens of this species, ZMB 27413 (which arrived in Berlin in Mar 1884) and ZMH 7864 (collected in Nov 1878) arrived too late to be considered types, as the description was published in Jun 1878. Reichenow (1878b) mentioned male, female and juvenile in a sales list for this species, but their whereabouts are unknown.

#### Charadriidae

## Charadrius venustus G.A. Fischer & Reichenow, 1884b: 178.

Now: Charadrius pallidus venustus G.A. Fischer & Reichenow, 1884. See Reichenow (1900c: 173); but see also Peters (1934: 250).

Syntype: ZMB 27030 (B 18687, Fischer no. 897), skin, former mount, male, collected in "Salzsumpf Massailand", 01.07.[1883].

Syntype: ZMB 27031 (B 18687, Fischer no. 898), skin, former mount, female, collected in "[Salzsumpf] Massailand", [01.07.1883].

**Type locality**: "Massailand (Inneres Ost-Afrika)" [Kenya/Tanzania], from the original description, ascertained as the saline wetlands of Lake Natron (northern Tanzania) [= southeastern shore of Lake Natron, close to the Ol Doinyo Lengai volcano, Arusha Region, Tanzania], the collecting locality of both syntypes.

**Remarks**: In the original description, no type was chosen, nor were inventory numbers for specimens given. Both sexes were described and measurements for more than one specimen were given. Two specimens collected by Fischer (nos. 897, 898) were given in Fischer (1884). Regarding the type locality in the description, all Fischer specimens from that region in the Berlin collection (ZMB 27030, ZMB 27031) are regarded as syntypes. ZMB 27030 was inventoried in 1884–1885 with the note "ex originale", and the collector's number 898 was added to ZMB 27031 based on its collecting data.

## Hemiparra hybrida Reichenow, 1909: 42.

Now: Vanellus crassirostris crassirostris (Hartlaub, 1855). See White (1965: 120); but see also Peters (1934: 237).

**Syntype**: ZMB 2000.47825 (Fischer no. 407), skin, collected at "Tschara", 08.12.[1878].

**Syntype**: ZMB 2000.47828, skin, collected at "Kagehi", [between 11.1885 and 01.1886].

Syntype: ZMB 27338 (B 17561), mount, male, collected by R. Böhm at Kakoma, 01.[1881].

Syntype: ZMB 50.130, skin, collected by A.F.H. von Mecklenburg at Shirati, 18.11.[1905].

Syntype (missing): collected by R. Böhm in the Ugalla.

Syntype (missing): collected by R. Böhm at "Upembasee" (Lake Upemba), Feb.

Syntype (missing): collected by Emin Pasha at Niangesi, Oct.

Syntype (missing): collected by Emin Pasha at "Buingo", Oct.

**Type locality**: "Deutsch-Ost-Afrika" [South Kenya/Tanzania], from the original description and localities of the syntypes.

Remarks: In the original description no type was chosen and no inventory numbers for specimens were given, but Reichenow (1909) refers to Reichenow (1900c: 185) where he described an intermediate form between *Hemiparra crassirostris* Hartlaub and *H. leucoptera* (today *Vanellus crassirostris crassirostris* and *V. c. leucopterus*) without giving a name. In 1909 he gave the name *Hemiparra hybrida* Reichenow to these presumed hybrids. Reichenow (1900c) lists all the specimens (with month, locality, and collector) that he includes in the presumed hybrids. All are regarded as syntypes for *H. hybrida*. ZMB 50.130 was inventoried in 1950 as type specimen for *H. hybrida*. It was collected after Reichenow (1900c) and is not listed therein, but fits the type locality and was collected before 1909, so is included in the type series. The whereabouts of the missing specimens are unknown. Neumann (in Grant & Mackworth-Praed 1936) wrongly reported that "the type" was collected in Shirati. There is no indication that these specimens are hybrids.

## Stephanibyx melanopterus minor Zedlitz, 1908: 180.

Now: Vanellus melanopterus minor (Zedlitz, 1908). See White (1965: 122).

Syntype: ZMB 2000.19179 (Fischer no. 236), skin, female, collected at Niakune, 16.02.1886.

**Syntype**: ZMB 29738, skin, collected by Konrad Beyrich, in "Pondoland, St. Johns Fluss", [1888–1889]. **Syntype** (missing): ZMB 20205 (B6815), collected by G.T. Fritsch in "S. Afrika" [South Africa], [1863–1866].

**Type locality**: "Ost- und Südafrika" [East and South Africa], from the original description as well as localities of the syntypes.

**Remarks**: In the original description, the three specimens were given as syntypes, and were identified by their ZMB or Fischer's collecting numbers. Niakune is near the eastern shore of Lake Victoria, but is slightly out-of-range for this species. Either the specimen was a vagrant or the locality is wrong. Clancey (1965) restricted the type locality to "St. Johns River, Pondoland".

#### Glareolidae

## Cursorius gracilis G.A. Fischer & Reichenow, 1884b: 178.

Now: Smutsornis africanus gracilis (G.A. Fischer & Reichenow, 1884). See Peters (1934: 301).

Syntype: ZMB 27028 (B 18685, Fischer no. 723), skin, former mount, male, collected at "Klein Aruscha", 18.03.[18]83.

Syntype: ZMB 27029 (B 18685, Fischer no. 708), skin, former mount, female, collected at "Ebene bei Pare" = Plains near the South Pare Mountains, 07.03.[18]83.

Syntype: ZMB 2000.32548 (Fischer no. 743), skin, male, juvenile, collected at "Akazienhain am Rongaflüßchen", 27.03.[18]83.

Syntype: ZMH 8320 (Fischer no. 900), skin, former mount, female, collected at "Dönjo Ngai", 04.07.[18]83.

**Type locality**: "Massailand" [Kenya/Tanzania], from the original description, here ascertained as Arusha Region [Arusha Region, Tanzania] for the localities of the syntypes.

**Remarks**: In the original description, no type was chosen, and no inventory numbers for specimens were given, but measurements were given for more than one individual, and all specimens listed here were shown in Fischer (1884) for this species. Thus, as all the localities are in "Massailand", all Fischer specimens of this species from that region at the ZMB and ZMH are syntypes. ZMH 8320 was also mentioned as type specimen for this species in Bolau (1898).

#### Strigidae

## Scotopelia peli fischeri Zedlitz, 1908: 172, 173.

Now: Scotopelia peli Bonaparte, 1850. See Peters (1940: 123).

Holotype: ZMB 24593 (Fischer no. 406), skin, male, collected at Kau, 10.12.[1878].

Type locality: "Kau, Ostafrika" [Kau (Ngau), Tana River County, Kenya], as the description and locality of the holotype.

**Remarks**: The original description lists only one specimen with the inventory number ZMB 24593, and it is thus regarded here as the holotype.

#### Accipitridae

## Accipiter minullus tropicalis Reichenow, 1898: 139.

Now: Accipiter minullus tropicalis Reichenow, 1898. See Peters (1931: 222).

Lectotype: ZMB 31899, skin, female, adult, collected by Oscar Neumann at Tanga, 03.[1893].

Paratype: ZMB 23542 (Fischer no. 144), mount, male, juvenile, collected in the Witu area, 10.11.[1877].

Paratype: ZMB 79.77 (Fischer no. 604), skin, female, adult, collected at "Usegua", 06.[1882].

**Debatable Paratype**: ZMB 32896, skin, male, adult, collected by Oscar Neumann at Kahe, 14.01.[1895].

Debatable Paratype: ZMB 79.75, skin, female, adult, collected by W.L.H. von der Marwitz at Marangu, 19.02.[1895].

Debatable Paratype: ZMB 79.76, skin, female, adult, collected by R. Böhm at "Qua Mpara", 20.07.1883.

Debatable Paratype: ZMB 32897, skin, female, juvenile, collected by O. Neumann at "Kibosho", 05.01.[1895].

**Type locality**: East Africa, from the original description, ascertained as Tanga [Tanga Region, Tanzania] the locality of the lectotype.

**Remarks**: In the original description, no type was chosen, nor were inventory numbers for specimens given; only the locality "Ostafrika" (East Africa) was mentioned. Therefore, all specimens of this species from that region housed at the ZMB in 1898 are regarded as types for *A. m. tropicalis*. All the above listed types were also mentioned for *A. m. tropicalis* in Reichenow (1901), and were identified by their collecting locality, month and collector. Only ZMB 32897 is not included in Reichenow (1901). It is unknown whether Reichenow regarded that juvenile female as belonging to *A. m. tropicalis*. Further specimens listed in Reichenow (1901) cannot be included in the type series as it is unknown where they are housed and when they were collected.

There is considerable uncertainty concerning the subspecific differentiation of *Accipiter minullus* (Daudin) (see Dickinson & Remsen 2013; del Hoyo & Collar 2014; Gill et al. 2023). Furthermore, the distribution of the proposed subspecies *tropicalis* is also unclear. Del Hoyo & Collar (2014) give Somalia, coastal Kenya to Mozambique for *A. m. tropicalis*. However, many of the specimens used for the description of the subspecies were collected inland, west to the DR Congo (Qua Mpara). In addition to Reichenow (1898, 1901), Neumann (1899: 43) explicitly wrote that ZMB 31899, ZMB 32896, and ZMB 79.77 show the characteristics of *A. m. tropicalis*, with a brighter back, in contrast to the distribution in del Hoyo & Collar (2014). Due to missing data we cannot determine the distribution of specimens with characters given by Reichenow (1898, 1901) for that subspecies. However as a coastal distribution is generally accepted (see White 1965 and del Hoyo & Collar 2014), ZMB 23542, ZMB 31899 as well as ZMB 79.77 are the ones most suitably attributable to subspecies *tropicalis*. Stresemann (1923) had earlier designated ZMB 31899 as the lectotype for this species and restricted the type locality to Tanga [Tanga, Tanga Region, Tanzania].

#### Coliidae

## Colius leucocephalus Reichenow, 1879b: 114.

Now: Colius leucocephalus leucocephalus Reichenow, 1879b. See Peters (1945: 146).

Holotype: ZMB 24267 (Fischer no. 362, ZMB B 15723), skin, male, collected at Kinakomba, 23.10.[1878].

**Type locality**: "Kinakomba (Ostafrica)" [Kinakomba, Tana River County, Kenya], from the original description and locality of the holotype.

**Remarks**: In the original description no type was chosen, nor were inventory numbers for specimens provided, but measurements for just one specimen and the locality "Kinakomba (Ostafrica)" were given. Fischer & Reichenow (1879: 341) listed only one individual (no. 362) for this species; its measurements are identical to that in Reichenow (1879b), so it is regarded as the holotype. Another (now missing) specimen (no. 730) was collected later on the Ronga River (Kenya, 1883) (Fischer 1884), too late to be included in the type series.

#### Coraciidae

#### Coracias naevius sharpei Reichenow, 1899b: 192.

Now: Coracias naevius naevius Daudin, 1800. (See Peters 1945: 243).

Syntype: ZMB 50.68 (Fischer no. 46), skin, female, collected at "Soboro", 30.09.[1885].

Syntype: ZMB 2002.361 (Böhm no. 1063), skin, collected by R. Böhm at Igonda, 19.11.[18]82.

Syntype: ZMB 2000.20408, skin, collected by R. Böhm at Igonda, [1880–1884].

**Type locality**: "Deutsch Ost Afrika (Ussandaui, Igonda)", from the original description, here ascertained as "Soboro" [Zoboro, Singida Region, Tanzania] and Igonda [Igonda, Tabora Region, Tanzania] as the localities of the type specimens (compare Peters 1945).

**Remarks**: In the original description, no type was chosen, nor were measurements or inventory numbers for specimens given; only the localities "Igonda" and "Ussandaui" were mentioned. No specimens at the ZMB have the locality "Ussandaui" (Ussandawe), the area inhabited by the Sandawe people in Kondoa District of Dodoma

region. It lies southwest of Kondoa Town on current maps. "Soboro" is at 5°35'S, 35°10'E in what was then called "Ussandawe" country. The three above listed specimens have the name *Coracias naevius sharpei* on the historical museum labels. Reichenow (1902a: 226) listed all these specimens for *C. n. sharpei*, so all specimens are regarded as types. The type locality is ascertained as "Soboro" [Zoboro, Singida Region, Tanzania] and Igonda [Igonda, Tabora Region, Tanzania] being the localities of the type specimens. Peters (1945: 243) restricted the type locality to Igonda [Igonda, Tabora Region, Tanzania] and Ussandaui [Tanzania], the two localities given in the description. This subspecies' name honors the English ornithologist and curator of the bird collection at the BMNH Richard Bowdler Sharpe.

## Coracias garrulus loquax Reichenow, 1899b: 191.

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Now: Coracias garrulus garrulus Linnaeus, 1758. See Reichenow (1902a: 217); White (1965: 236).
Syntype: ZMB 2002.349 (Fischer no. 372), skin, female, juvenile, collected at "Massa", 01.11.1878.
Syntype: ZMB 2002.350 (Fischer no. 130), skin, male, collected at "Kagehi", 17.11.1885.
Syntype: ZMB 185, mount, collected by L. Krebs in "Kaffernland", [1820–1839].
Syntype: ZMB 9589, skin, collected by L. Krebs in "Kaffernland", [1820–1839].
Syntype: ZMB 24538, mount, female, collected by J.M. Hildebrandt in Duruma, [01.1877].
Syntype: ZMB 28006 (Stuhlmann no. 659), skin, male, collected by F. Stuhlmann at "Quilimane", 10.02.1889.
Syntype: ZMB 31949 (Stuhlmann no. 92), skin, male, collected by F. Stuhlmann in "Usaramo", 26.02.1894.
Syntype: ZMB 34140, skin, male, collected by O. Neumann at Pangani, 03.1893.
Syntype: ZMB 34141, skin, female, collected by O. Neumann at Pangani, 03.1893.
Syntype: ZMB 34142, skin, female, collected by O. Neumann at Tanga, 03.1893.
Syntype: ZMB 2002.351 (Böhm no. 790), skin, female, juvenile, collected by R. Böhm at Igonda, 01.01.1882.
Syntype: ZMB 2002.352 (Böhm no. 820), skin, collected by R. Böhm at Igonda, 12.01.1882.
Syntype: ZMB 2002.353, skin, collected by L. von Trotha in the Pare Mountains, 06.03.1896.
Syntype: ZMB 2002.354, skin, female, collected by L. von Trotha at Mkalama, 12.1896.
Syntype: ZMB 2002.355, skin, collected by L. von Trotha on the Ugalla River, 12.1896.
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**Type locality**: Ost- und Südafrika [East and South Africa], from the original description as well as localities of the syntypes.

**Remarks**: M.H.C. Lichtenstein (1854) named specimens from "Kaffernland" [South Africa] *Coracias loquax*, but without a description it was in effect a *nomen nudum*. Later Reichenow (1899b) validated the name by providing a description as well as localities. In Reichenow's description no type was chosen, nor were measurements or inventory numbers for specimens given. He mentions a "grosse Reihe" (many birds) and extended the range into "Ost- und Südafrika" (East and South Africa) as localities. Thus, all the specimens at the ZMB from those regions available in 1899 belong to the type series. Reichenow (1902a: 218–219) included the subspecies in the nominate form but further extended the range for *Coracias loquax* to the whole of Africa, as the differences he found in comparison to the nominate form are aseasonal. Therefore, the specimen list given in this publication is not relevant for the type list.

ZMB 2002.357 and ZMB 2002.358 collected by Schmitt arrived in the collection in 1900, too late to be type specimens. ZMB 2000.20404 (collected by Paul Preuss) also probably arrived too late, while the arrival date of ZMB 2002.356 (collected by Friedrich Fülleborn) is unknown. Thus, these specimens were not included in the type series.

## Eurystomus afer suahelicus Neumann, 1905a: 186.

**Now**: *Eurystomus glaucurus suahelicus* (Neumann, 1905a). See Peters (1945: 245). **Holotype**: ZMB 35597 (Fischer no. 293), skin, female, collected at Tschara, 15.08.[1878].

**Type locality**: "Ost-Afrika" [East Africa], from the original description, ascertained as "Tschara am Tana" [Tschara, Tana River County, Kenya] as the locality of the holotype.

**Remarks**: In the original description, ZMB 35597 was given as the only Fischer specimen and type with the locality "Tschara am Tana", so it is regarded as the holotype. The *locus typicus* was given as "Ost-Afrika" and ascertained as Tschara [Tschara, Tana River County, Kenya], the locality of the holotype.

#### Alcedinidae

#### Halcyon semicaerulea hyacinthina Reichenow, 1900b: 249.

**Now:** *Halcyon leucocephala hyacinthina* (Reichenow, 1900b). See Peters (1945: 198). **Syntype**: ZMB 49.320 (Fischer no. 6), skin, male, collected on "Sansibar", 18.3.[18]77. **Syntype** (missing): Fischer no. 650, male, collected at Maurui, [17.01.1883].

**Type locality**: "Sansibar" [Zanzibar, Tanzania] and "Usegua" [Useguha country, Tanga Region, Tanzania], from the original description.

**Remarks**: In the original description no type was chosen, nor were there measurements or inventory numbers for specimens, but localities "Sansibar" and "Usegua" were mentioned. Only one syntype from Zanzibar was found at the ZMB. Fischer however collected a male *H. semicaerulea* (no. 650) at Maurui on 17 Jan 1883 (Fischer 1884). Maurui is in the Lower Pangani River Valley at 5°07'S, 38°23'E in the area then known as Useguha or "Usegua". The whereabouts of this syntype is unknown. There is no indication that this missing syntype was at the ZMB, so it is unclear whether Reichenow saw it or only cited it following Fischer (1884).

## Lybiidae

## Trachyphonus suahelicus Reichenow, 1887: 60.

Now: Trachyphonus vaillantii suahelicus (Reichenow, 1887). See Peters (1948: 61).

Holotype: ZMB 50.19 (Fischer no. 1), skin, female, collected in "Usegua", 25.08.1885.

Paratype: ZMB 30418 (Böhm no. 609), skin, male, collected by R. Böhm, at Kakoma, 22.08.[1881].

Paratype: ZMB 2000.32621 (Fischer no. 508), skin, male, possibly collected for him by a local collector in the Nguru Mountains, [Jul].

Type locality: "Usegua" [Useguha country, Tanga Region, Tanzania], the locality of the holotype.

**Remarks**: In the original description, the holotype was mentioned with these collecting dates. It was also mentioned that a specimen collected by one of Fischer's local collectors was from the "Nguru-Berge" and identified as *Trachyphonus caffer* (see Fischer 1884: 372) as well as a male collected by Böhm at Kakoma, also belong to the newly described species *T. suahelicus*.

## Trachyphonus Böhmi G.A. Fischer & Reichenow, 1884b: 179-180.

Now: Trachyphonus darnaudii boehmi (G.A. Fischer & Reichenow, 1884b). See Peters (1948:62).

Syntype: ZMB 2000.32620, skin, male, collected by a local collector for Fischer at "Barawa", [11.1881].

Syntype: ZMH 8269 (Fischer no. 740), skin, former mount, male, collected at Arusha, 26.03.[18]83.

Syntype (missing): (Fischer no. 599), skin, male, collected in Pare, [03.03.1883].

Syntype (missing): (Fischer no. 981), skin, male, collected in Pare, [03.08.1883].

Syntype (missing): skin, collected by R. Böhm in "Uniamwesi".

Syntype (missing): skin, collected (possibly by J.M. Hildebrandt) in "Ukamba".

**Type locality**: "Ost-Afrika zwischen 4° s.Br. und 0°" [East Africa between 4°S and 0°: "Pare Gebirge" [South Pare Mts., Kilimanjaro Region, Tanzania], Arusha [Arusha, Arusha Region, Tanzania], "Ukamba" [Ukambani, Makueni County/Kitui County/Machakos County, Kenya] and "Barawa" [Baraawe, Lower Shabeelle Region, Somalia], from the original description.

Remarks: In the original description no type was chosen nor were inventory numbers for specimens provided, but the following sites were given: "Pare Gebirge", Arusha, "Ukamba" and "Barawa". Fischer (1884) listed three specimens (nos. 599, 740, 981) as well as a specimen from "Barawa", specimens collected in "Ukamba" (possibly by Hildebrandt) and from "Uniamwesi" (collected by Böhm). Only one Fischer specimen at the ZMB and one at the ZMH could be traced. The whereabouts of the other specimens are unknown. ZMB 2000.32620 was collected for Fischer (Fischer 1885a). ZMH 8269 had been mentioned as the type specimen for this species in Bolau (1898). Later

Zedlitz (1915) cited ZMB 2000.32620 as "the type" and restricted the *terra typica* to "Barawa, S. Somaliland", as this was the only specimen of the original description that he found in the ZMB collection. According to the ICZN (1999) this cannot be accepted as a lectotype designation, as he did not select the specimen from other syntypes. Zedlitz (1915: 16) incorrectly listed "no. 24012" for that specimen. Indeed, number B 24012 is written on the label, but it does not exist in the B-catalogue. The species was named in honour of Dr. Richard Böhm (1854–1884), an important collector and ornithologist in Tanzania, who tragically died of fever at an early age.

## Barbatula simplex G.A. Fischer & Reichenow, 1884b: 180.

Now: Pogoniulus simplex G.A. Fischer & Reichenow, 1884b. See Peters (1948: 46). Holotype: ZMB 27026 (B 18672, Fischer no. 1009), skin, male, collected at Pangani (River Valley?), [22.08.1883].

**Type locality**: "Massailand" (region inhabited by the Masai tribe) [Kenya/Tanzania], from the original description, ascertained as Pangani (River Valley?) = Lower Pangani River Valley [Pangani, Tanga Region, Tanzania] as the locality of the holotype (Fischer 1884).

**Remarks**: In the original description no type was chosen nor were inventory numbers for specimens provided, but measurements for one specimen and the locality "Massailand" were given. Therefore ZMB 27026 (no. 1009) is regarded as the holotype (see also Fischer 1884: 371). The very general information about the *locus typicus* in the description "Massailand" was ascertained as Pangani (River Valley?) for the locality of the holotype (Fischer 1884). Fischer collected the holotype in the Lower Pangani River Valley, but it is impossible to give an exact locality.

#### Barbatula Fischeri Reichenow, 1880: 181 (in Fischer & Reichenow 1880b).

**Now**: *Pogoniulus bilineatus fischeri* (Reichenow, 1880). See Peters (1948: 50); but see also Nwanko et al. (2018). **Holotype**: ZMB 2000.40044 (B 19019, Fischer no. 451), skin, male, collected on "Sansibar", [06.06.1880].

**Type locality**: "Ost-Afrika" [East Africa], from the original description, and ascertained as "Sansibar" [Zanzibar, Tanzania], the locality of the holotype (van Someren 1922).

**Remarks**: In the original description, no type was chosen nor were inventory numbers for specimens provided, but measurements for one and the locality "Ost-Afrika" were given, though no collector was mentioned. However, as the species was described with another new species collected by Fischer and as the species was named after him, Fischer would likely have been the collector. Therefore, ZMB 2000.40044 (no. 451) is regarded as the holotype; it was also collected in Jun 1880 and a new species of *Barbatula* from Zanzibar was mentioned in Fischer (1880b). There are two further Fischer specimens of this species from Zanzibar (ZMB 2000.40045 and ZMB 2000.40046), but as one was collected in 1881, and with no date available for the other, we do not regard them as types.

**Additional Comment**: The status of the form *fischeri* requires further research. While its song is almost identical to that of *Pogoniulus simplex*, rather than *P. bilineatus* Sundevall, based on molecular data it is nested within *P. b. bilineatus* (Nwanko et al. 2018).

#### Barbatula affinis Reichenow, 1879b: 114.

**Now**: *Pogoniulus pusillus affinis* (Reichenow, 1879b). See Peters (1948: 47). **Holotype** (missing): ZMB 24268 (B 15740, Fischer no. 260), mount, male, collected at Kipini, [26.07.1878].

**Type locality**: "Kipini (Ostafrica)" [Kipini, Tana River County, Kenya], from the original description and the locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one and the locality Kipini were given. Therefore no. 260 is regarded as the holotype (see also Fischer & Reichenow 1879). In the catalogue it is noted that the specimen was not found following World War II. There is however a Fischer specimen in the Berlin collection ZMB 2000.32549, but with locality only of

"Ostafrika". As Fischer collected at least two further females of this species at Malindi and "Groß Aruscha" (Fischer & Reichenow 1879; Fischer 1884), it is unclear which of those specimens it is, but it cannot be the male type specimen, which appears to have been destroyed during World War II.

#### Pogonorhynchus massaicus Reichenow, 1887: 59.

Now: Tricholaema diademata massaica (Reichenow, 1887). See Peters (1948: 53).

Holotype: ZMB 50.16 (Fischer no. 14), skin, female, collected at Loeru, [05.09.1885].

Paratype: ZMB 27526 (B 18671, Fischer no. 824), male, collected at "Naiwascha", [27.05.1883].

Paratype (missing): Fischer no. 769, skin, male, collected at Matióm, [14.04.1883].

**Type locality**: "Massailand" (region inhabited by the Masai tribe) [Kenya/Tanzania] and Loeru, from the description, ascertained as Loeru [Loeru, southeast of Kondoa, Dodoma Region, Tanzania], the locality of the holotype.

**Remarks**: In the original description the holotype was mentioned with the collecting dates, and that specimens collected earlier by Fischer in "Massailand" and determined as *Pogonorhynchus frontatus* Cabanis also belong to the newly described species *P. massaicus*. For *P. frontatus*, Fischer (1884) listed two specimens (Fischer nos. 769, 824), which are thus regarded as paratypes, but no. 769 is missing. The type locality was ascertained as Loeru [Loeru, southeast of Kondoa, Dodoma Region, Tanzania], the locality of the holotype.

#### Lybius leucocephalus usukumae Neumann, 1908: 46.

Now: Lybius leucocephalus lynesi C.H.B. Grant & Mackworth-Praed, 1938. See del Hoyo & Collar (2014); but see also Peters (1948: 58); Short & Horne (2002).

Holotype: ZMB 50.29 (Fischer no. 189), skin, male, collected at "Kagehi", [06.12.1885].

Paratype: ZMB 29077 (Emin Pasha no. 687), skin, male, collected by Emin Pasha at "Bussissi", [16.10.1890].

**Type locality**: "countries on the south and south-east shore of Lake Victoria", from the original description and "Kagehi" [Kayenzi, Mwanza Region, Tanzania], the locality of the holotype.

**Remarks**: In the original description the holotype was mentioned as the "type" and the collecting date is provided. ZMB 29077 collected by Emin Pasha was designated as a paratype by Neumann, who compared it with all specimens available at the ZMB, and its locality is included in the type locality. Neumann (1908) considered the type locality as "countries on the south and south-east shore of Lake Victoria". Simultaneously, he defined "Kagehi" [Kayenzi, Mwanza Region, Tanzania] as type locality with the designation of a holotype. The form *usukumae* was regarded as a synonym of *Lybius leucocephalus albicauda* (Shelley) (White 1965: 254), but Short & Horne (2002) considered it an intergrade between *albicauda* and *lynesi* (see Dickinson & Remsen 2013: footnote p. 330).

#### **Picidae**

#### Dendromus nubicus Var. pallida Reichenow, 1902a: 179.

Now: Campethera nubica pallida (Reichenow, 1902); but see also Peters (1948: 117).

Syntype: ZMB 2002.473, skin, female, collected at Baraawe, 11.[1881].

Syntype: ZMB 50.41, skin, female, collected by Emin Pasha at Mpapua, [11.06.1890].

**Type locality**: Mpapua [Mpapua, Dodoma Region, Tanzania] and "Barawa" [Baraawe, Lower Shabeelle Region, Somalia], from the original description and localities of the syntypes.

**Remarks**: In the original description no type was chosen, nor were there inventory numbers for specimens, but measurements for more than one specimen and the localities "Mpapua" and "Barawa" were given. As the above-listed specimens are the only ones with these data at the ZMB, both are regarded as syntypes. ZMB 2002.473 was collected for Fischer (Fischer 1885a). Sharpe (1902) gave the name *Dendromus pallidus* for the same taxonomic entity. The name is often wrongly attributed to Sharpe (1902). However, as Sharpe's article was published in Oct

1902 while Reichenow's was published in Jun 1902, we regard *Dendromus pallidus* Sharpe, 1902 as a junior homonym of *Dendromus nubicus Var. pallida* Reichenow, 1902a.

A specimen from Mpapua in the Dodoma Region of north-central Tanzania collected by Emin Pasha clearly belongs to *Campethera nubica pallida* but was collected well inland from its supposed range (despite no obvious mistake in the documentation of the locality). Therefore, it throws into question the validity of all coastal birds that have long been treated as *pallida*. Similarly, the Mpapua specimen comes from within the known range of nominate *nubica*, so is also close to (if not within) the area occupied by birds referred to as *Campethera scriptoricauda* (Reichenow). As such it may be prudent to consider treating *nubica* as monospecific, with further fieldwork required on all *Campethera* woodpeckers in that area of north-central and eastern Tanzania.

## Dendromus chrysurus suahelicus Reichenow, 1902a: 175.

**Now**: *Campethera abingoni suahelica* (Reichenow, 1902a). See Peters (1948: 119). **Syntype**: ZMB 2002.476, skin, female, juvenile, collected at Mandera, 09.1881.

Syntype: ZMB 2002.477 (Fischer no.535), skin, female, collected at "Usaramo", [08.]01.1882.

Syntype: ZMB 50.59 (Stuhlmann no. 138), skin, male, collected by F. Stuhlmann at Mbusini, 31.08.1888.

Syntype (missing): Böhm no. 281, male, collected by R. Böhm at Kakoma, 21.02.1881. Syntype (missing): Böhm no. 47, male, collected by R. Böhm at "Kangasi", 08.08.[1880]. Syntype (missing): Fischer no. 961, male, collected at "Gross-Aruscha", 19.07.[1883].

**Type locality**: "Deutschostafrika" [now Tanzania], from the original description as well as localities of the syntypes.

Remarks: In the original description no type was chosen, nor were there inventory numbers for specimens. However Reichenow (1902a) mentions localities "Grossaruscha", "Mandera", "Usaramo", "Kakoma", "Kangasi" and "Mbusini" with collection month and collector's names. Therefore, the three specimens available in the ZMB collection are regarded as syntypes. Others from the localities mentioned refer to missing Böhm and Fischer specimens, but were listed in more detail in Schalow (1883) and Fischer (1884). Problematically, Reichenow (1902a) listed for *D. chrysurus suahelicus* as well as for *Dendromus bennetti* (Smith) the locality Kakoma (Böhm) with Mar and Nov as collecting months. On the other hand, Schalow (1883) only listed *Picus abingoni* (Smith) and *Picus hemprichi* Ehrenberg for Kakoma (Böhm), not *Dendromus (Picus) bennetti*. It is uncertain which of the missing specimens from Kakoma collected by Böhm in Mar and Nov belong to which species, and which Reichenow included in his description of *Dendromus chrysurus suahelicus* (1902a).

## Picus (Campothera [sic]) mombassicus G.A. Fischer & Reichenow, 1884c: 262.

**Now**: Campethera mombassica G.A. Fischer & Reichenow, 1884c. See Short & Horne (1988); but see also Peters (1948: 119). **Holotype**: ZMB 23414 (Fischer no. 102), skin, male, collected at "Mombassa", 10.07.[1877].

**Type locality**: "Mombasa" [Mombasa Island, Mombasa County, Kenya], from the original description and locality of the holotype.

**Remarks**: In the original description no type was chosen, nor were there inventory numbers for specimens provided, but measurements for one male, the locality "Mombassa" and the date 10.07.1877 were given. As the only Fischer specimen of this species at the ZMB or ZMH, and with collecting data fitting the description, this specimen is regarded as the holotype. It is also the only specimen of *Picus abingoni* listed in Fischer & Reichenow (1878b).

Formerly *Picus* (*Campothera*) *mombassicus* was considered a race of Golden-tailed Woodpecker (*C. abingoni*), but it was considered worthy of separate species status by Short & Horne (1988) based on its distinctly different vocalizations and lack of drumming. Despite reported intergrades with *abingoni*, Dickinson & Remsen (2013), del Hoyo & Collar (2014) and Gill et al. (2023) all support separate species status. Fuchs et al. (2017) found that genetic divergence of *mombassicus* from *abingoni* was very limited and that further sampling was required to determine whether gene flow occurs.

#### Picus (Mesopicus) rhodeogaster G.A. Fischer & Reichenow, 1884b: 180.

Now: Dendropicos spodocephalus rhodeogaster (G.A. Fischer & Reichenow, 1884b). See Reichenow (1902a: 188); but compare Peters (1948: 221).

Syntype: ZMB 27404 (Fischer no. 928), skin, male, collected at Mount Meru, [15.07.]1883.

Syntype (missing): ZMB 27405 (Fischer no. 715), female, collected at "Klein-Aruscha", [15.03.1883].

Syntype: ZMH 8263 (Fischer no. 835), skin, former mount, male, collected at "Naiwascha", 04.06.[18]83.

**Type locality**: "Massailand" (region inhabited by the Masai tribe) [Kenya/Tanzania], from the original description, ascertained as Arusha Region [Arusha Region, Tanzania] and Naivasha [Naivasha, Nakuru County, Kenya], localities of the syntypes.

**Remarks**: In the original description, no type was chosen nor were inventory numbers for specimens given. However, the description includes both sexes and measurements for more than one specimen, and mentions the locality "Massailand". Furthermore, three Fischer specimens of this species (nos. 715, 835, 928) are listed by Fischer (1884). As the localities of those specimens are those of the type locality, they are all regarded as syntypes. ZMH 8263 was also mentioned as type specimen for this species in Bolau (1898).

#### Falconidae

## Poliohierax [sic] semitorquatus deckeni Zedlitz, 1914: 675.

Now: Polihierax semitorquatus A. Smith, 1836. See White (1965: 60); but see also Peters (1931: 282).

Syntype: ZMB 24395 (B 15727, Fischer no. 376), skin, former mount, female, adult, collected at "Massa" (Tana River), 02.11.[1878].

Syntype: ZMB 2002.225 (B 591, Berger no. 50), skin, male, adult, collected by A. Berger at the "Baringo See" (Lake Baringo), 19.10.[1908].

**Syntype**: SMF-11064 (Erlanger/Hilgert no. 11064), skin, collected by C. von Erlanger/C. Hilgert at "Kismaju" (Somaliland), 13.07.1901.

Syntype: SMF-11061 (Erlanger/Hilgert no. 11061), skin, collected by C. von Erlanger/C. Hilgert at "Gardolia-Djira", 10.05.1901.

Syntype: SMF-11062 (Erlanger/Hilgert no. 11062), skin, collected by C. von Erlanger/C. Hilgert at "Gardolia-Djira", 10.05.1901.

Syntype: NRM 569842 (Müller no. 113), skin, male, collected by C. Müller at Afgoi, 19.02.[19]11] (Zedlitz collection).

Syntype: NRM 569843 (Müller no. 115), skin, female, collected by C. Müller at Afgoi, 04.03.[19]11 (Zedlitz collection).

**Type locality**: "Süd-Somali und Brit. O-Afrika bis zum Baringo-See" [Southern Somalia and Kenya to Lake Baringo], from the original description and localities of the syntypes.

**Remarks**: Zedlitz described the new subspecies based on specimens from his own collection (collected by his taxidermist and collector C. Müller) and from the collections of Carlo von Erlanger and the ZMB. He gave the collector and the locality as well as numbers. Thus the two specimens of the ZMB collection, three of the Erlanger collection (now in SMF) and the two of the Zedlitz collection (now in NRM) are syntypes. Zedlitz mentioned eight specimens from his collection, largely acquired by the NRM (Wikipedia, 02.12.2020), but six specimens are missing. This species name honors the German ornithologist Karl Klaus von der Decken (1833–1865).

#### **Psittacidae**

#### Poeocephalus massaicus G.A. Fischer & Reichenow, 1884b: 179.

Now: Poicephalus gulielmi massaicus (G.A. Fischer & Reichenow, 1884b). See Reichenow (1902a: 10): Peters (1937: 226).

**Syntype**: ZMB 27027 (B 18673, Fischer no. 949), skin, male, collected at "Aruscha, Maeru-Berg", 16.7.[18]83.

Syntype: ZMH 8312 (Fischer no. 920), skin, former mount, male, collected at "Groß Aruscha, Maeru-Berg", 13.7.[18]83.

**Type locality**: "Gross-Aruscha am Märuberg" [Mt Meru, Arusha Region, Tanzania], from the original description and localities of the syntypes.

**Remarks**: In the original description, no type was chosen, nor were inventory numbers for specimens provided, but measurements for one and the locality "Gross-Aruscha am Märuberg" were given. In Fischer (1884) two specimens were listed (Fischer nos. 949, 920). The measurements given belong to no. 949, but as the locality and date of both match the description, Fischer regarded both as belonging to the newly described species (Fischer 1884). Furthermore, *Poecephalus massaicus* was written on the original collector's label of ZMH 8312. Therefore, both specimens are regarded as syntypes. ZMH 8312 was not mentioned as type of this species in Bolau (1898).

## Poeocephalus simplex Reichenow, 1887: 55.

**Now**: *Poicephalus rufiventris rufiventris* (Rüppell, 1842). See Reichenow (1902a: 15): but see also Peters (1937: 228). **Holotype**: ZMB 50.188 (Fischer no. 20), skin, female, collected near "Serian", 10.9.[1885].

**Type locality**: "bei Serian" [near Serya, Kondoa District, Dodoma Region, Tanzania], from the original description and locality of the holotype.

**Remarks**: In the original description, no type was chosen, nor were inventory numbers for specimens provided, but measurements for one specimen, the locality "Serian", and the date were given. As ZMB 50.188 is the only specimen of that species with these collecting data, it is regarded as the holotype. Reichenow (1887) suspected that this species was probably the female of *P. rufiventris*.

#### Agapornis Fischeri Reichenow, 1887: 54.

Now: Agapornis fischeri Reichenow, 1887. See Reichenow (1902a, 23); Peters (1937: 255). Syntype: ZMB 28179 (B 20117, Fischer no. 63), skin, female, collected near Ussure, 11.10.[1885]. Syntype: AMNH SKIN 622323 (Fischer no. 69), skin, female, collected near Ussure, [18.10.1885]. Syntype: AMNH SKIN 622324 (Fischer no. 1537), skin, female, collected near Ussure, [18.10.1885].

**Type locality**: "bei Ussure" [near Ussure, Singida Region, Tanzania], from the original description and locality of all syntypes.

**Remarks**: In the original description no type was chosen, nor were inventory numbers for specimens given, but it was stated that three females collected near Ussure belong to the type series. Thus, all three are regarded as syntypes, only one of which is at the ZMB, the other two specimens being at the AMNH. AMNH SKIN 622324 has a wrong collector's number (Fischer nos. 66, 67, 68, 70 or 71 are possible field numbers). These specimens were not mentioned as types in Greenway (1978).

#### Agapornis personata Reichenow, 1887: 55.

**Now**: *Agapornis personatus* Reichenow, 1887. See Reichenow (1902a: 23); Peters (1937: 255). **Holotype**: ZMB 28178 (B 20103), skin, male, collected near "Serian", 11.9.[1885].

**Type locality**: "bei Serian" [near Serya, Kondoa District, Dodoma Region, Tanzania], from the original description and locality of the holotype.

**Remarks**: In the original description, no type was chosen, nor were any inventory numbers for specimens given, but measurements for one specimen, the locality "Serian", and the date were given. As ZMB 28178 is the only specimen of this species with these collecting data, it is regarded as the holotype.

#### Vangidae

## Prionops poliolophus, G.A. Fischer & Reichenow, 1884b: 180.

Now: Prionops poliolophus, G.A. Fischer & Reichenow, 1884. See Mayr & Greenway (1960); White (1962b: 10).

**Holotype**: ZMB 27412 (B 18657, Fischer no. 804), skin, former mount, female, collected at "Naiwascha See" (Lake Naivasha), 10.05.1883.

**Type locality**: "Naiwascha See" [Lake Naivasha, Nakuru County, Kenya], from the original description and locality of the holotype.

**Remarks**: In the original description, no type was chosen, nor were there inventory numbers for specimens provided, but there was only one specimen, a female, and the locality was given. Furthermore, Fischer (1884) listed one specimen (Fischer no. 804) for this species, and so ZMB 27412 is considered the holotype. The ZMH houses a further Fischer specimen of this species (ZMH 8232, skin, former mount, female, 1883, Naivasha). However, it was clearly stated in the original description and in Fischer (1884) that there was only one specimen. Furthermore, on the original label of ZMH 8232 the species name *Prionops talacoma* Smith was written first but revised later to *Prionops poliolophus*. Thus, this specimen is not regarded as a type, though it was mistakenly considered as such by Bolau (1898).

## Platysteiridae

#### Batis puella soror Reichenow, 1903b: 485.

Now: Batis soror (Reichenow, 1903). See Mayr et al. (1986: 382).

Syntype: ZMB 24759 (B 15694, Fischer no. 162), skin, former mount, female, collected by G.A. Fischer on "Sansibar", 29.03.[18]78.

Syntype: ZMB 28018 (Stuhlmann no. 607), skin, male, collected by F. Stuhlmann at "Quilimane", 29.01.1889.

Syntype: ZMB 28019 (Stuhlmann no. 612), skin, female, collected by F. Stuhlmann at "Quilimane", 29.01.1889.

Syntype: ZMB 28020 (Stuhlmann no. 608), skin, male, collected by F. Stuhlmann at "Quilimane", 29.01.1889.

Syntype: ZMB 2000.6501 (Stuhlmann no. 612), skin, female, collected by F. Stuhlmann at "Quilimane", 29.01.1889.

Syntype: ZMB 2000.6502, skin, male, collected by F. Fülleborn at Undi, [1898–1900].

Syntype: ZMB 2000.64515 (Stuhlmann no. 272), skin, male, collected by F. Stuhlmann on "Sansibar", 03.11.1888.

Syntype: ZMB 2000.64541 (B 53, Stierling no. 154), skin, male, collected by N. Stierling at "Humbluti", 16.08.1900.

Syntype: ZMB 2000.64543 (B 53, Stierling no. 83), skin, male, juvenile, collected by N. Stierling at Songea, 18.07.1900.

Syntype: ZMB 2000.64544 (B 53, Stierling no. 143), skin, male, collected by N. Stierling at Songea, 06.08.1900.

Syntype: ZMB 2000.64545 (B 53, Stierling no. 130), skin, female, collected by N. Stierling at Songea, 03.08.1900.

Syntype: ZMB 2000.64546, skin, male, collected by F. Fülleborn at Songea, 07.[1898–1900].

Syntype: ZMB 2000.64547 (Marwitz no. 92), skin, female, collected by W.L.H. von der Marwitz at Malangali, 26.08.1899.

Syntype: ZMB 2000.64563 (B 53, Stierling no. 82), skin, male, collected by N. Stierling at Songea, [18.07.1900].

**Type locality**: "Sansibar und Niassagebiet bis Quilimane" [Zanzibar and Niassa Province to Quelimane, Tanzania/Mozambique].

Remarks: See Frahnert et al. (2021).

## Batis molitor littoralis Neumann, 1907: 356.

Now: Batis soror (Reichenow, 1903). See Mayr et al. (1986: 382).

**Holotype**: ZMB 24759 (B 15694, Fischer no. 162), skin, former mount, female, collected by G.A. Fischer on "Sansibar", 29.03.76 [1878, error on the museum's label as Fischer first arrived in Zanzibar in 1877].

Paratype: ZMB 23536 (B 15041, Fischer no. 83), mount, female, collected by G.A. Fischer at "Mombassa", 26.06.[18]77.

Paratype: ZMB 2000.64515 (Stuhlmann no. 272), skin, male, collected by F. Stuhlmann on "Sansibar", 03.11.1888.

Possible Paratype (missing): SMNS 10965 female, collected by D. Steudel at "Bagamojo, Central Ostafrika", 1893.

**Type locality**: "Sansibar" [Zanzibar, Tanzania], from the locality of the holotype.

Remarks: See Frahnert et al. (2021).

#### Batis minor suahelicus Neumann, 1907: 353.

Now: Batis minor suahelica Neumann, 1907; contra Mayr et al. (1986: 384).

**Syntype**: ZMB 2000.64511, skin, female, collected by G.A. Fischer at Pangani, 09.1881. **Syntype**: ZMB 2000.64513, skin, male, collected by G.A. Fischer in "Usaramo", 01.1882.

Syntype: ZMB 2000.64562, skin, male, collected by G.A. Fischer in "Usaramo", 01.1882.

Syntype: ZMB 32010 (Stuhlmann no. 32), skin, male, juvenile (female given by Neumann1907a), collected by F. Stuhlmann at Pangani, 20.01.1894.

Syntype: ZMB 2000.64512 (Stuhlmann no. 170), skin, male, collected by F. Stuhlmann at "Dar-es-Salaam", 28.03.1894.

Syntype: ZMB 34024 skin, male, collected by O. Neumann at Kahe, 13.01.1895.

Syntype: ZMB 2000.64514, skin, male, collected by W.L.H. von der Marwitz at Marangu, 1895.

Syntype (missing): female, collected by R. Böhm, no locality given.

**Type locality**: "Deutsch Ost Afrika und südlicher Teil von Englisch Ost Afrika (Mombassa und Teita)" [Tanzania and South of Kenya], further referred to as eastern Tanzania and southeastern Kenya after the localities of the type specimens and the original description (see also Louette 2006; Frahnert et al. 2021).

Remarks: See Frahnert et al. (2021).

#### Malaconotidae

#### Telephonus reichenowi Neumann, 1900: 120.

Now: Bocagia minuta reichenowi (Neumann, 1900); but see Reichenow (1903b); Mayr & Greenway (1960: 320).

Syntype: ZMB 27496 (B 18656, Fischer no. 618), skin, former mount, male, collected at Pangani, 22.12.[1882].

Syntype: ZMB 27497 (B 18656, Fischer no. 621), skin, former mount, female, collected at Pangani, 25.12.[1882].

Syntype: ZMB 31874 (Stuhlmann no. 383), skin, female, collected by F. Stuhlmann at "Kissaki", 12.1894.

Syntype: ZMB 2000.61902 (Stuhlmann no. 201), skin, collected by F. Stuhlmann at "Dar-es-Salaam", 28.04.1894.

Syntype (missing): collected by S.T. Pruen at Kikombo (Ugogo), 04.06.1888 (cited from Tristram 1889).

Syntype (missing): collected by S.T. Pruen at Kikombo (Ugogo), 04.06.1888 (cited from Tristram 1889, Telephonus anchietae).

Syntype (missing): collected by J. Kirk at "Ussambara" (cited from Reichenow 1894, 1903b; Shelley 1881).

Syntype (missing): collected by J. Kirk at Lamu (cited from Reichenow 1894, 1903b; Shelley 1881).

Type locality: "Küstengebiete von Deutsch-Ost-Afrika und Britisch Ost-Afrika (Lamu) und geht bis Ugogo ins Innere des Landes" [coast provinces of Tanzania and Kenya (Lamu, Lamu County, Kenya) to Ugogo (Ugogo country, Dodoma Region, Tanzania)], from the original description.

**Remarks**: In the original description four specimens from Pangani, Kissaki and Dar es Salam were mentioned, and four of *Bocagia minutus* from these localities were located at the ZMB. Fischer (1884) listed two specimens for *Telephonus minutus* from Pangani (nos. 618 and 621). Therefore, the four Fischer and Stuhlmann specimens are regarded as the type specimens for *T. reichenowi*. Neumann (1900) included further specimens of *T. minutus* and *T. anchietae* from the literature (Shelley 1881; Tristram 1889; Reichenow 1894) that match the distribution area of the newly described species. All these specimens are regarded as syntypes. The missing specimens are not housed at the BMNH or the AMNH. Hall & Moreau (1970) and Sibley & Ahlquist (1990) suggested that *reichenowi* may be worthy of separate species status, but due to lack of documentation, this was not supported by Dowsett & Dowsett-Lemaire (1993), Dickinson & Christidis (2014), or del Hoyo & Collar (2016).

#### Telephonus minor Reichenow, 1887: 64.

**Now**: *Tchagra australis minor* (Reichenow, 1887). See Mayr & Greenway (1960: 324); White (1962b: 21); Dickinson & Christidis (2014).

Holotype: ZMB 2000.5082 (B 20151, Fischer no. 140), skin, female, collected at "Kagehi", 19.11.[1885].

**Type locality**: "Kagehi" [Kayenzi, Mwanza Region, Tanzania], from the original description and locality of the holotype.

**Remarks**: In the original description no type was directly chosen, but measurements for one specimen, and a specimen with no. 140, the date, and the locality "Kagehi" were given; thus ZMB 2000.5082 is regarded as the holotype for this species. The localities "Wembaere Steppe" [Wembere Plains] and "Simiu Fluß" [Simiyu River] were additionally listed in Reichenow (1887) as a citation from Fischer's diaries, but without details of any collected specimens.

#### Dryoscopus major mossambicus G.A. Fischer & Reichenow, 1880a:141.

Now: Laniarius aethiopicus mossambicus (G.A. Fischer & Reichenow, 1880). See Dickinson & Christidis (2014); but see also Mayr & Greenway (1960: 329); White (1962b: 27).

Holotype: ZMB 24922 (B 16562, Fischer no. 225), skin, former mount, collected at "Mossambique", [05.1879].

**Type locality**: "Mossambique" [Mozambique Island, Nampula Province, Mozambique], from the original description as well as locality of the holotype.

**Remarks**: The original description clearly refers to one specimen with no. 225 (ZMB 24922). As no further specimen is mentioned, ZMB 24922 is the holotype for this species. The specimen was inventoried at the ZMB in January 1881 and was mounted. In the catalogue it was mentioned that it is the type for *Dryoscopus major mossambicus* in 1881. Thus it is probable that the specimen was not directly inventoried when it arrived. As Fischer was in Zanzibar in May 1879 and there is no complete collecting date for the specimen given, it would seem that it was obtained on behalf of Fischer. The spelling "Mossambique" clearly indicated the island in 1880. Its name later became that of the country of Mozambique following its independence from Portugal (when earlier known as Portuguese East Africa).

#### Dryoscopus nigerrimus Reichenow, 1879b: 114.

**Now**: *Laniarius nigerrimus* (Reichenow, 1879b). See Dickinson & Christidis (2014); Finch et al. (2016: 74); but see also Mayr & Greenway (1960: 329).

Holotype: 24256 (B 15705, Fischer no. 244), skin, former mount, male, collected at Kipini, 15.07.1878.

Type locality: Kipini [Kipini, Tana River County, Kenya], from the original description and locality of the holotype.

**Remarks:** In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Kipini" were given. As the given measurements are identical to those in Fischer & Reichenow (1879), no. 244 is the holotype. In the entry catalogue (B 15705) the specimen was mentioned as type for *Dryoscopus aterrimus*, Reichenow (an error for *nigerrimus*?).

Stresemann (1947) was of the opinion that *nigerrimus* merely represented an all-black form of *Laniarius* ferrugineus sublacteus (Cassin), but Turner et al. (2011) discussed the problem, giving several possibilities for the status of *L. nigerrimus* (Reichenow): a) the all-black birds occurring on Manda Island alongside *L. a. sublacteus* possess vocalisations unlike any form of *L aethiopicus* (Gmelin), and thus require comparison with the types of *L. nigerrimus* and *erlangeri* (Reichenow); also that b) should the all-black birds from southern Somalia south to Manda Island and Kipini require a higher taxonomic status (as the vocal evidence suggests) than as races of *L. aethiopicus*, the nomenclature of these East African birds would require revision; c) the all-black birds may revert to *L. nigerrimus*, while d) the black-and-white birds in southern Somalia would revert to *L. a. somaliensis* (Reichenow), and that the taxonomic status of *erlangeri* as defined by Nguembock et al. (2008) would require re-evaluation as that name was originally used by Reichenow for an all-black bird. Finch et al. (2016) argued for separate species status for *Laniarius nigerrimus*.

## Laniarius cathemagmenus Reichenow, 1887: 63.

Now: Rhodophoneus cruentus cathemagmenus (Reichenow, 1887). See Mayr & Greenway (1960: 326).

Syntype: ZMB 28271 (B 20095 female, Fischer no. 11), skin, former mount, female, collected at "Loeru, Massaigebiet", 05.09.[18]85.

Syntype: ZMB 28272 (B 20095 male, Fischer no. 10), skin, former mount, male, collected at "Loeru, Massaigebiet", 05.09.[18]85.

**Type locality**: Loeru [Loeru, southeast of Konda, Dodoma Region, Tanzania] and Ugaia [Ugaia country (south of Kavirondo Gulf), Homa Bay County, Kenya], from the original description and ascertained as Loeru [Loeru, southeast of Konda, Dodoma Region, Tanzania], the locality of the syntypes.

**Remarks**: In the description no type was chosen nor were inventory numbers for specimens given. The characters were described and measurements given for both sexes, and the localities "Loeru" and "Ugaia" were given. Therefore both ZMB 28272 and ZMB 28271 are syntypes. The locality "Ugaia" was given for "birds observed" (from Fischer's diary). Therefore the type locality is ascertained as Loeru [Loeru, southeast of Konda, Dodoma Region, Tanzania].

#### Monarchidae

#### Trochocercus bivittatus Reichenow, 1879a: 108.

Now: *Trochocercus bivittatus bivittatus* Reichenow, 1879. See Reichenow (1903b: 499); but see also Mayr et al. (1986: 469). Syntype: ZMB 24254 (B 15702, Fischer no. 319), skin, former mount, male, collected at "Muniuni", [18.09.1878]. Syntype: ZMB 24255 (B 15702, Fischer no. 327), skin, former mount, female, collected at "Muniuni", [24.09.1878].

**Type locality**: "Muniuni" [Munyuni, Tana River County, Kenya], from the original description and locality of the syntypes.

**Remarks**: In the original description, no type was chosen, nor were inventory numbers for specimens given, but measurements for more than one individual and the locality "Muniuni" were given and both sexes described. As there are no other Fischer specimens of this species from "Muniuni", ZMB 24254 and ZMB 24255 are regarded as syntypes. Another Fischer specimen (no. 542) of the species in the collection in Berlin (ZMB 2000.17182) cannot belong to the type series as it was collected in "Usaramo" in 1882.

#### Laniidae

#### Urolestes aequatorialis Reichenow, 1887: 65.

**Now**: *Urolestes melanoleucus aequatorialis* (Reichenow, 1887). See Mayr & Greenway (1960: 342); White (1962b:40); Dickinson & Christidis (2014).

Holotype: ZMB 2000.35129 (Fischer no. 43), skin, female, collected at the "Gasa-Berge", 24.09.[1885].

Paratype: ZMB 2000.32623 (Fischer no. 962), skin, female, juvenile collected at "Groß Aruscha", 22.07.[18]83.

Paratype: ZMB 2000.35126 (Böhm no. 993), skin, female, collected by R. Böhm at "Gonda", 15.09.[18]82.

Paratype (missing): collected by J.H. Speke in Bogue country (East Africa), [October 1861].

Type locality: "Gasa-Berge" [Gasa Mts, Dodoma Region, Tanzania], also the locality of the holotype.

Remarks: The original description clearly refers to one specimen "Das vorliegende Exemplar", Fischer no. 43 (ZMB 2000.35129), which is thus regarded as the holotype. Subsequently other specimens were attributed to the described species [one collected by Fischer in "Aruscha" (ZMB 2000.32623) and one collected by Böhm at "Gonda" (ZMB 2000.35126)]. Furthermore, Reichenow includes the species *Basanistes cissoides* from Sclater (1864); when Sclater (1864: 109) presented the collection of Capt. J.H. Speke he mentioned one specimen from "Bogue" (East Africa) under the name *Basanistes cissoides* Lichtenstein, 1842 (*nomen nudum*). All these additional specimens are regarded as paratypes. Speke's missing specimen is not housed at the BMNH, the AMNH or the World Museum Liverpool. Reichenow (1887) lists additional localities: "Soboro, Kagehi and Speke Golf", all taken from Fischer's diaries (observations). "Bogue" was a location in northwest Tanganyika (Tanzania) that Speke passed through in Oct 1861 during his search for the source of the River Nile. It was west or southwest of Lake Victoria and south of Karagwe region. The name no longer exists today.

#### Lanius affinis G.A. Fischer & Reichenow, 1884c: 261.

Now: Lanius collurio Linnaeus, 1758. See Reichenow (1903b: 622).

Syntype: ZMB 2000.4096 (B 19005, Fischer no. 586), skin, male? (male with female plumage?), collected "near Lindi (10° s.B.)", [04.1882].

**Syntype**: ZMB 27562 (B 18653, Fischer no. 749), mount, female, collected at "Klein Aruscha", 29.03.1883. **Syntype** (missing): male, juvenile, collected near Pangani, [01.12.1882].

**Type locality**: "bei Lindi (10° s.B.)" [Lindi, Lindi Region, Tanzania], "Klein Aruscha" [Arusha Chini, Arusha Region, Tanzania] and Pangani [Pangani, Tanga Region, Tanzania], all localities of the syntypes.

**Remarks**: The original description clearly refers to the specimen collected "bei Lindi (10° s.B.)" (ZMB 2000.4096). However two further specimens—juveniles (in the original description)—were mentioned and described within this species (ZMB 2000.27562 and a further specimen that was not inventoried in Berlin). All these specimens are regarded as syntypes. ZMB 27562 was mentioned as type in the catalogue of the ZMB, while Fischer (1884) did not list the name *Lanius affinis*. Fischer no. 749 (ZMB 27562) and the juvenile male are mentioned under *Lanius phoenicuroides* (Schalow) but with no obvious link to Fischer & Reichenow (1884c). Specimen 586 is not listed.

The name *Lanius affinis* was preoccupied by *Lanius affinis* Legge, 1876 (a species from Sri Lanka, now *Tephrodornis affinis*). Later Shelley (1894: 42) proposed the name *Enneoctonus reichenovi* (Shelley) for *Lanius affinis* Fischer & Reichenow, 1884, which Reichenow (1903b) treated as a synonym of nominate *Lanius collurio* Linnaeus.

#### Paridae

#### Parus fringillinus G.A. Fischer & Reichenow, 1884a: 56.

Now: Melaniparus fringillinus (G.A. Fischer & Reichenow, 1884). See Greenway et al. (1967: 103).

Syntype: ZMH 6880I (Fischer no. 916), male, skin, former mount, collected at "Groß-Aruscha", 10.07.[18]83.

Syntype: ZMH 6880II (Fischer no. 913), female, skin, former mount, collected at "Groß-Aruscha", 10.07.[18]83.

**Type locality**: "am Fuße des Maeru-Berg (Massai)" [base of Mt Meru, Arusha Region, Tanzania], from the original description and locality of both syntypes.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality were given. Fischer (1884) listed two specimens for this species, a male and a female. As Fischer (1884) mentioned that the female has nearly the same coloration as the male and both specimens have the same locality, both are regarded as syntypes. Both were mentioned as type specimens in Bolau (1898). The town of "Groß Aruscha" is situated at the base of Mount Meru.

#### Alaudidae

## Coraphites leucopareia G.A. Fischer & Reichenow, 1884a: 55.

Now: Eremopterix leucopareia (G.A. Fischer & Reichenow, 1884). See Mayr & Greenway (1960: 32); White (1961: 46).

Syntype (missing): ZMB 27022 (B 18629, Fischer no. 881), male, collected at Nguruman, 21.06.[1883].

Syntype: ZMH 6878I (Fischer no. 710), skin, former mount, male, collected at "Klein-Aruscha", 14.03.1883.

Syntype: ZMH 6878II (Fischer no. 882), skin, former mount, female, collected at "Salzsteppe bei Nguruman", 22.06.1883.

**Type locality**: Nguruman [Nguruman salzsteppe = near the base of the Nguruman Escarpment, probably at Lake Magadi, Kajiado County, Kenya] and "Klein-Aruscha" [Arusha Chini, Arusha Region, Tanzania], from the original description and localities of the syntypes.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for more than one specimen ("etwa" interpreted as "round") and the localities "Nguruman" and "Klein-Aruscha" were given. Fischer (1884) listed for this species nos. 710, 881 and 882, also the same measurements as in the original description. Thus, all these specimens are regarded as syntypes for this species. Specimen ZMB 27022 has been lost since at least 1950 when Stresemann and Meise collected information concerning type specimens in the ornithological collection in Berlin. It was probably destroyed during World War II.

Fischer collected his first specimen of this lark (male) on the plains close to "Klein-Aruscha" on 13 March 1883 (Fischer no. 710). Later on his return journey from Naivasha he collected two additional birds (Fischer nos. 881, 882) at a nest (two eggs) on the "Salzsteppe near Nguruman" which is in southern Kenya around the alkaline Lake Magadi (Swahili for Soda) at the base of the Nguruman Hills and close to the Kenya-Tanzania border. The collecting locality of this pair was approximately 1°55'S, 36°10'E (Fischer 1884). ZMH 7688 (wrong number) was mentioned as type for this species with two specimens (nos. 720, 882) by Bolau (1898). The collector's number 720 was also wrongly mentioned by Bolau (1898) but correct on the original no. 710 label. Fischer (1884) allocated for his no. 720 a specimen of *Notauges superbus* (Sturnidae), thus collector's number 710 is correct for *Coraphites leucopareia*. ZMB 27022 was inventoried in March 1884 with the note "ex originale".

Further Fischer specimens of this species: ZMB 2000.10272 (no. 93, male, Usukuma, 01.11.1885) and ZMB 2000.10286 (no.186, female, Kagehi, 04.12.1885) were collected in 1885, too late to be types for this species, and they have different localities to those given in the description.

#### Alauda poecilosterna Reichenow, 1879d: 155.

**Now**: *Calendulauda poecilosterna* (Reichenow, 1879). See Mayr & Greenway (1960: 20); White (1961: 27). **Holotype**: ZMB 24270 (Fischer no. 394), skin, male, collected at Kibaradja, 12.11.[1878].

**Type locality**: Kibaradja (Africa orientalis) [Kibaradja, Tana River County, Kenya], from the original description and locality of the holotype.

**Remarks**: In the original description no type was chosen and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Kibaradja" were given. Fischer & Reichenow (1879) mentioned just one specimen for this species (no. 394), with the same measurements as in the description, so ZMB 24270 is regarded as a holotype for this species. Additional Fischer specimens of this species: ZMB 27560 (no. 975, female, "Klein Aruscha", [01.08.]1883) and ZMH 6913 (no. 696, female, "Ebene bei Pare", 02.03.[18]83) were collected in 1883, too late to be types for this species. However, they later formed the type series for *Megalophonus massaicus* G.A. Fischer & Reichenow, 1884a: 55 (as detailed below).

#### Megalophonus massaicus G.A. Fischer & Reichenow, 1884a: 55.

Now: Calendulauda poecilosterna (Reichenow, 1879). See Mayr & Greenway (1960: 21).

Syntype: ZMB 27560 (B 18627, Fischer no. 975), skin, former mount, female, collected at "Klein-Aruscha", 01.08.1883.

Syntype: ZMH 6913 (Fischer no. 696), skin, female, collected at "Ebene bei Pare", 02.03.[18]83.

**Type locality**: "Klein-Arusha" [Arusha Chini, Arusha Region, Tanzania] and plains near the Pare Mountains [plains near South Pare Mts, Kilimanjaro Region, Tanzania], from the original description and localities of the syntypes.

Remarks: In the original description no type was chosen and there were no inventory numbers for specimens provided, but measurements for more than one specimen ("etwa" interpreted as "approximately") and the locality "Klein-Aruscha" were given. Fischer (1884) listed for this species two specimens (nos. 975 and 696). The measurements in the original description are identical with those of ZMH 6913 (except the total length), but Fischer (1884) further wrote that no. 975 has "Oberkopf ausgesprochen grau und zeigt eine Andeutung einer dunkleren Längsstrichelung" [top of the head very grey and a slight...], identical with "Oberkopf grauer" [top of the head very grey] in the original description. As "Klein-Aruscha" is situated on the plains to the west of the Pare Mountains, and as Fischer (1884) stated for both specimens "Ebene am Pare Gebirge" (plains near Pare Mountains), both are regarded as syntypes. ZMH 6913 was not mentioned as type for this species in Bolau (1898), but was referred to as a paratype for *Megalophonus massaica* in the ZMH catalogue.

Fischer collected his first specimen (02.03.1883) close to the South Pare Mountains where he spent one week (1–7 March) at approximately 3°46'S, 37°37'E. He arrived at "Klein-Aruscha" on 14.03.1883. The second specimen (01.08.1883) was collected on his return journey on the plains to the south of "Klein-Aruscha", which are to the west of the North Pare Mountains, at approximately 3°40'S, 37°30'E.

#### Mirafra intercedens Reichenow, 1895: 96.

**Now**: Calendulauda alopex intercedens (Reichenow, 1895). See White (1961: 24); but see also Mayr & Greenway (1960: 16). **Holotype**: ZMB 49.232 (Fischer no. 13), skin, male, collected at Loeru, 05.09.1885.

**Type locality**: "Loeru (Massailand)" [Loeru, Dodoma Region, Tanzania], from the original description and locality of the holotype.

**Remarks**: In the original description no type was chosen and no collecting number was given. However, Reichenow (1895) refers to *Mirafra sabota* (Smith, A.) in Reichenow (1887: 74) and a specimen from the locality "Loeru" of the collector Fischer. As ZMB 49.232 (Fischer no. 13) is the only Fischer specimen of this species from Loeru, it is the holotype for this species.

The East African population of *intercedens* has long been placed within *africanoides* (Smith, A.), contra Ryan et al. (2004) and Hockey et al. (2005) who restrict *africanoides* to southern Africa, and place East African birds within the smaller and more richly colored *Calendulauda alopex* (Sharpe, RB) of Somaliland and the Ogaden region, as do both del Hoyo & Collar (2016) and Gill et al. (2023). However as Alström et al. (2013) had no molecular data to support a sister group relationship between *Calendulauda alopex intercedens* and *C. africanoides austinrobertsi* (White, C.M.N.), treatment of *intercedens* within *africanoides* was maintained by Dickinson & Christidis (2014).

Spilocorydon Reichenow, 1879d: 155. Type by original designation Spilocorydon hypermetrus Reichenow.

Spilocorydon hypermetrus Reichenow, 1879d: 155.

**Now**: *Mirafra hypermetra hypermetra* (Reichenow, 1879). See Mayr & Greenway (1960: 9). **Holotype** (missing): ZMB 24259 (B 15709, Fischer no. 361), male, collected at Kibaradja, [23.10.1878].

**Type locality**: Kibaradja [Kibaradja, Tana River County, Kenya], from the original description and locality of the holotype.

Remarks: In the original description no type was chosen and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Kibaradja" were given. Fischer & Reichenow (1879: 354) listed for this species no. 361 and Kibardja as locality, so this specimen is regarded as the holotype for this species. ZMB 24259 has been known to be lost since at least 1950 when Stresemann and Meise collected information concerning type specimens in the ornithological collection in Berlin. It was probably destroyed during World War II. As ZMB 24259 is a male from Kibaradja and arrived in Berlin in 1879, it is regarded as Fischer no. 361. Fischer (1884) listed additional specimens for *Spilocorydon hypermetrus* with the collecting numbers 765 (ZMB 27490, male, Sigirari, 02.04.1883, now determined as *M. africana athi* Hartert, E.J.O.), 686 (ZMB 27491, male, Pangani 28.02.1883) and 814 (male, "Naiwascha See", 21.05.1883, missing). All these specimens were collected in 1883 and cannot be considered types for this species as they were collected after publication of the original description, and their localities differ from those given in the description.

#### Megalophonus Fischeri Reichenow, 1878 (in Fischer & Reichenow 1878): 266.

**Now**: *Mirafra rufocinnamomea fischeri* (Reichenow, 1878). See Mayr & Greenway (1960: 14). **Holotype**: ZMB 23539 (Fischer no. 120), skin, male, collected at "Rabai (Wanika) bei Mombas", 24.07.1877.

**Type locality**: "Rabai, Mombas, Lamu, Formosabay" and "Wito" as in the original description, ascertained as "Rabai (Wanika) bei Mombas" [Rabai near Mombasa, Kilifi County, Kenya], the locality of the holotype.

**Remarks**: In the original description, no type was explicitly chosen, but one specimen with measurements and collecting number 120 was given. Therefore, ZMB 23539 is the holotype for this species. Fischer & Reichenow (1878) gave further localities ("Mombas, Lamu, Formosabay", Wito) citing them as localities given in Fischer (1878b) as observations. Fischer mentioned that he had observed a new species and already cited the name *Megalophonus Fischeri* in his 1878 article. As only one specimen was collected, the type locality of the holotype is ascertained as

"Rabai (Wanika) bei Mombas" [Rabai near Mombasa, Kilifi County, Kenya]. Although another such specimen is listed in a sales list (Reichenow 1878b), its whereabouts are unknown.

## Macrosphenidae

## Sylviella leucopsis Reichenow, 1879b: 114.

**Now**: *Sylvietta leucopsis* (Reichenow, 1879); but see Mayr et al. (1986: 210); White (1961: 730). **Holotype** (missing): ZMB 24245 (B 15685, Fischer no. 365), male, collected at Kibaradja, [23.10.1878].

**Type locality**: Kibaradja [Kibaradja, Tana River County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for one individual and the locality "Kibaradja" were given. Fischer & Reichenow (1879: 355) listed two specimens for this species, one collected in Kibaradja (collector's number 365) and one collected in Malindi (collector's number 174a). As Reichenow (1879b) gave Kibaradja as type locality, ZMB 24245 (no. 365) is the holotype for this species, whereas no. 174a (ZMB 24246) has no type status [although it later became the type for *Sylviella fischeri* Reichenow, 1900 (see below)]. Neither specimen is now at the ZMB; they were mounted and probably destroyed during World War II.

## Sylviella fischeri Reichenow, 1900a: 22.

**Now**: *Sylvietta whytii minima* (Ogilvie-Grant, 1900). See Mayr et al. (1986: 211). **Holotype** (missing): ZMB 24246 (B 15685, Fischer no. 174a), male, collected at Malindi, [31.05.1878].

**Type locality**: Malindi [Malindi, Kilifi County, Kenya], from the original description as well as locality of the holotype. **Remarks**: In the original description one Fischer specimen from Malindi was mentioned, but was formerly referred to as *Sylviella leucopsis*. The only specimen with such characteristics is ZMB 24246, which is regarded as the holotype. However, it is not now at the ZMB; it was mounted and probably destroyed during World War II. *Sylviella fischeri* Reichenow, 1900 was described in February 1900 and so is a junior synonym to *Sylviella minima* Ogilvie-Grant, 1900, described in January 1900.

#### Cisticolidae

## Tricholais occipitalis G.A. Fischer & Reichenow, 1884b: 181.

Now: *Eremomela scotops scotops* Sundevall, 1850. See White (1962a: 723); but see also Mayr et al. (1986: 201). Syntype: ZMB 27386 (B 18624, Fischer no. 620), skin, former mount, male, collected at Pangani, 25.12.1882. Syntype: ZMH 8325 (Fischer no. 642) skin, former mount, female, collected at Maurui, 14.01.[18]83.

**Type locality**: Pangani [Lower Pangani River, Tanga Region, Tanzania] and Maurui [Maurui, Tanga Region, Tanzania], from the original description as well as localities of the syntypes.

Remarks: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for one individual and the localities "Pangani" and "Maurui" were given. Fischer (1884) listed two specimens for this species, one collected in Pangani (no. 620) and one collected in Maurui (no. 642). Therefore both are syntypes for this species. ZMH 8325 was mentioned as the type specimen in Bolau (1898). Both specimens were collected at the beginning of Fischer's expedition to Masailand and Lake Naivasha. He travelled up the Tanzania coast to Pangani and the mouth of the Pangani River, and then followed the river north passing through the town of Maurui some two weeks later (see Fischer 1885b, c).

#### Euprinodes Golzi G.A. Fischer & Reichenow, 1884b: 182.

**Now**: *Apalis flavida golzi* (G.A. Fischer & Reichenow, 1884). See White (1962a: 702); Mayr et al. (1986: 162). **Holotype**: ZMB 27387 (Fischer no. 956), female, collected at "Gross-Aruscha", 18.07.[18]83.

**Type locality**: "Gross-Aruscha" [Arusha, Arusha Region, Tanzania], from the original description as well as locality of the holotype.

Remarks: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for one individual, the locality "Gross-Aruscha", and the description of a female were given. Fischer (1884) listed one specimen for this species collected in "Gross-Aruscha" with collector's number 956. ZMB 27387 is therefore regarded as the holotype for this species. There is another Fischer specimen (ZMB 2000.32457) with the locality "Massailand". However, this specimen was not listed for this species in Fischer (1884), it is a male, and is not included in the original description, so has no type status. The species name honors the German ornithologist Heinrich Golz (1825–1898).

## Apalis chariessa Reichenow, 1879: 114.

Now: Apalis chariessa chariessa Reichenow, 1879. See White (1962a: 701); Mayr et al. (1986: 160). Syntype: ZMB 24249 (B 15697, Fischer no. 310), male, skin, collected at Mitole, 13.09.1878. Syntype: ZMB 24250 (B 15697, Fischer no. 400), female, skin, collected at Mitole, 19.11.1878.

**Type locality**: Mitole [Mitole, Tana River County, Kenya], from the original description as well as locality of the syntypes.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for more than one individual and the locality "Mitole" were given. Fischer & Reichenow (1879: 354) listed two specimens from Mitole for this species, so both are syntypes. The loss of forest habitat along the lower Tana suggests that this nominate form may now be globally extinct; a specimen was collected in 1961 (https://ebird.org/checklist/S117362807).

## Burnesia melanocephala G.A. Fischer & Reichenow, 1884a: 56.

**Now**: *Apalis melanocephala melanocephala* (G.A. Fischer & Reichenow, 1884). See White (1962a); Mayr et al. (1986: 168). **Holotype**: ZMH 6908 (Fischer no. 1010a), male, skin, former mount, collected at Pangani, [22.08.1883].

**Type locality**: "Pangani (Küstengebiet)" [Lower Pangani River, Tanga Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for one individual and the locality "Pangani (Küstengebiet)" were given. Fischer (1884) listed one specimen for this species with the same measurements as in the original description and the collector's number 1010a. As that is the only Fischer specimen of this species, ZMH 6908 (also mentioned as the type in Bolau 1898) is the holotype for this species.

#### Calamonastes Fischeri Reichenow, 1884a: 57.

Now: Calamonastes simplex (Cabanis, 1878). See Reichenow (1905: 573); White (1962a: 718).

Holotype: ZMH 6907 (Fischer no. 698), skin, former mount, male, collected at "Panganifluß bei Pare", 03.03.[18]83.

Paratype: ZMB 27384 (B 18617, Fischer no. 889), skin, former mount, male, collected at Nguruman, 25.06.[18]83.

Type locality: "Mittellauf des Panganiflusses" [Middle reaches of the Pangani River, Kilimanjaro Region, Tanzania], in the original description, here ascertained as "Panganifluß bei Pare" [Pangani River Valley, near South Pare Mts, Kilimanjaro Region, Tanzania], as the locality of the holotype.

Remarks: In the original description no type was chosen and no inventory numbers for specimens were

provided, but measurements for one individual and the locality "Mittellauf des Panganiflusses" (mid-Pangani River) were given. Fischer (1884) listed two specimens for this species (nos. 698, 889) with the localities Pare and Nguruman. As the measurements given in the original description fit ZMH 6907, which is no. 698 (Fischer 1884) with the same locality as in the description, this specimen is regarded as holotype. ZMB 27384 (no. 889) with the locality Nguruman is regarded as a paratype. ZMH 6907 was also mentioned as the type in Bolau (1898), with the wrong inventory number ZMH 6707 but the correct collector's number. ZMB 27384 was inventoried in March 1884 with the note "ex originale".

#### Camaroptera pileata Reichenow, 1891b: 66.

Now: Camaroptera brachyura pileata (Reichenow, 1891). See White (1962a); Mayr et al. (1986: 186).

Syntype: ZMB 24756 (B 15689, Fischer no. 411), male, former mount, collected on "Sansibar", 02.10.[1878 or 1879].

Syntype (missing): ZMB 18940 (B 6334, von der Decken no. 22), female, former mount (originally in alcohol), collected by C.C. von der Decken on "Sansibar", [23.12.1862].

Type locality: "Sansibar" [Zanzibar, Tanzania], from the original description and locality of the syntypes.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but the description refers to two specimens collected by von der Decken ("Sansibar", 23.12.1862) and Fischer ("Sansibar", 2.10.). Therefore both are regarded as syntypes, but it is unclear whether ZMB 24756 was collected by Fischer himself. Fischer's specimen was listed as *Camaroptera olivacea* Sundevall in Fischer & Reichenow (1879: 354).

## Cisticola nana G.A. Fischer & Reichenow, 1884c: 260.

Now: Cisticola nana G.A. Fischer & Reichenow, 1884. See White (1962a: 675); Mayr et al. (1986: 113).

Holotype: ZMB 27018 (B 18620, Fischer no. 906), skin, former mount, male, collected at "Ngaruka (Massailand)", [07.07.1883].

Type locality: "Ngaruka (Massailand)" [Engaruka, Arusha Region, Tanzania], the locality of the holotype.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for one individual and the locality "Ngaruka (Massailand)" with the date 07.07.1883 were given. Fischer (1884) listed one specimen for this species with the same measurements as in the description and the collector's number 906. Therefore ZMB 27018 is the holotype for this species. ZMB 27018 was inventoried in March 1884 with the note "ex originale".

## Acrocephalidae

## Chloropeta massaica G.A. Fischer & Reichenow, 1884a: 54.

Now: Iduna natalensis massaica (G.A. Fischer & Reichenow, 1884). See Fregin et al. (2009); but see also White (1960: 416); Mayr et al. (1986: 83).

Holotype: ZMH 6910 (Fischer no. 759), male, skin, former mount, collected at "Komboko am Kilima Ndjaro", [31.03.1883].

**Type locality**: "Tschaga (Fuss des Kilimandjaro)" [= Komboko in Chagga (Tchagga) country, Arusha Region/Kilimanjaro Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for one individual and the locality "Tschaga (Fuss des Kilimandjaro)" were given. Fischer (1884) listed one specimen for this species with the same measurements as in the description, the collector's number 759 with "Komboko" as the locality, which was in "Tschaga (Chagga) country", so ZMH 6910 is the holotype. ZMH 6910 was also mentioned as type specimen in Bolau (1898).

## Acrocephalus baeticatus suahelicus Grote, 1926: 145.

Now: Acrocephalus scirpaceus suahelicus (Grote, 1926); but see Mayr et al. (1986: 64).

Holotype: ZMB 48.10 (Fischer no. 497), skin, male, collected on "Sansibar", 05.06.[18]81.

Paratype: ZMB 66.526 (Fischer no. 507), skin, female, collected on "Sansibar", [21.07.1881].

Paratype: ZMB 26048 (B 16822, Fischer no. 453), skin, former mount, female, collected on "Sansibar", 18.06.[1881].

Paratype: ZMB 28068 (Stuhlmann no. 442), skin, male, collected on "Sansibar", 26.11.1888. Paratype: ZMB 28069 (Stuhlmann no. 443), skin, male, collected on "Sansibar", 26.11.1888.

Paratype: ZMB 2000.32544 (B 18999, Fischer no. 501), skin, female, collected on "Sansibar", 13.07.[18]81.

**Type locality**: "Sansibar" [Zanzibar, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: In the original description ZMB 48.10 was chosen as the "Typus" and is therefore the holotype of this species. Grote (1926) commented that he had measured six *Acrocephalus baeticatus* (Vieillot, L.J.P.) from "Sansibar" which were at the ZMB. As the above listed specimens from Zanzibar were available at the ZMB in 1926, these specimens are regarded as paratypes. There are further Fischer skins of juvenile *A. s. suahelicus* from Zanzibar (ZMB 2000.40605, ZMB 2000.40606 and ZMB 2000.40607). However, these are not included as paratypes as they were not explicitly included in the original description.

Taxonomy of the *Acrocephalus scirpaceus/baeticatus* complex remains a subject of much debate. It is regarded as one species *A. scirpaceus* by Dowsett-Lemaire & Dowsett (1987), Dickinson & Christidis (2014) and Gill et al. (2023) while *A. baeticatus* is regarded as a separate species by del Hoyo & Collar (2016).

## Phyllostrephus parvus G.A. Fischer & Reichenow, 1884c: 262.

**Now**: *Acrocephalus gracilirostris parvus* (G.A. Fischer & Reichenow, 1884). See White (1960); Mayr et al. (1986: 75). **Holotype**: ZMB 27398 (B 18651, Fischer no. 841), male, skin, former mount, collected at Murentat, 08.06.[18]83].

**Type locality**: "Murentat (Naiwascha-See)" [Morendat, Nakuru County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description, no type was chosen and no inventory numbers for specimens were provided, but measurements for one specimen and the locality "Murentát (Naiwascha-See)" were given. Fischer (1884) listed one specimen (collector's number 841) for this species with the same data as in the description, so is regarded as the holotype for this species. Fischer & Reichenow (1884c) and Fischer (1884) gave the collecting date for no. 841 as 07.06., but the label indicates 08.06.83. The holotype was collected in papyrus where the Morendat (now Malewa) River enters Lake Naivasha at 0°42'S, 36°25'E on 07 or 08 June 1883.

#### Turdirostris leptorhyncha Reichenow, 1879: 155.

**Now**: *Acrocephalus gracilirostris leptorhynchus* (Reichenow, 1879). See White (1960); Mayr et al. (1986: 75). **Holotype** (missing): ZMB 24269 (B 15996, Fischer no. 405), male, collected at Tchara, Tana River, [09.12.1878].

**Type locality**: Tschara [Tschara, Tana River County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for one individual and the locality "Tschara, Africa orientalis" were given. Fischer & Reichenow (1879: 347) listed one specimen (no. 405) for this species with the same measurements as in the description. As such no. 405 (ZMB 24269) is the holotype, but it is missing. A further specimen of this species (Fischer no. 136) in the Berlin collection (ZMB 2000.32543) was collected at Kagehi on the 18.11.1885 but has no type status, as it was collected after publication of the description.

Tschara was very close to modern-day Kipini in the Tana River Delta area.

#### Hirundinidae

#### Cotyle rufigula G.A. Fischer & Reichenow, 1884a: 53.

**Now**: *Ptyonoprogne rufigula rufigula* (G.A. Fischer & Reichenow, 1884). Nec *Cotyle fuligula* (Lichtenstein, MHC, 1842); see Mayr & Greenway (1960: 104) and remarks below.

**Holotype**: ZMH 6906 (Fischer no. 860), skin, former mount, male, collected at "Naiwascha (Massai)(1500–200 Meter Höhe)", 12.06.[18]83.

**Type locality**: "Naiwascha (Massai) (1500–200 Meter Höhe)" [near Lake Naivasha (elevation 1500–2000m), Nakuru County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen nor were inventory numbers for specimens provided, but measurements for one specimen and the locality "Naiwascha See" were given. Fischer (1884) listed one specimen (no. 860) for this species, so ZMH 6906 is the holotype. The specimen was also mentioned as the type in Bolau (1898).

Fischer & Reichenow (1884a) clearly described the differences of the newly described species from *Cotyle fuligula* (Lichtenstein, MHC, 1842). The species was formerly placed in *Hirundo* and treated as *H. fuligula fusciventris* by White (1961: 62), (*rufigula* being preoccupied by *Hirundo rufigula* Bocage, 1878), but when placed in *Ptyonoprogne* the name *rufigula* is no longer preoccupied, and *Ptyonoprogne fuligula rufigula* is used by many authorities including Mayr & Greenway (1960) and Dickinson & Christidis (2014). Meanwhile del Hoyo & Collar (2016) split the African Rock Martin into two species: the tropical African *P. rufigula* (Red-throated Rock Martin) and the southern African *P. fuligula* (Large Rock Martin).

It is impossible to say where at Naivasha the holotype was collected; as being a bird of cliffs and gorges it would have been unlikely to be found near the lake itself. It is far more likely that it would have been collected close to Hell's Gate National Park (towards Mount Suswa) where it is locally abundant, also on 12 June 1883 Fischer was retreating from the Masai and was south of the lake at approximately 1°05'S, 36°21'E (see Fischer 1885b, c).

## **Pycnonotidae**

#### Andropadus insularis subalaris Reichenow, 1903a: 544.

Now: Andropadus importunus insularis Hartlaub, 1861; but see Mayr & Greenway (1960: 254).

**Syntype**: ZMB 49.34 (Fischer no. 181), skin, female, collected at Malindi, 02.06.[1878]. **Syntype**: ZMB 29657 (Fischer no. 189), skin, male, collected at Malindi, 04.06.[1878].

**Type locality**: Malindi [Malindi, Kilifi County, Kenya], from the original description as well as locality of the syntypes.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, with only the collector Fischer and the locality "Malindi" being mentioned. As no other specimens match the collecting data, the above-listed specimens are syntypes for this species. Both were listed in Fischer & Reichenow (1879: 348) as *Andropadus flavescens*.

## Chlorocichla centralis Reichenow, 1887: 74.

Now: Chlorocichla flaviventris centralis (Reichenow, 1887). See Mayr & Greenway (1960: 262).

Holotype: ZMB 49.46 (Fischer no. 16), skin, female, collected at Loeru, 05.09.[1885].

**Type locality**: Loeru [Loeru, southeast of Kondoa, Dodoma Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: The original description clearly refers to the specimen with Fischer no. 16 collected at Loeru, and measurements for one individual were given. Therefore ZMB 49.46 is the holotype for this species.

Other Fischer specimens of this species in the Berlin collection (ZMB 24278, ZMB 2000.26491, ZMB

2000.26496) were neither collected at Loeru nor included in the original description, so do not belong to the type series.

### Chlorocichla flaviventris mombasae Shelley, 1896: 64.

Now: Chlorocichla flaviventris centralis (Reichenow, 1887). See Mayr & Greenway (1960: 262). **Holotype**: BMNH 1895.5.1.734 (Fischer no. 109), skin, male, collected at "Mombassa", 15.07.1877.

**Type locality**: "Mombasa" [Mombasa Island, Mombasa County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: Shelley (1896) explicitly described the species based on a Mombasa specimen in his private collection before it went to the BMNH. As BMNH 1895.5.1.734 is the only Mombasa specimen of this species at the BMNH, it is the holotype (Warren & Harrison 1971: 361). Fischer & Reichenow (1878b) mentioned it as no. 109 under the name *Criniger flaviventris* (Smith, A).

#### Phyllastrephus capensis suahelicus Reichenow, 1904b: 405.

Now: Phyllastrephus terrestris suahelicus (Reichenow, 1904). See Mayr & Greenway (1960: 264). Syntype: ZMB 27115 (B 18695, Fischer no. 589), mount, collected at Masindi, 08.08.[18]83.

Syntype: ZMB 2000.26585, skin, collected in Usegua, 06.1882. Syntype: ZMB 2000.26586, skin, collected in Usegua, 06.1882 Syntype: ZMB 2000.26587, skin, collected in Usaramo, 01.1882.

Syntype: ZMB 49.39, skin, collected by R. Böhm at Msua, 08.[1880].

**Type locality**: "Ostafrika vom Pangani bis zum Rufiji" (East Africa from Pangani River to Rufiji River), from the original description, ascertained as coastal Tanzania [Tanga Region/Pwani Region, Tanzania], the localities of the syntypes.

**Remarks**: In the original description no type was designated. All the listed specimens are referred to as examined material (characterized by their collecting data) in the description and are thus regarded as syntypes. Sclater (1930: 382) noted under *Phyllastrephus capensis suahelicus* Reichenow, 1904 "type in Berlin from Msua". This cannot be considered the designation of a lectotype (ICZN 1999), as it was not stated that the specimen was selected from the series as given in the original description.

#### Criniger Fischeri Reichenow, 1879c: 139.

**Now**: *Phyllastrephus fischeri* (Reichenow, 1879). See Mayr & Greenway (1960: 270). **Holotype**: ZMB 24253 (B 15699, Fischer no. 322), skin, former mount, male, collected at "Muniuni", 20.09.1878.

**Type locality**: "Muniuni (Ostafrika)" [Munyuni, Tana River County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one individual and the locality "Muniuni" were given. Fischer & Reichenow (1879) mentioned one specimen for this species with no. 322 and the same measurements as in the description, so ZMB 24253 is the holotype. Another Fischer specimen of this species in the Hamburg collection (ZMH 8260) cannot be a type as it was collected at Maurui in 1883.

### Criniger strepitans Reichenow, 1879c: 139.

Now: Phyllastrephus strepitans (Reichenow, 1879). See Mayr & Greenway (1960: 265).

**Syntype**: ZMB 24251 (B 15698, Fischer no. 192), skin, former mount, male, collected at Malindi, 05.06.1878. **Syntype**: ZMB 24252 (B 15698, Fischer no. 191), skin, former mount, male, collected at Malindi, 05.06.1878.

**Type locality**: "Malindi (Ostafrika)" [Malindi, Kilifi County, Kenya], from the original description as well as localities of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one individual and the locality "Malindi" were given. Fischer & Reichenow (1879) mentioned two specimens with nos. 191 & 192 for this species, and so both are regarded as syntypes. Another Fischer specimen of this species in the Hamburg collection (ZMH 8259, Fischer no. 786) cannot be included in the type series as it was collected at Nguruman in 1883.

### Xenocichla tenuirostris G.A. Fischer & Reichenow, 1884c: 262.

Now: Phyllastrephus flavostriatus tenuirostris (G.A. Fischer & Reichenow, 1884). See Mayr & Greenway (1960: 267).

Syntype: ZMB 49.48 (Fischer no. 589), skin, collected at Lindi, 04.1882. Syntype: ZMB 49.49 (Fischer no. 588), skin, collected at Lindi, 04.1882.

**Type locality**: Lindi [Lindi, Lindi Region, Tanzania], from the original description as well as localities of the syntypes.

**Remarks**: The original description refers to Fischer nos. 588 & 589, collected at Lindi. Therefore, the above-listed specimens, probably collected for Fischer, are syntypes for this species.

## Zosteropidae

## Zosterops eurycricotus G.A. Fischer & Reichenow, 1884a: 55.

**Now**: *Zosterops eurycricotus* G.A. Fischer & Reichenow, 1884a. See Martins et al. (2020); but see also Greenway et al. (1967: 332).

**Holotype**: ZMH 6909 (Fischer no. 941), skin, former mount, female, collected at "Groß Aruscha" [Arusha, Arusha Region, Tanzania], 17.07.[18]83.

Type locality: "am Fuss des Maeru-Berg (Massai)" [near Mt Meru, Arusha Region, Tanzania], from the original description, here ascertained as "Groß Aruscha" [Arusha, Arusha Region, Tanzania], the locality of the holotype.

**Remarks**: In the original description no type was chosen and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "am Fuss des Maeru-Berg (Massai)" were given. The town of "Groß Aruscha" is situated at the base of Mount Meru. As Fischer (1884) listed only one specimen for this species (no. 941), ZMH 6909 is regarded as the holotype. It was also mentioned as the type specimen in Bolau (1898).

#### Leiothrichidae

### Argya mentalis Reichenow, 1887: 75.

Now: Argya aylmeri mentalis (Reichenow, 1887). See Deignan et al. (1964: 336).

Holotype: ZMB 29667 (Fischer no. 47), skin, female, collected at "Soboro", 30.09.[1885].

**Type locality**: "Soboro" [Zoboro, Singida Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: The original description clearly referred to no. 47 collected at "Soboro" and included measurements for one individual. Therefore, ZMB 29667 is the holotype for this species.

#### Crateropus squamulatus Shelley, 1884: 45.

Now: Turdoides squamulata squamulata (Shelley, 1884). See Deignan et al. (1964: 344).

Holotype: BMNH 1895.5.1.1328 (Fischer no. 104), skin, male, collected at "Mombassa", 23.07.1877.

**Type locality**: "Mombasa" [Mombasa Island, Mombasa County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description BMNH 1895.5.1.1328 was chosen as the type specimen and is therefore the holotype. The specimen, which belonged to the private collection of Captain Shelley before being incorporated into the BMNH collection (Warren & Harrison 1971: 525), is identified from its collection data. The collector's number was added following Fischer & Reichenow (1878b) where the specimen was listed under the name *Crateropus kirkii* (Sharpe, RB).

#### Crateropus hypoleucus rufuensis Neumann, 1906: 148.

Now: Turdoides hypoleuca rufuensis (Neumann, 1906). See Deignan et al. (1964: 346).

Holotype: ZMB 29701 (Fischer no. 2), skin, male, collected in "Usegua", 28.08.1885.

Paratype: ZMB 2000.64508, skin, male, juvenile, collected by L. von Trotha at "Kiboscho (Kilima Ndscharo)", 17.03.1896.

Type locality: "Usegua" [Useguha country, Tanga Region, Tanzania], the locality of the holotype.

**Remarks**: In the original description ZMB 29701 was chosen as the type specimen and is therefore the holotype for this subspecies. Neumann (1906) also mentioned another specimen collected by von Trotha that he had examined (ZMB 2000.64508). He gave the distribution as "Gebiet des oberen Rufu (Pangani) von Kiboscho am Kilima Ndscharo bis nach Usegua" (Area of the upper Rufu (Pangani) River from Kiboscho at Kilimanjaro to Usegua).

#### Sturnidae

Speculipastor Reichenow, 1879a: 107–108. Type, by original designation, Speculipastor bicolor Reichenow.

Speculipastor bicolor Reichenow, 1879a: 107-108.

Now: Speculipastor bicolor Reichenow, 1879. See Amadon et al. (1962b: 99).

Syntype (missing): ZMB 24261 (B 15711, Fischer no. 238), male, collected at Kipini, [11.07.1878].

Syntype: ZMB 24262 (B 15711, Fischer no. 240), skin, former mount, female, collected at Kipini, 11.07.1878.

**Syntype** (missing): Fischer no. 239, female, collected at Kipini, [11.07.1878].

**Type locality**: "Kipini (Ost-Africa)" [Kipini, Tana River County, Kenya], from the original description as well as locality of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for more than one specimen, descriptions for both sexes, and the locality "Kipini (Ost-Africa)" were given. Fischer & Reichenow (1879) listed three specimens (nos. 238, 239, 240) for this species, and thus all three are syntypes. The missing no. 239 was not inventoried in Berlin. The other two were mounted in 1879–1880, and ZMB 24261was probably destroyed along with other mounts in World War II.

Cosmopsarus Reichenow, 1879a: 107–108. Type, by original designation Cosmopsarus regius Reichenow, 1879.

Cosmopsarus regius Reichenow, 1879a: 107-108.

Now: Lamprotornis regius (Reichenow, 1879). See Amadon et al. (1962: 102).

Holotype: ZMB 24260 (Fischer no. 373), skin, male, collected at "Massa", 02.11.1878.

**Type locality**: "Massa" [Masabubu, Tana River County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Massa" were given. Fischer & Reichenow (1879)

listed one specimen (no. 373) for this species, and with no other Fischer specimen of this species, ZMB 24260 is the holotype.

### Notauges Fischeri Reichenow, 1884a: 54.

Now: Lamprotornis fischeri (Reichenow, 1884). See Amadon et al. (1962: 100).

**Holotype**: ZMH 6915 (Fischer no. 985), skin, female, collected on "Ebene bei Pare" (plains near the Pare Mountains), 04.08.[18]83.

**Type locality**: "Ebene bei Pare" [plains near South Pare Mts, Kilimanjaro Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Ebene bei Pare" (plains near the Pare Mountains) were given. Fischer (1884) noted that he collected only one specimen (no. 985), and as there is no other Fischer specimen of this species, ZMH 6915 is the holotype. The specimen was mentioned as the type in Bolau (1898), but with the wrong collecting date. Fischer collected this specimen on his return to the coast, and on that date he would have been near what is now the town of Mkomazi (north of Mazinde), at approximately 4°38'S, 38°05'E.

#### **Turdidae**

**Pseudocossyphus G.A. Fischer & Reichenow**, **1884a: 58.** Type, by original designation *Pseudocossyphus rufus* G.A. Fischer & Reichenow.

## Pseudocossyphus rufus G.A. Fischer & Reichenow, 1884a: 58.

Now: Neocossyphus rufus rufus (G.A. Fischer & Reichenow, 1884). See Deignan et al. (1964: 95).

Syntype: ZMB 27382 (B 18606, Fischer no. 1002), skin, former mount, female, collected at Pangani, 23.08.[18]83.

Syntype: ZMH 6914 (Fischer no. 991), skin, former mount, male, collected at Pangani, 15.08.[18]83.

**Type locality**: "Pangani (Küstengebiet)" [Pangani River, Tanga Region, Tanzania], from the original description as well as locality of the syntypes.

**Remarks**: In the original description no type was chosen, there were no inventory numbers for specimens provided, but measurements for one individual and the locality "Pangani (Küstengebiet)" were given. As Fischer (1884) listed two specimens for this species (nos. 991 and 1002) together with the locality Pangani and with the description fitting both specimens, both are regarded as syntypes. ZMH 6914 (no. 991) was also given as the type in Bolau (1898). In the accompanying documentation it was marked as a "Lektotype" without further comment, but we were unable to find a lectotype designation. ZMB 27382 was inventoried in March 1884 with the note "ex originale".

### Turdus guttatus fischeri Hellmayr, 1901: 54.

Now: Geokichla guttata fischeri (Hellmayr, 1901). See Deignan et al. (1964: 154); Prigogine (1985).

Holotype: ZMH 8395 (Fischer no. 1005), skin, former mount, female, collected at Pangani, 21.08.[18]83.

Paratype (missing): ZMB 24272 (B 15682, Fischer no. 266), male, collected at Kipini, [28.07.1878].

Paratype (missing): Fischer no. 265, female, collected at Kipini, [28.05.1878].

Type locality: Pangani [Pangani River Valley, Tanga Region, Tanzania], the locality of the holotype.

**Remarks**: In the original description ZMH 8395 was mentioned as type specimen with an inventory number referring to the holotype. Hellmayr (1901) examined ZMH 8395, which was available to him, but also included in the new species all Fischer specimens collected at Kipini on the basis of their measurements. Therefore, the other

two specimens are regarded as paratypes. Fischer & Reichenow (1879) listed under the name *Turdus guttatus* two specimens from Kipini (Fischer nos. 265, 266). Only one of them (now missing) was inventoried in the Berlin collection as ZMB 24272, while the whereabouts of no. 265 are also unknown, and there are no further Fischer specimens of this subspecies (Fischer 1884; Reichenow 1887).

Concerning the distribution Hellmayr (1901) wrote: "Unsere Form wurde bisher bloss von Kipini (Formosa Bai), dann in der Küstenregion zwischen Mombas und dem Tanafluss, sowie am Pangani beobachtet." (this form was only observed at Kipini (Formosa Bay), in the coastal region between Mombasa and the River Tana as well as at the River Pangani).

# Muscicapidae

## Thamnobia quadrivirgata Reichenow, 1879b: 114.

Now: Tychaedon quadrivirgata quadrivirgata (Reichenow, 1879). See Deignan et al. (1964: 25).

Syntype: ZMB 24247 (B 15686, Fischer no. 267), skin, former mount, male, collected at Kipini, 28.07.[1878].

Syntype (missing): Fischer no. 263, male, collected at Kipini, [27.07.1878].

**Type locality**: "Kipini (Ostafrica)" [Kipini, Tana River County, Kenya], from the original description as well as locality of the syntypes.

**Remarks**: In the original description measurements for more than one specimen and the locality "Kipini (Ostafrica)" were given. Fischer & Reichenow (1879) listed two specimens (nos. 263, 267) from Kipini for this species, so both are regarded as syntypes. The whereabouts of specimen no. 263 are unknown. It was neither inventoried in Berlin nor mentioned in Bolau (1898) as the type for the ZMH, but such a specimen was listed as type specimen in a sales list (Reichenow 1878b).

#### Aëdon psammochroa Reichenow, 1879c: 139.

**Now**: Cercotrichas galactotes (Temminck, 1820), subspecies uncertain. See Reichenow (1905: 656); Jackson & Sclater (1938: 1020).

Holotype: ZMB 24248 (B 15687, Fischer no. 386), skin, former mount, female, juvenile, collected at "Massa", 05.11.[18]78.

**Type locality**: "Massa (Ostafrika)" [Masabubu, Tana River County, Kenya], from the original description as well as locality of the holotype.

Remarks: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Massa" were given. As there is only one Fischer specimen for this species in the ZMB and ZMH collections and only one was mentioned by Fischer & Reichenow (1879: 355) with no. 386 for this species, ZMB 24248 (marked as the type specimen in the collection catalogue) is regarded as the holotype. Reichenow (1905: 656) considered *Aedon psammochroa* a race of *Agrobates familiaris* (Ménétriés), while Jackson & Sclater (1938) referred to this specimen as being synonymous with *Agrobates galactotes syriacus* (Hemprich & Ehrenberg), following Meinertzhagen (1922). [See footnote in Sclater 1930: 498.] Two subspecies of *Cercotrichas galactotes (familiaris* and *syriacus*) winter in East Africa, but subspecific assignment of the holotype (a juvenile female) was not possible.

# Erythropygia vulpina Reichenow, 1891b: 62.

Now: Cercotrichas leucophrys vulpina (Reichenow, 1891). See Deignan et al. (1964: 20).

Syntype: ZMB 27511 (B 18616, Fischer no. 697), skin, former mount, male, collected at Pare (Pare Mountains), 03.03.[18]83. Syntype: ZMB 24830 (B 14857, Hildebrandt no. 195), skin, former mount, male, collected by J.M. Hildebrandt at Ndi, Teita, 07.[18]77.

**Type locality**: "Ndi in Teita" [Ndi, Teita-Taveta County, Kenya] and "Pare Gebirge" [South Pare Mts, Kilimanjaro Region, Tanzania], from the original description as well as localities of the syntypes.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, though the localities "Ndi in Teita" and "Pare Gebirge" together with the names of the collectors were given. As there are no other specimens of this species with that combination of locality and collector, ZMB 27511 and ZMB 24830 are syntypes for this species. Deignan et al. (1964: 20) gave as locality for this species "Ndi in Teita".

## Erythropygia brunneiceps Reichenow, 1891b: 63.

Now: Cercotrichas leucophrys brunneiceps (Reichenow, 1891). See Deignan et al. (1964: 20).

Holotype: ZMB 27016 (B 18615, Fischer no. 800), skin, former mount, female, collected on the "Waso nyiro", 28.04.[18]83.

**Type locality**: "Waso nyiro" [Uaso Nyiro River, Southern Uaso Nyiro Valley, near the Nguruman Escarpment, Kajiado County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but the locality Nguruman was given. Fischer (1884) listed two females of this species from Nguruman (nos. 777, 800). Of these, only no. 800 was inventoried and is now in the collection (there is no trace of no. 777); evidently only ZMB 27016 was in the collection in 1891, so is regarded as the holotype for this species. On the collecting date, Fischer was travelling along the Southern Uaso Nyiro Valley at the base of the Nguruman Escarpment on his way north to Lake Naivasha.

## Erythropygia brunneiceps soror Reichenow, 1904a: 95.

**Now**: *Cercotrichas leucophrys brunneiceps* (Reichenow, 1891); but see White (1962a); Deignan et al. (1964: 20). **Holotype**: ZMB 2000.2489 (Fischer no. 737), skin, male, collected at "Klein Aruscha", 26.03.[18]83.

**Type locality**: "Klein Aruscha" [Arusha Chini, Arusha Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: In the original description, no type was chosen and there were no inventory numbers for specimens provided, but measurements for more than one individual as well as the locality "Klein Aruscha" and the collector Fischer were given. Fischer (1884) listed only one specimen of *Erythropygia leucoptera* (Rüppell) from "Klein-Aruscha" (no. 737). As only this Fischer specimen of this subspecies from "Klein Aruscha" was inventoried, and no other specimen can be traced in the collection (neither presently nor in the catalogues), it would appear that only ZMB 2000.2489 (which matches the characteristics in the original description) was in the collection in 1904. Therefore it is regarded as the holotype for this subspecies, despite measurements for more than one individual having been given.

Reichenow (1905) listed many more specimens of *Erythropygia brunneiceps soror* from the following collectors: Fischer (ZMB 27016, ZMB 2000.2482, ZMB 2000.2485, ZMB 2000.2497, ZMB Fischer no. 626); Emin Pasha (ZMB 30398); Schnorrenpfeil (ZMB 2000.2498); Stuhlmann (ZMB 2000.2483, ZMB 2000.2486); Fülleborn (ZMB 2000.2495, ZMB 2000.2496); Whyte (ZMB 31163). As they were not all mentioned in Reichenow (1904a), they are not regarded as types but may be regarded as possible paratypes.

The holotype was collected only three weeks after Fischer collected *Erythropygia vulpina* (see above) at the base of the South Pare Mountains, highlighting some of the problems surrounding the entire *Cercotrichas leucophrys* (Vieillot) complex. Deignan et al. (1964) merely followed White (1962a) in synonymizing *Erythropygia leucophrys soror* with *E. l. zambesiana* (Sharpe).

#### Erythropygia ruficauda iodomera Grote, 1927: 104.

Now: Cercotrichas leucophrys zambesiana (Sharpe, 1882). See Deignan et al. (1964: 20).

Holotype: ZMB 2000.2482 (Fischer no. 601), skin, male, collected in "Usegua", 06.[18]82.

Paratype: ZMB 2000.2497 (Fischer no. 579), skin, collected at Lindi, 04.[18]82.

Paratype: ZMB 2000.2486 (Stuhlmann no. 908/2), skin, male, collected by F. Stuhlmann at Pangani, [1888–1890].

Paratype: ZMB 2000.2498 (Schnorrenpfeil no. 15), skin, collected by Karl Schnorrenpfeil at Lindi, [04.1895–08.1897].

Type locality: Usegua [Useguha country, Tanga Region, Tanzania], the locality of the holotype.

**Remarks**: The original description clearly refers to the specimen with Fischer's collection number 601, so ZMB 2000.2482 is the holotype. Grote (1927) noted that he had seen nine specimens and found this subspecies "die ganze ostafrikanische Küste mindestens von Pangani an bis Lindi" (along the whole East African coast at least between Pangani and Lindi); those listed as paratypes match that distribution, and are labeled *Erythropygia ruficauda iodomera*. Although this name is also mentioned on ZMB 2000.2484 (Pangawe, 1911, Karl Hofmann) and ZMB 2000.2485 (Maurui, 1883, Fischer), neither of these localities are coastal and therefore the specimens are not included in the type series. It is unclear what other specimens Grote (1927) included in his new subspecies.

#### Alseonax murina G.A. Fischer & Reichenow, 1884a: 54.

Now: Muscicapa adusta murina (G.A. Fischer & Reichenow, 1884). See Mayr et al. (1986: 328).

Syntype: ZMB 27438 (B 18662, Fischer no. 930), skin, former mount, female, collected at "Gross-Aruscha", 15.07.[18]83.

Syntype: ZMH 6911 (Fischer no. 925), skin, former mount, female, collected at "Gross-Aruscha", [14.07.1883].

**Type locality**: "Maeru Berg (Massai)" [Mt Meru, Arusha Region, Tanzania], from the original description as well as locality of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Maeru-Berg, Massai" were given. Fischer (1884) listed two specimens (nos. 925, 930) from "Groß-Aruscha" for this species. As both specimens from "Groß Aruscha" were collected near Mount Meru (no specimens of this species are traceable from Mount Meru itself), ZMH 6911 and ZMB 27438 are regarded as syntypes. ZMH 6911 was also listed as the type in Bolau (1898). ZMB 27438 was inventoried in March 1884 with the note "ex originale".

#### Bradyornis microrhyncha Reichenow, 1887: 62.

**Now**: *Bradornis microrhynchus microrhynchus* Reichenow, 1887. See Mayr et al. (1986: 302). **Holotype**: ZMB 2000.32625 (B 20105, Fischer no. 28), skin, male, collected at Irangi, 16.09.[1885].

**Type locality**: Irangi [Irangi, Dodoma Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: The original description clearly refers to one specimen, no. 28. As no further specimen was mentioned, ZMB 2000.32625 is the holotype for this species.

Dioptrornis Reichenow, 1884a: 53. Type, by original designation Dioptrornis Fischeri Reichenow.

## Dioptrornis Fischeri Reichenow, 1884a: 53.

Now: Melaenornis fischeri fischeri (Reichenow, 1884). See Mayr et al. (1986: 303).

Syntype: ZMB 27025 (B 18661, Fischer no. 912), skin, former mount, female, collected at "Groß Aruscha", 10.07.[18]83.

Syntype: ZMH 6916 (Fischer no. 931), skin, former mount, male, collected at "Gr[oß] Aruscha", [15.07.]1883.

**Type locality**: "Maeru Berg (Massai)" [Mt Meru, Arusha Region, Tanzania], from the original description as well as locality of the syntypes.

Remarks: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Maeru-Berg, Massai" were given. Fischer (1884) listed four (nos. 912, 931, 826, 820) from "Groß-Aruscha" and "Naiwascha" for this species. As the description matches both sexes, and with both specimens from "Groß Aruscha" collected near Mount Meru (no specimens of this species are traceable from Mount Meru itself), ZMH 6916 and ZMB 27025 are regarded as syntypes for this species. The juvenile specimens Fischer nos. 826 [see Fischer 1884; ZMB 27437 (female, "Naiwascha", 27.05.1883), no. 820 (see Fischer 1884), and possibly ZMH 8406 ("Naiwascha", 1883)] were all collected at Lake

Naivasha and are therefore not regarded as syntypes. Bolau (1898) incorrectly listed ZMH 6919 and ZMH 8406 as the type specimens.

### Tarsiger orientalis G.A. Fischer & Reichenow, 1884a: 57.

**Now**: *Pogonocichla stellata orientalis* (G.A. Fischer & Reichenow, 1884). See Deignan et al. (1964: 31). **Holotype**: ZMH 6905 (Fischer no. 1004), skin, male, collected at "Pangani (Küstengebiet)", [21.08.1883].

**Type locality**: Pangani [Pangani, Tanga Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Pangani (Küstengebiet)" were given. Fischer (1884) listed only one specimen (no. 1004) for this species, and as there are no other Fischer specimens of this species, ZMH 6905 (also listed as type in Bolau 1898) is the holotype.

#### Lusciola africana G.A. Fischer & Reichenow, 1884b: 182.

**Now**: *Luscinia megarhynchos africana* (G.A. Fischer & Reichenow, 1884). See Deignan et al. (1964: 41). **Holotype**: ZMB 27015 (B 18604, Fischer no. 716), skin, former mount, [male], collected at "Klein-Aruscha", 16.03.[18]83.

**Type locality**: "Klein-Aruscha am Kilimandjaro" [Arusha Chini, Arusha Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Klein-Aruscha am Kilimandjaro" were given. As Fischer (1884) listed only one specimen for this species (no. 716), ZMB 27015 is the holotype. The inventory number was not mentioned on the museum label, but it was labelled as the type specimen. Although noted as missing in the catalogue around 1950, it seems to be the only Fischer specimen of this species, so must be the type.

#### Thamnolaea subrufipennis Reichenow, 1887: 78.

Now: Thamnolaea cinnamomeiventris subrufipennis (Reichenow, 1887). See Deignan et al. (1964: 120).

Syntype: ZMB 28415 (Fischer no. 64), skin, male, collected "auf dem Weg nach Ussure" [on the way to Ussure], 12.10.[1885].

Syntype: ZMB 28416 (Fischer no. 95), skin, female, collected in "Magala-Steppe, Usukuma", 04.11.[1885].

Syntype (missing): Fischer no. 222, female, collected in "Schasche", [25.01.1886].

**Type locality**: Ussure [Ussure, Singida Region, Tanzania], Usukuma [Usukuma country, Mwanza Region, Tanzania] and Schasche [Mt Schasche, Mara Region, Tanzania], from the original description as well as localities of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen were given. Three specimens mentioned in Fischer (1884) (nos. 64, 95, 222) are regarded as syntypes. The whereabouts of no. 222 are unknown, and it was not listed in the ZMB catalogues. There is however a further Fischer specimen of that species (ZMB 27566, no. 677, female, Maurui, 03.02.1883), which was originally identified as *Thamnolaea albiscapulata* (Rüppell), but is not regarded as a type specimen for *T. subrufipennis*.

### Myrmecocichla leucolaema G.A. Fischer & Reichenow, 1880b: 181.

**Now**: *Myrmecocichla arnotti leucolaema* (G.A. Fischer & Reichenow, 1880). See Deignan et al. (1964: 117). **Holotype** (missing): one specimen collected in "Nguru-Berge" (Nguru Mountains).

**Type locality**: "Nguru-Berge" [Nguru Mts, Morogoro Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Nguru-Berge" (Nguru Mountains.) were given. The whereabouts of this specimen are unknown. It was probably collected for Fischer, as it was cited by him (Fischer 1885: 142), but it was never integrated into the ZMB and ZMH collections. A different specimen, ZMB 27325 [collected by Böhm from Yangzeange (in Usagara) in 1880], is incorrectly labelled as a type for this species, although it does match the morphological characteristics in the description.

#### Saxicola Schalowi G.A. Fischer & Reichenow, 1884a: 57.

Now: *Oenanthe lugens schalowi* (G.A. Fischer & Reichenow, 1884). See Deignan et al. (1964: 128). Syntype: ZMB 27383 (B 18610, Fischer nos, 848?), skin, male, collected at "Naiwaschasee", 09.06.[18]83. Syntype: ZMH 6912 (Fischer no. 834a), skin, former mount, male, collected at "Naiwascha", 04.06.[18]83.

**Type locality**: "Naiwascha-See (Massai)" [Lake Naivasha, Nakuru County, Kenya], from the original description as well as locality of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Naiwascha See" were given. As Fischer (1884) mentioned two specimens for this species, both are regarded as syntypes. Specimen ZMH 6912 is marked as a type specimen on the label. Bolau (1898) was unable to explain the discrepancy between no. 834 (Fischer 1884) and no. 834a (on label). However in Fischer (1884), no. 834 is also given for a specimen of *Cisticola haematocephala* Cabanis which would explain why Fischer added the "a" to distinguish them. ZMB 27383 was inventoried in March 1884 with the note "ex originale". It may also be the one mentioned in Fischer (1884) as no. 848. The species name honors the German ornithologist Herman Schalow (1852–1925).

#### Nectariniidae

### Cinnyris Fischeri Reichenow, 1880a (in Fischer & Reichenow 1880): 142.

Now: Cyanomitra verreauxii fischeri (Reichenow, 1880). See Greenway et al. (1967: 228).

**Holotype** (missing): ZMB 24982 [B 16566, Fischer no. 224], former mount, male, collected on "Mossambique Island", [May 1879].

**Type locality**: "Mossambique Island" [Mozambique Island, Nampula Province, Mozambique] from the original description as well as locality of the holotype.

Remarks: The original description clearly refers to one specimen (no. 224) collected for Fischer at "Mossambique" in May 1879, so ZMB 24892 is the holotype for this species. The specimen was inventoried at the ZMB in January 1881 and was mounted, and in the catalogue it was mentioned that it is the type for *Cinnyris Fischeri* in 1881. In the 1950s, however, it was noted that the mounted holotype was missing, suggesting it was destroyed during World War II. A further Fischer specimen of this species, ZMB 27396 (B 18647, no. 1002, also missing), male mount, collected in Pangani, [21.08.1883] arrived in Berlin during March 1884, but has no type status. It is unlikely that Fischer went to northeast Mozambique in May 1879, as he was on Zanzibar on 18 May and at Bagamoyo on 01 June 1879 (possibly returning from the Nguru Mountains). It is however possible that the Denhardt brothers went in their boat south to Mozambique Island during May 1879 and brought back the three birds for Fischer that we know came from the island.

**Drepanorhynchus G.A. Fischer & Reichenow**, **1884a**: **56.** Type, by original designation *Drepanorhynchus Reichenowi* G.A. Fischer.

## Drepanorhynchus Reichenowi G.A. Fischer, 1884 (in Fischer & Reichenow 1884a): 56.

Now: Drepanorhynchus reichenowi reichenowi G.A. Fischer, 1884. See Greenway et al. (1967: 270).

Holotype: ZMH 6903 [Fischer no. 861], skin, former mount, male, collected at "Naiwascha", 12.06.[1883].

Paratype (missing): ZMB 27397 [B 18648, Fischer no. 853], male, juvenile, collected at "Naiwascha", 11.06.[18]83.

**Type locality**: "Naiwascha-See (Massai)" [south of Lake Naivasha, Nakuru County, Kenya], from the original description as well as locality of the holotype (see comment below).

Remarks: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Naiwascha" were given. Fischer (1884) listed two males collected at the same locality and on the same date, one (no. 853) a juvenile. He gave the same description as in Fischer & Reichenow (1884a) for the "Typus", which refers to the adult specimen no. 861. For the juvenile no. 853, Fischer (1884) described the coloration in detail, but this is distinctly different to that given in the species description. Therefore ZMH 6903 (also mentioned as type specimen for this species in Bolau 1898) is regarded as the holotype for this species and ZMB 27397 as a paratype. ZMB 27397 was itself inventoried with the note "ex originale" at the ZMB in March 1884 and was mounted. In the catalogue is a note that it was missing in the 1950s, suggesting it was among those destroyed during World War II.

Fischer (1884) wrote "Die meisten der erlegten Exemplare befanden sich in der Mauser" [Most of the collected specimens were in moult], however the whereabouts of those specimens are unknown. At Naivasha Fischer camped close to the Morendat River (around 0°45'S, 36°25'E) for some time, and at this time of the year this sunbird is common in the Rift Valley feeding on flowers.

However on the collection dates of 11–12 June 1883, Fischer was closer to Mount Suswa than to Lake Naivasha. He passed through what is now Hell's Gate National Park to the Mount Suswa side and then south to the Nguruman Escarpment area (see Fischer 1885b, c), thus making the collection area approximately 01°10'S, 36°20'E.

#### Nectarinia melanogastra G.A. Fischer & Reichenow, 1884b: 181.

Now: Cinnyris melanogastrus (G.A. Fischer & Reichenow, 1884); but see Greenway et al. (1967: 266).

Holotype (missing): ZMB 27394 [B 18646, Fischer no. 782], male, collected at Nguruman, [21.04.1883].

Paratype (missing): ZMB 27395 [B 18646, Fischer no. 783], [juvenile male or female] collected at Nguruman, [21.04.1883].

Possible Paratype: AMNH 690932, male, collected at Nguruman, 04.[18]83.

**Type locality**: Nguruman [near the base of the Nguruman Escarpment, Kajiado County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but one specimen and the locality Nguruman were given. Fischer (1884) listed two male specimens collected at the same locality and date for this species. One of them (no. 783) is a juvenile, and neither publication gives any information about the coloration of the specimen. Therefore, ZMB 27394 is regarded as the holotype for this species. ZMB 27395 was listed as a juvenile male in Fischer (1884), but as a female in the catalogue. However, as it was treated as *Nectarinia melanogastra* by Fischer (1884), the specimen is regarded as a paratype. A further specimen of *N. melanogastra* is housed in the AMNH (AMNH 690932). This specimen has a collector's label very similar to those of Fischer found at the ZMB and ZMH, but not identical. The specimen may have been part of Fischer's private collection (see Reichenow 1878b), and as with the Rothschild collection, it also reached the AMNH. As on the collector's label the name *N. melanogastra* as well as the locality Nguruman and date "April 83" is mentioned, the specimen is regarded as a further (now the only available) paratype for this species although it is not mentioned in the published documentation (Fischer & Reichenow 1884b; Fischer 1884) as well as in LeCroy (2010).

Both ZMB 27394 and ZMB 27395 were inventoried at the ZMB in March 1884 and were mounted. In the catalogue it was noted that during the 1950s ZMB 27394 was missing, suggesting that it was destroyed during World War II along with many other mounts in the ornithological collection. The whereabouts of the paratype (ZMB 27395) is unknown, and it seems probable that it was also destroyed during World War II.

On 21 April 1883, Fischer was approaching the foot of the Nguruman Escarpment (on his way to Naivasha) and was in Masailand at c. 2°05'S, 36°15'E.

## Cinnyris Falkensteini G.A. Fischer & Reichenow, 1884a: 56.

**Now**: *Cinnyris venustus falkensteini* G.A. Fischer & Reichenow, 1884a. See Greenway et al. (1967: 250). **Holotype**: ZMH 6904 [Fischer no. 852], male, skin, former mount, collected at "Naiwascha", 10.06.[18]83.

**Type locality**: "Naiwascha-See (Massai)" [Lake Naivasha, Nakuru County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Naiwascha-See (Massai)" were given. Fischer (1884) listed only one specimen for this species, and so ZMH 6904 is regarded as the holotype. It was also mentioned as the type in Bolau (1898). The species name honors the German collector Julius Falkenstein (1842–1917).

#### Ploceidae

Histurgops Reichenow, 1887: 67. Type, by original designation Histurgops ruficauda Reichenow.

#### Histurgops ruficauda Reichenow, 1887: 67.

Now: Histurgops ruficauda Reichenow, 1887. See Amadon et al. (1962: 6).

Syntype: ZMB 30733 (B 20123, Fischer no. 76), skin, male, collected in "Wembere Ebene", 24.10.[18]85.

Syntype (missing): Fischer no. 217, collected at "Ruwana-Fluß (Ruwana River), 22.01.1886.

Type locality: "Wembaere" [Wembere steppe, Singida Region, Tanzania] and "Ruwana-Fluß" [Ruwana River, Mara Region, Tanzania], from the original description as well as localities of the syntypes.

**Remarks**: In the original description no type was chosen, but two specimens (nos. 76, 217), their localities "Wembaere" and "Ruwana-Fluß", and dates were given, so the above-listed specimens are regarded as syntypes. However, all ZMB catalogues list just one specimen of this species collected by Fischer on his 1885–1886 expedition, ZMB 30733. The whereabouts of syntype Fischer no. 217 is unknown. The Ruwana River flows into Speke Gulf in the southeastern corner of Lake Victoria (near Bunda) at approximately 2° 07'S, 33°48'E (from Polhill 1988).

### Nigrita dorsalis Reichenow, 1887: 71.

Now: Pseudonigrita arnaudi dorsalis (Reichenow, 1887). See Amadon et al. (1962: 7). **Holotype**: ZMB 30705 (Fischer no. 75), skin, male, collected in "Wembaere", 24.10.[1885].

**Type locality**: "Wembaere" [Wembere steppe, Singida Region, Tanzania], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the information that the species was collected in the "Wembaere Steppe" on 24 October were given. An additional locality "Speke am Nassa Golf" (Speke Gulf) was mentioned in Fischer's diaries. As no other known Fischer specimens of this species from the Wembere Steppe would have been available to Reichenow in the Berlin collection, ZMB 30705 is regarded as holotype.

Fischer collected a number of specimens while crossing the Wembere floodplain in October 1885. His position on 24 October was approximately 4°30'S, 34°10'E.

## Nigrita Cabanisi G.A. Fischer & Reichenow, 1884a: 54.

Now: Pseudonigrita cabanisi (G.A. Fischer & Reichenow, 1884a). See Amadon et al. (1962: 7).

Syntype: ZMB 27391 (B 18642, Fischer no. 973), skin, former mount, female, collected near the Pare Mountains, 28.07.[18]83.

Syntype: ZMH 6877 (Fischer no. 690), skin, female, collected at the Pangani River near Pare, 01.03[18]83.

**Type locality**: "Ebene am Pare-Gebirge" [plains near South Pare Mts, Kilimanjaro Region, Tanzania], from the original description as well as locality of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Ebene am Pare-Gebirge" (plains near the Pare Mountains) were given. As two specimens were listed in Fischer (1884), both (nos. 690 and 973) are regarded as syntypes. ZMH 6877 was mentioned as the type specimen for this species in Bolau (1898). Fischer collected no. 690 on the plains below the South Pare Mountains close to the upper Pangani River on 01 March 1883, while no. 973 was collected in roughly the same locality on his return journey on 31 July 1883 at approximately 3°40'S, 37°30'E.

This species' name honors the German ornithologist and curator of the ornithological collection at the ZMB, Jean Louis Cabanis (1816–1906).

## Pyrenestes unicolor G.A. Fischer & Reichenow, 1878 (in Reichenow 1878a): 88.

Now: Amblyospiza albifrons unicolor (G.A. Fischer & Reichenow, 1878). See Amadon et al. (1962: 31). Syntype: ZMB 23368 (B 15036, Fischer no. 59), skin, former mount, male, collected on "Sansibar", 24.05.[18]77. Syntype (missing): (Fischer no. 38), male, collected at "Festland bei Mombas" (mainland near Mombas), [01.07.1877].

**Type locality**: "Mombas" [Mombasa, Mombasa County, Kenya] and "Sansibar" [Zanzibar Island, Tanzania], from the original description as well as localities of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the localities "Mombas" and "Sansibar" were given. As Fischer & Reichenow (1878b) mentioned only two specimens for this species (nos. 38 and 59), both are regarded as syntypes. However, the whereabouts of no. 38 are unknown. An additional Fischer specimen of this species is in the Berlin collection (ZMB 25661), but it was collected on Zanzibar in 1880 and is therefore not a type.

#### Euplectes diadematus G.A. Fischer & Reichenow, 1878 (in Reichenow 1878a): 88.

**Now**: *Euplectes diadematus* G.A. Fischer & Reichenow, 1878. See Amadon et al. (1962: 66). **Holotype**: ZMB 23367 (B 15054, Fischer no. 128), skin, former mount, male, collected at Malindi, 04.09.1877.

Type locality: Malindi [Malindi, Kilifi County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality Malindi were given. As Fischer & Reichenow (1878b) listed only one specimen (no. 128) for this species, ZMB 23367 is the holotype.

Another Fischer specimen of this species from near Lamu, ZMB 2000.8155 (no. 556) is not included in the type series because of the different locality. Furthermore, there is a specimen of this species in the Heineanum collection MHH 4090 (skin, former mount, male, adult, Malindi) (Quaisser & Nicolai 2006), but as there is no collecting date or the original collector's label, and only one specimen was collected in 1877 (Reichenow 1878a), it is not regarded as belonging to the type series (contra Quaisser & Nicolai 2006: 79). Fischer travelled alone along the Kenya coast (north at least to Malindi from June–December 1877), and again with the Denhardt brothers on their Tana River Expedition (May–December the following year 1878). Thus MHH 4090 may have been collected in 1878.

### Euplectes Friederichseni G.A. Fischer & Reichenow, 1884a: 54.

**Now**: *Euplectes gierowii friederichseni* G.A. Fischer & Reichenow, 1884a. See Amadon et al. (1962: 66). **Holotype**: ZMH 6879 (Fischer no. 886), skin, former mount, male, collected at Nguruman, 24.06.[18]83.

**Type locality**: "Nguruman (Massai)" ["Nguruman Salzsteppe" = area close to the base of the Nguruman Escarpment, Kajiado County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Nguruman (Massai)" were given. As Fischer (1884)

listed only one specimen for this species (no. 886), ZMH 6879 is the holotype, and was mentioned as the type in Bolau (1898).

Fischer collected this specimen on his return journey to the coast. He followed the river valley at the base of the Nguruman Escarpment that drains into a swampy area north of Lake Natron. On 24 June 1883 he would have been at approximately 02°05'S, 34°10'E.

## Euplectes capensis litoris Neunzig, 1928: 114.

Now: Euplectes capensis crassirostris (Ogilvie-Grant, 1907). See Amadon et al. (1962: 69).

Holotype: ZMB 47.116 (Stuhlmann no. 225), skin, male, collected by F. Stuhlmann at Morogoro, 06.1894.

Paratype: ZMB 2000.52014, skin, male, collected at Lindi, 04.1882.

Paratype: ZMB 2000.52040 (Fischer no. 623), skin, male, collected at Pangani, 25.12.1882.

Paratype: ZMB 2000.52007 (Stuhlmann no. 234), skin, male, collected by F. Stuhlmann at Morogoro, 06.1894.

Paratype: ZMB 2000.52049 (Stuhlmann no. 222), skin, male, collected by F. Stuhlmann at Morogoro, 06.1894.

Paratype: ZMB 2000.52024 (Stuhlmann no. 203), skin, male, collected by F. Stuhlmann at "Daressalam", 29.04.1894.

Paratype: ZMB 2000.52026 (Sjöstedt no. 14), skin, male, collected by Y. Sjöstedt at Tanga, 14.03.1906.

Paratype: ZMB 34524, skin, male, collected by O. Neumann at Magila.

Paratype: ZMB 2000.52021, skin, male, collected by K. Röhl at Mlalo, [1905].

Paratype: ZMB 2000.52001 (Hofmann no. 464), skin, male, collected by K. Hofmann at Magogoni, 20.04.[1911–1912].

Paratype: ZMB 2000.52033 (Münzner no. 68), skin, male, collected by M. Münzner at Morogoro, 27.12.1912.

Paratype: ZMB 2000.52004 (Münzner no. 216), skin, male, collected by M. Münzner at "Sanji-Mahenge", 27.06.1914.

Paratype: ZMB 2000.52006 (Münzner no. 131), skin, male, collected by M. Münzner at "Sanji-Mahenge", 02.06.1913.

Paratype: ZMB 2000.52031 (Emin Pasha no. 3), skin, male, collected by Emin Pasha at "Mssuai", 03.05.1891.

Paratype: ZMB 2000.52020 (Fromm no. 10), skin, male, collected by P. Fromm at "Kilawa", 31.05.1908.

Paratype: ZMB 2000.52039 (Fromm no. 1), skin, male, collected by P. Fromm at "Msingino-Kilawa", 29.05.1908.

Paratype (missing): skin, male, collected by F. Stuhlmann at Morogoro.

Paratype (missing): skin, male, collected by F. Stuhlmann at Morogoro.

Paratype (missing): skin, male, collected by K. Hofmann at Magogoni.

Paratype (missing): skin, male, collected by K. Hofmann at Magogoni.

Paratype (missing): skin, male, collected by K. Hofmann at Magogoni.

Paratype (missing): skin, male, collected by K. Hofmann at Magogoni.

Paratype (missing): skin, male, collected by K. Hofmann at Magogoni.

Paratype (missing): skin, female, collected by K. Hofmann at Magogoni.

**Paratype** (missing): skin, female, collected by K. Hofmann at Magogoni.

Paratype (missing): skin, male, collected by K. Hofmann in "Ost-Uluguru".

Paratype (missing): skin, male, collected by K. Hofmann in "Ost-Uluguru".

Paratype (missing): skin, male, collected by K. Schnorrenpfeil at Lindi.

Paratype (missing): skin, male, collected by H. Grote at Mikindani.

Paratype (missing): skin, male, juvenile, collected by H. Grote at Mikindani.

**Type locality**: "Ostafrika: Küstengebiet von Tanga bis Mikindani" (East-Africa: coast region from Tanga [Tanga Region, Tanzania] to Mikindani [Mikindani, Mtwara Region, Tanzania]), from the original description, and ascertained as Morogoro [Morogoro Region, Tanzania] being the locality of the holotype.

Remarks: In the original description a male collected by Franz Stuhlmann at Morogoro in June 1894 (Stuhlmann no. 23) was chosen as "the type" (holotype), while thirty specimens were mentioned as type material (= 29 paratypes) at the ZMB in total. However, the collector's number 23 of the holotype seems to be incorrect as Stuhlmann's collector's numbers in June 1894 were greater than 200, so it is not possible to identify the holotype with certainty. In 1947, ZMB 47.116 was determined as the holotype (from label and catalogue data), and we follow that 1947 decision. We consider that specimen to be the holotype rather than a lectotype, as Neunzig (1928) had already defined a holotype. The whereabouts of all the missing specimens are unknown. *E. hordeaceus* (Linnaeus) and *E. nigroventris* Cassin from Mikindani collected by Grote are in the collection as well as other *E. hordeaceus*, *E. ardens* Boddaert and *E. nigroventris*, but only one *E. capensis* (Linnaeus) from Magogoni collected by K. Hofmann. As there were so many in the collection, it may be that the missing specimens were used as exchange material.

The Fischer specimens are possibly those listed in Fischer (1885a) as *Orynx capensis*.

## Urobrachya axillaris neumanni Neunzig, 1928: 118.

Now: Euplectes axillaris phoeniceus (Heuglin, 1862). See Amadon et al. (1962: 70).

Holotype: ZMB 34531, skin, male, collected by O. Neumann in Umbugwe (Mbulu Highlands), 12.11.1893.

Paratype: ZMB 2000.52299 (Fischer no. 111), skin, male, collected at Magu, 12.11.[1885].

Paratype: ZMB 2000.52249 (Sjöstedt no. 324), skin, male, collected by Y. Sjöstedt at "Kilimandscharo", 09.09.1905.

Paratype: ZMB 34526, skin, male, collected by O. Neumann in Umbugwe (Mbulu Highlands), 11.11.1893.

Paratype: ZMB 34528, skin, female, collected by O. Neumann in Umbugwe (Mbulu Highlands), 16.11.1893.

Paratype: ZMB 2000.52291, skin, male, collected by H.A. Conrads on Ukerewe Island, [1907].

Paratype: ZSM 11.2783 skin, male, collected by W. Kattwinkel at Olgos (near Ikoma), 02.1911.

Paratype: ZSM 11.2784 skin, male, collected by W. Kattwinkel at Olgos (near Ikoma), 02.1911.

Paratype: ZSM 11.2785 skin, male, collected by W. Kattwinkel at Olgos (near Ikoma), 02.1911.

Paratype (missing): skin, male, collected by O. Neumann in Umbugwe (Mbulu Highlands).

Paratype (missing): skin, female, collected by Y. Sjöstedt at "Kilimandjaro".

**Type locality:** "Ostafrika: Landstriche östliche des Victoriasees bis zum Olgos und Kilimandscharo" (East-Africa: region east of Lake Victoria to Olgos Hill and Kilimandscharo), from the original description, ascertained as Umbugwe [Umbugwe country (Mbulu Highlands), Manyara Region, Tanzania], the locality of the holotype.

**Remarks**: In the original description a male collected by Oscar Neumann in Umbugwe with the inventory number ZMB 34531 was chosen as "the type" and eleven specimens from the Berlin and Munich collections were mentioned as type material (10 paratypes). Therefore ZMB 34531 is determined as the holotype and all other specimens of the given combination of locality and collector that were in the collections in Berlin and Munich in 1928 are paratypes. The missing Neumann specimen was not inventoried at the ZMB. The Fischer paratype was mentioned in Reichenow (1887) as *Penthetria phoenicea* (Heuglin).

#### Penthetria soror Reichenow, 1887: 70.

**Now**: *Euplectes macroura macroura* (J.F. Gmelin, 1789). See Amadon et al. (1962: 71). **Holotype**: ZMB 48.5 (Fischer no. 250), skin, male, collected at "Kawanga", 15.03.[18]86.

**Type locality**: "Kawanga" [Mumias, Kakamega County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Kawanga" with the date 15 March were given. As no. 250 was the only *P. soror* Fischer collected at "Kawanga", ZMB 48.5 is regarded as the holotype for this species. "Kawanga" (Wanga's place) was a locality where travelers and expeditions engaged porters and took on supplies, now the town of Mumias in western Kenya (0°20'N, 34°29'E).

## Sycobrotus Reichenowi G.A. Fischer, 1884 (in Fischer & Reichenow 1884b): 180.

Now: Ploceus baglafecht reichenowi (G.A. Fischer, 1884). See Amadon et al. (1962: 35).

Syntype: ZMB 27392 (B 18644, Fischer no. 763), skin, former mount, female, collected at Sigirari, 02.04.[18]83.

Syntype: ZMB 27393 (B 18644, Fischer no. 932), skin, former mount, male, collected at "Gross Aruscha", 15.07.[18]83. Syntype: ZMH 8377 (Fischer no. 840), skin, former mount, male, juvenile, collected at "Naiwascha", [08.06.]1883.

**Type locality**: "Gross-Aruscha" [Arusha, Arusha Region, Tanzania] and "Naiwascha-See" [Lake Naivasha, Nakuru County, Kenya], from the original description, but "Gross-Aruscha" [Arusha, Arusha Region, Tanzania], Sigirari [Sigirari, Arusha Region, Tanzania] and "Naiwascha-See" [Lake Naivasha, Nakuru County, Kenya] as localities of the three syntypes.

**Remarks**: In the original description no type was chosen, and no inventory numbers for specimens were provided, but measurements for one specimen, descriptions for both sexes, and the localities "Gross-Aruscha" and "Naiwascha-See" were given. Fischer (1884) listed three specimens for this species (nos. 932, 840, 763). All mentioned specimens are regarded as syntypes; ZMB 27392 with the vague locality Sigirari (not mentioned in

the original description) is the only female, and a female is described in the original description. ZMH 8377 was mentioned as type specimen in Bolau (1898), but with an incorrect catalogue number (6377).

# Ploceus fischeri Reichenow, 1887: 69.

Now: Ploceus melanocephalus dimidiatus Antinori & Salvadori, 1873, but see Amadon et al. (1962: 49); White (1963: 139); Dickinson & Christidis (2014: 288), who all prefer Ploceus melanocephalus fischeri Reichenow, 1887.

Syntype: ZMB 47.101 (B 20147, Fischer no. 142), skin, male, collected at "Kagehi", 20.11.[1885].

Syntype: ZMB 2000.55462 (B 20147, Fischer no. 135), skin, male, juvenile, collected at "Kagehi", 18.11.[1885].

Syntype: ZMB 2000.55463 (B 20147, Fischer no. 195), skin, female, collected at "Kagehi", 12.12.[1885], is considered parent of the clutch of 5 eggs with collector's number 131 (ZMB 2000.61019 to ZMB 2000.61024).

**Syntype** (missing): female, collected at "Kagehi", [1885]. **Syntype** (missing): juvenile, collected at "Kagehi", [1885].

**Type locality**: "Kagehi am Victoria-See" [Kayenzi, Mwanza Region, Tanzania], from the original description as well as locality of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but there were descriptions for both sexes, and measurements for more than one specimen (2 males, 2 females, 1 juvenile) from the locality "Kagehi" were given. Only three specimens were mentioned in the ZMB entry catalogue for *P. fischeri* (B 20147), while under B 20148 an additional three specimens of *Ploceus dimidiatus* were listed, and which were also mentioned as *P. dimidiatus* (nos. 132, 144, 152, 159, 160) by Reichenow (1887). Four of the latter were later identified as *Ploceus jacksoni* Shelley (ZMB 2000.55470, ZMB 2000.55471, AMNH SKIN 723537, AMNH SKIN 723538), but no. 132 is either missing or the label data is lost. Reichenow (1887) may have regarded *P. jacksoni* as *P. dimidiatus* and described the species *P. dimidiatus* as *P. fischeri*. Therefore, ZMB 47.101, ZMB 2000.55462 and ZMB 55.463 are regarded as syntypes for *Ploceus fischeri*. The whereabouts of the missing specimens are unknown, as they are not registered in the ZMB, ZMH and AMNH collections. In addition *P. fischeri* may be best considered subspecifically distinct due to it being well separated from *P. dimidiatus* of northern Sudan and Eritrea by an area occupied by *P. taeniopterus* Reichenbach, HGL (Gill et al. 2023). Reichenow (1887) also mentioned that the specimen described by Pelzeln (1881: 149) as *P. affinis* Heuglin was possibly a female of *Ploceus fischeri*, but as this appears in doubt we do not include the Pelzeln specimen in the type list.

In addition, there are 14 eggs attributed to *Ploceus fischeri*. Two clutches probably came directly with Fischer's collection (clutch 1: 3 eggs, ZMB 2000.61016–ZMB 2000.61018; clutch 2: 5 eggs with no. 131, ZMB 2000.61019–ZMB 2000.61024). Additionally, five eggs of that species collected by Fischer arrived at the ZMB in 1916 with the egg collection of Adolph Nehrkorn (ZMB 2000.61652–ZMB 2000.61656), two of which also bear Fischer's no. 131. "Kagehi" was very close to present-day Mwanza on the southern shore of Lake Victoria (2°23'S, 33°03'E).

## Symplectes stictifrons G.A. Fischer & Reichenow, 1885 (in Reichenow 1885): 373.

**Now**: *Ploceus bicolor stictifrons* (G.A. Fischer & Reichenow, 1885). See Amadon et al. (1962: 55). **Syntype**: ZMB 30723 (B 19013, Fischer no. 590), skin, former mount, collected at Lindi, 04.[18]82.

**Syntype**: ZMB 2000.32541 (B 19013), skin, juvenile, collected at Lindi, 04.[18]82. **Syntype**: ZMB 2000.32542 (B 19013), skin, juvenile, collected at Lindi, 04.[18]82.

**Type locality**: Lindi [Lindi, Lindi Region, Tanzania], from the original description as well as locality of the syntypes.

**Remarks**: Reichenow (1885) included a description for *Symplectes stictifrons* but mentioned that it was described by Fischer and Reichenow. In the original description no type was chosen, and there were no inventory numbers for specimens provided, and only the locality Lindi was given. As there are three 1882 Lindi specimens of this species at the ZMB that were probably collected for Fischer (see Fischer 1885a), they are all regarded as syntypes. In Fischer (1885a) they were listed under the name *Sycobrotus bicolor*. The entry catalogue however refers to only two specimens, which may be an error, or that one of the juveniles was originally not included in the collection. USNM 105550 is not a type specimen as it was not collected at Lindi.

## Calyphantria erythrogenys G.A. Fischer & Reichenow, 1884b: 181.

Now: Anaplectes rubriceps (Sundevall, 1850). See Amadon et al. (1962: 60).

Syntype: ZMB 24974 (B 16588, Emin Pasha no. 184), skin, former mount, male, collected by Emin Pasha at Lado, 12 03 1879

Syntype: ZMB 27537 (B 18645, Fischer no. 978), mount, female, collected in Pare, 03.08.[18]83. [On 03 August 1883, Fischer was returning to the coast, moving south between the North and South Pare Mountains, though much closer to the South Pares].

Syntype: ZMH 8386 (Fischer no. 661), skin, male, collected at Maurui, 21.01.[18]83.

**Type locality**: Pare [Near the South Pare Mts, Kilimanjaro Region, Tanzania], Maurui [Maurui, Tanga Region, Tanzania] and Lado [Lado, Central Equatoria, South Sudan], from the original description as well as localities of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens or measurements provided, but the localities Maurui (Lower Pangani River Valley at 5°08'S, 38°23'E) and "Pare" (from below the South Pare Mountains on 03 August 1883 at approximately 4°30'S, 37°55'E) for Fischer, and Lado for Emin Bey [= Emin Pasha] were mentioned. While Fischer (1884) listed two: the Maurui and "Pare" specimens (nos. 661, 978), the three above-listed three specimens are all syntypes. ZMH 8386 was not mentioned as a type for this species in Bolau (1898).

## Hyphantica aethiopica var. intermedia Reichenow, 1886a: 393.

Now: Quelea quelea aethiopica Sundeval 1850. See Amadon et al. (1962: 62).

Syntype: ZMB 23472 (B 14921), skin, male, collected by J.M. Hildebrandt from Taita, 02.1877.

**Type locality**: "Barawa" [Baraawe, Lower Shabeelle Region, Somalia], Duruma [Duruma country, Kwale County, Kenya], "Ndi in Taita" [Ndi, Taita-Taveta County, Kenya], also "Gonda" and "Mdaburu" from the original description as well as localities of the syntypes.

Remarks: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but it was mentioned that this form was described based on the collections of Hildebrandt and Fischer from East Africa. Furthermore, it was also mentioned that the species was known from the following localities: "Barawa" (Fischer), Duruma and "Ndi in Taita" (Hildebrandt), and "Gonda" and "Mdaburu" (Böhm). The ZMB has 13 *Quelea quelea aethiopica* from the collectors Böhm, Fischer and Hildebrandt that were in the collection before the original description was published, but with only seven of the listed localities. As Reichenow mentioned that he had examined 12 individuals, only ten were of the newly described form. The described variation occurs at the same localities as the "normal" *Quelea quelea aethiopica*, while the important determining character is seen only in adult males, making it impossible to accurately determine the types. The above listed syntype is marked as a type specimen on the historical label, while additional syntypes could be any of the following: ZMB 23473, ZMB 23474, ZMB 2000.50696, ZMB 2000.50699, ZMB 2000.50712, ZMB 2000.50722, ZMB 2000.50728, ZMB 2000.50735, ZMB 2000.50738, ZMB 2000.50759, ZMB 2000.50737.

#### Estrildidae

# Pytilia melba grotei Reichenow, 1919: 227.

Now: Pytilia melba grotei Reichenow, 1919. See Blake et al. (1968: 314).

Syntype: ZMB 2000.20327 (Fischer no. 567), skin, male, collected in "Usegua", 02.1882.

Syntype: ZMB 2000.20329 (Fischer no. 566), skin, female, collected in "Usegua", 02.1882.

Syntype: ZMB 31980 (Stuhlmann no. 415), skin, male, collected by F. Stuhlmann at "Kionga", 02.1895.

**Syntype**: ZMB 63.6, skin, male, collected by H. Grote at Mikindani, 22.04.1909.

**Syntype**: ZMB 66.703, skin, female, collected by H. Grote at Mikindani, 02.1910.

Syntype: ZMB 2000.20326, skin, male, collected by H. Grote at Mikindani, 16.03.1909.

Syntype: ZMB 2000.20328, skin, male, collected by H. Grote at Mikindani, 02.1910.

Syntype: ZMB 2000.20331, skin, male, collected by H. Grote at Mikindani, 25.06.1909. Syntype: ZMB 2000.20332, skin, female, collected by H. Grote at Mikindani, 24.04.1910.

Syntype: ZMB 2000.20333, skin, collected by H. Grote at Mikindani, 06.06.1910.

Type locality: "Küstengebiet Deutsch-Ostafrikas" (= coastal regions of Tanzania from Tanga Region to Mozambique), from the original description and "Kionga" [Quionga Bay, Cabo Delgado Province, Mozambique], Mikindani [Mikindani, Mtwara Region, Tanzania] and "Usegua" [Useguha country, Tanga Region, Tanzania], the localities of the syntypes.

Remarks: In the original description no type was chosen, and there were no inventory numbers for specimens provided; only the localities "Kionga", Mikindani and Useguha were given. Therefore all listed specimens are regarded as syntypes. ZMB 2000.20327 and ZMB 2000.20329 were later also included in the type series for Pytelia melba useguhae Neunzig, 1928 (see below).

#### Pytelia melba useguhae Neunzig, 1928: 109.

Now: Pytilia melba grotei Reichenow, 1919. See Blake et al. (1968: 315).

Holotype: ZMB 2000.20327 (Fischer no. 567), skin, male, collected in "Usegua", 02.1882.

Paratype: ZMB 2000.20329 (Fischer no. 566), skin, female, collected in "Usegua", 02.1882.

Paratype: ZMB 2000.20330, skin, male, collected by K. Hofmann at Magogoni, 15.08.1911.

Paratype: ZMB 2000.20334, skin, female, collected by K. Hofmann at Magogoni, 12.04.1911–1912.

Paratype: ZMB 2000.20335, skin, male, collected by K. Hofmann at Magogoni, 12.04.1911–1912.

Paratype: ZMB 2000.20337, skin, female, collected by K. Hofmann at "Morogoro-Kiroka".

Paratype: ZMB 2000.20336, skin, female, collected by K. Hofmann at "Bismarckburg".

Paratype (missing, ZMH): skin, male, juvenile, collected by F. Stuhlmann at Mbusini, Usegua.

Type locality: Useguha and "Landstriche am Rufu" (Useguha and "area along the Ruvu River"), from the original description ascertained as Useguha [Useguha country, Wazigwa country, Tanga Region, Tanzania], the locality of the holotype.

Remarks: In the original description a male collected by Fischer in Usegua was chosen as the "Typus" (holotype), and another seven specimens were mentioned as additional material (paratypes) in the Berlin and Hamburg collections. Therefore ZMB 2000.20327 is designated as the holotype, while all other specimens in the ZMH and ZMB collections in 1928 are listed as paratypes. The whereabouts of the missing specimen are unknown. No specimens could be traced in Hamburg, and the missing ZMH specimen were probably destroyed in World War II.

### Uraeginthus ianthinogaster Reichenow, 1879b: 114.

Now: Granatina ianthinogaster (Reichenow, 1879). See Blake et al. (1968: 335).

Syntype: ZMB 24257 (B 15708, Fischer no. 378), skin, male, collected at "Massa", 03.11.[1878]. Syntype: ZMB 24258 (B 15708, Fischer no. 377), skin, female, collected at "Massa", 03.11.[1878].

Type locality: "Massa" [Masabubu, Tana River County, Kenya], from the original description as well as locality of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements and descriptions for both sexes (Figure 1c), and the locality "Massa" were given. Fischer & Reichenow (1879) listed two (nos. 377, 378) for this species. As these two specimens are the only ones of this species collected by Fischer found in the Berlin and Hamburg collections, and the locality is correct, both are regarded as syntypes.

## Pitylia caniceps Reichenow, 1879c: 139.

Now: Odontospiza griseicapilla (Delacour, 1943). See Blake et al. (1968: 335).

Holotype: ZMB 24263 (B 15712, Fischer no. 385), skin, male, collected at "Massa", 05.11.[1878].

**Type locality**: "Massa" [Masabubu, Tana River County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Massa" were given. The given measurements are identical to those listed in Fischer & Reichenow (1879) for no. 385, so ZMB 24263 is the holotype for this species. The correct name is *Odontospiza griseicapilla* Delacour, 1943, as the original species name *caniceps* was preoccupied by *Munia caniceps* (Blake et al. 1968).

#### Viduidae

#### Vidua splendens Reichenow, 1879b: 114.

Now: Vidua hypocherina J.P. Verreaux & J.B.É. Verreaux, 1856. See Reichenow (1904b: 216); Jackson & Sclater (1938: 1528)

Holotype: ZMB 24264 (B 15713, Fischer no. 396), mount, male, collected at Kibaradja, 12.11.1878.

**Type locality**: "Kibaradja (Ostafrika)" [Kibaradja, Tana River County, Kenya], from the original description as well as locality of the holotype.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Kibaradja (Ostafrika)" were given. Fischer & Reichenow (1879: 352) listed one specimen (no. 396). As there is only one Fischer specimen from that locality and the collector's number matches that in Fischer & Reichenow (1879), ZMB 24264 is regarded as the holotype for this species. The specimen was mounted and inventoried in October 1879, after publication of the description (August 1879). Other Berlin Fischer specimens (ZMB 26641, ZMB 2000.32539, ZMB 2000.32540) were collected later, at other localities, so have no type status.

*Linura* Reichenow, 1882: 91. Type, by monotypy *Linura Fischeri* Reichenow.

### Linura Fischeri Reichenow, 1882: 91.

Now: Vidua fischeri (Reichenow, 1882). See Blake et al. (1968: 394).

**Syntype**: ZMB 26639 (B 18056), skin, former mount, male, collected in "Usegua", 02.[18]82. **Syntype**: ZMB 26640 (B 18056, Fischer no. 563), skin, male, collected in "Usegua", 02.[18]82.

**Syntype**: ZMB 2000.32617, skin, male, collected in "Usegua", 02.[18]82.

Syntype: MHH 4054 (Fischer no. 564), mount, male, collected in "Usegua", 02.[18]82, ex. coll. F. Heine.

**Type locality**: "Usegua (Ostafrika)" [Useguha country, Tanga Region, Tanzania], from the original description as well as locality of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Usegua" were given. As only the male was described, females are not included in the type series (e.g. ZMB 26641). Therefore ZMB 26639, ZMB 26640, ZMB 2000.32617 and MHH 4054 (Quaisser & Nicolai 2006) (all collected for Fischer) are regarded as syntypes. Fischer (1885a) listed "Usegua" ("unweit Kipumbui") and Matióm as localities, but Matióm is far from Useguha country, so the Matióm specimens have no type status. "Kipumbui" (Kipumbwi) however lies to the southwest of Pangani (05°38'S, 38°53'E) in what was known as Useguha country. The locality is close to the coast and would be surprising, as *Vidua fischeri* is typically a species of arid and semi-arid country. Therefore "unweit (close to) Kipumbui" could mean inland from Kipumbui.

## Hypochera ultramarina var. orientalis. Reichenow, 1894: 188.

Now: Vidua chalybeata centralis (Statius Müller, 1776). See Blake et al. (1968: 392).

**Lectotype** (herein designated, see below for explanation): ZMB 2000.38775 (Fischer no. 158), skin, male, collected at "Kagehi", 24.11.[1885].

Paralectotype: ZMB 30115, skin, male, collected by Emin Pasha & F. Stuhlmann at Bukoba, 13.04.[18]92.

Paralectotype: ZMB 30141, skin, male, collected by Emin Pasha & F. Stuhlmann at Bukoba, 07.04.[18]92.

Excluded Paralectotype (*Vidua funerea nigerrima*): ZMB 2000.38796, skin, male, collected by Emin Pasha at Bukoba, 30.11.[18]90.

Excluded Paralectotype (*Vidua funerea nigerrima*): ZMB 2000.38797 (B 19569, Böhm no. 1138), skin, male, collected by R. Böhm at Karema, 04.03.[1883].

Excluded Paralectotype (*Vidua funerea nigerrima*): ZMB 2000.38798 (Böhm no. 1174), skin, male, collected by R. Böhm at Karema, 04.[1883].

Type locality: "Paregebirge" [South Pare Mts, Kilimanjaro Region, Tanzania], Arusha [Arusha, Arusha Region, Tanzania], Nguruman [Nguruman Escarpment, Kajiado County, Kenya], Karéma [Karema, Katavi Region, Tanzania], Kagéyi [Kayenzi, Mwanza Region, Tanzania], Bukóba [Bukoba, Kagera Region, Tanzania], from the original description, while "Kagehi" [Kayenzi, Mwanza Region, Tanzania] is given in the lectotype designation (below).

Remarks: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but several localities were listed as the distribution of this subspecies. Since 1894 the ZMB has held three *Vidua chalybeata centralis* from the listed localities, so these are included in the type series. Reichenow (1894) also listed the locality Karema for *Hypochera purpurascens* Reichenow. Reichenow (1904b) gave *Hypochera amauropteryx* Sharpe as a synonym for *Hypochera ultramarina* var. *orientalis* but only the localities Arusha, Nguruman, Pare and "Kagehi" of Fischer. Those from Karema (IV, Böhm) and Bukoba (IV, XI, Stuhlmann) were determined to be *Hypochera funerea* de Tarragon and Karema (III, Böhm) as *Vidua serena* (Linnaeus) (Reichenow 1904b). Thus it cannot be determined without doubt which individuals from Bukoba and Karema were used to describe *Hypochera ultramarina* var. *orientalis*. ZMB 2000.38796, ZMB 2000.38797 and ZMB 2000.38798 were collected at Bukoba and Karema but are now considered to be *Vidua funerea nigerrima* Sharpe and are therefore not included in (or excluded from) the type series, even though ZMB 2000.38796 has an historical label indicating it is a type specimen of *Hypochera ultramarina* var. *orientalis*. Fischer (1884) listed for *Hypochaera nitens* var. *ultramarina* (Gmelin) the localities Pare, Arusha and Nguruman, but without specimen numbers. Therefore, it is possible that they were observations rather than collected specimens from these localities.

Due to the confusion concerning assignment to the type series, and the fact that the specimens are not satisfactorily identifiable without further information concerning coloration of bill and legs, we designate ZMB 2000.38775 as a lectotype. This specimen is the only one Reichenow included in different publications (Reichenow 1894, 1904b) relating to this taxon, and is the only *Vidua* from Kagehi in the ZMB collection. The specimen is deep black lacking gloss (bill brownish-white, feet pale orange, iris brown, wing length 64 mm, tail length 46 mm).

The name *Hypochera ultramarina* var. *orientalis* Reichenow, 1894 is preoccupied by *Vidua paradisea orientalis* Heuglin (ICZN 1999).

## Hypochera purpurascens Reichenow, 1883: 221.

Now: Vidua purpurascens (Reichenow, 1883); but see Blake et al. (1968: 393).

Syntype: ZMB 30709, skin, former mount, male, collected in "Usegua", 02.[18]82.

Syntype: ZMB 2000.32618, skin, male, collected in "Usegua", 02.[18]82.

Syntype: ZMB 2000.32790 (Fischer no. 568), skin, male, collected in "Usegua", 02.[18]82.

**Type locality**: "Usegua" [Useguha country, Tanga Region, Tanzania] and Lindi [Lindi, Lindi Region, Tanzania], from the original description, and ascertained as "Usegua" [Useguha country, Tanga Region, Tanzania], the locality of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the localities "Usegua" and Lindi were given. As there is a description only for the male, the female of this series (ZMB 2000.32619) is excluded from the type series. These specimens were obtained for Fischer, but apparently were not inventoried when they arrived in Berlin. The whereabouts of possible specimens collected at Lindi (also mentioned in Fischer 1885a) are unknown, and the possibility that they were only observations cannot be discounted. Therefore, ZMB 30709, ZMB 2000.32618 and ZMB 2000.32790 are designated here as syntypes and the type locality is determined as "Usegua" [Useguha country, Tanga Region, Tanzania]. However,

*Vidua purpurascens* is a bird of low rainfall areas and parasitizes *Lagonosticta rhodopareia* (Heuglin), itself a bird of semiarid bush country. "Usegua" is not a known locality for this species, and as the provenance of these specimens is largely unknown, there remains much uncertainty concerning both the type locality and true identity of all specimens.

### Passeridae

### Passer rufocinctus G.A. Fischer & Reichenow, 1884a: 55.

Now: Passer rufocinctus G.A. Fischer & Reichenow, 1884a; but see Amadon et al. (1962: 15).

Syntype: ZMB 27388 (B 18630, Fischer no. 854), mount, male, collected at "Naiwascha", 11.06.[18]83.

Syntype (missing): ZMB 27389 (B 18630, Fischer no. 811), mount, male, juvenile, collected at "Naiwascha See", [20.]05.[18]83.

Syntype (missing): ZMB 27390 (B 18630, Fischer no. 855), mount, female, collected at "Naiwascha See", [11.]06.[18]83.

Syntype: ZMH 6876 I (Fischer no. 812), skin, male, collected at "Naiwascha", 20.05.[18]83.

Syntype: ZMH 6876 II (Fischer no. 813), skin, female, collected at "Naiwascha", 21.05.[18]83.

**Type locality**: "Naiwascha-See (Massai)" [Lake Naivasha, Nakuru County, Kenya], from the original description as well as locality of the syntypes.

Remarks: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for one specimen and the locality "Naiwascha-See (Massai)" were given. Fischer (1884) listed three specimens (nos. 811, 854 and 855), so all mentioned specimens in Berlin are regarded as syntypes. The two specimens from the ZMH are also included in the type series as they were collected at the same time from the type locality, and the field label gives the name *Passer rufocinctus*. The whereabouts of the missing specimens in Berlin are unknown; they may have been destroyed during World War II. The field numbers show that the specimens in Hamburg are not the missing Berlin specimens. A further specimen in Berlin (ZMB 2000.32547) was collected in 1885 and therefore cannot be a type. Two specimens (ZMH 6876 (I and II)) were mentioned as types in Bolau (1898). This species is abundant in Naivasha District, so it is not surprising that Fischer collected a number of specimens. However, the exact locality cannot be determined as he collected in so many different locations in the Naivasha area.

# P[asser] g[riseus] ugandae Reichenow, 1904b: 231.

Now: Passer griseus ugandae Reichenow, 1904b; but see Amadon et al. (1962: 18).

**Syntype**: ZMB 2000.15459 (B 20166, possibly inventoried as *Passer swainsoni* (Rüppell), Fischer no. 198), skin, male, collected at "Kagehi", 13.12.[18]85.

Syntype: ZMB 29208, male, skin, collected by F. Stuhlmann at Mengo, [02.]01.[18]91.

Syntype: ZMB 29209, female, skin, collected by F. Stuhlmann at "Manjonga", [12.]01.[18]91.

Syntype: ZMB 2000.40132, male, skin, collected by F. Stuhlmann at "Manjonga", [12.]01.[18]91.

Syntype: ZMB 30390 (Emin Pasha no. 395), male, skin, collected by Emin Pasha at Tabora, [23.]08.[18]90.

**Syntype**: ZMB 2000.39900 (B 23144), male, skin, collected by L. von Trotha at "Uchicha", 07.[18]96.

Syntype (missing): collected by W.J. Ansorge at "Unjoro", Uganda.

Syntype (missing): collected by W.J. Ansorge at "Kaboa".

**Syntype** (missing): collected by W.J. Ansorge at Fort George, [04].

**Syntype** (missing): collected by W.J. Ansorge at Kitima, [05].

**Type locality**: "Uganda bis Unjamwesi" (Uganda to Unjamwesi country) [western and central Uganda and in Tanzania at Mwanza, Tabora and Iringa Regions], from the original description as well as localities of the syntypes.

**Remarks**: In the original description no type was chosen, but localities were given with dates and collectors, so the mentioned specimens are regarded as syntypes. The whereabouts of the types from the other localities are unknown; no *Passer griseus* (Vieillot) specimen of W.J. Ansorge was traceable at the ZMB. Reichenow (1899a) mentioned the name *Passer griseus ugandae* but did not give a complete description, so it is a *nomen nudum*.

### Motacillidae

#### Macronyx aurantiigula Reichenow, 1891a: 222.

Now: Macronyx aurantiigula Reichenow, 1891a. See Mayr & Greenway (1960: 143).

Syntype: ZMB 49.240 (Fischer no. 651), skin, collected at Maurui [Maurui, Tanga Region, Tanzania], 18.01.[18]83.

Syntype (missing): Fischer no. 964, juvenile male, "Ebene unweit des Maeru-Berges", 22.07.[1883].

Possible Syntype: RMNH.AVES.258114, skin, male, collected at Pangani River, arrived from Berlin in 1892.

**Type locality**: "Hab. Africa orientalis ad flumen Pangani" [northeast Tanzania close to the Pangani River] [Tanga Region, Tanzania], from the original description and localities of the syntypes.

Remarks: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for more than one specimen and the locality "Ost-Afrika bis zum Pangani Fluß" were given. Fischer (1884) listed nos. 651 and 964 as *Macronyx croceus* (Vieillot). In the original description Reichenow (1891) mentioned that *M. aurantiigula* is similar to *M. croceus*. Therefore, Fischer nos. 651 and 964 are regarded as syntypes. In addition, RMNH.AVES.258114 was given as syntype for this species in Dekker (2003), but it cannot be no. 964 which is not a juvenile (Dekker, pers. comm.). Therefore it is uncertain whether RMNH.AVES.258114 is a further syntype, as detailed collecting information is missing. Three further Fischer specimens of this species in the Berlin collection (ZMB 2000.11019, ZMB 2000.11020, ZMB 2000.11021) have merely "Tanzania" as the collecting locality and no date, so are not regarded as types. Reichenow (1904b) also listed for *Macronyx aurantiigula* material of Fischer from Maurui (January) and "Meruberg" [Mount Meru] (July), the latter information refers to the missing syntype.

# Fringillidae

## Crithagra dorsostriata Reichenow, 1887: 72.

Now: Crithagra dorsostriata Reichenow, 1887. See White (1963: 109), but see Blake et al. (1968: 221).

Syntype: ZMB 2000.32536 (Fischer no. 153), skin, male, collected at "Kagehi (Massailand)", [23.11.1885] (male to ZMB

2000.32537).

Syntype: ZMB 2000.32537 (Fischer no. 184), skin, female, collected at "Kagehi (Massailand)", [04.12.1885].

Syntype: ZMB 2000.32538 (Fischer no. 84), skin, male, juvenile, collected in "Wembaere", [26.10.1885].

Syntype (missing): collected in "Niansa" [Lake Victoria, Kenya/Tanzania], [15.11.1885].

Syntype (missing): collected at Schasche, [25.01.1886].

Type locality: "Kagehi", "Wembaere", "Niansa" and Schasche, the localities of the syntypes.

Remarks: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but measurements for more than one individual were given, and different localities and dates for five collected specimens were listed, so all five are regarded as syntypes. The whereabouts of specimens from "Niansa" (Lake Victoria) and (Mt.) Schasche are unknown. All specimens of this species in the ZMB collection have Fischer's original labels with the determination "Crithagra", to which Reichenow evidently added "dorsostriata". Sclater (1930: 815) mentioned for Crithagra dorsostriata Reichenow, 1887 "type in Berlin museum, Wembere". However, this was not accepted as valid designation of a lectotype in the sense of ICZN (1999), as it was unclear that the specimen had been chosen from the series as given in the original description.

# Spinus citrinelloides kikuyensis Neumann, 1905b: 356.

Now: Crithagra citrinelloides kikuyensis (Neumann, 1905). See Blake et al. (1968: 212).

Lectotype: AMNH SKIN 710620, skin, male, collected by W. Doherty in the Kikuyu Mountains.

Paralectotype: AMNH SKIN 710613, skin, male, collected by W. Doherty in the Kikuyu Mountains, 10.1900. Paralectotype: AMNH SKIN 710614, skin, male, collected by W. Doherty in the Kikuyu Mountains, 11.1900. Paralectotype: AMNH SKIN 710615, skin, male, collected by W. Doherty in the Kikuyu Mountains, 11.1900. Paralectotype: AMNH SKIN 710616, skin, male, collected by W. Doherty in the Kikuyu Mountains, 12.1900.

**Paralectotype**: AMNH SKIN 710617, skin, male, collected by W. Doherty in the Kikuyu Mountains, 01.1901. **Paralectotype**: AMNH SKIN 710618, skin, male, collected by W. Doherty in the Kikuyu Mountains, 01.1901. **Paralectotype**: AMNH SKIN 710619, skin, male, collected by W. Doherty in the Kikuyu Mountains, 03.1901.

Paralectotype: AMNH SKIN 710621, skin, male, collected by W. Doherty in the Kikuyu Mountains.

**Paralectotype**: AMNH SKIN 710622, skin, female, collected by W. Doherty in the Kikuyu Mountains, 11.1900. **Paralectotype**: AMNH SKIN 710623, skin, female, collected by W. Doherty in the Kikuyu Mountains, 03.1901.

Paralectotype: ZMB 27513 (B 18633, Fischer no. 864), skin, former mount, male, collected at "Naiwascha-See" (Lake Naivasha), 12.06.1883.

**Type locality**: Kikuyu mountains [Kikuyu Mts, Kiambu County, Kenya] and "Naiwascha-See" [Lake Naivasha, Nakuru Country, Kenya], from the original description, ascertained as the Kikuyu Mountains [Kikuyu Mts, Kiambu County, Kenya] the locality of the lectotype.

Remarks: In the original description no type was chosen, and there were no inventory numbers for the specimens listed, but six specimens from the Kikuyu Mountains collected by W. Doherty as well as one collected by G.A. Fischer at "Naiwascha-See" (Lake Naivasha) were mentioned and descriptions for males and females were given. LeCroy (2013) designated AMNH 710620 as lectotype and all the other above-mentioned specimens at the AMNH as paralectotypes. She mentions that Neumann (1905b) further included a Fischer specimen, and Kenya specimens collected by Lord Delamere which are here included in the list of paralectotypes. The AMNH specimens belonged to the Rothschild Collection, which were at Tring prior to being sold to the AMNH in the 1930s. The whereabouts of the paralectotypes collected by Lord Delamere are unknown. ZMB 27513, paralectotype in the taxon *kikuyensis* Neumann, was inventoried as *Citrinella melanops* Heuglin, also listed as a syntype for *Spinus citrinelloides frontalis* Reichenow, and was also mentioned in Reichenow (1904b: 275) as *S. c. frontalis*. Fischer was leaving the Naivasha area and was well to the south of the lake, between Hell's Gate Gorge and Mount Suswa, on 12 June 1883. Any citril near Naivasha would be *kikuyuensis* not *frontalis*.

## Spinus citrinelloides hypostictus Reichenow, 1904b: 275.

Now: Crithagra hyposticta hyposticta (Reichenow, 1904); but see Blake et al. (1968: 213).

Syntype: ZMB 27514 (B 18633, Fischer no. 950), skin, former mount, female, juvenile, collected at "Groß Aruscha", 18.07.1883.

Syntype: ZMB 47.46, skin, male, collected by K. Kittenberger at "Moshi (Kilimandjaro)", 24.06.1903.

Syntype: ZMB 2000.40318, skin, collected by W.L.H. von der Marwitz at "Ngomingi", 17.08.1899.

Syntype: ZMB 2000.40302, skin, collected by F. Fülleborn at Tembo, 09.07.1898.

Syntype: ZMB 2000.40831, skin, collected by F. Fülleborn at "Rupira", 21.09.1899.

Syntype (missing): collected by Hunt and Johnston in the "Kilimandjaro" region.

Syntype (missing): collected by A. Sharpe and A. Whyte at "Somba" [06].

**Type locality**: "Ostafrika vom Kilimandscharo bis zum Niassagebiet" (East Africa from Kilimanjaro Region to Niassa), from the original description and localities of the syntypes.

**Remarks**: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but both sexes were described, more than one specimen was measured, and the examined specimens were mentioned by their collecting data (locality, month, collector). Therefore the above-listed specimens are regarded as syntypes. The whereabouts of the specimens from the further listed localities are unknown ["Kilimandscharo" (Hunt, Johnston), "Somba" (Sharpe, Whyte)]; we found no traces of them in BMNH and AMNH.

ZMB 27514 was inventoried as *Citrinella melanops*. Fischer spent several days (10–22 July 1883) in the Arusha area, mainly around Mount Meru (now Arusha National Park). Sclater (1930: 826) gave for *Spinus citrinelloides hypostictus* Reichenow "type in Berlin from Moshi, Kilimanjaro". However, this was not accepted as valid designation of a lectotype (ICZN 1999) as it was unclear that the specimen had been chosen from the series as given in the original description.

## Spinus citrinelloides frontalis Reichenow, 1904b: 275.

Now: Crithagra frontalis (Reichenow, 1904); but see Blake et al. (1968: 213).

**Lectotype** (herein designated, see below for explanation): ZMB 47.47, skin, male, collected by R. Kandt at "Kiwusee", [1899–1902].

Paralectotype: ZMB 29213, skin, male, collected by Emin Pasha at Bukoba, 18.01.1891.

**Paralectotype**: ZMB 30118, skin, male, collected by Emin Pasha at Kandanda, "Butumbi", 26.04.1891. **Paralectotype**: ZMB 30121, skin, male, juvenile, collected by Emin Pasha at "Karevia", 13.06.1891.

Paralectotype: ZMB 30159, skin, male, collected by Emin Pasha at Kafuro, 24.02.1891.

Excluded Paralectotype: ZMB 27513 (B 18633, Fischer no. 864), skin, former mount, male, collected at "Naiwascha-See" (Lake Naivasha), 12.06.1883.

**Type locality**: "Ostafrika, Gebiet des Victoria Niansa" (East Africa, region at Lake Victoria): Bukoba, "Butumbi", Kafuro, "Karevia", Nandi, Chiriko, "Kenia", "Kiwusee", from the original description, here ascertained as "Kiwusee" [Lake Kivu, Democratic Republic Congo/Rwanda], the locality of the lectotype.

Remarks: In the original description no type was chosen, and there were no inventory numbers for specimens provided, but both sexes were described and the examined specimens were mentioned by their collecting data (locality, month, collector). Therefore, the above-listed specimens are all regarded as belonging to the type series. ZMB 27513 was inventoried as *Citrinella melanops* and mentioned in Reichenow (1904b: 275) as *Spinus citrinelloides frontalis* and is also listed as a syntype for *Spinus citrinelloides kikuyensis* Neumann. Any citril near Naivasha would be *kikuyuensis* not *frontalis*, which is easily confused with *frontalis*. Therefore we designate here ZMB 47.47 as lectotype for *Spinus citrinelloides frontalis* Reichenow and exclude ZMB 27513 from the type series. ZMB 47.47 shows the yellow-brown characteristic coloration on the head of that species. With this lectotype designation we follow an earlier decision documented on the label but which lacked any further information, as we ascertain the type locality as Lake Kivu, the locality of the lectotype. Sclater (1930: 826) indicated for *Spinus citrinelloides frontalis* Reichenow "type in Berlin from Lake Kivu". This is not a valid designation of a lectotype (ICZN 1999) as it was not clear that the specimen had been chosen from the series as given in the original description. The whereabouts of the specimens of the additional listed localities (Nandi, Chiriko, "Kenia") are unknown; we found no trace of them at BMNH and AMNH.

On 12 Jun 1883, Fischer was well to the south of Lake Naivasha, between Hell's Gate Gorge and Mount Suswa.

### Acknowledgements

This study resulted from a GBIF project on bird types housed in museums in Germany in 2003-2005. During this project, many individuals contributed to a list of bird type specimens in German museums. We especially thank Renate van den Elzen (Vienna) as one of the organizers of that project and as a representative of them all. Further, Stefanie Firyn (formerly MfN) studied the historical background of Fischer's collections. Marlies Gräwe (formerly MfN) and especially Pascal Eckhoff (MfN) supported the identification of the birds in the ZMB collection as well as the collation of associated data. Rene Dekker and Steven van der Mije (both RMNH), Gerald Mayr (SMF), Friederike Woog (SMNS), Markus Unsöld (ZSM), Mark Adams (BMNH) and Thomas J. Trombone (AMNH) kindly provided data from the collections under their care. Mark Adams (BMNH, Tring) gave the crucial hint for tracking the former Tring specimens. Carola Radke (MfN) and Hwa Ja Götz (MfN) prepared photographs of the specimens and labels of the MfN. Heidelies Wittig and Jamie Dau (Museum am Rothenbaum (MARKK), Hamburg) searched for traces of Fischer's fourth expedition in the collections of the Museum am Rothenbaum, and Tobias Hoff (University of Hamburg) helped by providing access into the library of the "Geographische Gesellschaft Hamburg". Alexander Haas (ZMH) provided support at the ZMH, and Brady Mattsson and Christina Braun proofread the paper. Robert J. Dowsett and Michel Louette gave very profound remarks on the manuscript. We want to thank all these persons for their kind support. We also thank Pamela Rasmussen for her encouragement and invaluable editorial comments and suggestions.

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georeferencing concerning geonames.org (2020) if not otherwise remarked: Ash & Miskell (1998), estimation based on map in Fischer (1885c), setimation D.A. Turner, Polhill (1988), <sup>5</sup>Chapin (1954), <sup>6</sup>estimation based on Reichenow (1902b), <sup>7</sup>approximately after map in Stuhlmann (1890), <sup>8</sup>estimation R.J. Dowsett, expedition number for Fischer only TABLE 1. Collecting localities of the type specimens

Afgoi	Updated location	Locality description	county / region / district	Country	гапппе	Longitude	Collector locality of	Expedition
	Afgoi, Afgooye	collecting site north of Mogadishu	Lower Shabelle Region	Somalia	2°08'30"N¹	45°07'20"E	C. Müller (collector for O. von Zedlitz)	
Akazienhain am Rongaflüßchen	Acacia grove at Ronga River	landscape at a river flowing off Kilimanjaro into Masailand and joining the Ruvu (Pangani) river south of Arusha Chini (see map in Fischer 1885c)	Arusha Region	Tanzania	approx. 3°30'S-3°45'S²	approx. 37°15'E–37°25'E²	G. A. Fischer	4
Am Fusse des Maeru- Berg (Massai)	at the foot of Mt Meru	forest at the base of Mt Meru (Arusha National Park)	Arusha Region	Tanzania	3°22'0"S	36°41'0"E	G.A. Fischer	4
Aruscha, Groß Aruscha, Grossaruscha	Arusha	historical area prone to periods of drought and inhabited by the Warusha people, now a populated place/region at the base of Mt Meru	Arusha Region	Tanzania	3°22'0"S	36°41'0"E	G.A. Fischer	4
Bagamojo	Bagamoyo	populated place in coastal Tanzania just north of Dares-Salaam.	Pwani Region	Tanzania	6°26'32''S	38°54'15"E	G.A. Fischer, D. Steudel	8
Barawa	Baraawe, Brava	populated place, coastal town	Lower Shabelle Region	Somalia	1°6'47''N	44°1'46"E	local collector for G.A. Fischer	3
Baringo See	Lake Baringo	freshwater rift valley lake	Baringo County	Kenya	0°38'47"N	36°3′49″E	A. Berger	
Bismarckburg	Kasanga	historical German name for a town (now Kasanga) on the southeastern shore of Lake Tanganyika	Rukwa Region	Tanzania	8°28'0"S	31°09°0"E	K. Hofmann	

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Original location name (label)	Updated location name	Updated location Locality description name	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Bogue		historical area in Uzinza country (inhabited by the Zinza people who lived around the southwest comer of Lake Victoria and on the islands within the lake)	Mwanza Region/ Kagera Region	Tanzania			J.H. Speke	
Britisch Ostafrika	Kenya	historical region		Kenya				
Buingo		first stop after leaving Niangesi, a village on the south bank of Lake Victoria (see Emin 1891)	Mwanza Region	Tanzania	approx. 2°30°S³	approx. 32°35'E³	Emin Pasha	
Bukoba	Bukoba	populated place on the northwest shore of Lake Victoria	Kagera Region	Tanzania	1°19'54''S	31°48'44''E	Emin Pasha, F. Stuhlmann	
Bussissi	Busisi	collecting locality south of Mwanza	Mwanza Region	Tanzania	2°43'0"S	32°52'0"E	Emin Pasha	
Butumbi	near Kantanda	historical populated place	Kigezi District	Uganda	S.,0,55.0	29° 59' 0"E	Emin Pasha	
Daressalam, Dar es Salam, Dar-es-Salam	Dar es Salaam	port city and capital of Dar-es-Salaam Region	Daressalam Region	Tanzania	6°49'24"S	39°16′10′'E	F. Stuhlmann	
Deutsch-Ost-Afrika, Deutsch Ost Afrika, Deutschostafrika		historical region that included the Great Lakes region, Ruanda-Urundi, Tanganyika and parts of the former Portuguese East Africa		Tanzania, Burundi, Rwanda and part of Mozambique				
Dönjo Ngai	Ol Doinyo Lengai	volcano close to the south end of Lake Natron	Arusha Region	Tanzania	2°45°0"S	35°54'0"E	G.A. Fischer	4
Duruma	Duruma country	area inhabited by the Duruma people, inland and south of Mombasa, southeast Kenya	Kwale County	Kenya	4°33°0″S	39°5'0"E	J.H. Hildebrandt	
Ebene am Pare Gebirge	plains near the SouthPare Mts	plains below the South Pare Mts	Kilimanjaro Region	Tanzania			G.A. Fischer	4

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TABLE 1. (continued)	ed)							
Original location name (label)	Updated location name	Locality description	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Ebene bei Pare	plains near the Pare Mts	plains below the South Pare Mts	Kilimanjaro Region	Tanzania			G.A. Fischer	4
Formosabay, Ungama Bay	Ungama Bay, Ungwana Bay	off northeast coast of Kenya near the Tana Delta	Kilifi County	Kenya	2°48'47"S	40°18'18"E	G.A. Fischer	2
Fort George	Fort George	historical fort on a hill near Lake Katwe	Kasese District	Uganda	S,,0,8,0	29°52'0''E	W.J. Ansorge	
Gardolia-Djjra	Garre Liwin, Wante	locality on the Lower Juba, a short way upstream from Kismayu concerning Erlanger (1904)	Lower Juba Province	Somalia	0°43'2"N	41°45′18″E	C. von Erlanger, C. Hilgert	
Gasa-Berge	Gasa Mts	Gasa Hills in the Kondoa- Irangi District	Dodoma Region	Tanzania	\$°05°S <sup>5</sup>	35°46'E <sup>5</sup>	G.A. Fischer	8
Gonda	Igonda	collecting locality south of Tabora town	Tabora Region	Tanzania	5°33°S <sup>4</sup>	32°40'E⁴	R. Böhm	
Groß Aruscha / Gross- Arusha, Grossaruscha	Arusha	historical area prone to periods of drought and inhabited by the Warusha people, now a populated place/region at the base of Mt Meru	Arusha Region	Tanzania	3°22'0"S	36°41'0"E	G.A. Fischer	4
Humbluti	Nambuti	collecting locality	Lindi Region	Tanzania	10°31'0"S	37°56'0"E	N. Stierling	
Igonda	Igonda	collecting locality south of Tabora town	Tabora Region	Tanzania	5°33°S <sup>4</sup>	32°40'E⁴	R. Böhm	
Irangi	Irangi	area immediately to the south of Kondoa town (Kondoa district)	Dodoma Region	Tanzania	4°45°S <sup>4</sup>	36°00'E <sup>4</sup>	G.A. Fischer	5
Kaboa	Kabowa	collecting locality near Lake Victoria	Kampala	Uganda	0°16'58"N	32°33'44"E	W.J. Ansorge	
Kaffernland		historical Dutch name for Cape Colony		South Africa			L. Krebs	
Kafuro	Kafuro	freshwater spring, today also a populated place	Kagera Region	Tanzania	1°44'7"S	31°0′3″E	Emin Pasha	

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TABLE 1. (continued)	ned)							
Original location name (label)	Updated location name	Updated location Locality description name	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Kagehi	Kayenzi	historical fishing village on southern shore of Lake Victoria close to today's town of Mwanza	Mwanza Region	Tanzania	2°23'0''S	33°5'0"E	G.A. Fischer 5	
Kahe	Kahe	populated place south of Moshi	Kilimanjaro Region	Tanzania	3°30°0″S	37°26'0"E	O. Neumann	
Kakoma	Какота	collecting locality south of Tabora town	Tabora Region	Tanzania	5°47'0''S	32°26'0"E	R. Böhm	
Kangasi		unknown collecting site near Simbamwenni (estimation based on field number and other birds collected by Böhm)	Morogoro Region	Tanzania			R. Böhm	
Karema	Karema	collecting site at the East side of Lake Tanganyika	Katavi Region	Tanzania	8°50°58″S	30°27'53"E	R. Böhm	
Karevia		collecting site west of Mt Rwenzori (see Reichenow 1902b)	Nord Kivu	Democratic Republic Congo	0°21'N <sup>5</sup>	29°45'E <sup>5</sup>	Emin Pasha	
Kau	Kau, Ngao	populated place, lower Tana River	Tana River County	Kenya	2°29S <sup>4</sup>	40°26'E⁴	G.A. Fischer	
Kawanga	Wanga's (Mumias)	Home of Wanga, a historical place where explorers picked up porters and supplies, now Mumias town	Kakamega County	Kenya	0°20'5"N	34°29°16″E	G.A. Fischer	
Kibaradja	Kibaradja	Kinakomba area of the Lower Tana River	Tana River County	Kenya	1°41'50"S	40°7′18″E	G.A. Fischer	
Kiboscho	Kibosho	populated place on south slope of Mt Kilimanjaro near Moshi, altitude c. 2200m	Kilimanjaro Region	Tanzania	3°15'0"S	37°19'0"E	O. Neumann, L. von Trotha	
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TABLE 1. (continued)	(pe							
Original location name (label)	Updated location name	Locality description	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Kikombo	Kikombo	populated place, located very close to Mpwapwa town east of Dodoma	Dodoma Region	Tanzania	6°13'0''S	35°59'0"E	S. T. Pruen	
Kikuyu	Kikuyu Mts	highland area south of Mt Kenya (incl. Kikuyu escarpment forest)	Kiambu County	Kenya	approx. 0°54'4''S	approx. 36°42′13″E	W. Doherty	
Kilawa (Msingino- Kilawa)	Kilwa	collecting site in Kilwa district, coastal Tanzania	Lindi Region	Tanzania	approx. 8°55'30"S	approx. 39°30'47''E	P. Fromm	
Kilimandjaro / Kilimandscharo/Kilima Ndjaro	Kilimanjaro	snow-capped mountain dominating the Kilimanjaro Region	Kilimanjaro Region	Tanzania	3°4'33''S	37°21'12"E	B.Y. Sjöstedt	
Kinakomba	Kinakomba	Kinakomba area of the Lower Tana River	Tana River County	Kenya	1°41'52''S	40°3'7"E	G.A. Fischer	
Kiniamongo	Kiniamongo	historical area close to the eastern shore of Lake Victoria where the Mara River enters Lake Victoria, near the town of Musoma and just south of the Kenya-Tanzania border	Mara Region	Tanzania	approx. 1°30°0"S	approx. 33°48'0"E	G.A. Fischer 5	
Kionga	Quionga Bay	coastal region at the mouth of the Ruvuma River	Cabo Delgado Province	Mozambique	10°34'0"S	40°32'11"E	F. Stuhlmann	
Kipini	Kipini	populated place at the mouth of the Tana River	Tana River County	Kenya	2°31'32"S	40°32'20"E	G.A. Fischer	
Kiroka	Kiroka	village just to the northeast of Morogoro town	Morogoro Region	Tanzania	8°50°0°S	37°49'0''E	K. Hofmann	
Kismaju	Kismayo, Kismayu	port in southeast coastal Somalia	Lower Juba Province	Somalia	0°21'29''S	42°32'43"E	C. von Erlanger, C. Hilgert	
Kissaki	Kisaki	populated place on Ruvu River (south of Morogoro Town)	Morogoro Region	Tanzania	7°27'41''S	37°36'53"E	F. Stuhlmann	
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Original location name (label)	Updated location name	Locality description	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Kitima	Kitima	collecting locality on the Ituri River		Democratic Republic Congo	1°18'N⁵	27°55'E <sup>5</sup>	W.J. Ansorge	
Kiwusee	Lake Kivu	lake on the border between the Democratic Republic of Congo and Rwanda		Democratic Republic Congo / Rwanda			R. Kandt	
Klein-Aruscha / Klein Aruscha	Arusha Chini	populated place south of Moshi	Arusha Region	Tanzania	3°35°0°S	37°20'0"E	G.A. Fischer	4
Komboko am Kilima Ndjaro	Komboko, Mt Kilimanjaro	historical village in Chagga (Tchagga) country on the southwestern slopes of Mt Kilimanjaro and close to Mt Meru (see Fischer 1885c)	Arusha Region/ Kilimanjaro Region	Tanzania	3°12'S²	37°10°E²	G.A. Fischer	4
Küste bei Maurui	coast near Maurui	coastal area to the southeast of Maurui	Tanga Region	Tanzania	\$~7.0,.Z	38°23'0"E	G.A. Fischer	4
Lado	Lado	collecting locality on the Upper White Nile in South Sudan	Central Equatoria	South Sudan	5°1'59"N	31°41'15"E	Emin Pasha	
Lamu	Lamu	island in northeast coastal Kenya	Lamu County	Kenya	2°16′18″S	40°54′7″E	J. Kirk	
Lindi	Lindi	port in southeast Tanzania	Lindi Region	Tanzania	9°59'49''S	39°42'59''E	local collector for G.A. Fischer, K. Schnorrenpfeil	e
Loeru, Massaigebiet	Loeru, Konda	collecting locality in Masailand near Kondoa town	Dodoma Region	Tanzania	5°15°S <sup>6</sup>	36°50'E <sup>6</sup>	G.A. Fischer	2
Maeru Berg, "Massai"	Mt Meru	mountain in Masailand overlooking Arusha Town	Arusha Region	Tanzania	3°14'48"S	36°45'36''E	G.A. Fischer	4
Magila	Magila	locality in Usambara Mts, Lushoto District	Tanga Region	Tanzania	4°48°0"S	38°19'0"E	O. Neumann	
Magogoni	Magogoni	collecting locality on Upper Ruvu River	Morogoro Region	Tanzania	7°13'36''S	37°59'15''E	K. Hofmann	
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TABLE 1. (continued)	ted)							
Original location name (label)	Updated location name	Locality description	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Magu	Magu	small town on the southern shore of Lake Victoria in Magu Bay (east of Mwanza Town) (see also Reichenow 1902b)	Mwanza Region	Tanzania	2°35°26°'S	33°26'46"E	G.A. Fischer	S
Malangali	Malangali	Malangali in Usafua (see Reichenow 1902b), collecting locality between Lake Rukwa and Lake Malawi	Mbeya Region	Tanzania	8°34°S⁴	34°51'E⁴	W.L.H. von der Marwitz	
Malindi	Malindi	populated place north of Kilifi	Kilifi County	Kenya	3°13'4"S	40°7′0″E	G.A. Fischer	1, 2
Maliwe in Kilawa, Maliwe, Bez. Kilwa	Lake Maliwe	lake in Kilwa District	Lindi Region	Tanzania	8°50°0"S	39°0'0''E	P. Fromm	
Mandera	Mandera	Church Mission Station close or at Mandera Bridge over the Wami River	Pwani Region	Tanzania	6°12'0"S	38°25°0"E	G.A. Fischer	3
Manjonga, Manjonio	Munyonyo	collecting locality north of Kampala	West Mengo District	Uganda	0°15'9"N	32°36'3"E	F. Stuhlmann	
Marangu	Marangu	populated place east of Moshi	Kilimanjaro Region	Tanzania	3°17'0"S	37°31'0"E	W. L.H. von der Marwitz	
Masindi	Masindi, Mazinde	populated place close to the Usambaras in Korogwe district	Tanga Region	Tanzania	4°48'0''S	38°13'0"E	G.A. Fischer	4
Massa	Masabubu	collecting locality on the Lower Tana River	Tana River County	Kenya	1°12'26''S	40°0′13″E	G.A. Fischer	2
Massailand	Maasai Area	tribal area covering a vast area of the Rift Valley, southem Kenya, northem & interior Tanzania		Kenya and Tanzania			G.A. Fischer	4, 5
Matióm	Matiom Mts	mountain range (see also Reichenow 1902b)	Arusha Region	Tanzania	2°42'0''S	36°23°0″E	G.A. Fischer	4

name (Iabel)	Updated location name	Locality description	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Maurui	Maurui	railway station and populated place on the Lower Pangani (close to town of Korogwe)	Tanga Region	Tanzania	5°7'0''S	38°23'0"E	G.A. Fischer	4
Mbusini	Mbusini	research station near monastery in Usegua country	Tanga Region	Tanzania	6°15°S <sup>7</sup>	38°05′E <sup>7</sup>	F. Stuhlmann	
Mengo	Mengo	populated area in central Uganda	East/West Mengo Districts	Uganda	N0.30.00	32°15'0"E	F. Stuhlmann	
Mikindani	Mikindani	populated place close to the port of Mtwara in southeast Tanzania	Mtwara Region	Tanzania	10°16'49"S	40°6′52″E	H. Grote	
Mitole	Mitole	former forest area on the Lower Tana River	Tana River County	Kenya	2°8'26"S	40°11'23"E	G.A. Fischer	2
Mittellauf des Panganiflusses	middle reaches of the Pangani River	middle reaches of the Pangani River, below the South Pare Mts	Kilimanjaro Region	Tanzania			G.A. Fischer	4
Mkalama	Mkalama	trading centre and populated place on edge of the Wembere plains	Singida Region	Tanzania	4°7′0″S	34°38'0"E	L. von Trotha	
Mialo	Mlalo	Church Mission Station and populated place near Lushoto (West Usambaras)	Tanga Region	Tanzania	4°35'0"S	38°21'0"E	(Pastor) K. Röhl	
Mombas, Mombassa	Mombasa Island	port in coastal Kenya	Mombasa County	Kenya	4°3′29″S	39°40'52''E	G.A. Fischer	
Morogoro	Morogoro Region	populated place and Regional H/Q in central Tanzania	Morogoro Region	Tanzania	6°49′15″S	37°39'40"E	F. Stuhlmann, M. Münzner	
Morogoro-Kiroka	Kiroka	village just to the northeast of Morogoro town	Morogoro Region	Tanzania	6°50°S <sup>4</sup>	37°48'50''E <sup>4</sup>	K. Hofmann	
Moshi	Moshi	town at the southern base of Mt Kilimanjaro	Kilimanjaro Region	Tanzania	3°21'00"S	37°20'00"E	K. Kittenberger	

TABLE 1. (continued)	ed)							
Original location name (label)	Updated location name	Locality description	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Mossambique	Mozambique Island	island off the northeast coast of Mozambique	Nampula Province	Mozambique	15°2'4"S	40°44'4"E	unknown person on behalf of G.A. Fischer	3
Mpwapwa, Mpapua	Mpapua, Mpwapwa	small village close to the main railway line northeast of Kilosa	Dodoma Region	Tanzania	6°21'0"S	36°29°0″E	Emin Pasha	
Msua, Mssuai, Mssua	Msua	populated place and railway station west of Dar-es-Salaam	Pwani Region	Tanzania	6°46°0″S	38°27'0"E	R. Böhm, Emin Pasha	
Muniuni	Munyuni	collecting locality and seasonal oxbow lake on the lower Tana River	Tana River County	Kenya	2°03'22''S	40°10'41''E	G.A. Fischer	2
Murentat (Naiwascha See)	Morendat	point where the Malewa river enters Lake Naivasha, north side of Lake Naivasha, also a railway station (see map in Wichmann & Fischer 1895)	Nakuru County	Kenya	0°40'19"S	36°23°14″E	G.A. Fischer	4
Naiwascha, Naiwascha See, Naiwaschasee	Lake Naivasha	large (circular) freshwater lake in the Central Rift Valley of Kenya	Nakuru County	Kenya	approx. 0° 45'56"S	approx. 36°21′20"E	G.A. Fischer	4
Nassa	Nyashimo	site of a Church Mission Station on Speke Gulf, southeast Lake Victoria, now a populated place	Simiyu Region	Tanzania	2°24'0"S	33°33°0"E	G.A. Fischer	2
Ndi, Teita	Ndi	railway station below the Taita Hills	Taita-Taveta County	Kenya	3°14'12"S	38°30'11"E	J.H. Hildebrandt	
Ngaruka (Massailand)	Engaruka	trading centre south of Lake Natron, today a populated place	Arusha Region	Tanzania	2°59'0"S	35°57'0"E	G.A. Fischer	4
Ngomingi		collecting site in Uhehe country (see Reichenow 1902b)	Iringa Region	Tanzania	8°10'S <sup>5</sup>	35°12′E <sup>5</sup>	W.L.H. von der Marwitz	

Original location name (label)	Updated location name	Locality description	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Nguru-Berge	Nguru Mts	mountain range to the north of Morogoro town	Morogoro Region	Tanzania	S.,0,0.9	37°30'0"E	local collector for G.A. Fischer	
Nguruman, Massailand; Nguruman Salzsteppe	Nguruman	area north of lakes Natron and Magadi, at the base of the Nguruman Hills (incl. Nguruman escarpment) close to the Kenya-Tanzania border, ca. 680m elevation (Fischer 1884)	Kajiado County	Kenya	approx. 2°1'10"S	approx. 36°2′10″E	G.A. Fischer	4
Niakatschi, Niakatchi	Nyakach Bay	historical locality on west shore of Lake Victoria (see map in Wichmann & Fischer 1895)	Kisumu County	Kenya	S.,6Z,L10	34°49'26"E	G.A. Fischer	v,
Niakune	Niakune Hill, Ugaia (range)	historical collecting site near Oyugis (see map in Wichmann & Fischer 1895)	Homa Bay County	Kenya	0°30°35″S	34°43'50"E	G.A. Fischer	v
Niangesi	Niangesi	collecting site on southern shore of Lake Victoria (see Reichenow 1902b) close to Buingo and north of Bussisi	Mwanza Region	Tanzania	approx. 2°35'S³	approx. 32°45'E³	Emin Pasha	
Niansa, Niansa Victoria / Victoria See	Lake Victoria	largest freshwater lake in Africa		Kenya, Tanzania			G.A. Fischer	5
Niassa, Niassa Gebiet	Niassa Province	historical region north and east of Lake Nyasa (Malawi)	Niassa Province	Mozambique				
Olgos	Olgos Hill, Ol Gazi	hill in Masailand, close to the eastern boundary of Serengeti NP and the Loliondo Game Controlled Area	Arusha Region	Tanzania	2°6′0"S	35°17′0"E	W. Kattwinkel	

TABLE 1. (continued)	ued)							
Original location name (label)	Updated location name	Updated location Locality description name	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Ost-Uluguru	Uluguru Mts	East Ulugurus Mts	Morogoro Region	Tanzania	7°6′18"S	37°39'15"E	K. Hofmann	
Pangani	Pangani	historical coastal area (Pangani district) of northeast Tanzania	Tanga Region	Tanzania			G.A. Fischer, O. Neumann, F. Stuhlmann	
Pangani	Pangani	river (see Fischer 1885c)	Tanga Region	Tanzania			G.A. Fischer	
Pare, Pare Berge	South Pare Mts	Pare Mts, referred to today as the South Pare Mts (see Fischer 1885c)	Kilimanjaro Region	Tanzania	4°15′0"S	37°52'0"E	G.A. Fischer 4	
Qua Mpara	Mpala	populated place on the western shore of Lake Tanganyika	Tanganyika Province	Democratic Republic Congo	6°43'56"S	29°31'28"E	R. Böhm	
Quilimane	Quelimane	port town	Provincia de Zambezia	Mozambique	17°52'43"S	36°53'18'E	F. Stuhlmann	
Rabai (Wanika)	Rabai	Church Mission Station northwest of Mombasa town	Kilifi County	Kenya	3°55'54"S	39°34'13"E	G.A. Fischer	
Ronga Flüsschen, Ronga-Flüßchen	Ronga River	river flowing off Mt. Kilimanjaro into the Pangani River, collecting site near Arusha-Chini	Arusha Region	Tanzania			G.A. Fischer 4	
Rupira		historical collecting site in Ukinga highlands	Iringa Region	Tanzania	3°56'S <sup>5</sup>	34°16′E <sup>5</sup>	F. Fülleborn	
Ruwana-Fluß	Ruwana River	river flowing through the Grumeti Controlled Area along northern boundary of Serengeti NP and entering the Speke Gulf area of Lake Victoria	Mara Region	Tanzania	2°07'S <sup>4</sup>	33°48'E⁴	G.A. Fischer 5	
Salanda	Saranda	populated place	Singida Region	Tanzania	5°43'0"S	34°59'0"E	G.A. Fischer 5	

TABLE 1. (continued)	ed)							
Original location name (label)	Updated location name	Updated location Locality description name	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Salzsumpf Massailand	salty marshes near Ol Doinyo Lengai	salty (alkaline) wetlands along the southeast shore of Lake Natron, close to Ol Doinyo Lengai volcano	Arusha Region	Tanzania	approx. 2° 45'0"S	_pprox 35° 54'0"E	G.A. Fischer 4	
Sanji-Mahenge	Mahenge	collecting locality close to the historical garrison town of Mahenge (see also Reichenow 1902b)	Morogoro Region	Tanzania	approx. 8°41'0".S	approx. 36°43'0"E	M. Münzner	
Sansibar	Zanzibar	island, semi-autonomous region and historical trading centre	Zanzibar	Tanzania	S,,0,01°9	39°20'0"E	C.C. von der Decken, G.A. Fischer, F. Stuhlmann	
Schasche, Schaschi	Mt. Schasche	hill or rocky outcrop close to Speke Gulf, southeastern corner of Lake Victoria	Mara Region	Tanzania	2°2'0''S	33°55'0"E	G.A. Fischer 5	
Serian	Serya	collecting site in Kondoa District	Dodoma Region	Tanzania	4°56'0"S	35°40'0"E	G.A. Fischer 5	
Shirati	Shirati	trading center and populated place on the eastern shore of Lake Victoria	Mara Region	Tanzania	1°8'0"S	33°59'0"E	A.F. Herzog zu Mecklenburg	
Sigirari	Sigirari	area inhabited by the Sigirari tribe between Mt. Meru and Mt. Kilimanjaro (see map in Fischer 1885c)	Arusha Region	Tanzania	2°45'S-3°30'S <sup>4</sup>	37°00'E <sup>4</sup>	G.A. Fischer 4	
Simiu	Simiyu River	river southeast of Lake Victoria, between Usukuma and Magu	Mwanza Region/ Shinyanga Region	Tanzania			G.A. Fischer	S
Soboro	Zuboro/Zoboro	populated place southeast of Singida Town, in Ussandawe country	Singida Region	Tanzania	2°35'0"S	35°10'0"E	G.A. Fischer, L. Von 5 Trotha	

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TABLE 1. (continued)	(pa)							
Original location name (label)	Updated location name	Locality description	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Somba	Zomba Plateau	plateau in the Shire Highlands	Southern Region	Malawi	15°19'37"S	35°19'15"E	A. Sharpe, A. Whyte	
Songea	Songea	regional HQ in southeast Tanzania	Ruvuma Region	Tanzania	10°41'0"S	32°39°0°E	N. Stierling, F. Füllebom	
St. Johns Fluss, Pondoland	Umzimvubu, Mzimvubu	river in Pondoland (historical area), today in the southern Kwa Zulu Natal region	Eastern Cape Province	South Africa			K. Beyrich	
Suswa	Mt Suswa, Susua	dormant volcano near Hell's Gate National Park	Nakuru County	Kenya	S,,0,6 <sub>0</sub> 1	36°21'10"E	G.A. Fischer	
Tabora	Tabora	regional HQ in west- central Tanzania	Tabora Region	Tanzania	\$,,8\$,0 <sub>°</sub> \$	32°49'35"E	Emin Pasha	
Taita	Taita Hills	highland area in southeastern Kenya	Taita Taveta County	Kenya	3°24'15"S	38°19'40"E	J.H. Hildebrandt	
Tana-Fluss	Tana River	major river in Kenya	Tana River County	Kenya			G.A. Fischer	
Tanga	Tanga	coastal town	Tanga Region	Tanzania	5°4′8′′S	39°5′55"E	O. Neumann, B.Y. Sjöstedt	
Tembo	Tembo Hill	hill in Kilosa District	Morogoro Region	Tanzania	06°07'S <sup>4</sup>	$37^{\circ}07^{\cdot}\mathrm{E}^{4}$	F. Fülleborn	
Tschara, Tchara	Tschara	populated place, lower Tana River Valley near Kipini at the mouth of the Tana River	Tana River County	Kenya	2°30'26"S	40°17'43''E	G.A. Fischer 2	
Ualimi	Ualimi country	collecting locality near Kibaradja, Lower Tana River (see Reichenow 1902b)	Tana River County	Kenya	1°42°S°	40°07'E°	G.A. Fischer	
Uchicha	Luiche	locality near Kigoma	Kigoma Region	Tanzania	4°55'0"S	29°44'0"E	L. von Trotha	

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TABLE 1. (continued)	led)							
Original location name (label)	Updated location name	Locality description	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Ugaia	Ugaia country	historical area south of Kavirondo Gulf, Lake Victoria	Homa Bay County	Кепуа			G.A. Fischer 5	
Ugalla river	Ugalla river	major river flowing through the Ugalla Game Reserve in western Tanzania	Katavi Region/ Tabora Region	Tanzania			R. Böhm, L. von Trotha	
Ugogo	Ugogo country	historical area inhabited by the Wagogo people	Dodoma Region	Tanzania	S,,0,L <sub>0</sub> 9	35°30°0°E	S.T. Pruen	
Ukamba	Ukambani	region inhabited by the Wakamba people in southeast Kenya, southeast Mt. Kenya (see Reichenow 1902b)	Makueni County/ Kitui County/ Machakos County	Kenya	approx. 0°40'S–3°00'S <sup>4</sup>	approx. 35°00'E–38°30'E⁴	J.H. Hildebrandt	
Ukerewe Island	Ukerewe Island	island in Lake Victoria	Mara Region	Tanzania	2°3'0"S	33°0′0′E	H.A. Conrads	
Umbugwe	Umbugwe country	area southwest of Lake Manyara (Mbulu Highlands)	Manyara Region	Tanzania	3°51'0"S	35°32'0"E	O. Neumann	
Undi, Undis	Undi	village south of Tunduru in southeast Tanzania near the Mozambique border	Ruvuma Region	Tanzania	11°17'0''S	37°20'0"E	F. Fülleborn	
Uniamwesi	Unyamwezi country	homeland of the Nyamwezi people, covering parts of present- day Tabora, Singida and Shinyanga regions, northern Tanzania	Shinyanga Region/Singida Region/Tabora Region	Tanzania	2°40'S-5°30'S <sup>5</sup>	31°40'E-33°50'E <sup>5</sup>	R. Böhm	
Unjoro	Bunjoro, Bunyoro	area west of Lake Albert (see Reichenow 1902b)	Bunyoro District	Uganda	$1^{\circ}40^{\circ}\mathrm{N}^{8}$	31°30'E <sup>8</sup>	W.J. Ansorge	
Upembasee	Lake Upemba	lake in southeast DR Congo	Haut-Lomami	Democratic Republic Congo	8°37′20″S	26°24'26"E	R. Böhm	
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TABLE 1. (continued)	ed)							
Original location name (label)	Updated location name	Locality description	county / region / district	Country	Latitude	Longitude	Collector locality of	Expedition number
Usaramo	Uzaramo country	historical area around the lower Ruvu River Valley, lying southwest of Dar-es- Salaam	Pwani Region	Tanzania	7°10'S⁴	38°50'E <sup>4</sup>	G.A. Fischer, F. Stuhlmann	3
Usegua	Useguha country	historical area to the south of the Lower Pangani River Valley, inhabited by the Wasegua people, Wazigua country, Pangani River Valley	Tanga Region	Tanzania	5°40'S-6°40'S'	37°30'E–38°25'E <sup>5</sup>	G.A. Fischer	1, 5
Ussambara	Usambara Mts	highland region	Tanga Region	Tanzania	4°07'S-5°20'S <sup>5</sup>	37°45'E-38°55'E <sup>5</sup>	J. Kirk	
Ussandaui/Ussandawe	Usandaui country	area historically inhabited by the Sandawe people in Kondoa District, southwest of Kondoa Town (see Reichenow 1902b)	Dodoma Region	Tanzania	5°22'S <sup>5</sup>	35°08'E–35°55'E <sup>5</sup>	G.A. Fischer	У
Ussure	Ussure	populated place in the Wembere steppe	Singida Region	Tanzania	4°39°0″S	34°23'0"E	G.A. Fischer	5
Usukuma	Usukuma/ Ussukuma country	area historically inhabited by the Sukuma people on or near the southern shores of Lake Victoria	Mwanza Region	Tanzania	2°27'S <sup>4</sup>	33°08°E⁴	G.A. Fischer	ĸ
Waso nyiro	Uaso Nyiro River, Ewaso Ng'iro, Lagh Dera	river flowing along the southern Uaso Nyiro Valley at base of the Nguruman Escarpment	Kajiado County	Kenya			G.A. Fischer	4
Weg nach Ussure	on the way to Ussure (Wembere Mbuga)	marsh, Wembere steppe/ floodplains on the way to Ussure, near Salanda	Singida Region	Tanzania			G.A. Fischer	S
Wembaere, Wembere, Wembaere-Steppe, Wembere-Ebene	Wembere steppe Wembere Plain, Wembere Mbuga	Wembere steppe/ floodplains	Singida Region	Tanzania	4°30'0"S	34°0°0″E	G.A. Fischer, W.L.H. von der Marwitz	ĸ

TABLE 1. (continued)	(pai							
Original location name (label)	Updated location name	Updated location Locality description name	county / region / Country district		Latitude	Longitude	Collector locality of Expedition number	Expedition number
Wito/Witu	Witu Forest	coastal forest	Lamu County Kenya	Kenya	2°22°54"S	40°29'49"E	G.A. Fischer	, 3
Yangzeange	Yange Yange	stream	Morogoro Region Tanzania	Tanzania			R. Böhm	

TABLE 2: Collectors (full names and identifiers) for type specimens

Name	Initials	Life span	Wikidata-id	GND-ID
Ansorge	William John	1850-1913	Q21392784	1177823721
Berger, Dr.	Arthur Charles Henri	1871–1941	Q95009262	136911986
Beyrich	Konrad	1852-	Q63491169	117590150
Böhm, Dr.	Richard	1854–1884	Q71184	116220589
Conrads, Father	Hubert Aloys	1874–1936	Q113660071	
Decken, von der	Carl Claus	1833-1865	Q65951	116043296
Doherty	William	1857-1901	Q3568555	
Erlanger, von	Carlo	1872-1904	Q69865	116540524
Fischer, Dr.	Gustav Adolf	1848-1886	Q64309	11750906X
Fromm	Paul	1864–1940	Q111508242	1155755286
Fülleborn, Prof. Dr.	Friedrich (Georg Hans Heinrich)	1866–1933	Q107557	116845694
Grote	Hermann Johannes	1882-1951	Q3134158	117564753
Hildebrandt	Johann Maria	1847-1881	Q75765	116804211
Hilgert	Carl	1866–1940	Q46839200	
Hofmann	Karl	1823-1859		137409125
Kandt	Richard	1867–1918	Q76072	118843184
Kattwinkel	Wilhelm	1866–1935	Q1709147	116067470
Kirk	John	1832-1922	Q1700717	117520152
Kittenberger	Kálmán	1881-1951	Q1112757	106042610
Krebs	Ludwig Engelhard	1792-1844	Q5982493	1034930354
Marwitz, von der	Wilhelm Ludwig Heinrich	1874–1915	Q114793526	
Mecklenburg(-Schwerin), zu	Adolf Friedrich	1873-1969	Q60697	119333252
Müller	C.W.			
Münzner	Max			
Neumann	Oscar Rudolph	1847–1946	Q77186	1104762404
Pasha	Emin	1840-1892	Q60271	118530135
Pruen	Septimus Tristram	-1936	Q75409882	
Röhl, Pastor, Dr.	Karl	1870-1951		
Schnorrenpfeil	Karl			
Sharpe	Alfred	1853-1935	Q459640	
Sjöstedt, Prof. Dr.	Bror Yngve	1866–1948	Q770555	117630519
Speke	John Hanning	1827-1864	Q125084	117649139
Steudel	D.			
Stierling	N.			
Stuhlmann, Dr.	Franz (Ludwig)	1863-1928	Q107750	119365154
Trotha, von	(Adrian Dietrich) Lothar	1848-1920	Q65898	117636908
Whyte	Alexander	1834–1908	Q2833227	122997824
Zedlitz und Trützschler, Graf von	Otto Eduard	1873–1927	Q107142	1137856254

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