



ATTI
DELLA
SOCIETÀ TOSCANA
DI
SCIENZE NATURALI

MEMORIE • SERIE B • VOLUME CXXXI • ANNO 2024



Edizioni ETS

ATTI DELLA SOCIETÀ TOSCANA DI SCIENZE NATURALI

MEMORIE

Via Santa Maria, 53 - 56126 Pisa

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Gli Atti sono pubblicati in due volumi (Serie A - Abiologica, ISSN 0365-7655; Serie B - Biologica, ISSN 0365-7450) all'anno nel mese di dicembre. Possono essere pubblicati ulteriori volumi, definiti Supplementi, su temi specifici.

Atti are published yearly in two Issues (Serie A - Abiological, ISSN 0365-7655; Serie B - Biological, ISSN 0365-7450) in December. Some monographic volumes may be published as Supplementi.

Le lingue usate dalla rivista sono l'inglese o l'italiano // *The languages of the journal are English or Italian.*

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Fondata nel (*founded in*) 1874

Via Santa Maria, 53 - 56126 Pisa

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Autorizzazione n. 17/56 del 26 luglio 1956, Trib. di Pisa

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AN ITALIAN PHYSICIAN IN CONGO: BIRDS COLLECTED BY RENZO ROSATI (1879-1935) PRESERVED IN THE NATURAL HISTORY MUSEUM OF THE UNIVERSITY OF PISA, ITALY

Abstract - L. VANNI, F. BARBAGLI, C. VIOLANI, M. CAPOCCI, S. FARINA, *An Italian physician in Congo: Birds collected by Renzo Rosati (1879-1935) preserved in the Natural History Museum of the University of Pisa, Italy.*

Renzo Rosati was an Italian physician who lived in Congo from 1907 to 1910 with the task entrusted to him by the Belgian government to study sleeping sickness and other tropical diseases. In this period he set up a collection of 228 skin-prepared birds collected from various localities of Congo from 18-10-1909 to 28-06-1910. This paper not only provides a systematic review of the specimens currently preserved in the Natural History Museum of the University of Pisa, Italy, but also presents, for the first time, the catalogue of the collection, which was previously unknown. It also explores Rosati's relationship with J.P. Chapin, an ornithologist who, along with Herbert Lang, was part of the American Museum Congo Expedition (1909-1915). This connection led to the inclusion of four specimens shot by Rosati in the collection of the American Museum of Natural History.

Key words - Natural History Collections, Africa, American Museum Congo expedition, Natural History Museum of the University of Pisa, Italy, ornithology

Riassunto - L. VANNI, F. BARBAGLI, C. VIOLANI, M. CAPOCCI, S. FARINA, *Un medico italiano in Congo: uccelli raccolti da Renzo Rosati (1879-1935) conservati presso il Museo di Storia Naturale dell'Università di Pisa.*

Renzo Rosati è stato un medico italiano che visse in Congo dal 1907 al 1910 con l'incarico affidatogli dal governo belga di studiare la malattia del sonno e altre malattie tropicali. In questo periodo costituì una collezione di 228 uccelli preparati in pelle, raccolti in diverse località del Congo dal 18-10-1909 al 28-06-1910. Il presente contributo, oltre alla revisione sistematica degli esemplari conservati presso il Museo di Storia Naturale dell'Università di Pisa, riporta per la prima volta il catalogo di questa collezione inedita e il rapporto che Rosati ebbe con J.P. Chapin, l'ornitologo che fece parte, insieme a Herbert Lang, della spedizione dell'American Museum of Natural History in Congo (1909-1915) che ha portato alla presenza di quattro esemplari raccolti da Rosati nella collezione dell'American Museum of Natural History.

Parole chiave - Collezioni naturalistiche, Africa, Spedizione in Congo del Museo Americano di Storia Naturale, Museo di Storia Naturale dell'Università di Pisa, ornitologia

INTRODUCTION

The Natural History Museum of the University of Pisa preserves an important ornithological collection consisting of more than 7000 specimens, including stuffed specimens, skins, osteological and other anatomical preparations. Additionally, the collection includes 248 nests and 555 eggs from 112 different species (Vanni & Farina, 2019; Nocchi & Farina, 2017). Since the 1980s, following the museum's relocation from Pisa to its current location at the Pisa Charterhouse in Calci, the main acquisitions were the private collections of Meluzzi and Barbero, which together include approximately 750 stuffed specimens.

The skins collection consists of 646 specimens, which can be divided into four distinct parts. The first includes those acquired by Paolo Savi (director of the Natural History Museum of the University of Pisa from 1823 to 1871) from 1831 to 1854. The second part consists of 6 specimens collected by Orazio Antinori (1811-1882) during his expedition to Central Africa (Vanni & Farina, 2019). The third part comprises 15 specimens from the Enrico Hillyer Giglioli collection, gathered in China between 1861 and 1862. The final part features 228 specimens from Congo (1909-1910) collected by Renzo Rosati. The aim of this paper is to shed light on the life of this Italian physician and his connection with the Lang-Chapin expedition in Belgian Congo (Osborn *et al.*, 1919). We also report for the first time the catalogue of the specimens he collected, which are currently preserved at the Natural History Museum of the University of Pisa, along with a systematic review.

MATERIALS AND METHODS

The Rosati ornithological collection consists of 228 skin-prepared birds collected from 18-10-1909 to 28-06-1910 from various localities of Congo. Of these, 182 birds retain their original label, made of gauze

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glued to paper and attached to the legs of the specimens. The labels provide information on the habitat where the birds were collected, as well as the colour of their eyes, legs, and beak, their diet, age, and sex (Fig. 1). The remaining 46 specimens lack labels.

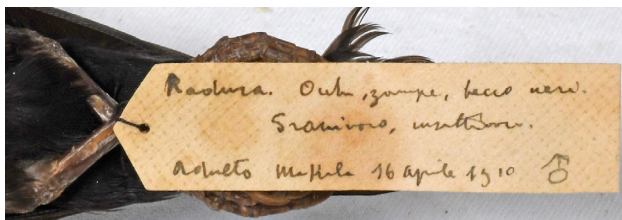


Figure 1. Example of the label associated to the specimens.

According to the information on the labels, Rosati collected birds mainly from Avakubi, where he lived, but also from Makala (from 3rd to 27th November 1909 and from 16th to 21st of April 1910), Fungiakambi (the 1st of December 1909 returning to Avakubi from Makala), Bomili (from 7th to 9th March of 1910), Mawambi (from 19th to 31st May of 1910), Irumu (from 4th to 10th and from 21st to 28th of June 1910) and Kilo (from 13rd to 19th June 1910) (Fig. 2).

Institutional archives, local newspapers, medical journals and hunting magazines were consulted to reconstruct Rosati's life. Important sources of information for the period that Rosati spent in the Belgian Congo were also the private writings of James Paul Chapin (Chapin 1909a, 1909b, 1910), available at American Museum of Natural History (hereinafter AMNH) website (<https://www.amnh.org/research/research-library/virtual-resources/congo>), the four volumes of *The Birds of the Belgian Congo* (Chapin, 1932, 1939, 1953, 1954) and the memories of the Swedish reserve officer Eskil Sundhagen (Sundhagen, 2013).

In order to determine the specimens in the collection we consulted the *Handbook of the birds of the world* (del Hoyo *et al.*, 1992-2013), *Birds of western Africa* (Borrow & Demey, 2014), *The birds of Africa* (Urban *et al.*, 1986-2013) and *Sunbirds: A guide to the sunbirds, flowerpeckers, spiderhunters and sugarbirds of the world* (Cheke & Mann, 2001). Furthermore, in 1996, many specimens of the collection were compared with those in the Natural History Museum at Tring. The subspecies is reported only for the specimens compared with the ornithological collection

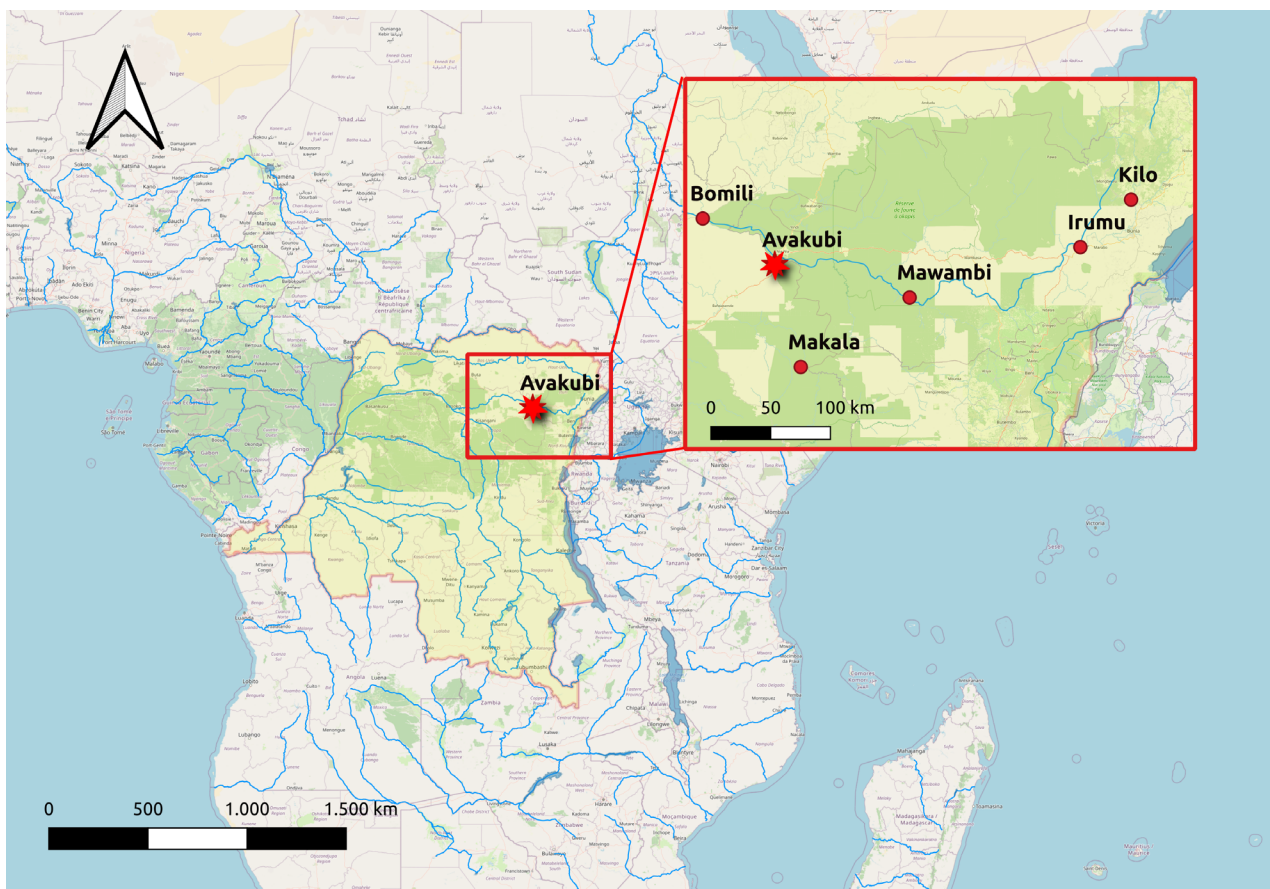


Figure 2. Map of Central Africa. The Democratic Republic of Congo is represented with yellow background. In the red box is the Ituri Region with the localities where Rosati collected the specimens.

of the Natural History Museum at Tring or when phenotypically clearly identifiable. The systematic review was conducted according to IOC World Bird List v14.1 (Gill *et al.*, 2024). For each species we reported the inventory number and, where available, the information on the label in the following order: locality and the date of collection, habitat, colour of the eyes, legs and beak, diet, age (adult or juvenile) and sex. Any comments on the specimens are reported in notes.

RESULTS

Renzo Rosati

Renzo Rosati (Fig. 3) was born in Pisa on March 8th, 1879 to Enrichetta Tedeschi and Filippo Rosati, former vice director of “Scuola Normale Superiore di Pisa” (AA.VV., 1916; AA.VV., 1927). In November 1903 he achieved a medical and surgical degree with a mark of 80/110 at the University of Pisa. Following his graduation, he served as a voluntary assistant on the team of the renowned surgeon Antonio Ceci for two years in Pisa, and then as medical assistant at Santa Maria Nuova in Florence for another two years (AA.VV., 1927). Like many Italian physicians of his time, Rosati was drawn to the emerging field of colonial bacteriology and sought further training abroad. In the spring of 1907, he attended a three month course at the School of Tropical Medicine in Bruxelles, and soon after he was dispatched to the Belgian Congo (Institute of Tropical Medicine Archive, Antwerp: Box 4.1.4.1.1 - Processen-verbaal van de uitslagen 1906-1911). There, he worked as a field bacteriologist, contributing to the Belgian effort to combat sleeping sickness, which was the main drive for the establishment of the School of Tropical Medicine in 1906 (Baetens, 2009). He lived in the colony from 1907 to 1910 holding the rank of Major colonial bacteriologist (Archivio Storico Università di Parma, Registro del personale, n. 7; Diana, 1961). He was one of the three physicians commissioned by the Belgian government to study sleeping sickness and other tropical diseases (The Sydney Morning Herald, May 15th 1935, p. 17). He was employed first in the Stanley Pool District (in the western Congo) and then in the Northern Ituri Region, in the North-East Congo (Diana, 1961).

After his experience in the Congo, he returned to Italy and joined the University of Parma, as a volunteer assistant in anatomy from October 1911. He resigned from this position in October 1913 (Archivio Storico Università di Parma, Registro del personale, n. 7) to join the Red Cross during the Italo-Turkish war in Libya (The Sydney Morning Herald, May 15th 1935, p. 17). After three months, in January 1914 he moved to New South Wales (Australia) where he initially set-

tled in Braidwood and later to Coonamble, working as an obstetric surgeon. In Australia, Rosati married Margherita Rossi in 1916 and between 1917 and 1925 they had three children: Filippo, Mirella Sylvia and Anita (The Sydney Morning Herald, May 15th 1935, p. 17).

Rosati returned to Italy (Pisa) for a holiday in May 1929, before going back to Australia where he passed away in May 1935 at Lewisham Private Hospital in Sydney “after a long and painful illness” (Italian Bulletin of Commerce; Sydney, NSW: 1929 - 1935; 1st May 1935, p. 5).



Figure 3. Renzo Rosati (Image taken from Italian Bulletin of Commerce (Sydney, NSW: 1929-1935). 1st May 1935 - <https://trove.nla.gov.au/newspaper/article/259098622?searchTerm=Rosati>).

The years in Congo

Several mentions of Renzo Rosati in the Congo are found in the writings of Swedish reserve officer Eskil Sundhagen (Sundhagen, 2013). In his diary, he describes how, during late summer 1908, Rosati treated his bilious fever while he was in Avakubi, the capital of Ituri province. Sundhagen also recounts a dinner at Rosati's house in Avakubi, portraying him as an avid wildlife hunter and entertainer, eager to share hunting stories with his guests. Furthermore, Sundhagen also reports that in that period (though he does not specify exactly when, but certainly af-

ter 1908), Rosati specialized in hunting small birds to build a scientific collection of stuffed skins. His fame as a hunter is also confirmed by articles he wrote for an Italian hunting magazine, in which he claimed to have hunted large mammals, such as a buffalo and three elephants in the Mawambi area (Rosati, 1909a) and various hippos in the Kilo area (Rosati, 1909b).

During his time in Belgian Congo, Rosati met the ornithologist and former curator of the AMNH in New York City, James Paul Chapin (1889-1964). Chapin was the assistant of Herbert Lang, the leader of the American Museum Congo Expedition (Osborn *et al.*, 1919), which conducted a biological survey of the Belgian Congo between 1909 and 1915 to expand the Museum's collection of African zoological specimens. The research data gathered formed the basis for Chapin's most famous work, the four-volume *The Birds of Belgian Congo*. Chapin also kept a detailed diary of his trip, preserved in the AMNH archives, and recently made available on the Museum's website.

Chapin arrived in Avakubi on 30 September 1909. In his diaries, he often mentions *the doctor* (i.e. Rosati) as his hunting partner (Chapin, 1910). The Italian doctor is first mentioned on 28 October (Chapin, 1909a) when they "[...] went out toward the mission [...]", likely hunting, as he noted that "[...] the doctor shot a Dove [...]". Chapin also mentions Rosati's short trip to Makala between 1st and 30th November 1909, after which Rosati returned to Avakubi "[...] bringing a number of skins of small birds collected on the trip [...]".

The dove (*Streptopelia turtur arenicola*) mentioned by Chapin in his diary (Chapin, 1909a, 1909b), is the specimen shot on 28-10-1909 (No. 412; Fig. 4), now part of the ornithological collection of the AMNH (catalogue number SKIN-157158). Besides the dove, Rosati gave to Chapin other specimens for his collection (Chapin, 1909a, 1909b), including a Great Snipe *Gallinago media* shot on 30-11-1909 (No. 502; Fig. 5), and two Cattle Egrets *Bubulcus ibis* shot on 02-12-1909 (No. 504 and 505; Chapin, 1909a, 1910). These specimens are also part of the ornithological collection of ANMH with the catalogue number respectively of SKIN-157403, SKIN-157608 and SKIN-157609.

Rosati's skills as a taxidermist and bird collector were honed through his meeting with Chapin in autumn 1909, as confirmed by Rosati himself during a conference he held in Pisa in April 1911, where he stated that he had been appointed by "the British government" as a guide for the American expedition. During the six months spent with the American expedition, he reported learning bird conservation and preparation techniques from the expedition members (Corriere Toscano, martedì 4 Aprile 1911). Indeed, the labels of

the collection specimens are all subsequent to his encounter with the American expedition. Furthermore, the preparation of the specimens collected by Rosati is very similar to the ones of the Lang-Chapin expedition: the legs are crossed, the tag is tied to both legs, the label has the apex near the leg cut out almost in the same way, and the information reported on the labels are also the same (environment, diet, colour of the eyes, beak and legs, date of collection, place and sex).

Regarding the specimens donated to Chapin, we cannot state with certainty if Rosati gave him other specimens, as we couldn't find several of the birds mentioned in Chapin's diaries as shot by the doctor among the collection hosted by the Natural History Museum of the University of Pisa (e.g. some sunbirds and a "small resplendent starling" from Makala, probably *Hylopsar purpureiceps*; Chapin, 1910). On the other hand, among the examined skins in this catalogue, we were able to identify other birds mentioned by Chapin, such as the "[...] peculiar dark-grey cuckoo, with yellow bill [...]" that Mr. Planche shot near N'Gayu between 10 and 26 December 1909, of which Chapin saw a specimen brought back from Makala by Rosati (Chapin, 1910; specimen AV 6542 of this catalogue), or the male Red-backed Shrike (*Lanius collurio*) that Chapin mentions in Birds of Congo (Chapin, 1954) as obtained by Rosati near Makala in November 1909 (specimen AV 6552 of this catalogue).

Among the species in the collection it is worth highlighting the presence of a specimen of *Muscicapa sethsmithi* (AV 6412) which was described by Victor van Someren only in 1922 (Van Someren, 1922), 13 years after this specimen was collected by Rosati. Furthermore, two skins in the collection belong to taxa not currently living in the Congo: *Pternistis clappertoni* (AV 6327) and *Cinnyris habessinicus* (AV 6619). It remains unsolved whether these birds lived in the region in the past or maybe they were acquired by Rosati from some exchange or purchase.

Finally, by cross-referencing the localities reported in the labels, we noticed a probable transcription error by Rosati for the specimens collected on June 13 and 14 1910. In fact, there are two specimens collected at Irumu, specifically specimen AV 6269 on the 13th and AV 6626 on the 14th, and four specimens collected on the same days at Kilo, specifically specimen AV 6401 on the 13th and specimens AV 6400, AV 6565 and AV 6557 on June 14. Considering that we know with certainty from one of his published letters (Rosati, 1909a) that he was in Kilo on June 14, 1910, it is probable that he incorrectly reported the date of the specimens collected in Irumu, where he was from June 4 to 10 and then from June 21 to 28, 1910.



Figure 4. Specimen of *Streptopelia turtur arenicola* (Hartert, EJO 1894) shot by Rosati on 28-10-1909. American Museum of Natural History, catalogue number SKIN-157158. Courtesy of AMNH.



Figure 5. Specimen of *Gallinago media* (Latham, J 1787) shot by Rosati on 30-10-1909. American Museum of Natural History, catalogue number SKIN- 157403. Courtesy of AMNH.

THE CATALOGUE OF THE SPECIMENS

Order Galliformes Family Phasianidae

Pternistis squamatus (Cassin, 1857)
AV 6328; label information: Avakubi, 08-XII-1909; forest, grey eyes, red legs, red and black beak. Granivorous and insectivorous. Adult. Female.

Pternistis clappertoni (Children & Vigors, 1826)
AV6327; no label.

Order Apodiformes Family Apodidae

Telacanthura ussheri sharpei (Neumann, 1908)
AV 6402; label information: Avakubi, 23-XII-1909; forest, black eyes, black beak, black legs, insectivorous (exclusively). Adult. Male.

Order Cuculiformes Family Cuculidae

Centropus senegalensis (Linnaeus, 1766)
AV 6264; label information: Avakubi, 29-III-1910; forest, red eyes, black legs and beak, insectivorous, small mammals. Adult. Female.

Ceuthmochares aereus aereus (Vieillot, 1817)
AV6318; label information: Avakubi, 14-I-1910; forest, red eyes, black legs, yellow beak, insectivorous and granivorous. Adult. Male.

AV6542; label information: Makala, 17-XI-1909; forest (clearing), red eyes, black legs, yellow beak, insectivorous and granivorous. Adult. Female.

Clamator jacobinus (Boddaert, 1783)
AV 6265; label information: Avakubi, 07-XII-1909; clearing, grey eyes, whitish legs, black beak, insectivorous. Adult. Male.

Chrysococcyx caprius (Boddaert, 1783)
AV 6258; label information: Avakubi, 18-I-1910; clearing, red eyes and eyelids, black and white beak, blackish legs. Adult. Male (Fig. 6).

AV 6259; label information: Avakubi, 04-IV-1910; forest, brown eyes, whitish legs and beak, granivorous and insectivorous. Adult. Female

AV 6260; label information: Avakubi, 04-IV-1910; clearing, reddish eyes, whitish legs and beak, insectivorous. Adult. Male

AV 6261; label information: Bomili, 09-III-1910; clearing, red eyes, blackish legs and beak, granivorous and insectivorous. Adult. Male

AV 6262; label information: Bomili, 07-III-1910; clearing, grey eyes, blackish legs and beak, granivorous and insectivorous. Adult. Female

AV 6263; no label.

Notes: the specimen is a male

AV 6266; no label.

Notes: female or young specimen

AV 6267; no label.

Notes: the specimen is a male

Chrysococcyx klaas (Stephens, 1815)
AV 6628; label information: Makala, 08-XI-1909; dense forest, grey eyes, greyish legs, grey beak, granivorous. Male.



Figure 6. AV 6258 *Chrysococcyx caprius* (Boddaert, 1783); total length: 170 mm.

Chrysococcyx cupreus (Shaw, 1792)

AV 6539; label information: Avakubi, 10-II-1910; forest, grey eyes, black legs and beak, insectivorous. Adult. Female.

AV 6540; no label.

Notes: the specimen is a female.

AV 6543; no label.

Notes: the specimen is a male.

Cuculus solitarius Stephens, 1815

AV 6559; label information: Avakubi, 02-XI-1909; forest, yellow eyes, blackish beak, insectivorous and granivorous. Adult. Male.

Order Columbiformes

Family Columbidae

Turtur afer (Linnaeus, 1766)

AV 6326; label information: Avakubi, 29-I-1910; clearing, red eyes, red legs, red beak, granivorous. Adult. Female.

Order Charadriiformes

Family Charadriidae

Charadrius hiaticula Linnaeus, 1758

AV 6441; label information: Makala, 11-XI-1909; near to the Lindi coast, black eyes, yellow legs, black beak, insectivorous. Adult. Male.

Family Scolopacidae

Calidris pugnax (Linnaeus, 1758)

AV 6440; label information: Makala, 20-IV-1910; river coast, black eyes, grey legs, black beak, vermivorous. Adult. Female.

Tringa glareola (Linnaeus, 1758)

AV 6439; label information: Avakubi, 25-XII-1909; river coast, chestnut brown eyes, black beak, green-yellow legs, insectivorous. Adult. Male.

Family Laridae

Chlidonias leucopterus (Temminck, 1815)

AV 6442; label information: Makala, 16-XI-1909; river coast, black eyes, reddish legs, black beak, insectivorous. Adult. Female.

AV 6443; label information: Makala, 19-XI-1909; river coast, black eyes, red legs, black beak. Insectivorous. Adult. Male.

Order Coraciiformes

Family Coraciidae

Eurystomus glaucurus (Müller PLS, 1776)

AV 6541; no label.

Eurystomus glaucurus afer (Latham, 1790)

AV 6330; label information: Avakubi, 14-XII-1909; clearing, brown eyes, yellow beak, blackish legs. Insectivorous. Adult. Female

Family Alcedinidae

Halcyon senegalensis fuscopileus Reichenow, 1906

AV 6289; label information: Avakubi, 05-XII-1909; clearing, black eyes, black legs, red and black beak. Insectivorous. Adult. Female.

AV 6290; label information: Avakubi, 11-XII-1909; clearing, black eyes, black legs, black-reddish beak. Insectivorous. Adult. Male.

Notes: The specimen is immature.

AV 6329; label information: Avakubi, 12-XII-1909; clearing, black eyes, black legs, red and black beak. Insectivorous. Adult. Male.

Ispidina picta picta (Boddaert, 1783)

AV 6407; label information: Makala, 21-XII-1909; river coast, black eyes, coral red legs and beak. Insectivorous and piscivorous. Adult. Male.

Notes: Probably the specimen is immature.

Family Meropidae

Merops viridissimus Swainson, 1837

AV 6404; no label.

Merops gularis australis (Reichenow, 1885)

AV 6400; label information: Kilo, 14-VI-1910; savannah, ash-grey eyes, black beak, black legs. Insectivorous. Adult. Female.

AV 6401; label information: Kilo, 13-VI-1910; savannah, black eyes, black beak, black legs. Insectivorous. Adult. Male.

Merops albicollis Vieillot, 1817

AV 6295; no label.

Note: the specimen is a male

AV 6296; label information: Avakubi, 06-XII-1909; clearing, grey eyes, black beak, black legs. Insectivorous. Adult. Female.

AV 6297; label information: Avakubi, 11-XII-1909; clearing, red eyes, black beak, black, legs. Insectivorous. Adult. Male.

AV 6298; label information: Avakubi, 15-XII-1909; clearing, red eyes, black beak, black, legs. Insectivorous. Adult. Male.

AV 6299; label information: Avakubi, 16-XII-1909; clearing, grey eyes, black beak, black legs. Insectivorous. Adult. Female.

AV 6300; label information: Avakubi, 20-XII-1909; clearing, red eyes, black beak, whitish legs. Insectivorous. Adult. Male.

AV 6422; label information: Avakubi, 17-XII-1909; clearing, red eyes, black beak, whitish legs. Insectivorous. Adult. Male.

Order Piciformes

Family Lybiidae

Gymnobucco bonapartei Hartlaub, 1854

AV 6569; label information: yellow eyes, black legs, black beak. Granivorous and insectivorous. Nest inside a tree. Female.

Gymnobucco sladeni Ogilvi-Grant, 1907

AV 6431; no label.

Pogoniulus scolopaceus flavisquamatus (Verreaux J.)

AV 6561; label information: Makala, 13-XI-1909; forest, yellow eyes, black legs and beak. Granivorous and insectivorous. Adult. Female.

Pogoniulus subsulphureus (Fraser, 1843)

AV 6562; label information: 10 hours walk from Avakubi towards Makala, 08-XI-1909; clearing, black eyes, black legs and beak. Granivorous and insectivorous. Male.

AV 6563; label information: Mawambi, 22-V-1910; clearing, ash-grey eyes, black legs and beak. Insectivorous. Adult. Male.

Pogoniulus bilineatus (Sundevall, 1850)

AV 6564; label information: Mawambi, 22-V-1910; clearing, ash-grey eyes, black legs and beak. Insectivorous. Adult. Female.

Tricholaema hirsuta (Swainson, 1821)

AV 6567; label information: Kilo, 19-VI-1910; savannah, brown eyes, black legs and beak. Granivorous and Insectivorous. Adult. Female.

AV 6568; label information: Makala. 20-XI-1909; forest, black eyes, black legs and beak. Granivorous and Insectivorous. Adult. Female.

AV 6333; no label.

Lybius guifsobalito Hermann, 1783

AV 6629; no label.

Trachyphonus purpuratus Verreaux J. & Verreaux E., 1851

AV 6331; no label.

AV 6565; label information: Kilo, 14-VI-1910; savannah, dark eyes, yellow beak, black legs. Granivorous and Insectivorous. Adult. Male.

AV 6566; label information: Mawambi, 19-V-1910; forest, ash-grey eyes, yellowish beak, black legs. Granivorous and Insectivorous. Adult. Male.

Family Indicatoridae

Prodotiscus insignis insignis (Cassin, 1856)

AV 6627; label information: Avakubi, 27-I-1910; clearing, black eyes, legs and beak. Granivorous. Adult. Male.

Family Picidae

Chloropicus xantholophus Hargitt, 1883

AV 6630; label information: Avakubi, 13-XII-1909; forest, yellowish eyes, blackish beak and legs. Insectivorous. Adult. Female.

AV 6632; label information: Avakubi, 13-XII-1909; forest, red eyes, blackish beak and legs. Insectivorous. Adult. Male.

Dendropicos gabonensis (Verreaux J. & Verreaux E., 1851)

AV 6631; label information: Avakubi, 29-II-1910; forest, black eyes, blackish legs and beak. Insectivorous. Adult. Female.

AV 6633; no label.

Notes: the specimen is a male

Order Psittaciformes

Family Psittaculidae

Agapornis pullarius (Linnaeus, 1758)

AV 6430; label information: Irumu, 21-VI-1910; high grass, black eyes, pink beak, pale pink legs. Granivorous. Adult. Female.

Order Passeriformes

Family Platysteiridae

Platysteira castanea Fraser, 1843

AV 6556; label information: Makala, 19-IV-1910; forest, red eyes, reddish legs, black beak. Insectivorous. Adult. Male.

Platysteira cyanea (Müller PLS, 1776)

AV 6557; label information: Kilo, 14-VI-1910; high grass, ash-grey eyes, black beak and legs. Insectivorous and granivorous. Adult. Female.

Family Malaconotidae

Chlorophoneus bocagei (Reichenow, 1894)

AV 6432; label information: Avakubi, 08-II-1910; clearing, black eyes, black legs and beak. Insectivorous and granivorous. Adult. Male.

AV 6547; label information: Avakubi, 04-III-1910; forest, red eyes, black legs and beak. Insectivorous and granivorous. Adult. Male.

Bocagia minuta (Hartlaub, 1858)

AV 6552; label information: Irumu, 24-VI-1910; high grass, red eyes, black legs, black and white beak. Insectivorous. Adult. Male.

Bocagia minuta minuta (Hartlaub, 1858)

AV 6626; label information: Irumu, 14-VI-1910; lowland, red eyes, black legs and beak. Insectivorous and granivorous. Adult. Male.

Dryoscopus senegalensis (Hartlaub, 1857)

AV 6548; label information: Avakubi, 07-I-1910; forest, red eyes, black legs and beak. Insectivorous and granivorous. Adult. Female.

AV 6625; label information: Irumu, 10-VI-1910; plains, Red eyes, black legs and beak. Insectivorous. Adult. Male.

Laniarius leucorhynchus (Hartlaub, 1848)

AV 6444; no label.

AV 6445; label information: Mawambi, 27-V-1910; forest, grey eyes, black legs and beak. Insectivorous and granivorous. Adult. Male.

AV 6581; label information: Makala, 21-IV-1910; forest, black eyes, legs and beak. Insectivorous and granivorous. Adult. Male.

Laniarius erythrogaster (Cretzschmar, 1829)

AV 6332; no label.

AV 6579; no label.

Family Vangidae

Prionops rufiventris mentalis (Sharpe, 1884)

AV 6574; no label.

Megabyas flammulatus Verreaux J. & Verreaux E., 1855

AV 6555; label information: Avakubi, 26-I-1910; clearing, red eyes, black beak, whitish legs. Insectivorous and granivorous. Adult. Male.

Bias musicus (Vieillot, 1818)

AV 6334; label information: Avakubi, 21-II-1910; clearing, brown eyes, black beak, yellow legs. Insectivorous. Adult. Male.

Note: female-like plumaged. Presumably young male.

AV 6335; no label.

AV 6336; label information: Avakubi, 20-I-1910; clearing, red eyes, black beak, white-greenish legs. Insectivorous. Adult. Male.

Note: female-like plumaged. Presumably young male.

AV 6424; no label.

Notes: the specimen is a male.

AV 6425; label information: Avakubi, 22-II-1910; forest, yellow eyes, black beak, yellow legs. Insectivorous. Adult. Male.

AV 6551; label information: Avakubi, 12-II-1910; clearing, yellow eyes, black beak, yellow legs. Insectivorous. Adult. Male.

AV 6554; label information: Avakubi, 12-II-1910; forest, brown eyes, black beak, yellowish legs. Insectivorous. Adult. Female.

Family Laniidae

Lanius minor Gmelin, JF, 1788

AV 6583; label information: Makala, 21-IV-1910; clearing, red eyes, black legs and beak. Insectivorous. Adult. Male.

Lanius collurio Linnaeus, 1758

AV 6582; label information: Makala-Avakubi, 25-XI-1909; forest, red eyes, black legs and beak. Insectivorous. Adult. Female.

Note: the specimen is a male.

Family Oriolidae

Oriolus brachyrhynchus Swainson, 1837

AV 6270; label information: Avakubi, 01-II-1910; Forest, ash-grey eyes, black legs, reddish beak. Granivorous. Adult. Female.

AV 6271; label information: Avakubi, 02-I-1910; forest, black eyes, black legs, whitish-black beak. Granivorous. Adult. Female.

Note: The specimen is an immature female.

AV 6272; label information: Avakubi, 06-I-1910; forest, grey eyes, black legs, reddish beak. Granivorous. First adult. Male.

Oriolus nigripennis Verreaux J. & Verreaux E., 1851

AV 6273; label information: Avakubi, 08-I-1910; forest, red eyes and beak, black legs. Granivorous and insectivorous. Adult. Female.

AV 6274; label information: Avakubi, 30-I-1910; forest, red eyes, reddish beak, black legs. Granivorous. Adult. Male.

AV 6275; label information: Avakubi, 02-I-1910; forest, red eyes, red beak, black legs. Granivorous. Adult. Male.

AV 6276 - label information: Avakubi, 02-I-1910; forest, grey eyes, black beak and legs. Granivorous. Adult. Male.

Note: the specimen is an immature male.

Family Dicruridae

Dicrurus modestus Hartlaub, 1849

AV 6573; label information: Avakubi, 02-IV-1910; forest, Black eyes, legs and beak. Insectivorous and granivorous. Adult. Male.

Family Monarchidae

Terpsiphone rufiventer (Swainson, 1837)

AV 6553; label information: Makala (10 hours walking from Avakubi towards Makala), 03-XI-1909; forest, ash-grey eyes, grey legs and beak. Insectivorous and granivorous. Female.

Terpsiphone viridis cfr *ferreti* (Guerin-Meneville, 1843)

AV 6253; label information: Avakubi, 08-XII-1909; clearing, grey eyes, black legs, grey beak. Insectivorous and granivorous. Adult. Male.

AV 6254; label information: Avakubi, 12-XII-1909; forest, grey eyes, black legs, blackish beak. Insectivorous. Adult. Female.

AV 6255; label information: Makala, 12-XI-1909; clearing, grey eyes, grey legs, greyish-black beak. Insectivorous. Adult. Female.

Note: the occurrence of a white margin on the greater coverts and the secondaries suggests that this specimen is an immature male.

AV 6256; label information: Avakubi, 27-I-1910; clearing, grey eyes, black legs and beak. Insectivorous and granivorous. Adult. Female.

Note: the occurrence of a white margin on the greater coverts and the secondaries suggests that this specimen is an immature male.

AV 6257; label information: Avakubi, 12-XII-1909; forest, grey eyes, black legs, greyish-black beak. Insectivorous. Adult. Female.

Family Stenostiridae

Elminia longicauda (Swainson, 1838)

AV 6438; no label.

Note: the specimen is not prepared.

AV 6549; label information: Mawambi, 29-V-1910; clearing, brown eyes, black legs and beak. Insectivorous. Adult. Female.

Family Nicatoridae

Nicator chloris (Valenciennes, 1826)

AV 6291; label information: Makala, 13-XI-1909; forest, grey eyes, whitish legs and beak. Granivorous and insectivorous. Adult. Male.

AV 6292; label information: Makala, 08-XI-1909; forest, grey eyes and legs, black beak. Granivorous. Adult. Female.

AV 6293; label information: Makala, 08-XI-1909; forest, red eyes, almost black legs, black beak. Granivorous and insectivorous. Adult. Male.

AV 6294; label information: Avakubi, 20-I-1910; clearing, red eyes, black legs and beak. Granivorous and insectivorous. Adult. Male.

AV 6301; label information: Avakubi, 21-XII-1909; forest, grey eyes, black beak, whitish legs. Granivorous and insectivorous. Adult. Female.

Family Pycnonotidae

Eurillas virens virens (Cassin, 1857)

AV 6623; label information: 10 hours walking from Avakubi towards Makala, 03-XI-1909; forest, grey eyes, pale legs, blackish beak. Insectivorous and granivorous. Male.

AV 6224; label information: Avakubi, 16-I-1910; forest, black eyes, blackish legs and beak. Insectivorous and granivorous. Adult. Male.

Eurillas gracilis ugandae (Van Someren, 1915)

AV 6601; label information: 12 hours walking from Avakubi towards Makala, 03-XI-1909; grey eyes, blackish legs and beak. Insectivorous and granivorous. Male.

AV 6602; label information: 1 hour walking from Makala, 08-XI-1909; forest, black eyes and beak, blackish legs. Granivorous. Female.

Ixonotus guttatus Verreaux J. & Verreaux E., 1851
AV 6644; label information: Avakubi, 10-II-1910; forest, black legs and eyes, whitish beak. Granivorous. Adult. Male.

Criniger calurus (Cassin, 1856) / *Criniger ndussuensis* Reichenow, 1904 (since the similarity of these two taxa, we prefer not to give specific attribution to the following three specimens).

AV 6560; label information: Pilipili (Makala), 05-XI-1909; forest, grey almost black eyes, black beak, grey legs. Male.

AV 6578; label information: Pilipili (Makala), 05-XI-1909; red eyes, grey-black legs and beak. Insectivorous and granivorous. Male.

AV 6606; label information: Makala, 08-XI-1909; forest, red eyes, black legs, blackish beak. Granivorous. Adult. Male.

Phyllastrephus xavieri xavieri (Oustalet, 1892)

AV 6603; label information: 10 hours walking from Avakubi towards Makala, 03-XI-1909; clearing, grey eyes, whitish legs and beak. Insectivorous and granivorous. Male.

Phyllastrephus icterinus (Bonaparte, 1850)

AV 6605; label information: Makala, 08-XI-1909; forest, grey eyes, grey/black legs, yellow-blackish beak. Insectivorous and granivorous. Adult. Male.

Pycnonotus tricolor (Hartlaub, 1862)

AV 6426; no label.

AV 6427; label information: Avakubi, 18-X-1909; brownish eyes, black beak and legs. Male.

AV 6604; label information: Avakubi, 22-XII-1909; clearing, black eyes, black legs and beak. Granivorous and insectivorous. Adult. Female.

Family Hirundinidae

Cecropis senegalensis saturator (Bannerman, 1923)

AV 6287; label information: Mawambi, 31-V-1910; black eyes, legs and beak. Insectivorous excl. Adult. Female.

AV 6288; label information: Mawambi, 31-V-1910; Black eyes, legs and beak. Insectivorous excl. Adult. Male.

Family Hyliidae

Hylia prasina prasina (Cassin, 1855)

AV 6607; label information: Mawambi, 28-V-1910; forest, chestnut brown eyes, black beak, greenish legs. Insectivorous and granivorous. Adult. Male.

Family Cisticolidae

Cisticola natalensis (Smith, 1843)

AV 6634; label information: Irumu, 25-VI-1910; high grass, red eyes, reddish legs, whitish beak. Insectivorous. Adult. Female.

Cisticola cfr *anonymus* (Müller J. W., 1855)

AV 6635; label information: Avakubi, 21-VI-1910; clearing, red eyes, reddish legs, black beak. Insectivorous. Adult. Male.

Prinia cfr *subflava* (Gmelin J.F., 1789)

AV 6636; label information: Makala, 12-XI-1909; forest, yellow eyes, whitish legs and beak. Granivorous. Adult. Male.

Prinia bairdii bairdii (Cassin, 1855)

AV 6423; label information: 4 hours walk from Makala, 08-XI-1909; dark yellow eyes, blackish legs, black beak. Granivorous and insectivorous. Female.

Bathmocercus rufus vulpinus Reichenow, 1895
AV 6413; label information: Kilo, 19-VI-1910; savannah, ash grey eyes, black legs and beak. Insectivorous and granivorous. Adult. Male.

Eremomela badiceps badiceps (Fraser, 1843)
AV 6337; label information: Avakubi, 13-II-1910; forest, chestnut brown eyes, yellowish legs, black beak. Granivorous. Adult. Female.

Family Hyliotidae

Hyliota violacea violacea Verreaux J. & Verreaux E., 1851

AV 6411; label information: Avakubi, 26-I-1910; clearing, black eyes, beak and legs. Granivorous and insectivorous. Young adult. Female.

Note: according to the plumage characteristic, the specimen is probably a male.

Family Sturnidae

Hylopsar purpureiceps (Verreaux J. & Verreaux E., 1851)
AV 6575; label information: Avakubi, 05-IV-1910; clearing, white eyes, black beak and legs. Granivorous. Adult. Female.

AV 6576; label information: Avakubi, 12-IV-1910; clearing, white eyes, black beak and legs. Granivorous. Adult. Male.

Lamprotornis splendidus (Vieillot, 1822)
AV 6428; label information: Avakubi, 10-II-1910; clearing, yellow eyes, black beak and legs. Granivorous. Adult. Female.

Onychognathus fulgidus Hartlaub, 1849
AV 6429; label information: Avakubi, 12-II-1910; clearing, red eyes, black legs and beak. Granivorous and insectivorous. Adult. Female.

AV 6572; label information: Avakubi, 21-XII-1909; clearing, red eyes, black legs and beak. Granivorous and insectivorous. Adult. Female.

AV 6577; label information: Avakubi, 20-I-1910; clearing, red eyes, black legs and beak. Granivorous and insectivorous. Adult. Female.

Note: the specimen is a male.

Poeoptera lugubris Bonaparte, 1854

AV 6433; label information: Avakubi, 26-II-1910; clearing, grey eyes, black beak and legs. Granivorous and insectivorous. Adult. Female.

AV 6436; label information: Avakubi, 31-X-1909; clearing in deep forest, yellow eyes, black beak and legs. Insectivorous. Female.

AV 6437; label information: Avakubi, 21-II-1910; clearing, yellow eyes, black beak and legs. Granivorous and insectivorous. Adult. Male.

AV 6570; label information: Avakubi, 16-I-1910; clearing, yellow eyes, black beak and legs. Insectivorous and granivorous. Adult. Female.

AV 6571; label information: Avakubi, 11-II-1910; clearing, yellow eyes, black beak and legs. Granivorous. Adult. Male.

Family Turdidae

Stizorhina fraseri (Strickland, 1844)

AV 6338; label information: Irumu (5 hours), 04-VI-1910; forest, ash-grey eyes, blackish beak and legs. Insectivorous and granivorous. Adult. Female.

AV 6558; label information: Makala, 18-IV-1910; forest, brown eyes, reddish beak and legs. Insectivorous and granivorous. Adult. Male.

Turdus pelios Bonaparte, 1850

AV 6546; no label.

Family Muscicapidae

Bradornis fuliginosus (Verreaux J. & Verreaux E., 1855)
AV 6281; label information: Avakubi (6 hours walking towards Makala), 02-XI-1909; clearing, black eyes, legs and beak. Insectivorous. Female.

AV 6302; label information: Avakubi, 06-XII-1909; clearing, grey eyes, black legs and beak. Insectivorous. Adult. Female.

AV 6303; label information: Avakubi (13 hours walking towards Makala), 05-XI-1909; clearing, grey eyes, black legs and beak. Insectivorous. Male.

AV 6410; label information: Avakubi, 11-XII-1909; clearing, black eyes, legs and beak. Insectivorous. Adult. Male.

Muscicapa sethsmithi (Van Someren, 1922)
AV 6412; label information: Makala-Avakubi, 27-XI-1909; black eyes, yellow legs, blackish beak with yellow edges. Insectivorous. Adult. Male.

Muscicapa epulata (Cassin, 1855)
AV 6305; label information: Avakubi, 10-XII-1909; forest, black eyes and legs, black and yellow beak. Insectivorous. Adult. Male.

Muscicapa striata (Pallas, 1764)
AV 6434; label information: Makala, 13-XI-1909; forest, grey eyes, black beak and legs. Insectivorous. Adult. Female.

AV 6435; label information: Avakubi (6 hours towards Makala), 02-XI-1909; clearing in deep forest, grey eyes, black beak and legs. Insectivorous. Adult. Male.

AV 6550; no label.

Family Nectariniidae

Anthreptes tephrolaemus (Jardine & Fraser, 1852)
AV 6586; label information: Fungiakambi, 01-XII-1909; clearing, red eyes, black beak and legs. Nectar sucker and granivorous. Adult. Female.

Hedydipna collaris somereni (Chapin, 1949)
AV 6584; no label.

Note: the specimen is an immature male.

AV 6585; label information: Avakubi, 31-XI-1909; clearing, black eyes, legs and beak. Nectar sucker. Male.

Note: Dr. Rosati reported a wrong date. We know from the Chapin Diaries that Rosati came back from Makala to Avakubi the 30th of November. Probably Rosati collected this specimen on the 30th of November or the 1st of December.

Cyanomitra verticalis viridisplendens (Reichenow, 1891)
AV 6593; label information: Kilo, 15-VI-1910; savannah, black eyes, legs and beak. Adult. Male.

Cyanomitra cyanolaema (Jardine & Fraser, 1852)

AV 6323; no label.

Note: the specimen is a male.

AV 6324; no label.

Note: the specimen is a male.

AV 6325; no label.

Note: the specimen is a male.

Cyanomitra cyanolaema octaviae Amadon, 1953

AV 6617; label information: Avakubi, 19-II-1910; clearing, brown eyes, black legs and beak. Sucker and insectivorous. Adult. Male (Fig. 7).

Chalcomitra rubescens rubescens (Vieillot, 1819)

AV 6310; label information: Avakubi, 28-XII-1909; clearing, black eyes, legs and beak. Sucker and insectivorous. Adult. Male.

AV 6311; label information: Avakubi, 06-XII-1909; forest, black eyes, legs and beak. Sucker and insectivorous. Adult. Male.

AV 6312; label information: Makala, 11-XI-1909; clearing, chestnut eyes, black legs and beak. Sucker. Adult. Male.

AV 6313; label information: Makala, 14-XI-1909; clearing, black-chestnut eyes, black legs and beak. Sucker. Adult. Male.

AV 6314; label information: Makala, 15-XI-1909; clearing, black-chestnut eyes, black legs and beak. Sucker. Adult. Male.

AV 6315; label information: Makala, 18-XI-1909; clearing, black eyes, legs and beak. Sucker. Adult. Male.

AV 6316; label information: Makala, 21-XI-1909; clearing, black eyes, legs and beak. Sucker. Adult. Male.

AV 6317; label information: Makala, 12-XI-1909; clearing, chestnut eyes, black legs and beak. Sucker. Adult. Male.

AV 6592; label information: Makala, 17-XI-1909; clearing, black eyes, legs and beak. Sucker. Adult. Female.

AV 6616; no label.

Note: the specimen is an immature male.

AV 6621; label information: Makala, 15-XI-1909; clearing, black eyes, legs and beak. Sucker. Adult. Male.

Cinnyris chloropygius (Jardine, 1842)

AV 6306; label information: Avakubi, 21-X-1909; black eyes, blackish legs and beak. Omnivorous. Male.

AV 6307; label information: Makala, 11-XI-1909; clearing, black eyes, legs and beak. Sucker. Immature male.

AV 6320; no label.

Note: the specimen is a male.

Cinnyris chloropygius orphogaster Reichenow, 1899

AV 6599; label information: Makala 16-XI-1909; clearing, chestnut eyes, black legs and beak. Sucker. Adult. Male.

AV 6600; no label.

Note: the specimen is a male. It is not prepared.

AV 6620; label information: Avakubi ("succursale") 02-XII-1909; clearing, black eyes, legs and beak. Sucker. Immature male.

Cinnyris pulchellus pulchellus (Linnaeus, 1766)

AV 6596; no label.

Note: the specimen is a male.

Cinnyris habessinicus (Hemprich & Ehremberg, 1828)

AV 6619; no label (Fig. 8).

Cinnyris superbus (Shaw, 1811)

AV 6308; label information: Makala, 16-XI-1909; forest (clearing), black eyes, legs and beak. Sucker. Adult. Male.

AV 6309; label information: Makala, 20-XI-1909; clearing, black eyes, legs and beak. Sucker. Adult. Male.

AV 6321; no label.

Note: the specimen is a male.

AV 6322; no label.

Note: the specimen is a female.

Cinnyris superbus superbus (Shaw, 1811)

AV 6591; label information: Makala, 16-XI-1909; forest, (clearing), black eyes, legs and beak. Sucker. Adult. Male.



Figure 7. AV 6617 *Cyanomitra cyanolaema octaviae* Amadon, 1953; total length: 137 mm.

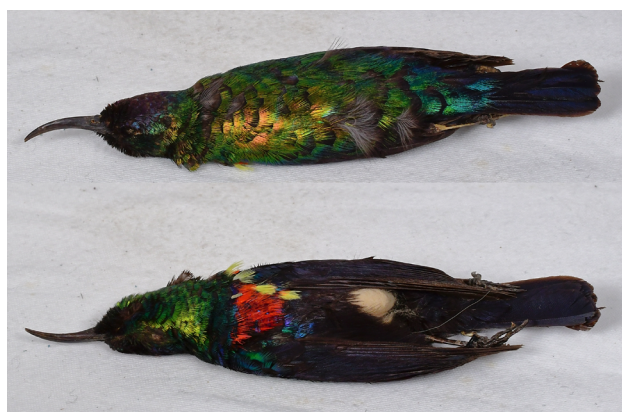


Figure 8. AV 6919 *Cinnyris habessinicus* (Hemprich & Ehremberg, 1828); total length: 125 mm.

AV 6597; label information: Makala, 15-XI-1909; clearing, black eyes, legs and beak. Sucker. Adult. Female. AV 6615; no label.

Note: the specimen is a juvenile.

Cinnyris venustus falkensteini Fischer & Reichenow, 1884

AV 6618; no label.

Note: the specimen is a male.

Family Ploceidae

Ploceus nigerrimus Vieillot, 1819

AV 6590; label information: Avakubi, 05-XII-1909; clearing, yellow eyes, pinkish legs, black beak. Granivorous. Adult. Male.

AV 6622; label information: Avakubi, 24-I-1910; clearing, light yellow eyes, black-whitish legs and beak. Granivorous and insectivorous. Adult. Female.

Ploceus tricolor interscapularis Reichenow, 1893

AV 6285; label information: Avakubi, 15-I-1910; clearing, red eyes, black beak, whitish legs. Granivorous. Adult. Male.

AV 6286; label information: Avakubi, 05-II-1910; forest, black eyes, legs, and beak. Granivorous. Adult. Male.

AV 6398; label information: Avakubi, 18-I-1910; clearing, brown eyes, black-whitish legs, black beak. Granivorous and insectivorous. Adult. Male.

AV 6399; label information: Avakubi, 18-III-1910; clearing, black eyes and beak, brown legs. Granivorous and insectivorous. Adult. Female.

Malimbus coronatus Sharpe, 1906

AV 6414; label information: Makala-Avakubi, 24-XI-1909; forest, black eyes, legs and beak. Granivorous. Adult. Female.

AV 6415; label information: Makala, 17-IV-1910; clearing, black eyes, legs and beak. Granivorous. Adult. Male.

AV 6416; label information: Two hours walking from Makala, 08-XII-1909; forest, black eyes and legs, blackish beak. Granivorous. Male.

Note: the specimen is an immature male.

Malimbus cassini (Elliot, DG, 1859)

AV 6588; label information: Makala, 16-IV-1910; clearing, black eyes, legs and beak. Granivorous and insectivorous. Adult. Male (Fig. 9).



Figure 9. AV 6588 *Malimbus cassini* (Elliot, DG, 1859); total length: 140 mm.

Malimbus nitens (Gray, JE, 1831)

AV 6589; label information: 9 hours walking from Avakubi towards Makala, 02-XI-1909; forest, red eyes, grey legs and beak. Granivorous and insectivorous. Male.

Brachycope anomala (Reichenow, 1887)

AV 6594; no label.

Note: the specimen is an immature male.

AV 6598; label information: Avakubi, 29-XII-1909; clearing, black eyes and beak, dark pink legs. Granivorous. Adult, female.

Euplectes gierowii ansorgei (Hartert, 1899)

AV 6609; label information: Irumu, 26-VI-1910; high grasses, grey eyes, black beak and legs. Granivorous and insectivorous. Adult. Male.

Euplectes hordeaceus hordeaceus (Linnaeus, 1758)

AV 6610; label information: Kilo, 19-VI-1910; high grasses, black eyes and beak, pinkish legs. Granivorous. Adult. Male.

Euplectes axillaris phoeniceus (Heuglin, 1862)

AV 6595; label information: Irumu, 26-VI-1910; high grasses, black eyes and legs, whitish beak. Granivorous and insectivorous. Adult. Male.

Euplectes ardens (Boddaert, 1783)

AV 6319; label information: Irumu, 28-VI-1910; high grasses, black eyes, legs and beak. Granivorous. Immature. Male

AV 6587; label information: Irumu, 26-VI-1910; high grasses, black eyes, legs and beak. Granivorous. Adult. Male.

Family Estrildidae

Spermestes cucullata Swainson, 1837

AV 6409; no label.

Spermestes fringilloides (Lafresnaye, 1835)

AV 6268; no label.

AV 6284; no label.

AV 6403; label information: Avakubi, 10-II-1910; clearing, black eyes, beak and legs. Granivorous. Adult. Male.

Spermestes bicolor phoeniceus (Fraser, 1843)

AV 6608; label information: Avakubi, 01-XII-1909; clearing, black eyes, beak and legs. Granivorous. Immature. Male.

Notes: quite little, especially in beak size.

Nigrita fusconotus Fraser, 1843

AV 6408; label information: Makala, 24-XI-1909; forest, black eyes and beak, grey legs. Granivorous and insectivorous. Adult. Female.

Nigrita bicolor (Hartlaub, 1844)

AV 6418; label information: Fariala (Avakubi), 18-V-1910; clearing, red eyes, black beak and legs. Granivorous. Adult. Male.

AV 6419; label information: Kilo, 17-VI-1910; savannah, grey eyes, black beak and legs. Granivorous. Adult. Female.

Nigrita canicapillus (Strickland, 1841)

AV 6304; label information: Makala, 19-IV-1910; forest, grey eyes, black beak and legs. Granivorous. Adult. Female.

AV 6417; label information: Avakubi, 12-II-1910; forest, chestnut eyes, black beak and legs. Granivorous. Adult. Female.

Estrilda nonnula Hartlaub, 1883

AV 6406; label information: Avakubi, 07-XII-1909; clearing, black eyes and legs, red and black beak. Granivorous. Adult. Female.

Spermophaga ruficapilla (Shelley, 1888)

AV 6339; label information: Avakubi, 03-I-1910; clearing, black eyes, beak and legs. Granivorous. Immature. Male.

Pyrenestes ostrinus (Vieillot, 1805)

AV 6420; no label.

Notes: the specimen is a male.

AV 6421; label information: Avakubi, 10-V-1910; high grasses, black eyes, beak and legs. Granivorous. Adult. Female.

Note: probably the specimen is a young male.

Pytilia melba (Linnaeus, 1758)

AV 6405. no label.

Notes: the specimen is a male.

Family Viduidae

Vidua macroura (Pallas, 1764)

AV 6269; label information: Irumu, 13-VI-1910; plain, black eyes and legs, red beak. Granivorous. Adult. Male.

AV 6282; no label.

Notes: the specimen is an immature male.

AV 6283; label information: Irumu, 13-VI-1910; plain, black eyes and legs, red beak. Granivorous. Adult. Male.

AV 6396; label information: Irumu, 26-VI-1910; high grasses, black legs and beak, red eyes. Granivorous. Adult. Male.

AV 6397; label information: Irumu, 26-VI-1910; high grasses, black eyes, blackish legs and dark pink beak. Granivorous. Adult. Female.

Family Motacillidae

Motacilla aguimp vidua Sundevall, 1850

AV 6580; label information: Avakubi, 23-XII-1909; clearing, black eyes, beak and legs. Insectivorous and granivorous. Adult. Male.

Macronys croceus (Vieillot, 1816)

AV 6545; label information: Irumu, 24-VI-1910; high grasses, grey eyes, yellowish legs, white and black beak. Granivorous and insectivorous. Adult. Male.

Department of Ornithology, Division of Vertebrate Zoology), and Paul R. Sweet (Collection Manager, Department of Ornithology, Division of Vertebrate Zoology) of the American Museum of Natural History for giving us the photos of the specimens hunted by Rosati and donated to Chapin. We also thank the staff of the archives of the University of Parma, of the Institute of Tropical Medicine (Antwerp), and the State Archives in Belgium for the information provided. We are also grateful to the late Professor Alexander R. Prigogine (Bruxelles) for his help. English language has been verified with Microsoft Copilot support.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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ACKNOWLEDGEMENTS

Our gratitude goes to Spartaco Gippoliti, for friendly and fruitful discussions on Rosati's activity as a mammal hunter. We are also very grateful to Brian T. Smith (Associate Curator, Department of Ornithology, Division of Vertebrate Zoology), Joel L. Cracraft (Lamont Curator,

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(ms. pres. 27 agosto 2024; ult. bozze 15 dicembre 2024)