



ON SUPPOSED PARAGUAYAN SPECIMENS OF *SICALIS COLUMBIANA* AND *SALTATOR MAXILLOSUS* IN THE MUSEO NACIONAL DE HISTORIA NATURAL DEL PARAGUAY REPORTED BY AMARILLA & ETCHEVERRY (1996), WITH A DISCUSSION ON BERTONI'S TREATMENT OF *SALTATOR*

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Resumen.- Se revisan ejemplares del Museo Nacional de Historia Natural del Paraguay asignados a *Sicalis columbiana* y *Saltator maxillosus* en el catálogo de dicho museo, publicado en 1996. Se determina que los mismos corresponden realmente a *Sicalis flaveola* y *Saltator similis*, respectivamente. Adicionalmente se discute la nomenclatura empleada por A. de W. Bertoni para especies del género *Saltator*.

Palabras clave: *Jilguero dorado*, *Pepitero verdoso*, *avifauna*.

Resumen.- Specimens deposited in the Museo Nacional de Historia Natural del Paraguay and assigned to *Sicalis columbiana* and *Saltator maxillosus* in the museum's catalogue, published in 1996, are revised. We determine them as corresponding to *Sicalis flaveola* and *Saltator similis* respectively. Additionally, we discuss the nomenclature used by A. de W. Bertoni for species in the genus *Saltator*.

Key words: *Saffron Finch*, *Green-winged Saltator*, *avifauna*.

The official list of the Paraguayan avifauna currently stands at 711 species (del Castillo, 2013), but the last detailed review of the country's avifauna (Guyra Paraguay, 2004) included a list of 101 species of "hypothetical" occurrence. These hypothetical species were further subdivided into three categories, those of possible occurrence (30), those of doubtful occurrence (33) and those that were not evaluated due to a lack of available data (38). Furthermore 12 species were considered to have been cited "in error" and hence were removed from the Paraguayan list. A total of eleven species from each of these hypothetical categories have since been accepted to occur in Paraguay (Smith *et al.*, 2006; Centrón, 2011; Lesterhuis & Clay, 2011; Álvarez *et al.*, 2012; del Castillo, 2013; Smith *et al.*, 2014b; Smith *et al.*, in press), and detailed discussions on 20 others have also been published, that in many cases have resulted in re-evaluations of their respective statuses (Smith *et al.*, 2014a; Smith & Ríos Díaz, 2014a,b; Smith *et al.*, in press).

A catalogue of the collection in the Museo Nacional de Historia Natural del Paraguay (MNHNP) (Romero-Martínez, 1996) contained a complete listing of the bird specimens held in the collection until the date of publication (Amarilla & Etcheverry, 1996). In their listings were purported specimens of two species not accepted on the Paraguayan list: Thick-billed Saltator (*Saltator maxillosus*), which is currently treated as of "possible" occurrence in Paraguay (Guyra Paraguay, 2004) and Orange-fronted Yellowfinch (*Sicalis columbiana*) which has not been previously cited for the Paraguayan avifauna and was apparently overlooked by Guyra Paraguay (2004).

During December 2014 the authors visited the MNHNP collection and were able to trace these specimens. Here we provide corrected identifications for both specimens, revised statuses for the species cited by Amarilla & Etcheverry (1996) and a discussion of previous literature reports for *Saltator maxillosus* in Paraguay. We also provide a commentary

on nomenclature for the species of *Saltator* as reported by Bertoni (1914, 1939).

Orange-fronted Yellowfinch, *Sicalis columbiana* Cabanis, 1851

(Figure 1A)

A single specimen from Estancia Dona Julia, Departamento Alto Paraguay listed by Amarilla & Etcheverry (1996) refers to MNHNP 000449. The specimen was collected on 26.IX.1984. This specimen is in fact an adult female Saffron

Finch, *Sicalis flaveola*, as confirmed by direct comparison with other specimens of that species in the collection. Furthermore the larger size and distinctly streaky plumage (Ridgely & Tudor, 1989) were sufficient to reject *S. columbiana* as a possible identification for this specimen. *Sicalis columbiana* is distributed well to the north of Paraguay where it is associated with shrubby and grassy areas in riparian zones of EC Brazil (S Maranhão, Piauí, W Pernambuco, N and W Bahía, Tocantins and Goiás) (Jaramillo *et al.*,

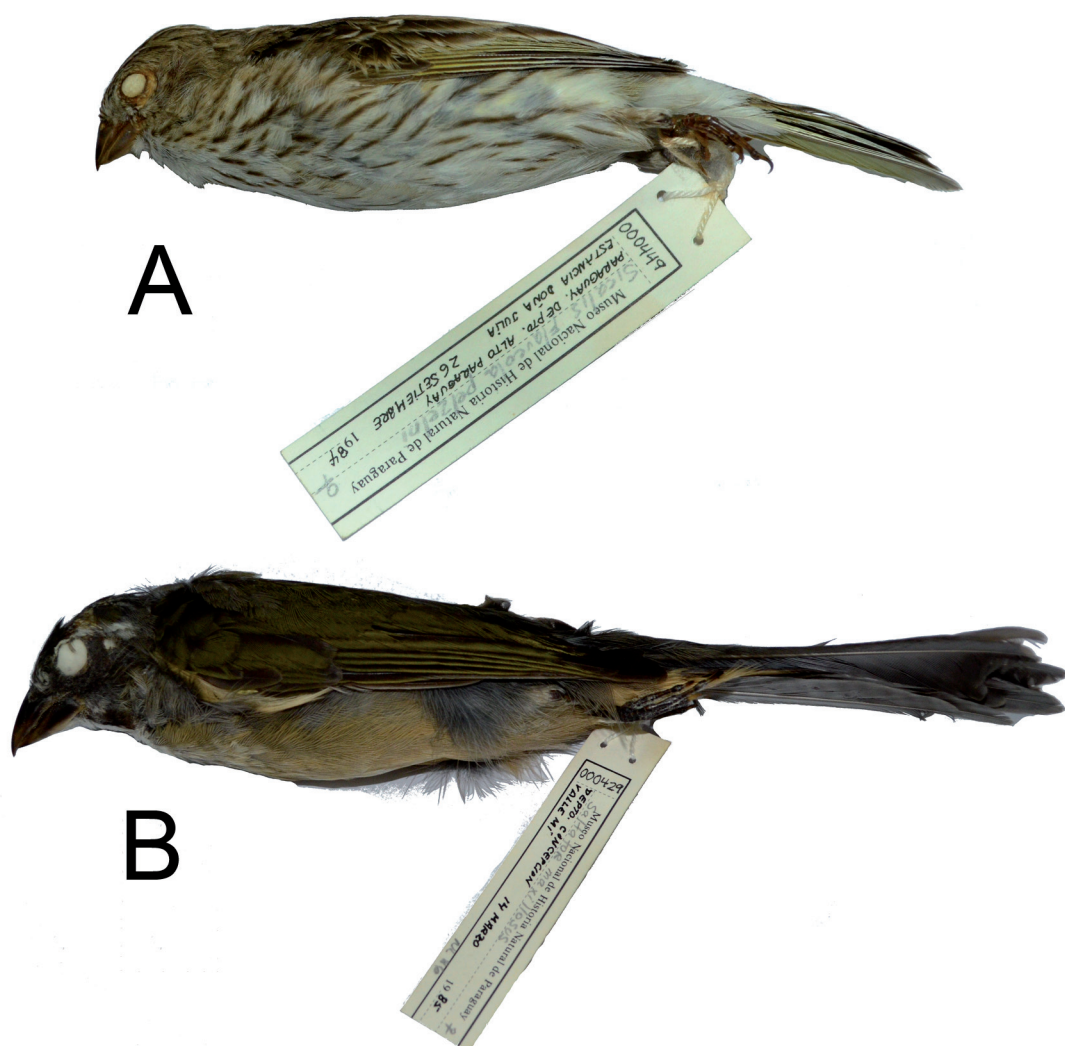


Figura 1. Specimens deposited in the Museo Nacional de Historia Natural del Paraguay. **A)** *Sicalis flaveola*, specimen MNHNP 000449. **B)** *Saltator similis*, specimen MNHNP 000429.

2011) and hence must be considered unlikely to ever occur in the country. *Sicalis columbiana* should be added to the list of erroneously cited species.

**Thick-billed Saltator, *Saltator maxillosus*
Cabanis, 1851
(Figure 1B)**

A single specimen from Vallemí, Departamento Concepción listed by Amarilla & Etcheverry (1996) refers to MNHNP 000429. The specimen was collected on 14.III.1985. This specimen is in fact an adult Green-winged Saltator, *Saltator similis*, as confirmed by direct comparison with other specimens of that species in the collection. This was further confirmed by the white throat, wholly dark bill and bill shape without curved culmen (Ridgely & Tudor, 1989). The closest documented records of *Saltator maxillosus* to Paraguay are from Provincia Misiones, Argentina, where the species is highly localized and associated with laurel forest (M. Pearman, pers. comm.).

Hayes (1995) listed four literature references (Bertoni 1907, 1914, 1939; Meisel *et al.*, 1992) and three Paraguayan localities (Puerto Bertoni, APN, Yaguarasapá, ITA? and Reserva Natural del Bosque Mbaracayu, CAN) for this species, noting that that no details were provided for these reports but that they "might well be valid".

Bertoni (1907) claimed the first Paraguayan record of *Stelgidostomus maxillosus* (Cab.), stating that the species "arrives in some years to the forests of Alto Paraná". This was presumably the source of his listing with the same name and locality in Bertoni (1914). Bertoni (1939) gives the localities "Alto Paraná, Puerto Bertoni, Yaguarasapá" for the species, but again provides no further details in support of the additional records. However it is perhaps worthy of note that Bertoni (1914, 1939) fail to provide locality data for the similar *Saltator similis*, a species that is common in the humid forests of eastern Paraguay. Confusion with that species must thus be considered a possibility.

Paynter (1989) was unable to locate Yaguarasapá, but this was the founding name of the town now known as Capitán Meza, located at 27° 01' S 55° 34' W in Itapúa department (where the Bertoni family was based prior to their occupation of Puerto Bertoni).

The listing for the Mbaracayú Forest Reserve, Departamento Canindeyú provided no details to support its occurrence within this well-sampled protected area (Meisel *et al.*, 1992). However it was treated as doubtful or omitted from all subsequent listings of the avifauna of this reserve (Fariña & Hostettler, 2003; Mazar Barnett & Madroño, 2003), suggesting that it lacks proper documentation.

Given that this species is easily confused with *Saltator similis* (especially the female), none of these publications provide sufficient information to rule out confusion with that species. However given the proximity of Argentine records we recommend that the species should be retained as possible in Paraguay pending further records or information.

Bertoni's (1914, 1939) *Saltator* listings

Below is a reproduction of Bertoni's (1914, 1939) *Saltator* listings with their localities and authors that he provided, including typographical errors and original use of italicisation. Bertoni (1914, 1939) lists six species in his interpretation of the genus *Saltator*, four of which are names in current usage for species accepted as occurring in Paraguay. The exact substitution in the usage of the names *S. magnus* and *S. m. maximus* between 1914 and 1939 can be appreciated.

BERTONI (1914)

- 581 *Saltator atricollis* Viell.
- 582 *Saltator aurantürostris* Viell. - Rio Mondañh
- 583 *Saltator caerulescens* Viell. - *Havia-tihvihtá*
- 584 *Saltatorfu lviventris* Lawr. - Paraguay (*Salvadori*)?

- 585 *Saltator magnus* (Gm.) - Puerto Bertoni !
 586 *Saltator similis* Lafr. & Orb.

BERTONI (1939)

- 622 *Saltator atricollis* Viell.
 623 *Saltator aurantirostris* Viell. - Rio Mondaíh
 624 *Saltator caerulescens* Viell. - Havia-tihvihtá - Asunción, Villa Hayes
 625 *Saltator fulviventris* Lawr. - Paraguay, Salvadori?
 626 *Saltator m. maximus* (Müll.) - Pto. Bertoni.
 627 *Saltator similis* - Lafr. & Orb.

Saltator fulviventris Lawrence, 1857 was confirmed to be the juvenile of *Saltator caerulescens* following examination of the type in the USNM (Hellmayr, 1938). Berlepsch (1888) had already stated that the type specimen was evidently juvenile and that he “had not the slightest doubt that it is the young of *S. caerulescens*”. Bertoni, cites Salvadori ? as the potential source of Paraguayan records, but there is no mention of the species in Salvadori (1895, 1900). He was presumably thus unaware of the source of Paraguayan reports and that the type locality of the form was Paraguay, the name being based on specimens collected during the Page expedition (Lawrence, 1857).

Saltator magnus (Gmelin, 1789) and *Saltator m. maximus* (Müller, 1776), are synonyms used for the same taxon, the species today known as Buff-throated Saltator: *Saltator maximus*. The species is distributed well to the north of Paraguay, with only marginal occurrence in extreme northern Mato Grosso do Sul state, Brazil (Aparecida do Taboado – Wikiaves, 2014 op. cit.), and is largely absent from the Pantanal and interior Atlantic Forest region of southern Brazil, including the neighbouring state of Paraná (Scherer-Neto *et al.*, 2011). Its presence in Paraguay at the locality stated by Bertoni, even allowing for habitat modification in the intervening years, would thus seem unlikely,

and its similarity to Green-winged Saltator, *Saltator similis*, and juvenile Greyish Saltator, *Saltator caerulescens*, means that careful and precise documentation would be required for such records to be accepted.

It is perhaps worthy of mention that the juvenile of *S. caerulescens* when identified following the key to the genus *Saltator* (Sclater, 1886) in the Catalogue of the BMNH (a series of volumes that Bertoni is known to have consulted heavily – Smith *et al.*, in press) would be identified as *Saltator magnus* on the basis of its olive-green back, wings and crown. However Bertoni (1930) specifically stated that *S. caerulescens* is a species that “has not been found in the Alto Paraná forests”. Similar descriptions of diagnostic features were also provided in Ihering (1898) and Ihering & Ihering (1907), another author which Bertoni frequently referenced, including the statement that *Saltator magnus* with its “Crown, nape and dorsum olive-green (“Vértice, nuca e dorso de côr verde-azeitonada”) could be distinguished from *Saltator similis* which is “similar but has a grey dorsum” (“Espécie parecida a precedente tendo o dorso de côr cinzenta”). In fact *S. similis* also has a greenish dorsum.

This species was considered “possible” by both Hayes (1995) and Guyra Paraguay (2004), but bearing in mind the known distribution, habitat preferences and the possibility of confusion given that Bertoni provides no details of his record, the species should perhaps best be considered doubtful in Paraguay.

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