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THE IDENTITY OF THE FABRICATED BIRD $SASSIUS\ SIMPLEX$ AND ITS FINAL DISSOCIATION FROM THE HAWAIIAN AVIFAUNA



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Abstract. — Sassius simplex Rothschild and Hartert, 1926, originally described as a new genus and species of Drepanididae, is based on a composite specimen that has no association whatever with the Hawaiian Islands. The bill and tongue of this specimen are designated as the lectotype of Sassius simplex and are identified with the sunbird Nectarinia lotenia. The genus Sassius becomes a synonym of Nectarinia Illiger, 1811, and the species Sassius simplex becomes a synonym of Nectarinia lotenia (Linnaeus, 1766).

Riassunto. — L'identità dell'uccello artefatto Sassius simplex e la sua definitiva dissociazione dall'avifauna hawaiana.

Sassius simplex Rothschild & Hartert, 1926, in origine descritto come nuovo genere e nuova specie di Drepanidide, è fondato su di un esemplare di origine composita, che non ha alcun riferimento con le isole Hawaii. Il becco e la lingua di questo esemplare (esistente nel Museo di Storia Naturale di Vienna) vengono designati come lectotipo di Sassius simplex e sono identificati con la nettarinia Nectarinia lotenia. Il genere Sassius diviene sinonimo di Nectarinia Illiger, 1811, e la specie Sassius simplex diventa sinonimo di Nectarinia lotenia (Linnaeus, 1766).

ROTHSCHILD and HARTERT (1926a) introduced Sassius simplex as a genus and species of Drepanididae, supposedly from the Hawaiian Islands, based on an ancient mounted specimen in the Naturhistorisches Museum in Vienna that had been called to their attention by Moriz Sassi. The description was republished in German, along with a photograph of the specimen (ROTHSCHILD & HARTERT, 1926b). At least DELACOUR (1928) and MATHEWS (1930) subsequently carried Sassius simplex as a valid

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genus and species of Hawaiian bird. Later, however, the specimen was generally ignored as a fabrication, but none of the standard sources on Hawaiian birds that refer to Sassius provide any documentation for this, or even refer to the most pertinent literature concerning the history of the specimen (i.e. Sassi, 1933; 1940). For example, Greenway (1968: 94, footnote) states only that Sassius simplex « is an artifact made of the skins of Nectariniidae », but gives no references. Bryan and Greenway (1944), followed by Amadon (1950), also considered the specimen to be an artifact of sunbird parts, and both cite Meise (1938) as an authority. But Meise (1938: 181) says only: « Falsifikat aus Teilen von Nectariniiden (Stresemann, in litt.) », despite the fact that Stresemann had previously examined the specimen and had agreed that it was an extinct Hawaiian bird (Rothschild & Hartert, 1926a).

Given the proclivity of ornithologists to ignore species based on unique specimens, one might wonder whether *Sassius* had been wrongly dismissed without a proper hearing, as in the case of *Dysmorodrepanis munroi*, a valid Hawaiian endemic known only from a single specimen (JAMES et al., in press). Furthermore, paleontological investigations have shown that many additional species of Drepanidini have been exterminated in the recent past (OLSON & JAMES, 1982), any one of which could conceivably be represented by an old, overlooked museum specimen. We therefore reviewed the literature on *Sassius simplex* and re-examined the holotype, from which we conclude that the specimen is indeed a fabrication and has nothing whatever to do with the Hawaiian avifauna.

The holotype of Sassius simplex (Naturhistorisches Museum Wien No. 50727) had been catalogued in 1806 as « Drepanis (Certhia) obscura? » and Rothschild and Hartert's diagnosis emphasized its differences from that Hawaiian species, now usually known as Hemignathus obscurus (Gmelin). Because the year 1806 also saw the dissolution and sale of the Leverian museum, which included specimens of Hawaiian birds from Cook's last voyage, some of which were purchased for the museum in Vienna (Medway, 1981), the date might seem significant in connection with a possible Hawaiian origin of Sassius. It is only coincidental, however, as this is the same year in which all of the collection at Vienna was rearranged and recatalogued by order of Kaiser Franz I (Sassi, 1933).

It was Sassi (1933; 1940) himself who discovered that the same specimen that became the holotype of *Sassius simplex* had been illustrated and described in a rare and ancient work by Spalowsky (1790). We have examined this work and concur that Plate 12, captioned « Certhia grisea, subtus alba rostro curviori, Bogenschnabel », depicts « *Sassius simplex* » (see fig. 1). In the text (p. 11), the species is said to occur « throughout

India » (« Er ist durch ganz Indien gemein »). Spalowsky does not appear to have been consistently binominal, but regardless, the name *Certhia grisea* Spalowsky, 1790, is a junior homonym of *Certhya grisea* Scopoli, 1786, and is unavailable. If the name *Certhia grisea* was still associated with the specimen when it was recatalogued in 1806, this may have seemed sufficiently similar to the name *Certhia obscura* Gmelin to induce some one to refer the specimen to that species. There was otherwise never any grounds for associating « *Sassius simplex* » with the Hawaiian Islands.



Fig. 1. — « Certhia grisea, subtus alba rostro curviori» [= holotype of Sassius simplex Rothschild & Hartert, 1926], as depicted in J. J. R. Spalowsky's « Beytrag zur Naturgeschichte der Vögel» (1790).

(Photo Naturhistorisches Museum, Vienna).

Concerning the specimen itself, Rotschild and Hartert (1926a: 52) noted that « the feathers of the body are glued on to a wooden model, and the wing-feathers have their base and part of the inner web cut off, apparently as the taxidermist found the entire wing too big for the small wooden body ». They examined the specimen with a microscope and even troubled to have it X-rayed, from which they concluded that the skull and both parts of the bill were real and continuous with one another and that « the skin and its feathers belong to the bill and skull ». Their microscopical examination must have been quite perfunctory, however, for they overlooked the distinctly serrated ramphotheca and the double tubular tongue (which still remains in the specimen!), both of which are characteristic features of the Nectariniidae that are quite unlike any member of the Drepanidini.

The area around the nostril at the base of the bill appears to be filled in with wax so that one may actually doubt whether the skin of the head is continuous with the bill. In length (culmen 25.8 mm), width (3.7 mm at the anterior margin of the nostrils), and in its distinctive strong arc, the bill of «Sassius simplex» agrees perfectly with that of the sunbird Nectarinia lotenia of India and Ceylon, so that Spalowsky's (1790) ascription of the specimen to India appears to have been correct. The plumage is brownish above, more rufous on the mantle and rump, the rectrices are fuscous with lighter margins, and the underparts are buffy whitish. There is no trace of iridescent plumage. At least some of the feathers are from the sparrow Passer rutilans cinnamomeus, also an Indian species.

Because the specimen is clearly a composite, we designate the bill and tongue as the lectotype of *Sassius simplex*. The genus *Sassius* Rothschild and Hartert, 1926, becomes a junior objective synonym of *Arachnechthra* Cabanis, 1851 (type *Certhia lotenia* Linnaeus, 1766) and a junior subjective synonym of *Nectarinia* Illiger, 1811 (type *Certhia famosa* Linnaeus) as used by modern authors (e.g. RAND, 1967). The species *Sassius simplex* Rothschild and Hartert, 1926, becomes a junior subjective synonym of *Certhia lotenia* Linnaeus, 1766.

A minor problem arises in the fact that *Nectarinia lotenia* has been divided into two subspecies, the nominate one from Ceylon and *N. l. hindustanica* (WHISTLER, 1944) from mainland India, to which one of us provisionally referred *Sassius simplex* (SCHIFTER, 1988: 67, footnote). However, if the lectotype of *Sassius simplex* could be shown to belong to the mainland form, the name *simplex* Rothschild and Hartert, 1926, would have priority over *hindustanica* Whistler, 1944. Bill length was the only difference that WHISTLER (1944) used to distinguish *N. l. lotenia* (30-32 mm in 13 adults) from *N. l. hindustanica* (25-29 mm in 17 adults).

The only intact specimens of this species available for comparison at the Smithsonian Institution were 6 males and 3 females from Ceylon. Not one of these had a bill as long as 30 mm, no matter how measured (culmen from base, 24.3-29.3 mm). Nor did any of the few specimens of nominate N. lotenia in the Vienna collection attain the dimensions given by Whistler. Thus it may be doubted that the species can actually be subdivided according to Whistler's criteria. In any case, because of the condition of the lectotype of Sassius simplex, it would be difficult to be certain of obtaining a measurement of the bill that is comparable to that in modern skin preparations. Therefore, at the subspecific level, the identity of this specimen may be regarded as indeterminate.

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