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STATUS OF *SPERMOPHILA SCHISTACEA* LAWRENCE.

BY THOMAS E. PENARD.

In comparing some Gray Seed-eaters from Surinam with a large series of *Sporophila intermedia* Cabanis (= *S. grisea* of authors) from various parts of northern South America, I have particularly noted the shallowness of the maxilla, the darker color of both male and female, and the longer wing and shorter tarsus of the Guiana birds, all suggestive of kinship to the bird described by Lawrence (Ann. Lyc. N. Y., VII, 1862, p. 474) as *Spermophila schistacea*, and listed by Ridgway (Birds of North and Middle America, I, 1901, p. 566) as a subspecies of *Sporophila grisea* under the name *Sporophila grisea schistacea* (Lawrence).

Through the kindness of Dr. Frank M. Chapman of the American Museum of Natural History, I have also been able to compare the Surinam specimens with the type of *Spermophila schistacea* which originally came from Lion Hill Station on the Panama Railroad.

These investigations show that *S. schistacea* is not a form of *S. intermedia*, but a different species, represented in Surinam and French Guiana by a distinct form. In addition to the characters distinguishing *S. schistacea* from *S. intermedia* already pointed out by Ridgway (*l. c.*), I find that the wing formulas of the two species are entirely different, affording an excellent means of identification. The structural characters may be briefly summarized as follows:

Sporophila intermedia.—Maxilla deeper, culmen strongly convex; wing rounded and shorter (less than 60 mm. in the male); *first (outermost) primary comparatively short—shorter than fifth*; tail long; tarsus long (15 mm. or more).

Sporophila schistacea.—Maxilla shallower, culmen not so strongly convex; wing pointed and longer (60 mm. or more in the male); *first (outermost) primary nearly or quite as long as second—very much longer than fifth*; tail short; tarsus short (less than 14.5 mm.).

The Surinam birds possess all the characters of the type of *S. schistacea*, except that the white patches on the sides of the throat of the male are slightly smaller, perhaps less sharply defined, and in some individuals practically obsolete. It is difficult to say whether this character will be found constant, and we certainly would not be justified in separating the Surinam bird on this slight difference. But the females from Surinam are so much darker and so much more olivaceous than a female from Colombia, which I take to be true *schistacea*, that I do not hesitate to describe the Guiana form as a distinct subspecies under the name

***Sporophila schistacea arthuri*, subsp. nov.**

Type.—No. 2,027. Collection of T. E. Penard (now No. 89,377, Museum of Comparative Zoology), adult ♀; Surinam: Lelydorp, 19 October, 1921; collected by Alex Pichot.

Subspecific characters.—Adult female similar to that of *Sporophila schistacea schistacea* (Lawrence), but upper parts darker, much more olivaceous, less brownish; breast band and sides olivaceous brown; middle of belly yellowish; under tail coverts buffy.

Measurements (in millimeters).

Sporophila schistacea arthuri. Six males from Surinam: wing, 61.5 (60.0–62.5); tail, 39.6 (39.0–41.0); tarsus, 14.1 (14.0–14.3); culmen, 11.0 (10.5–11.5).

One male from Tamanoir, Mana R., French Guiana: wing, 62.0; tail, 42.0; tarsus, 14.0; culmen, 10.0.

Three females from Surinam: wing, 57.5, 59.0, 60.0; tail, 37.0, 37.0, 37.5; tarsus, 14.0, 13.5, 13.9; culmen, 10.5, 10.8, 10.5.

Type, adult female: wing, 59.0; tail, 37.0; tarsus, 14.2; culmen, 10.8

Sporophila schistacea schistacea. Type, adult male: wing, 62.0; tail, 42.0; tarsus, 14.2; culmen, 10.4.

One adult female from Colombia: wing, 57.0; tail, 42.0; tarsus, 14.0; culmen, 11.0.

Sporophila intermedia. Fifty males from Colombia, Venezuela, and Trinidad: wing, 56.7 (54.0–59.0); tail, 45.0 (42.0–47.5); tarsus, 16.0 (15.0–17.0); culmen, 10.6 (10.0–11.5).

Eighteen females from Colombia and Venezuela: wing, 53.9 (51.8–56.2); tail, 42.1 (40.0–44.0); tarsus, 16.2 (15.2–17.0); culmen, 10.7 (10.0–11.0).

Remarks.—I take pleasure in dedicating this new form to my brother Arthur P. Penard of Paramaribo, to whose efforts mainly I owe the excellent series of specimens from Surinam.

The female of *S. s. schistacea* (Carnegie Museum, No. 67,706) I found in a large series of Gray Seed-eaters kindly loaned me by Mr. W. E. Clyde Todd. It was collected by M. A. Carriker, Jr., at Pavas, La Cumbre, Valle, Colombia, in July, 1918. This specimen resembles the female of *S. intermedia* in coloration, and might easily be mistaken for that species, but the short tarsus (14.0 mm.) and the long, pointed wing make its identity certain.

The male from French Guiana (Carnegie Museum, No. 61,062) was collected by S. M. Klages at Tamanoir, Mana River, in April, 1917. In this specimen, as in some males from Surinam, the white wing speculum is very small, but I doubt very much whether the size of the wing spot will be found to be of any taxonomic value in dealing with either *S. schistacea* or *S. intermedia*. One of the Surinam birds, an immature male, also has white tips to the median secondary coverts, similar to those on the type of *S. schistacea*.¹

No doubt there are in collections a number of specimens of *S. schistacea* erroneously identified as *S. grisea*. For example, Sharpe (Cat. Birds Br. Mus., XII, 1888, p. 96) mentions Panama skins with ill-defined white patches on the sides of the neck and with the inner greater wing-coverts tipped with white. Probably these are specimens of *S. schistacea*. Also Berlepsch and Hartert (Nov. Zool., IX, 1902, p. 25) mention a male from Caicara, Venezuela, which is darker, more schistaceous than the other specimens, the throat variegated with white and the wing rather long (63.5 mm.). This is undoubtedly an example of *S. schistacea*, but without seeing the female from that locality it will be difficult to say to which of the two forms it belongs.

Chubb (Ann. Mag. Nat. Hist., Ser. IX, 1921, p. 193) has described an apparently new Seed-eater from Roraima under the name *Sporophila longipennis*. The characters given by him in the original diagnosis, and the fuller description in his Birds of British Guiana (Vol. 2, 1920, p. 429), apply very well to the Surinam bird, so far as they go, with the exception that the Roraima bird is decidedly larger (wing, 65; tarsus, 15), and although Chubb does not mention the shallowness of the maxilla or the pointed wing, I strongly suspect close relationship between *S. longipennis* and *S. schistacea*. Unfortunately I am unable to examine the type of *S. longipennis*, but judging from the measurements and taking into consideration the type locality Roraima, with its peculiar fauna, I feel certain that the name *longipennis* does not apply to the Surinam bird.

It should also be noted that Snethlage (Bol. Mus. Goeldi, VIII, 1914, p. 428), under *S. grisea*, lists three males from Peixi-Boi at the mouth of the Amazon. The measurements (wing, 65; tarsus, 14.0) indicate kinship to *S. schistacea* rather than *S. intermedia*.

¹Since the above was written Mr. Todd has loaned me another female and four males of true *schistacea* from Las Ventanas (Santander) and Malagita (Choco), Colombia. The fully adult males, of which there were three in the lot, all have decided white tips to the median secondary coverts and large, well-defined, white patches on the sides of the throat. These characters in the male of true *schistacea*, taken in connection with the much darker coloration of the Surinam female can leave no doubt as to the validity of the Surinam form.

The two species occur together over a great part of their respective ranges. Apparently *S. intermedia* is restricted to Colombia, Venezuela, Trinidad, and British Guiana. I have no positive knowledge of its occurrence in Dutch or French Guiana, but Chubb in his *Birds of British Guiana* lists a specimen from Takutu Mountains. The range of *S. schistacea* extends from Panama and western Colombia at least to French Guiana.

I am greatly obliged to Mr. Outram Bangs for his opinion in regard to several points involved in my study of these two species.



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