A Ruddy Spinetail Synallaxis rutilans with aberrant plumage

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Reportamos un caso de Colaespina Rojiza *Synallaxis rutilans* con leucismo y melanismo para el Centro de Investigación y Capacitación Río Los Amigos, dpto. Madre de Dios, Perú, en junio y julio de 2003. Dentro de nuestro conocimiento, este es el primer caso reportado de leucismo o melanismo en el género *Synallaxis* y el segundo caso de leucismo reportado para la familia Furnariidae.

We report the observation of a Ruddy Spinetail Synallaxis rutilans with aberrant plumage, displaying both leucism and melanism, from the Centro de Investigación y Capacitación Río Los Amigos (CICRA), Madre de Dios, Peru. To our knowledge, this is the first record of leucism or melanism in the genus Synallaxis and only the second record of this type of aberrant plumage in the Furnariidae. The first record of albinism or leucism was a leucistic Rufous Hornero Furnarius rufus specimen at La Plata museum⁷, originally reported as an albino. A melanic Xiphorhynchus flavigaster has also been described⁶, and is more appropriately treated in Furnariidae than, as it has traditionally been, in Dendrocolaptidae⁴.

Observations

We observed the aberrant *S. rutilans* at CICRA in June–July 2003. The research station lies at 250 m, on the north bank of the río Madre de Dios, near the mouth of the río Los Amigos. CICRA represents a great diversity of terrestrial habitats, including *terra firme*, *várzea* and patchily distributed bamboo

forests. More information concerning the research station can be found: www.amazonconservation.org/home. We first captured the aberrant *S. rutilans* on 27 June in a 6-m mist-net in *terra firme* (12°33'S 70°05'W). It was photographed and released. We lacked permission to collect birds, preventing it from being prepared as a specimen. On 23 July, DJL observed the same bird again in a nearby *Guadua* bamboo thicket, always within 1 m of the ground. On 24 June, we captured a different *S. rutilans* with typical pigmentation in another *Guadua* bamboo patch c.4 km from where the aberrant was captured. We photographed the typical bird to compare with the aberrant.

Identification and diagnosis

The aberrant was identified as *S. rutilans* based on morphology, plumage and habitat. The size, bill shape and long stiffened rectrices were indicative of *Synallaxis*. Three species of *Synallaxis* (*S. rutilans*, Chestnut-throated Spinetail *S. cherriei* and Cabanis's Spinetail *S. cabanisi*) are found in mature forest or *Guadua* bamboo in the region,

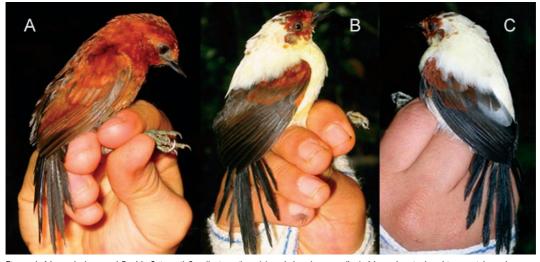


Figure I. Normal-plumaged Ruddy Spinetail Synallaxis rutilans (a) and the aberrant (b,c). Note the single white tertial on the aberrant bird's left wing (c). Also note that the secondaries of the aberrant are much darker compared to the all-rufous secondaries of the typical bird.

with additional species present in scrubby riparian or edge habitats. S. cabanisi lacks rufous on the earcoverts and is unknown at CICRA, but was heard in riparian Guadua bamboo a few kilometres downriver. S. cherriei recalls S. rutilans in plumage and habitat use, but differs vocally. It is exceptionally rare in lowland south-east Peru, and the closest records to CICRA are from Playa Bonita (11°50'S 71°23'W), c.6 km north of Cocha Cashu Biological Station in Manu National Park, dpto. Madre de Dios (pers. obs.), and Extrema, dpto. Pando, Bolivia (J. A. Tobias & N. Seddon in litt. 2005). S. rutilans is uncommon at CICRA, but was noted by voice and mist-net captures in three of eight Guadua bamboo patches surveyed (including that where the aberrant was captured), as well as in dense forest thickets. Fig. 1 shows both a typical (a) and the aberrant individual (b,c). Typical S. rutilans has no white in the plumage. Patches of normally pigmented, rufous feathers were present on the forehead, crown, lores, ear-coverts and malar of the aberrant, but the nape, mantle, rump, chin, breast, belly, undertail- and underwing-coverts were almost all white. The upperwing-coverts were mainly rufous, with typical pigmentation, but the greater secondary coverts also showed evidence of extra melanin (only noticed in the photographs). These coverts were blackish, with rufous restricted to the tip, and were much darker than the allrufous greater secondary coverts of the typical individual (Fig. 1b,c). The remiges, with the exception of one white tertial on the aberrant bird's left wing, were dark with an excess of melanin pigment. The rectrices were similar in colour to the typical bird. Its bill, legs and feet appeared normal, and iris coloration appeared normal in the hand, but in the photograph slightly paler compared to a typical individual (Fig. 1). Despite the pigmentation abnormalities, the bird's plumage pattern was still quite symmetric. The combination of extensive white plumage and darker remiges and greater secondary coverts indicate both leucism and melanism occurring simultaneously in different parts of the aberrant individual's plumage.

Discussion

This individual is interesting because it represents the first record of leucism and melanism in the genus *Synallaxis* and only the second record of this class of aberrant plumage in the Furnariidae. Continued documentation of aberrant plumages in all bird families will provide baseline data to assist researchers explain the biological causes of such plumages and help discern variation in the frequency of aberrant plumages across bird families^{1,3,5}, whilst populations with high frequencies of leucism may be indicative of inbreeding or environmental stress².

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References

- 1. Baptista, L. F. (1966) Albinistic feathers in storm petrels (Hydrobatidae). *Condor* 68: 512–514.
- Bensch, S., Hansson, B., Hasselqvist, D. & Nielsen, B. (2000) Partial albinism in a semi-isolated population of great reed warblers. *Hereditas* 133: 167–170.
- Jehl, J. R. (1985) Leucism in Eared Grebes in western North America. Condor 87: 439–441.
- Remsen, J. V., Jaramillo, A., Nores, M., Pacheco, J. F., Robbins, M. B., Schulenberg, T. S., Stiles, F. G., da Silva, J. M. C., Stotz, D. F. & Zimmer, K. J. (2006) A classification of the bird species of South America. www.museum.lsu.edu/~Remsen/SACCBaseline.html (accessed May 2006).
- Rintoul D. A. & Kennedy, E. D. (2002) Aberrant plumages in a Carolina Wren and two House Wrens from Kansas. Kansas Orn. Soc. Bull. 53(2): 21–24.
- Winker, K. (1995) Xiphorhynchus striatigularis (Dendrocolaptidae): Nomen monstrositatum. Auk 112: 1066–1070.
- Zapata, A. R. P. & Novatti, R. (1995) Passeriformes albinos en la collection del Museo de La Plata. Rev. Asoc. Cienc. Natur. Litoral 6: 69–71.

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