

## TWO LEUCISM CASES IN *Turdus rufiventris* Vieillot, 1818 (BIRDS, TURDIDAE), IN SOUTHERN BRAZIL

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### ABSTRACT

We report two cases of leucism in *Turdus rufiventris* in southern Brazil. One mutant specimen was found in the urban area of Santa Cruz municipality, Rio Grande do Sul. It had totally white secondary flight feathers on the left wing, but normal color on all its body parts. The other specimen was found in a forest fragment in the rural region of Santa Maria municipality, RS. Presenting leucistic feathers on the head, neck, breast and tail.

**Keywords:** Mutation; Rufous-bellied Thrush; Rio Grande do Sul.

### RESUMO

**Dois casos de leucismo em *Turdus rufiventris* (Aves, Turdidae), no sul do Brasil.** A presente comunicação reporta dois casos de leucismo em *Turdus rufiventris*, no Sul do Brasil. Um espécime mutante foi registrado em perímetro urbano, no município de Santa Cruz do Sul, Rio Grande do Sul, Brasil. O indivíduo apresentava rémiges secundárias totalmente brancas na asa esquerda e coloração normal no restante do corpo. O segundo espécime foi registrado num fragmento florestal, em área rural no município de Santa Maria, RS. A mutação afetava parte da cabeça, pescoço, peito e cauda.

**Palavras-chave:** Mutação; Sabiá-laranjeira; Rio Grande do Sul.

### INTRODUCTION

*Turdus rufiventris*, commonly known as ‘Rufous-bellied Thrush’ occurs in Brazil, Uruguay, Paraguay and Argentina, and may be found in open areas, parks, woods and orchards, feeding on fruits and insects. The bird’s color is basically brown, with an orange-hue, dark red belly (Andrade, 1997; Sick, 1997).

Several hue mutation changes in bird specimens have been reported in the literature (e.g. Collins,

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2003; Mancini *et al.*, 2010; Espinal *et al.*, 2011; van Grouw, 2013; Silva *et al.*, 2016), including albinism, brown, dilution, ino, melanism and leucism patterns (van Grouw, 2006). The latter mutation has been reported with great frequency. The dissemination of mutations and their variations in bird plumage is relevant to better understand such occurrences and processes (Bensch *et al.*, 2000; Silva *et al.*, 2016). Leucism is a genetic mutation caused by the blockage of melanin synthesis, attributed to mutant alleles, frequently confused with albinism (Bensch *et al.*, 2000; Møller and Moussaeu, 2001). This mutation affects plumage with loss of the original hue. Leucism may be either total, when the bird has a whitish color in all feathers, or partial, when it affects only some feathers, presenting the regular hue on the others (van Grouw, 2006; 2013). Leucism cases have been reported in several other bird species, such as *Patagioenas picazuro*, *Knipolegus lophotes* (Santos *et al.*, 2011), *Nannopterum brasilianus* (Espinal *et al.*, 2011), *Paroaria coronata* (Corrêa *et al.*, 2012), *Columbina picui* (Corrêa *et al.*, 2013), *Turdus leucomelas* (Silva *et al.*, 2016) and *Vanellus chilensis* (Brum *et al.*, 2017).

## OCCURRENCE DESCRIPTION

An adult *Turdus rufiventris* individual with such mutation has been reported on March 25, 2012, in the urban area of Santa Cruz do Sul municipality, Rio Grande do Sul state, Brazil ( $29^{\circ}42'S$ ,  $59^{\circ}25'W$ ). It had totally white secondary flight feathers on the left wing, but with normal color on all its body parts. The specimen was monitored all days during the months after reporting. The bird's behavior was similar to others of the same species. The specimen was reported feeding and defending its territory. After October 21, 2012, the bird was seen feeding its offspring (Figure 1). The other mutant individual was reported on June 18, 2013, in Santa Maria municipality, Rio Grande do Sul, near the Distrito de Pains ( $29^{\circ}45'S$ ,  $53^{\circ}42'W$ ). The specimen, which we report here descriptively, revealed de-pigmentation and whitish hue mutations affecting part of the head, neck, breast, back and almost all the tail. In both cases, partial leucism was characterized in *T. rufiventris*.



Figure 1. A specimen of *Turdus rufiventris* presenting partial leucism, feeding its offspring in an urban area of Santa Cruz do Sul, Rio Grande do Sul, Brazil. Photo: Alexsandro R. Mohr.

Cases of feather mutations in *T. rufiventris* in Brazil have already been documented by Veiga and Pardo (1990), Sick (1997), Piacentini (2001), Junior *et al.* (2008), Santos *et al.* (2011) and Junior and Corrêa (2017). It seems that such cases are not uncommon for the species. However, birds which lose their original hue mainly through albinism or leucism may become more vulnerable to predators (Collins, 2003; van Grouw, 2013), making it important to monitor these specimens in the wild (Corrêa *et al.*, 2012; Corrêa *et al.*, 2013). Consequently, studies documenting mutation cases and describing the behavior of mutant specimens are needed in the scientific literature.

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