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First report of piebaldism for the Crowned False Boa, *Pseudoboa coronata* Schneider, 1801, from the lowlands of Bolivia

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Piebaldism is a form of chromatic aberration characterised by the absence of melanin in certain regions of the body, with the skin exhibiting a white colour with pigmented regions, which produces lighter, homogeneous, or strongly choppy colours and colour patterns (Borteiro et al., 2021). Garcia-Elfring et al. (2023) identified various types of piebaldism depending on the degree of depigmentation in captive ball pythons, *Python regius* (Shaw, 1802).

This anomaly has been reported in some species of amphisbaenians (e.g., *Amphisbaena munoai* Klappenbach, 1960) and lizards (e.g., *Ctenosaura oedirhina* De Queiroz, 1987), but has primarily been observed in neotropical snakes (e.g., *Atractus zebrinus* (Jan, 1862), *Boiruna maculata* (Boulenger, 1896), *Pseudoboa nigra* (Duméril, Bibron and Duméril, 1854)) (Goode and Paschnik, 2016; Perez and Alvarez, 2020; Borteiro et al., 2021). In most cases, piebaldism occurs in terrestrial (including fossorial and semifossorial) and nocturnal snake species (Borteiro et al., 2021). Chromatic aberrancies or atypical colouration have been argued to reduce fitness and survival in snakes (Krecsák, 2008; Cyriac and Kodandaramaiah, 2019). Conversely, there is also research (albeit limited) that indicates chromatic aberrancies resulting in reduced pigmentation in snakes do not seem to affect fitness, survivability or result in higher predation rates (Mukherjee and Mohan, 2021; Stephenson et al., 2022). However, empirical evidence regarding chromatic aberrancies in wild snake populations and their effects on fitness and survivability remains scarce (Rivas et al., 2023a).

Pseudoboa coronata Schneider, 1801 has a wide distribution in South America (Nogueira et al., 2019); however, more specifically in Bolivia, this species has been reported from the departments of Beni and Santa Cruz (Fugler et al., 1995; Rivas et al., 2023b; Eversole et al., 2024). It is a terrestrial species that exhibits both nocturnal and diurnal activity (Martins and Oliveira, 1998; Santos-Costa et al., 2015; Rivas et al., 2022).

At 21:30 h on 28 January 2025, we found a subadult female specimen of *Pseudoboa coronata* with piebaldism (CIRAH-1507, Fig. 1) on a country road near Laguna Suarez, characterised by patujusales shoals and flooded forest, Municipality of Santísima Trinidad, Cercado Province, Beni Department, Bolivia (-14.8754°W, -64.8783°S; WGS84; elevation 157 m). Collected by Luis R. Rivas and Miguel A. Camacho, and deposited in the herpetological collection of the Centro de Investigación de Recursos Acuáticos (CIRAH) of the Universidad Autónoma del Beni José Ballivián.

The piebald *Pseudoboa coronata* measured 427 mm snout-vent length, 106 mm in tail length, and 22.6 g in live weight. It has 17-17-17 dorsal scales, with two apical pits, 193 ventral scales, 83 single subcaudal scales, single cloacal scale, 7/7 supralabial scales, 1/1 loreal scale; 1/1 preocular scale; 2/2 postocular scales, 8/8 infralabial scales; meristic characters consistent with the description by Cunha and Nascimento (1978), Costa et al. (2015) and Tabares-Pinheiro et al. (2021). In addition, the specimen presents design characteristics and colouration pattern typical of the species; however, the dorsolateral regions are white with irregular red and black pigmentation along the vertebral region, typical characteristics of piebaldism (Fig. 1).

Piebaldism is well documented in *Pseudoboa nigra* (Borteiro et al., 2021) but has not been observed in *Pseudoboa coronata*. Therefore, our report is the first record of this anomaly in *P. coronata* from the Beni floodplains, Bolivia. This report complements other colour anomalies (i.e., xanthism and hypomelanism)

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Figure 1. Subadult female of *Pseudoboa coronata* (CIRAH-1507) with piebaldism, collected in the area surrounding Laguna Suarez, Trinidad, Beni Department, Bolivia. Photo by Luis R. Rivas.

observed in snakes from Bolivia (Rivas et al., 2023a, c). It is likely that additional anomalies will be revealed not only in this taxon but also in other Bolivian vertebrates, as research efforts in the country increase.

At the time of collection, the specimen attempted to escape by burying itself in the loose soil on the edge of the road (i.e., exhibited semi fossorial behaviour). The habitat where it was found is characterised as patches of seasonally flooded forests surrounded by patujusales and grasslands, where cattle grasing takes place. In addition, the entire area surrounding the Laguna Suarez suffers strong pressure from livestock activity, agribusiness and recreational tourism. Despite this, biodiversity is thought to flourish in the area.

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