

Albinism in a *Liophis miliaris* (Linnaeus, 1758) (Serpentes: Dipsadidae) from Minas Gerais State, southern Brazil

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Abstract. We report the first case of albinism in *Liophis miliaris* (Serpentes: Dipsadidae). A total albino specimen was found exhibiting nocturnal activity in an Atlantic Forest fragment in Minas Gerais State, southeastern Brazil. After being collected, the specimen was placed in the herpetological collection of the Federal University of Viçosa, state of Minas Gerais, Brazil.

Keywords. total albino, xenodontine snakes, nocturnal activity, Atlantic Forest.

Albinism is a condition caused by a homozygosis in a recessive mendelian gene, which implies an inability to produce melanin (Griffiths et al., 1998). In Squamate reptiles, specimens presenting total albinism are characterized by the absence of skin pigmentation, reddish or pinkish eyes and tongue, and occasionally the partial or total absence of the dorsal and/or dorso-lateral pattern (e.g. Miranda et al., 1985; Bérnills et al., 1990; Sazima and Di-Bernardo, 1991; Di Toro, 2007; Krecsák, 2008). We present a record of total albinism in a xenodontine snake, *Liophis miliaris*, from southeastern Brazil.

On 28 December 2009 at 21:40h a total albino *Liophis miliaris* specimen was found in an Atlantic Forest fragment approximately 0.5 km from Private Reserve of Natural Patrimony (PRNP) Usina Maurício (21°27'50"S, 42°51'31"W, 280 m a.s.l.) municipality of Itamarati de Minas, Minas Gerais State, southeastern Brazil. The individual was crossing a road next to a stream, in an area with high density of arboreal vegetation. The female was 479 mm in snout-vent length, had a 121 mm long tail, possessed 17 scales in the dorsal rows around midbody, 142 ventrals and 44 subcaudal scales. The lack

of skin pigmentation, the reddish eyes and the pinkish tongue characterize the specimen as a total albino (Miranda et al., 1985). The distal part of the scales has a darker yellow color, a pattern similar to normal colored *L. miliaris* where dorsal scales show darkening r distally (Giraud et al., 2006). The specimen was photographed, collected and deposited in the herpetological collection of Universidade Federal de Viçosa (Federal University of Viçosa), state of Minas Gerais, Brazil, under the catalogue number MZUFV 1785.

This is the first record of albinism in *Liophis miliaris*. Total and partial albinism are recorded in some South American dipsadid species (e.g. *Helicops modestus*, *Leptodeira annulata*, *Liophis anomalus*, *Oxyrhopus clathratus*, *O. guibei*, *Philodryas patagoniensis*, *Pseudoboa nigra*, *Sibynomorphus mikanii*, *S. neuwiedi*, *Xenodon dorbignyi*) (Amaral, 1927a, b; Prado, 1939; Lema, 1960; Miranda et al., 1985; Sazima and Di-Bernardo, 1991; Duarte et al., 2005). The genus *Liophis* contains more than 50 species (Curcio et al., 2009) distributed from southern Central America (Costa Rica and Panama) to southern Argentina (Dixon, 1989). Among these species, there is a documented case of total albinism in *Liophis anomalus* (Miranda et al., 1985) and leucism in *Liophis poecilogyrus* (Lema, 1960). Thus, these chromatic anomalies seem to be rare in this genus, considering its diversity of species and their geographic range. Sazima and Di-Bernardo (1991) observed that most of the neotropical snakes with albinism/leucism records presents nocturnal and cryptic habits, considering the selective pressure exerted by visually oriented diurnal predators. *Liophis miliaris* is active during day and night (Marques et al., 2001), thus our finding corroborates the tendencies pointed out by Sazima and Di-Bernardo (1991).

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Figure 1. Albino *Liophis miliaris* found in Minas Gerais State, southern Brazil. Photograph: F. A. Silva.

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Figure 2. Head of the albino specimen, showing the reddish eyes. Photograph: F. A. Silva.