

## *Erythrolamprus miliaris orinus* Cope, 1868 (Serpentes: Dipsadidae: Xenodontinae): Melanism

Frederico de A. Menezes\* Daniela Gennari P. Toledo and Valdir J. Germano

Melanism is a chromatic phenomenon caused by excessive concentration of melanin in the skin, resulting in animals with a phenotype darker than usual (True, 2003). The incidence of melanism has been reported for different classes of vertebrates, including reptiles, and is most frequently observed in specimens from high latitudes (Cusella-Trullas et al., 2008) or elevation (Bernardo et al., 2012).

Considering snakes, melanism was already documented in a couple of families - e.g. Colubridae and Viperidae (Silva, 1999; Albaladejo, 2008). The hypotheses about its local functionality suggest a thermic role, in which darker phenotypes may enable a more efficient absorption of heat (Cusella-Trullas et al., 2008). Although melanism was also previously associated to an increase in growth rate and fecundity in females, it renders animals more conspicuous, increasing predation risk (Gibson and Falls, 1979; Andren and Nilson, 1981).

The genus *Erythrolamprus* Boie, 1826 currently comprises 42 species (Grazziotin et al., 2012) widely distributed from Honduras south to Argentina (Dixon, 1989; Curcio et al., 2009). Populations of *Erythrolamprus miliaris orinus* Cope, 1868 from the Atlantic forest (specifically from the coastal area of the state of São Paulo, south-eastern Brazil) exhibit a conspicuous colour pattern with dorsal scales showing black borders and yellow centers and a creamish white belly (Prado, 2003; Giraud et al., 2006).

The present study reports a case of melanism in *Erythrolamprus miliaris orinus*. The specimen was deposited in the herpetological collection of Butantan

Institute “Alphonse Richard Hoge” (IBSP 81992) and comes from Bertioiga (23° 85’ S 46° 13’ W), a coastal city in the state of São Paulo. This specimen is an immature male of 220 mm snout-vent length and 59 mm caudal length. Meristic data showed 17/17/15 dorsal scale rows, 161 ventral and 60 subcaudal scales. The specimen shows a black coloration throughout the body (figure 1A), except for small pale spots on the gular region up to the level of the fifteenth ventral scale (figure 1B).

Melanism is unusual for most species of *Erythrolamprus*. Chromatic phenomena reported for this genus are frequently related to mimicry (*E. aesculapii*; Marques and Puerto, 1991), albinism (*E. m. orinus*; Silva et al., 2010), and leucism: (*E. poecilogyrus*; Lema, 1960). Therefore, as far as we know, this represents the first report of melanism in *Erythrolamprus*.

Melanic condition in Iberian snakes is relatively frequent, mainly in mountainous areas with low solar incidence (Saint-Girons et al., 1986). Studies about populations of *Vipera seoanei* in the Cantabrian mountain range (northern Spain) show 38% of melanic specimens (Bea et al., 1984). However, records of this phenomenon for Neotropical snakes are not common. Therefore, we hope this report enables further investigations on the environmental costs associated to melanism in tropical snakes.

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**Figura 1.** Melanic specimen of *Erythrolamprus miliaris orinus* (A) Dorsal view; (B) Ventral view. Photo: Menezes, F. A.

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