An albino molossid bat from the southwestern Indian Ocean region

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Although albinism has been documented in many groups of vertebrates (Acevedo et al., 2009; El-Bakry, 2010; Razafimantandriana et al., 2012), it is considered rare in bats (Uieda, 2000). Nonetheless, recent studies reported cases of albinism from different bat families (Uieda, 2000; Buys et al., 2001; Aul & Marimuthu, 2006; Talerico et al., 2008). To date, 43 species of completely albino bats have been recorded from 24 countries (Sánchez-Hernández et al., 2010). Within the Family Molossidae, complete albinism has been detected in only five species, including those from South America and Australia: Tadarida brasiliensis, Chaerephon plicatus, Molossus fortis, M. molossus, and Eumops glacinus (Heatwole et al., 1964; Uieda, 2000; Sodré et al., 2004). In this note, we report the first case of albinism in a molossid bat from La Réunion.

A survey of a Mormopterus francoismoutoui maternity colony in the western portion of La Réunion was undertaken in December 2012 and in early 2013. The colony is located in a cave in the Trois Bassins ravine (21°06’36”S, 55°15’35”E), which has a 5 m wide entrance that opens up into a roosting site of approximately 30 m² surface and 8 m high. The colony has been previously estimated to contain 66,500 individuals during the reproductive season (Here, 2009), making this cave the most significant known reproduction site for this species. The surrounding habitat is mainly characterized by a secondary pastoral zone dominated by trees of Phytocellobium dulce, Tamarindus indica and Albizia lebbeck.

The albino bat was firstly observed on 11 December 2012 within the colony and photos were taken (Figure 1A). The bat was roosting high on a cave wall, making it difficult to catch. On 13 February 2013, we captured it by hand (Figures 1B, C, D). It had a free tail, long hairs on the hind foot, separated ears, completely white fur, and red to pink eyes. It was a female with small mammae, forearm length of 37.0 mm, ear length of 15.5 mm, hind foot length of 6.5 mm (excluding claw), and tail length of 37.5 mm. These characteristics allowed us to conclude that it was an albino M. francoismoutoui. After being measured, the individual was released inside the cave.

Our observation represents the first record of complete albinism in M. francoismoutoui, a small insectivorous bat, largely distributed and endemic to La Réunion. Additionally, this is apparently the first reported record of an albino bat from the southwestern Indian Ocean. Within the colony, the individual in question roosted amongst its congeners. Our observations are in parallel with previous reports that most albino bats recorded so far have been observed inside sheltered roosts such as caves, mines, galleries or buildings (Uieda, 2000). Such sites may be essential for the survival of albino bats to protect them against sunlight.

The record reported here is not the first of a white bat on La Réunion. Bory de Saint Vincent noted the presence of a small colony of white-bodied bats within palm leaves at two different sites during his visit to the island in 1802 (Lavergne, 2006). This “species”, known only from the written observations of Bory de Saint Vincent, was “described” as Boryptera alba (Brial, 2001).
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References


