Death-feigning in the lizard Leposoma scincoides

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izards use antipredator mechanisms, including **L**colouration and postural displays to avoid attacks by predators (Martins, 1996). Thanatosis or death-feigning is one particular postural display that is frequently used after physical contact with a predator (Humphreys & Ruxton, 2018) and has been reported in several species belonging to lizard families that include the Crotaphytidae (Gluesing, 1983), Liolaemidae (Santos et al., 2010), Scincidae (Patel et al., 2016), Tropiduridae (Bertoluci et al., 2006), and Gymnophthalmidae (Machado-Filho et al., 2018). Here we provide the first record of thanatosis in Leposoma scincoides (Gymnophthalmidae), a small lizard endemic to south-eastern Brazil found mainly in the litter of the Atlantic Forest, from Teresópolis (Rio de Janeiro) to Salvador (Bahia) (Rodrigues, 1997).

On 9 November 2019, two individuals of Leposoma scincoides were captured in leaf litter during sampling in the municipality of Santa Teresa, Espírito Santo, south-eastern Brazil (19° 52'16.38" S, 40° 33'43.34" W; 822 m a.s.l.). When handled, the subjects (SVL = 114 mm and 106 mm) immediately turned onto their backs, placing themselves in a simulated death posture with their eyes closed (Fig. 1A); after about four minutes they were touched by the researcher and their posture returned to normal (Fig. 1B).

Leposoma scincoides may use thanatosis when camouflage or escape attempts have failed. This strategy may work when predators wish to avoid dead prey so as not to be poisoned by toxins from bacterial decomposition; are unable to identify prey due to lack of movement; and/or where ingestion is hindered by the physical position of the prey (Humphreys & Ruxton, 2018). It has been suggested that this thanatosis evolved to counter visually orientated predators such as birds (Humphreys & Ruxton, 2018). The death-feigning posture reported here for Leposoma scincoides is similar to that described previously for other gymnophthalmids, Iphisa elegans (Machado-Filho et al., 2018), Micrablepharus atticolus (Mesquista et al., 2018) and Placosoma glabellum (Muscat et al., 2016).

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Figure 1. Leposoma scincoides (SVL = 114 mm) - A. Displaying deathfeigning, and **B.** Normal position

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