



# Potential Weed Dispersal by a Black-and-White Tegu, *Salvator merianae* (Squamata: Teiidae), in Southeastern Brazil

Glauco Cássio de Sousa Oliveira<sup>1</sup> and Guilherme Ramos Demetrio<sup>2</sup>

<sup>1</sup>Universidade Federal de Lavras, Trevo Rotatório Professor Edmir Sá Santos, CEP 37203-202, Lavras, Minas Gerais, Brasil (glaucomlds@hotmail.com)

<sup>2</sup>Laboratório de Ecologia Vegetal, Unidade Educacional Penedo, Campus Arapiraca, Universidade Federal de Alagoas, Avenida Beira Rio, s/n, Centro Histórico, Alagoas, CEP 57200-000, Penedo, Alagoas, Brasil

The Black-and-white Tegu (*Salvator merianae* Duméril and Bibron 1839) (Squamata: Teiidae), one of Brazil's largest lizards, has an extensive distribution in southern South America, including most of Brazil (Costa and Bérnills 2018).

Tegus are excellent swimmers and readily use this ability for colonization and dispersal between islands along the Brazilian coast (Abrahão et al. 2019). Although frugivorous lizards are important seed dispersers (e.g., Valido and Olesen 2019),



**Figure 1.** Potential epizoochory of the weedy Giant Salvinia (*Salvinia auriculata*) by a Black-and-white Tegu (*Salvator merianae*) in southeastern Brazil with the clonal structure of *S. auriculata* attached to its tail (arrows) (A1–4); habitat (B) and detail of a ramet (C) of *S. auriculata*. Photographs by G.C. de Sousa Oliveira.



including the dispersal of weeds (e.g., Heleno et al. 2012), little information addresses these reptiles dispersing plant propagules via epizoochory (Lasso and Barrientos 2015).

Aquatic ferns of the genus *Salvinia* are free-floating macrophytes that are considered among the most invasive aquatic weeds, as they can cause serious ecological, economic, and social problems in different parts of the world (Coetzee and Hill 2020) due to their rapid and efficient clonal growth (Gałka and Szmeja 2013). The dispersion of *Salvinia* spp. occurs mainly through water flow by hydrochory (Gałka and Szmeja 2013). However, propagules can also be dispersed through zoochory by animals moving across aquatic environments, either by endozoochory (e.g., aquatic birds; see Lovas-Kiss et al. 2018) or by epizoochory (e.g., aquatic mammals; see Hoffmann et al. 2024). Although reptiles with aquatic or semi-aquatic habits could also act as potential vectors of these plants, we are unaware of any reports of aquatic macrophytes being dispersed by lizards.

At about 1640 h on 12 November 2024, we observed an adult *S. merianae* crossing between two ponds in the floodplain of the Rio das Mortes, Municipality of Santa Cruz de Minas, south-central Minas Gerais, southeastern Brazil (-21.12556, -44.22361), with a clonal structure of a Giant *Salvinia* (*Salvinia auriculata* Aublet) (Salviniaceae) on its tail (Fig. 1). This observation suggests that *S. merianae* could disperse viable propagules of *S. auriculata* between ponds and between ponds and the river.

Similar observations of semi-aquatic turtles dispersing viable propagules of these plants via endozoochory or epizoochory demonstrate that they can be effective vectors capable of overcoming limitations of hydrochory (Burgin and Renshaw 2008; Padgett et al. 2018). We suggest that the roles of reptiles as dispersal agents of aquatic macrophytes is

overlooked and underestimated, especially in environments with large populations of semi-aquatic and aquatic reptiles and aquatic macrophytes, such as the Brazilian Pantanal.

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