Tupinambis quadrilineatus Manzani and Abe, 1997 (Fig. 1) is an endemic teiid lizard from the Brazilian Cerrado (Manzani and Abe, 1997; Colli et al., 1998). The species occurs from the northern state of Piauí and the southern state of Pará to the west of Minas Gerais and west of Mato Grosso States, with occurrences in Bahia, Maranhão, Tocantins, and Goiás States (Silveira, 2009; Ferreira et al., 2009; Freitas et al., 2011; Dal-Vechio et al., 2013; Freitas & Moura, 2013; Silva et al., 2013). The species mainly inhabits gallery forests, but can also be found in savannah habitats (Ferreira et al., 2009).

During herpetological inventories conducted in the states of Minas Gerais and Mato Grosso, southeastern and western Brazil, respectively, we encountered individuals of T. quadrilineatus outside of the known geographical distribution of the species. Some of these individuals were collected, measured in snout vent length (SVL) and sexed by verification of the presence or absence of hemipenes via dissection. In this paper, we present these new records, as well some ecological observations not previously documented for the species.

During field research at three parks located in central Minas Gerais, in the Cerrado region of the state, we collected two specimens of T. quadrilineatus on 5 February 2002 in Rio Preto State Park, municipality of São Gonçalo do Rio Preto (18.0639° S, 43.2018° W; elevation 750 m). The first specimen (male, adult, SVL = 213mm; Fig. 1) was found during an active search in the semi-deciduous gallery forests of the Preto River area around 1000 h, active on the soil approximately 5 m from the water. When recognizing the threat of our appearance, it immediately dove into the river and stayed immobile on the bottom for more than 3 min,
approximately 60 cm below the surface. The bottom of the river was rocky and reddish, and the color pattern of the lizard was similar to it. The water temperature was near 12°C, while the air temperature was over 23°C. The capture was made manually in the water.

The second specimen (male, young, SVL = 141 mm) was captured at the same locality as described above by pitfall trap, 1 h after the first capture. Both specimens were collected and deposited in the Herpetological Collection of the Museu de História Natural Capão da Imbuia (MHNCI), Curitiba, Paraná State, Brazil, with accession numbers MHNCI 16461 and 16462, respectively.

In the southern state of Mato Grosso, Fazenda Sales, municipality of Rondonópolis, Mato Grosso State (MT), DJVC recorded three specimens of *T. quadrilineatus*, two in a Cerrado sensu stricto area (both found by active-search method on the mornings of 16 and 18 February 2013) and one in a semi-deciduous forest (captured on 22 February 2015 at 1035 h by a Tomahawk live-trap, used to capture small mammals). The first two specimens were collected and deposited at MHNCI, with accession numbers MHNCI 14449 (female, adult, SVL = 170 mm) and 14486 (female, adult, SVL = 153 mm). The third specimen (not sexed) was released at the point of capture.

Given the information in Silveira (2009) and Ferreira et al. (2009), the records in Minas Gerais State extend the range of the species around 300 km to the east (Fig. 2), reaching the boundary limits of the Cerrado with the Atlantic Rainforest biome. In Mato Grosso, our records extend the species’ range, as previously described by Silveira (2009), around 150 km to the south. These records are nearest the border with the Mato Grosso do Sul State, where the Cerrado is mainly the vegetation type. We infer from our observations that the species also occurs in that state, and we recommend that research efforts be undertaken to ascertain its presence.

In relation to the behavior displayed by the first specimen cited here, we suspect that diving, followed by immobility on the river bottom, is a mixed defensive strategy that includes escape followed by camouflage to prevent predation. Even though rapid cooling may influence the metabolism of a lizard living in a tropical environment, cold waters may also impose a barrier on predators. This is the first record of this behavior in *T. quadrilineatus*, although escapes into water or amphibious habits are known from other terrestrial teiid lizards (e.g., *Salvator merianae*; Achaval & Langguth, 1973; Olmos, 1995).

**Acknowledgements.** We acknowledge the assistance of the Instituto Estadual de Florestas, Minas Gerais State (IEF) and the Instituto Brasileiro de Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA) in authorizing the collections. For providing field research opportunities, we thank Joésio Deoclécio Pierin Siqueira and Celia Sayama (STCP Engenharia de Projetos Ltda.), as well as Gustavo O. Borges, Fernando do Prado, and Pedro Dias (Cia. Ambiental). We also wish to thank Guilherme Gomes, Jason Butler and Hinrich Kaiser for the English revision and suggestions on the manuscript, Juliana Puga for preparing the map, and Julio Cesar de Moura-Leite for verification of specimen identities.

**References**


Range extension for *Tupinambis quadrilineatus* with notes on habitats and behavior


Accepted by Hinrich Kaiser