New data on the distribution of the rare and poorly known *Apostolepis goiasensis* Prado, 1943 (Serpentes, Xenodontinae, Elapomorphini) with remarks on morphology and colouration

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The burrowing snake *Apostolepis goiasensis* Prado, 1943 was described based on a fixed specimen from the municipality of Rio Verde, state of Goiás, Brazil. Lema (2003) redescribed the species based on a second specimen from the municipality of Uberlândia, state of Minas Gerais, Brazil (MCTP 9192) (Fig. 1 A-D). The last specimen known so far was reported by Abes and Ferrarezzi (2003) from the municipality of Ribas do Rio Pardo, state of Mato Grosso do Sul, Brazil (IBSP 67852). Here, we present new data on morphology and colour in life as well as new distribution records of this rare species.

The first specimen here presented is a young male deposited in the American Museum of Natural History (AMNH.87942) collected by B. Malkin in the state of Mato Grosso, Brazil, at the confluence of Araguaia and Tapirapé Rivers, between 26 to 29 November 1960. This specimen was previously identified as *Apostolepis nigroterminata* Boulenger, 1896 (see Harvey, 1999); however, Nelson Rufino de Albuquerque re-examined this specimen and concluded that it belonged to *A. goiasensis*. The main differences observed in this specimen were the presence of a vestigial light nuchal collar, besides its paravertebral stripes which are shadowed, vestigial or discoloured in the specimen of AMNH. Additional meristic and morphometric data are: total length (300 mm); snout-vent length (261 mm); fifth and sixth supralabials contacting the parietal on both sides; first four infralabials contacting anterior chinshields on each side; ventral scales (200), preceded by two preventrals; subcaudals (27/27); anal whole, which is perhaps an anomaly; light blotch on supralabials extends from second to sixth; light nuchal collar as wide as two vertebral dorsal scales.

Another two specimens of *A. goiasensis* were found by Thales de Lema in the Herpetological collection from CHUNB. These individuals are: 1) a specimen from the municipality of Luziânia, state of Goiás (CHUNB 30656; formerly IB 55144) and 2) a specimen without known locality (CHUNB 30659, formerly IB 55139).

Recently, the first living specimen hitherto known was collected in the municipality of Três Lagoas, state of Mato Grosso do Sul, Brazil (Fig. 1 E-F). This specimen allows us to describe the species’ colour in life, which was unknown at the present time. The young specimen presents the vertebral zone salmon red with three narrow and black stripes. The pileus is black (not blackish brown as previously recorded) (see Lema, 2003). The black tail blotch is long dorsally, being narrow and faulty ventrally, with the tip white. The nucho-occipital region has vestiges of the paravertebral stripes in the black nuchal ring. The specimen is deposited at the Coleção Herpetológica da Universidade Federal do Rio Grande (FURG 1344).

The new data here presented characterizes *A. goiasensis* as a small species with three black longitudinal stripes, snout strongly projected beyond the jaws, light supralabial blotches from the second to the sixth labial, lower sides white immaculate; tip tail blotch narrow ventrally with the tip white. The species belongs to the dimidiata group emphasized by its head shape and long white supralabial blotch, similar to the barrío morph of *Apostolepis dimidiata* (Jan, 1862).

The current data on the species distribution indicates a wide area of occurrence, covering the states of Goiás, Minas Gerais, Mato Grosso, Mato Grosso do Sul, in tropical Brazil, among latitudes 12°S to 21°S (Fig. 2); however, species seems to be restricted to the Cerrado (sensu Ab’Saber, 1977). The Cerrado is the morpho-climatic Domain with highest number of *Apostolepis* species recorded so far. The pattern found to *A. goiasensis*,

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i.e., species endemic from Cerrado was expected since most congeneric species have distribution restricted to a single domain. For instance, Apostolepis albicollaris Lema, 2002, Apostolepis ammodites Ferrarezi, Barbo & Albuquerque, 2005, Apostolepis assimilis (Reinhardt, 1861), Apostolepis cerradoensis Lema, 2003, Apostolepis christinae Lema, 2002, Apostolepis dorbignyi (Schlegel, 1837), Apostolepis flavotorquata (Duméril, Bibron & Duméril, 1854), and Apostolepis vittata (Cope, 1887) are species with records only in Cerrado. In the other hand, considering that most species have few specimens deposited on scientific collections in part due to their semi-fossorial behavior, it is difficult to determine distribution patterns for the tribe Elapomorphini. Therefore, further inventories are important to increase the knowledge of biogeography of these species.

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Figure 1. A-D) Head and tail detail of a fixed specimen of Apostolepis goiasensis (MCTP.9192); E-F) General view of the specimen from Três Lagoas, Minas Gerais, Brazil in life (CHFURG 1344).
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**References**


**Figure 2.** The current distribution records of *Apostoleis goiasensis* in Brazil. Note that this species is strongly associated to areas of the Cerrado Domain. 1 - Municipality of Rio Verde, state of Goiás; 2 - Municipality of Uberlândia, state of Minas Gerais; 3 - Municipality of Ribas do Rio Pardo, state of Mato Grosso do Sul; 4 - Confluence of Araguaia and Tapirapé Rivers; 5 - Municipality of Luziânia, state of Goiás; 6 - Municipality of Três Lagoas, state of Mato Grosso do Sul, Brazil.