

SHORT COMMUNICATION

Apostolepis specimens observed in collections from Goiás region, central Brazil (Serpentes, Xenodontinae, Elapomorphini)

Espécies de *Apostolepis* observadas em coleções da região de Goiás, Brasil central (Serpentes, Xenodontinae, Elapomorphini)

Thales de Lema¹
thalesdelema@terra.com.br

Márcia Ferret Renner¹
marciafrenner@terra.com.br

Abstract

We report on species of the tribe Elapomorphini based on specimens captured during a trip to Goiás State, Brazil. Various specimens were captured in a rescue of the Hydroelectric Power Plant Serra da Mesa, in Minaçu, North of Goiás; others, in the Universidade Nacional de Brasília, DF, in the Zoological Park, Brasília, DF, and Universidade Católica de Goiás, Goiânia. Ten species were observed, representing a very important sample of the taxon, with dominance of the species *Apostolepis ammodites* and *A. flavotorquata*.

Key words: Cerrado, central Brazil, *Apostolepis*, *Phalotris*, collections.

Resumo

Comentamos sobre espécies da tribo Elapomorphini, com base em espécimes capturados numa viagem ao estado de Goiás, Brasil. Vários exemplares foram capturados em trabalho de resgate de fauna na implantação da Hidroelétrica Serra da Mesa, em Minaçu, norte de Goiás; outros, na Universidade Nacional de Brasília, DF, no Parque Zoológico de Brasília e na Universidade Católica de Goiás, Goiânia. Dez espécies foram observadas, representando um amostra importante do grupo, com a dominância das espécies *Apostolepis ammodites* and *A. flavotorquata*.

Palavras-chave: Cerrado, Brasil central, *Apostolepis*, *Phalotris*, coleções.

The faunal rescue in Hydroelectric Serra da Mesa dam, low Tocantins river, in Minaçu, northern Goiás state, provide a precious sampling of snakes of the genus *Apostolepis* Cope, 1861, usually scarce in collections. These specimens were housed in the Universidade Católica de Goiás, Goiânia (UCG), and in the Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre (MCTP). The specimens of Serra da

Mesa Power Plant (UHESM) were examined in the Rescue Base I of the Furnas, Centrais Elétricas, S.A., in Minaçu, North of Goiás (Figure 1). The rarity of these snakes in collections is due to their cryptic life, living in galleries into soil, emerging at night or in floods. Many specimens were captured in pitfalls with fence, but the majority was caught in emergent islands resulting by water ascending. Other snakes captured in fau-

¹ Museu de Ciências e Tecnologia. Faculdade de Biociências, Pontifícia Universidade Católica do Rio Grande do Sul, P.O. Box 1429, 90619-900, Porto Alegre, RS, Brazil.

nal rescue, were from Corumbá Power Plant, Goiás state (UHEC) (Figure 2), also housed in CEPB. Both rescues were made by Nelson Jorge da Silva Jr, biologist of UCG, coordinator of both faunal rescues. In Brazil's Federal District, we examined specimens in the Universidade Nacional de Brasília (CHUNB), and we made a fast exploration of a reserve in the Zoological Park, capturing specimens, housed in the MCTP. A few papers were published about some specimens from those areas (Lema, 2002, 2003; Lema and Renner, 2004, 2007). This important material added to collections of Elapomorphini motivated this communication.

Examined material

Abbreviations: BA, Bahia; DF, Distrito Federal; GO, Goiás; MT, Mato Grosso; SP, São Paulo; TO, Tocantins; wd, without data; wn, without number; wo, without origin.

1. Hydroelectric power plant at Serra da Mesa, Minaçu, Goiás (UHESM), $13^{\circ}50'03''S - 48^{\circ}18'16''W$:

- 1.1. *Apostolepis albicularis* Lema 2002 -- 4644, 18169, 6544, 14644, 16544, 17980, 18167, 18169, 18484, 18796, 18862, 20907, 20967, 21800, 26402, 26744, 27917.
- 1.2. *Apostolepis ammodites* Ferrarelli, Barbo and Albuquerque 2005 -- 4414, 7132, 16503, 16516, 17132, 18000, 19532, 19579, 19679, 18000, 20364, 22387, 22389, 22562, 22817, 2392323632, 23764, 23912, 27132, 29540, 30849, 33006, 41028, 44392, 87033.
- 1.3. *Apostolepis cerradoensis* Lema 2003 -- 21800 (holotype).
- 1.4. *Apostolepis flavotorquata* (Duméril, Bibron and Duméril 1854) -- 1326, 2392, 3913, 3939, 5087, 5534, 6239, 6406, 6807, 7859, 8077, 8301, 8398, 8400, 8465, 9947, 10429, 11378, 11875, 12657, 13047, 13078, 13282, 13629, 13423, 13439, 14075, 14084, 14165, 14606, 15450, 15462, 15591, 16103, 16261, 16527, 16528, 17041, 17534, 17655, 18062, 18368, 18279, 18441, 18846, 18945, 19043, 19476, 19507, 19590, 19602, 20023, 20128, 20389, 20391, 20392, 20395.
- 1.5. *Apostolepis nelsonjorgei* Lema and Renner 2004 -- UHESM 7904, 14414 (holotype), 15214 (paratype), 16181 (paratype), 16182, 17477 (paratype), 24161 (paratype), 29063 (paratype).
- 1.6. *Apostolepis pymi* Boulenger 1903 -- UHESM 7904, 14414.
2. Hydroelectric power plant at Corumbá, Goiás (UHEC) -- $15^{\circ}55'26''S - 48^{\circ}48'32''W$
 - 2.1. *Apostolepis albicularis* -- 9641, 9712, 9930.
 - 2.2. *Apostolepis flavotorquata* -- 10977, 11169.
3. Centro de Estudos of the Universidade Católica de Goiás, Goiânia, Goiás (CEPB):
 - 3.1/8. *Apostolepis cf. pymi* -- CEPB 969/976 (8 specimens), Minaçu, GO.
4. Department of Zoology, Universidade Nacional de Brasília, D. F. (CHUNB):
 - 4.1. *Apostolepis albicularis* -- 8517, Riacho Fundo, DF; 23782, 23783, 24593, 29525, Brasília, DF; 30659, wo.

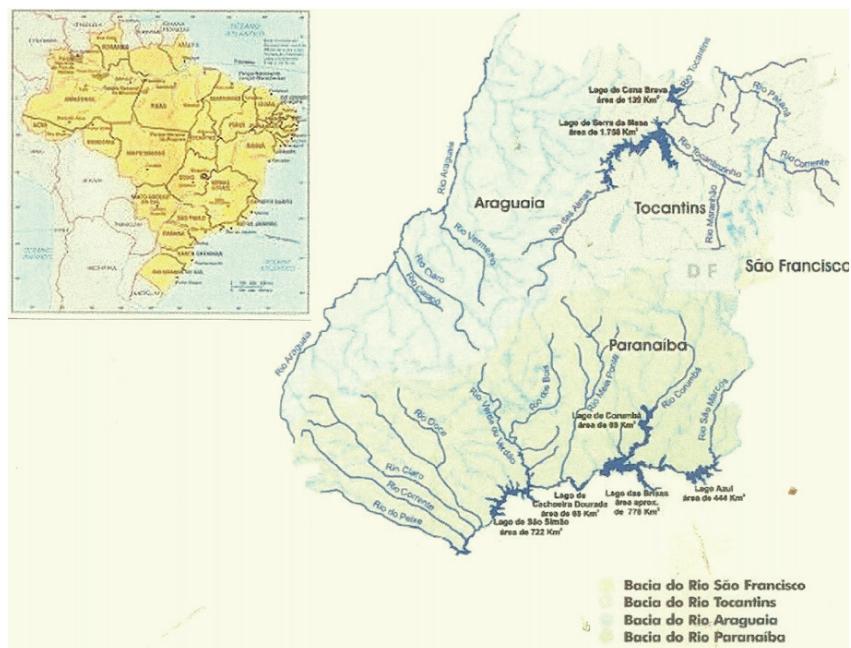


Figure 1. Location of Serra da Mesa dam, in Minaçu, Goiás, in the lower Tocantins, forming the lakes Serra da Mesa and Cana Brava. The figure also shows more to the South the Corumbá dam, in the same state, forming the Corumbá lake. The map shows other basins influencing the Cerrado snakefauna.

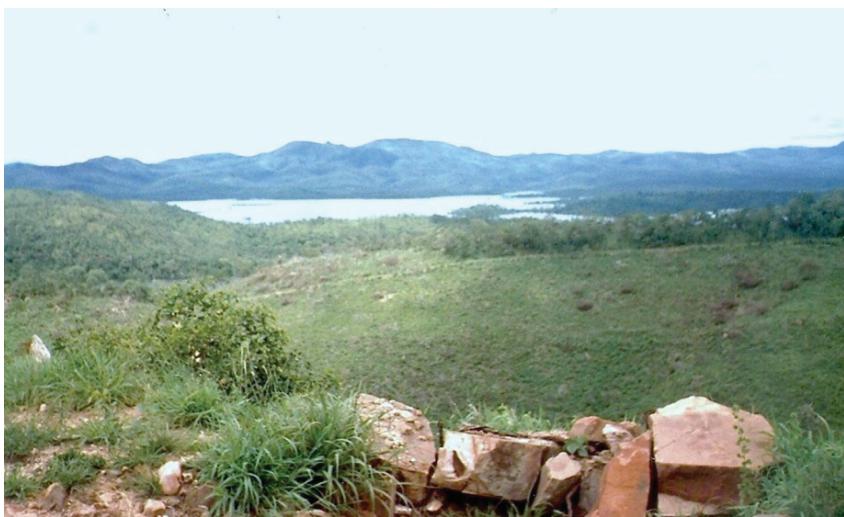


Figure 2. Lake Serra da Mesa at low Tocantins river, in Minaçu, Goiás

- 4.2. *Apostolepis ammodites* – wn, Serra Geral, GO; 1961, Barra do Garça, MT/GO (gift: MCTP.8002); 3279, Correntina, BA (gift: MCTP.8442); 16181 (paratype), 16182, 16183, 22069, Palmas, TO; 30659. wo; wn, “Serra Geral”, GO.
- 4.3. *Apostolepis cf. ammodites* – 23715, Cocos, BA.
- 4.4. *Apostolepis assimilis* (Reinhardt 1861) – 34, Planaltina, GO; 6141, Osasco, SP; 13810, Águas Lindas de Goiás, GO; 1418, 23781, 24456, 24474, 25357, 25359, 25360, 28946, 28947, 28950, 28951, 28952, 28953, 28954, 28955, Brasília, DF; 24237, wo.
- 4.5. *Apostolepis cf. dimidiata* – 23782, 23783, 29525, Brasília, DF.
- 4.6. *Apostolepis flavotorquata* – 1213, Coribe, GO; 948, 38893, Nerópolis, GO; 23780, Santo Antônio do Descoberto, GO; wn, Correntina, BA.
- 4.7. *Apostolepis goiasensis* Prado 19442 – 12794, Vilhena, RO; 30656, Luziânia, GO; 30659, wd.
- 4.8. *Apostolepis nelsonjorgei* – 16181 (Paratype), 16182, Palmas, TO.
- 4.9. *Apostolepis aff. pymi* – Wd.
- 4.10. *Apostolepis vittata* (Cope 1887) – 30656, Chapada dos Guimarães, MT.

- 4.11. *Apostolepis sp.* – 12794, Vilhena, RO; 30657, 30658, Luziânia, GO.
- 4.12. *Phalotris nasutus* (Gomes, 1915) – 778, Brasília, DF; 3314, Sobradinho, DF.
- 5. Zoological Park, Brasília, D. F. (MCTP):
 - 5.1. *Apostolepis albicollaris* – 8354, 8355 (Holotype), 8436, 9188.
 - 5.2. *Apostolepis ammodites* – 14497.

Specimens of *Apostolepis pymi* apparently presented the characteristic pattern of the species, but with some differences, perhaps due to the distance of the core area of the species (eastern Amazonia). The occurrence of this species in the area is remarkable. It is the most frequent species in Amazonia, representing an extreme dispersion to South, reaching the Northern of Goiás and SW of Rondônia (Christine Strüssmann, oral comm.). On the other hand, On the other hand, this occurrence indicates that the northern part of Goiás is an area that receives faunal species from southern Amazonia, confirmed by the presence of several species of vertebrates appeared in the Serra da Mesa dam rescue. *Apostolepis nelsonjorgei*, another species of the same group of *A. pymi*, with five-lineate pattern but

with white nuchal collar. *Apostolepis albicollaris* presented characteristics which were not mentioned in the original description. The species *A. albicollaris* and *A. dimidiata* (Jan, 1862), close related to each other, are parapatric. No intermediary phenotypes were found, emphasizing the differences between the two species. The high frequency of occurrence of *A. flavotorquata* (Figure 3), which is known by low number of housed specimens, was unexpected. This richness allowed the redescription of the species (Lema and Renner, 2005). A variation was noted in the Serra da Mesa specimens, with the occurrence of two patterns of coloration, perhaps due to sexual dimorphism. No specimen presented a vertebral stripe, as was recorded in specimens from Northern Brazil. Some specimens, however, presented vestiges of a vertebral stripe (shadowed stripe), that disappeared in preservative. The specimens of *A. ammodites* from Serra da Mesa (Figure 4) presented the black cervical ring shorter than others from southern Cerrado (Lema and Renner, 2007). The manager of the Coleção Herpetológica da Universidade Nacional de Brasília (CHUNB) (Alexander Bamberg de Araújo) gave us a specimen determined by him as *A. cearensis* Gomes 1915. Perhaps due to the strong reduction of the nucho-cervical rings, it may be a hybrid with another species of the same *assimilis* group from the area, as *A. assimilis*. The *A. assimilis* specimens from Minaçu differ from those of São Paulo and Minas Gerais (specimens in Instituto Butantan, São Paulo). The presence of *A. albicollaris*, *A. ammodites*, *A. assimilis*, *A. flavotorquata*, and *A. goiasensis* Prado, 1942 (the later previous observed) in northern Goiás, were expected by extension of the Cerrado. The occurrence of *A. aff. pymi*, *A. cf. pymi*, and *A. nelsonjorgei*, indicates conspicuous influence of the Amazonian forest domain in northern Goiás. The same was observed with some species of birds and mammals

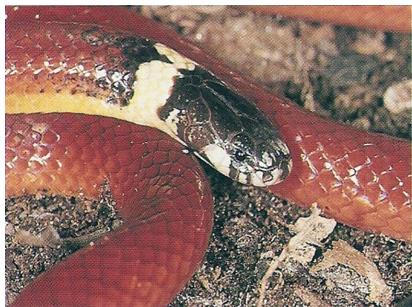


Figure 3. Living specimen of *Apostolepis flavotorquata*, a very frequent snake in the rescue in UHE Serra da Mesa, Minaçu, Goiás (Nelson Jorge da Silva Jr)



Figure 4. Living specimen of *Apostolepis ammodites*. This is another very frequent species in the rescue of UHE Serra da Mesa, Minaçu, Goiás.

found in the Serra da Mesa dam rescue (N. J. Silva Jr., personal communication). The importance of the snakefauna from this region of Cerrado is emphasized by presence of the species *A. albicularis*, *A. cerradoensis*, and *A. nelsonjorgei*, the holotypes of which were selected from this region, and by the rich biodiversity.

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