

Reptilia, Testudines, Kinosternidae, *Kinosternon scorpioides scorpioides* (Linnaeus, 1766): Distribution extension

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ABSTRACT: *Kinosternon scorpioides scorpioides* is the only subspecies of *K. scorpioides* with a South American distribution. We report the third known register of this taxon for the state of Mato Grosso, Brazil, representing the first record from the Aripuanã River basin. This point is at 390 km and 910 km western from the two previously known records of this species in Mato Grosso, reinforcing the importance of inventories of *K. s. scorpioides*.

The New World genus *Kinosternon* includes 18 species of freshwater turtles, distributed from southern Canada to Argentina (Ernst and Barbour 1989; Turtle Taxonomy Working Group 2009). *Kinosternon scorpioides* (Linnaeus, 1766) currently comprises four subspecies (Turtle Taxonomy Working Group 2009), of which *Kinosternon s. scorpioides* is the only one with a South American distribution, occurring in northern South America south to the Gran Chaco (Cabrera and Colantonio 1997; Berry and Iverson 2001).

At present, we are aware of only two published records of *K. s. scorpioides* in the state of Mato Grosso, Brazil: “Barra do Rio Tapirapé” (Pritchard and Trebbau 1984; Iverson 1992; Cabrera and Colantonio 1997), a tributary of Araguaia River, in northeastern Mato Grosso; and “Baixo Rio Cristalino” (Vitt *et al.* 2009), a tributary of Teles Pires River, in northern Mato Grosso.

The Museu de Zoologia João Moojen, at Universidade Federal de Viçosa, state of Minas Gerais, Brazil, houses in its herpetological collections a male of *K. s. scorpioides* (MZUFV-0043; carapace length 145 mm; plastron length 125 mm) (Figure 1), captured in a small stream inside primary forest on the left bank of Aripuanã River, a tributary of the Madeira River, municipality of Aripuanã, northwestern state of Mato Grosso (10°9'29.82" S, 59°28'10.72" W). The area is covered with submontane tropical rainforest, in the Amazonian biome (Rodrigues *et al.* 2002; Molina *et al.* 2009). This register represents a new locality record for *K. s. scorpioides* in Mato Grosso and the first record from the Aripuanã River basin.

The new locality is *ca.* 390 km and *ca.* 910 km western of the Cristalino and Tapirapé Rivers registers, respectively (state of Mato Grosso) (Pritchard and Trebbau 1984;

Iverson 1992; Cabrera and Colantonio 1997; Vitt *et al.* 2009), *ca.* 270 km southeastern Machado River register (state of Rondônia) (Cabrera and Colantonio 1997; Berry and Iverson 2001), *ca.* 520 km southern Madeira River register (the nearest locality in the state of Amazonas) (Pritchard and Trebbau 1984; Iverson 1992; Cabrera and Colantonio 1997; Berry and Iverson 2001), *ca.* 725 km and *ca.* 1,100 km southwestern Tapajós River and Serra dos Carajás registers (Pritchard and Trebbau 1984; Carvalho-Jr *et al.* 2008) (the nearest localities in the state of Pará) (Figure 2). It is an important demonstration of the need for inventories of *K. s. scorpioides* in Amazon as a whole (Vogt *et al.* 2001), and also farther south in Mato Grosso, where no records exist.



FIGURE 1. Specimen of *Kinosternon scorpioides scorpioides* (MZUFV-0043) from Aripuanã, Mato Grosso, Brazil. Photo by V. A. São-Pedro.

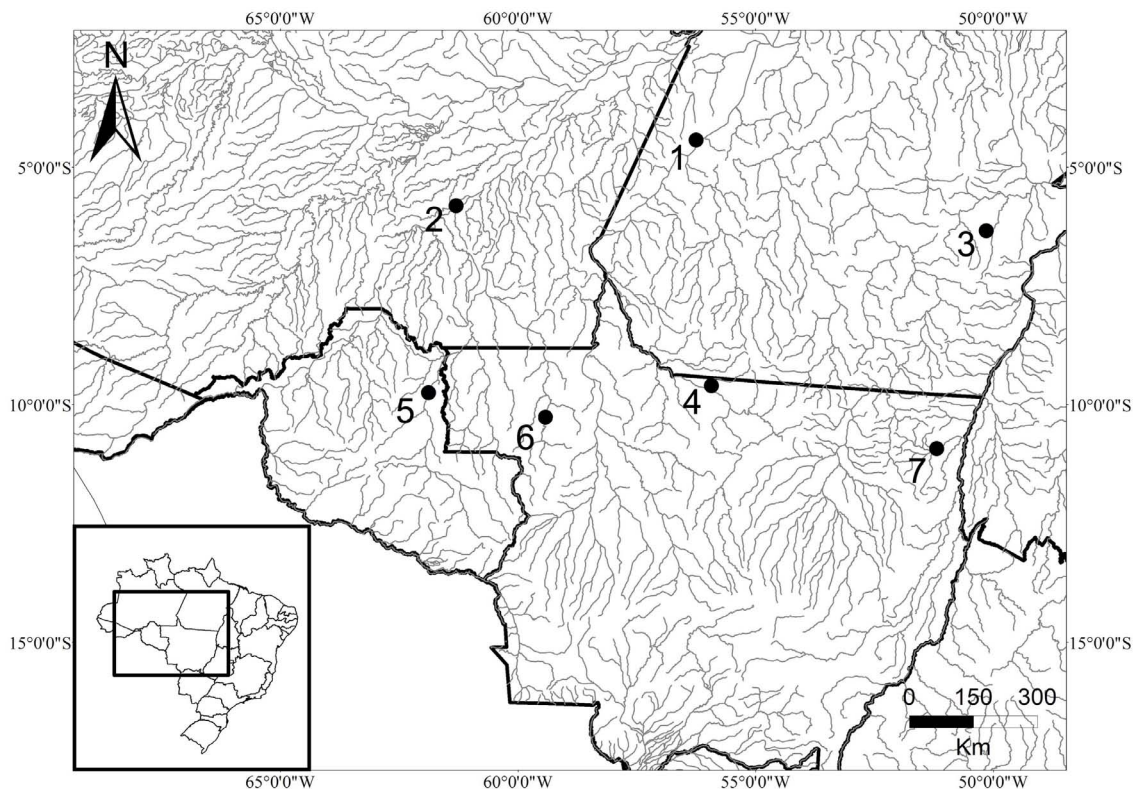


FIGURE 2. Map showing the known occurrence of *Kinosternon scorpioides scorpioides* in Mato Grosso and Rondônia states, and the nearest known localities in states of Amazonas and Pará, Brazil. 1 – São Luís, Tapajós River, Pará (Pritchard and Trebbau 1984); 2 – Manicoré, Madeira River, Amazonas (Iverson 1992; Cabrera and Colantonio 1997; Berry and Iverson 2001); 3 – Serra Sul, Serra dos Carajás, Pará (Carvalho-Jr. et al. 2008); 4 – Cristalino River, Mato Grosso (Vitt et al. 2009); 5 – Cachoeira do Nazaré, Machado River, Rondônia (Cabrera and Colantonio 1997; Berry and Iverson 2001), 6 – Aripuanã, Aripuanã River, Mato Grosso (present study); 7 – Tapirapé River, Mato Grosso (Pritchard and Trebbau 1984; Iverson 1992; Cabrera and Colantonio 1997).

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LITERATURE CITED

- Berry, J.F. and J.B. Iverson. 2001. *Kinosternon scorpioides*. *Catalogue of American Amphibians and Reptiles* 725: 1-11.
- Cabrera, M.R. and S.E. Colantonio. 1997. Taxonomic Revision of the South American Subspecies of the Turtle *Kinosternon scorpioides*. *Journal of Herpetology* 31(4): 507-513.
- Carvalho-Jr., E.A.R., C.S. Carvalho-Neto and E.L. Paschoalini. 2008. Diet of *Kinosternon scorpioides* in Serra dos Carajás, Eastern Amazonia. *Herpetological Review* 39(3): 283-285.
- Ernst, C.H. and R.W. Barbour. 1989. *Turtles of the World*. Washington, DC: Smithsonian Institution Press. 313 p.
- Iverson, J.B. 1992. *A revised checklist with distribution maps of the turtles of the world*. Richmond: Privately Printed. 374 p.
- Molina, F.B., H.C. Costa, V.A. São-Pedro and R.N. Feio. 2009. Reptilia, Testudines, Chelidae, *Platemys platycephala platycephala*: Distribution extension. *Check List* 5(3): 714-716.
- Pritchard, P.C.H. and P. Trebbau. 1984. The turtles of Venezuela. *SSAR Contributions to Herpetology* 2: 1-403.
- Rodrigues, M.T., V. Xavier, G. Skud and D. Pavan. 2002. *New specimens of Anolis phyllorhinus* (Squamata, Polychrotidae): The first female of the species and of proboscoid anoles. *Papéis Avulsos de Zoologia* 42(16): 363-380.
- Turtle Taxonomy Working Group (A.G.H. Rhodin, J.F. Parham, P.P. van Dijk and J.B. Iverson). 2009. *Turtles of the World: Annotated Checklist of Taxonomy and Synonymy, 2009 Update, with Conservation Status Summary*. *Chelonian Research Monographs* 5: 39-84.
- Vitt, L.J., F.G.R. França and G.R. Colli. 2009. *Reptiles of the lower Cristalino river area*. Electronic Database accessible at <http://www.omnh.ou.edu/personnel/herpetology/vitt/Cerrado/Cristalino/>. University of Oklahoma and Universidade de Brasília. Captured on 12 February 2009.
- Vogt, R.C., G.M. Moreira and A.C.O.C. Duarte. 2001. Biodiversidade de Répteis do Bioma Floresta Amazônica e Ações Prioritárias para sua Conservação; p. 89-96 In J.P.R. Capobianco, A. Veríssimo, A. Moreira, D. Sawyer, I. Santos and L.P. Pinto (eds.). *Biodiversidade na Amazônia Brasileira: avaliação e ações prioritárias para a conservação, uso sustentável e repartição de benefícios*. São Paulo: Estação Liberdade / Instituto Socioambiental.

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