Uma publicação da Sociedade Brasileira de Herpetologia

SEÇÃO VOL. 15
Biogeografia e Distribuição NUM. 01

New records expand the known geographic range of *Leposternon cerradense* and document its co-occurrence with *Leposternon infraorbitale* (Squamata: Amphisbaenidae)

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Editor de Área: Rodrigo Castellari Gonzalez
Submetido em 01/12/2025
Aceito em 25/02/2026
DOI: 10.5281/zenodo.20073002

Resumo

Leposternon cerradense é uma espécie de anfísbena endêmica do Cerrado, conhecida apenas da localidade-tipo em Aporé, estado de Goiás, Brasil. Nós registramos o primeiro exemplar da espécie fora da localidade-tipo, proveniente de Aparecida do Rio Doce, Goiás. Este registro amplia a distribuição de *L. cerradense* cerca de 110 km a norte de Aporé. Ademais, documentamos quatro exemplares de *L. infraorbitale*, coocorrendo com *L. cerradense*, apresentamos inferências sobre a história natural das duas espécies, além de revisarmos a distribuição conhecida de *L. infraorbitale* e corrigindo alguns registros. Os espécimes foram depositados em um museu de história natural em 2008, destacando a relevância das coleções científicas e a necessidade de esforços amostrais na região onde foram coletados.

Palavras-chave

anfísbenas, Cerrado, coleções científicas, fossorial, simpatria, solo

Abstract

Leposternon cerradense is a species of worm lizard endemic to the Cerrado, known only from the type locality in Aporé, state of Goiás, Brazil. We recorded the first specimen of the species outside the type locality, from Aparecida do Rio Doce, Goiás. This record extends the distribution of *L. cerradense* by about 110 km north of Aporé. Additionally, we documented four specimens of *L. infraorbitale* co-occurring with *L. cerradense*, providing inferences about the natural history of the two species, besides revising the known distribution range of *L. infraorbitale* and correcting some records. The specimens were deposited in a natural history museum in 2008, highlighting the importance of scientific collections and the need for sampling efforts in the region where they were collected.

Keywords

worm lizard, Cerrado, scientific collections, fossorial, sympatry, soil

Understanding the spatial distribution of species is essential for conservation planning and population management (Suzuki & Economo, 2021). However, some groups remain poorly studied, particularly fossorial lineages such as worm lizards (Amphisbaenia) (Measey, 2006; Barros-Filho et al., 2013; Costa & Garcia, 2019). Amphisbaenians are reptiles characterized by morphological specializations associated with burrowing habits, such as an elongate limbless body and a robust, strongly ossified skull (Gans, 1968; Kearney, 2003). Over 200 species are recognized worldwide, with 82 species found in Brazil (Uetz et al., 2025; Costa et al., 2026; Pérez et al., 2026).

The genus *Leposternon* Wagler, 1824 comprises 11 species externally diagnosed by a dorsoventrally compressed head, ventrally positioned nostrils, and the fusion of the rostral and nasal scales (Gans, 1971; Ribeiro et al., 2018). They also exhibit an unsegmented gular region and a very short, rounded tail lacking autotomy (Gans, 1971; Ribeiro et al., 2018). Most *Leposternon* species are endemic to Brazil and present narrow known geographic ranges (Guedes et al., 2023; Ribeiro & Eleutério, 2023). One example is *Leposternon cerradense* Ribeiro, Vaz-Silva & Santos-Jr., 2008 (not *cerradensis*; see Costa & Rigolon, 2024), a medium-sized worm lizard (snout-vent length 224–385 mm) known only from its type locality in the municipality of Aporé, state of Goiás, Brazil (Ribeiro et al., 2008; Colli et al., 2023). Due to the intense anthropogenic impacts on its restricted range, *L. cerradense* is currently listed as Data Deficient (DD) in both global and national red lists (Silveira et al., 2021a; Colli et al., 2023; IUCN, 2025).

While examining specimens from the reptile collection of the Museu de Ciências Naturais da Pontifícia Universidade Católica de Minas Gerais (MCNR), we identified one specimen of *L. cerradense* (MCNR 7175; Fig. 1A-B; Fig. 2A-C; Fig. 3A-B) collected in the municipality of Aparecida do Rio Doce (18.29º S, 51.14º W, datum WGS84, 565.3 m. asl), state of Goiás. The precise collection date is unknown, but it occurred between 9 April and 28 October 2008. The specimen was diagnosed as *L. cerradense* based on the presence of a single pore on each side of the precloacal shield; distinct rostronasal, azygous, prefrontal, frontal, and parietal shields; diamond-shaped pectoral scales; 13 tail annuli; two supralabials and two infralabials (Ribeiro et al., 2008) (Table 1). It also shows 297 dorsal and 301 ventral postpectoral half-annuli, slightly extending the known range of these counts for the species (299–341 dorsal and 302–349 ventral postpectoral half-annuli [Ribeiro et al. 2008, 2018]).

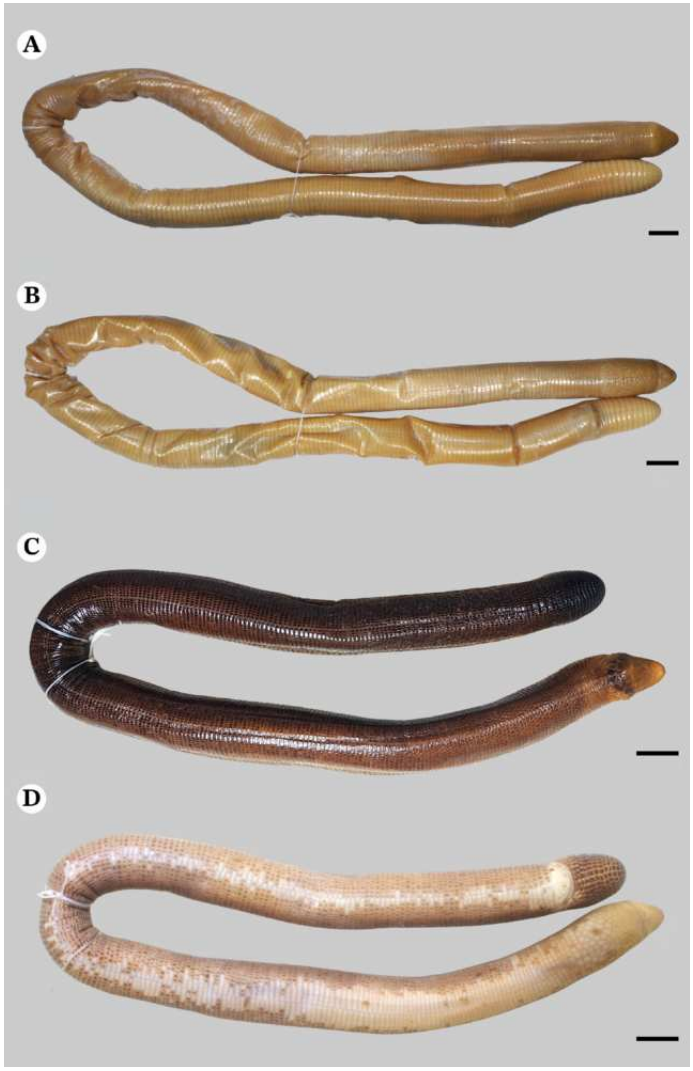


Figure 1. *Leposternon cerradense* (MCNR 7175, male, SVL 358 mm) (A, B) and *Leposternon infraorbitale* (MCNR 7179, female, SVL 294 mm) (C, D) from Aparecida do Rio Doce, state of Goiás, Brazil, in dorsal (A, C) and ventral view (B, D). Scale bar = 1 cm.

Additionally, we examined four specimens of *Leposternon infraorbitale* (Bertold, 1859) (MCNR 7176–7179; Fig. 1C-D; Fig. 2D-F; Fig. 4), collected in the same location (Aparecida do Rio Doce) and during the same time period. Although endemic to Brazil, *L. infraorbitale* has a wider geographic range, and its conservation status is listed as

Least Concern (LC) on both national (ICMBio, 2025) and international lists (Silveira et al., 2021b). The specimens were diagnosed by the absence of precloacal pores; distinct rostronasal, azygous, prefrontals, frontals, and parietals; 250–292 dorsal and 229–285 ventral postpectoral half-annuli; diamond-shaped pectoral scales; 9–13 tail annuli; three supralabials, and two infralabials (Ribeiro et al., 2018) (Table 1).

Leposternon cerradense			***Leposternon infraorbitale***				
Characters	**Diagnosis**	**MCNR 7175**	**Diagnosis**	**MCNR 7176**	**MCNR 7177**	**MCNR 7178**	**MCNR 7179**
Sex	-	Male	-	Male	Female	Female	Female
PCP	2–4	2	Absent	Absent	Absent	Absent	Absent
PES	Small, diamond-shaped	Small, diamond-shaped	Small, irregular shape	Small, irregular shape	Small, irregular shape	Small, irregular shape	Small, irregular shape
HS	AZ, PF, and F distinct, elongated PF, AZ contacting RN	AZ, PF, and F distinct, elongated PF, AZ contacting RN	AZ, PF, and F distinct, AZ not contacting RN	AZ, PF, and F distinct, AZ not contacting RN	AZ, PF, and F distinct, AZ not contacting RN	AZ, PF, and F distinct, AZ not contacting RN	AZ, PF, and F distinct, AZ not contacting RN
PREO	Absent	Absent	Absent	Absent	Absent	Absent	Absent
POSO	Present	Present	Present	Present	Present	Present	Present
SBO	Absent	Absent	Absent	Present	Present	Present	Present
SPO	Absent	Absent	Present	Present	Present	Absent	Present
SL	2	2	3	3	3	3	3
IL	2	2	2	2	2	2	2
DPA	299–341	297	250–292	291	280	285	273
VPA	302–349	301	229–285	239	234	237	232
TA	13–15	13	9–13	9	9	9	11
DSM	32–37	30	22–28	35	32	30	30
VSM	30–36	29	25–35	30	32	31	27
SVL	224–385	358	334–635	365	305	190	294
TL	12–18.7	20.5	-	17.6	12	8.25	13.4
HL	9.23–10.7	10.1	-	15	13.1	9.3	13.6
HW	-	9	-	13.8	10.4	7.1	10.1
AZL	-	4.3	-	6.1	4.9	3.3	4.6
AZW	-	3.7	-	5.6	4.6	3.3	4.8
Source	(Ribeiro et al., 2008, 2011, 2018)	Present study	(Gans, 1971), (Ribeiro et al., 2008, 2018)	Present study			

Table 1. Morphometric and meristic data of specimens analyzed from Aparecida do Rio Doce, state of Goías, Brazil. AZ = azygous; AZL = azygous length; AZW = azygous width; DPA = dorsal postpectoral half-annuli; DSM = dorsal segments in midbody half-annulus; F = frontal; HS = head shields; HL = head length; HW = head width; IL = infralabials; PCP = precloacal pores; PES = pectoral shields; PF = prefrontals; POSO = postocular; PREO = preocular; RN = rostronasal; SBO = subocular; SL = supralabials; SPO = supraocular; SVL = snout vent length; TA = tail annuli; TL = tail length; VPA = ventral postpectoral half-annuli; VSM = ventral segments in midbody half-annulus.

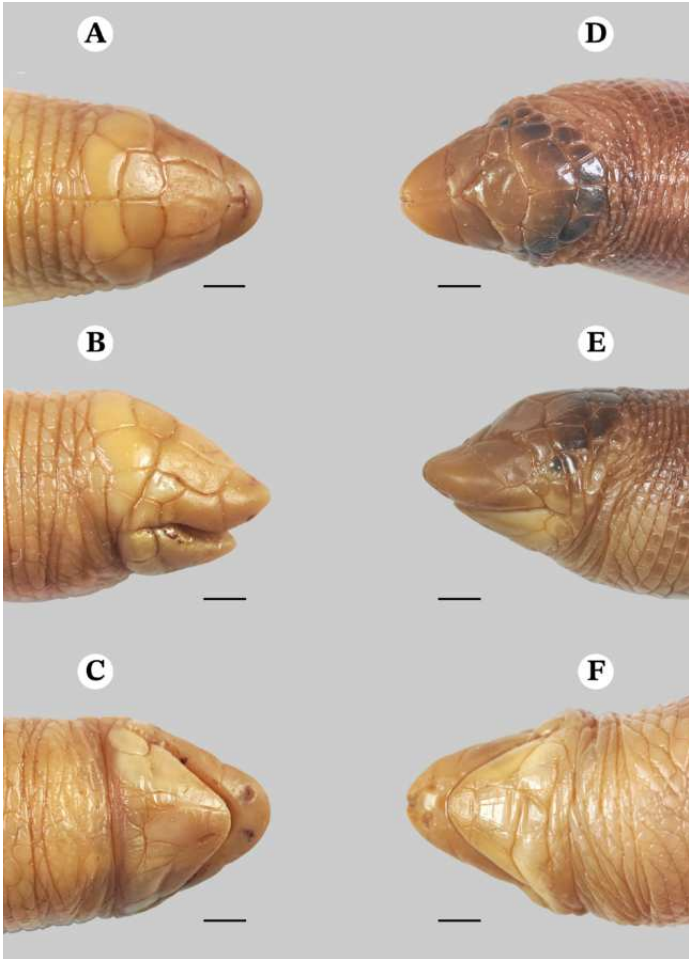


Figure 2. Head of *Leposternon cerradense* (MCNR 7175, male) (A–C) and Leposternon infraorbitale (MCNR 7179, female) (D–F) in dorsal (A, D), lateral (B, E), and ventral (C, F) view. Both from the Aparecida do Rio Doce, state of Goiás, Brazil. Scale bars = 2 mm.

The new record of *L. cerradense* represents a northeastward range extension of about 110 km from the type locality (Aporé) in southwestern Goiás. Aparecida do Rio Doce is in the Cerrado biome (IBGE, 2025), a biodiversity hotspot (Mittermeier et al., 2011) (Fig. 4), and one of the most threatened Brazilian regions (Latrubesse et al., 2019; Alencar et al., 2020; MapBiomas, 2025). Most of the natural cover in Aparecida do Rio Doce has been converted to agriculture and pasture (80.2%). The remainder includes fragments of forest formations (14.7%) and herbaceous-shrub vegetation (4.4%) (MapBiomas, 2024). The soils consist mostly of ferralsols and acrisols, similar to those found at the type locality in Aporé (Gardi et al., 2015). These soil types are widespread in Brazil, especially in the Cerrado, and are characterized by great depth (Gardi et al., 2015).

This study documents a previously unreported co-occurrence between *L. cerradense* and *L. infraorbitale* (Fig. 5). Although empirical evidence is lacking, morphological traits allow preliminary inferences about a potential spatial segregation. Body slenderness (snout-vent length / head width; Pinna et al., 2014) ranges from 31.29–40.84 (mean 37.18) in *L. cerradense* (data from the new specimen and the type series [Ribeiro et al., 2008; midbody diameter used as a proxy to head width]), whereas the *L. infraorbitale* specimens examined by us range from 26.45–29.33 (mean

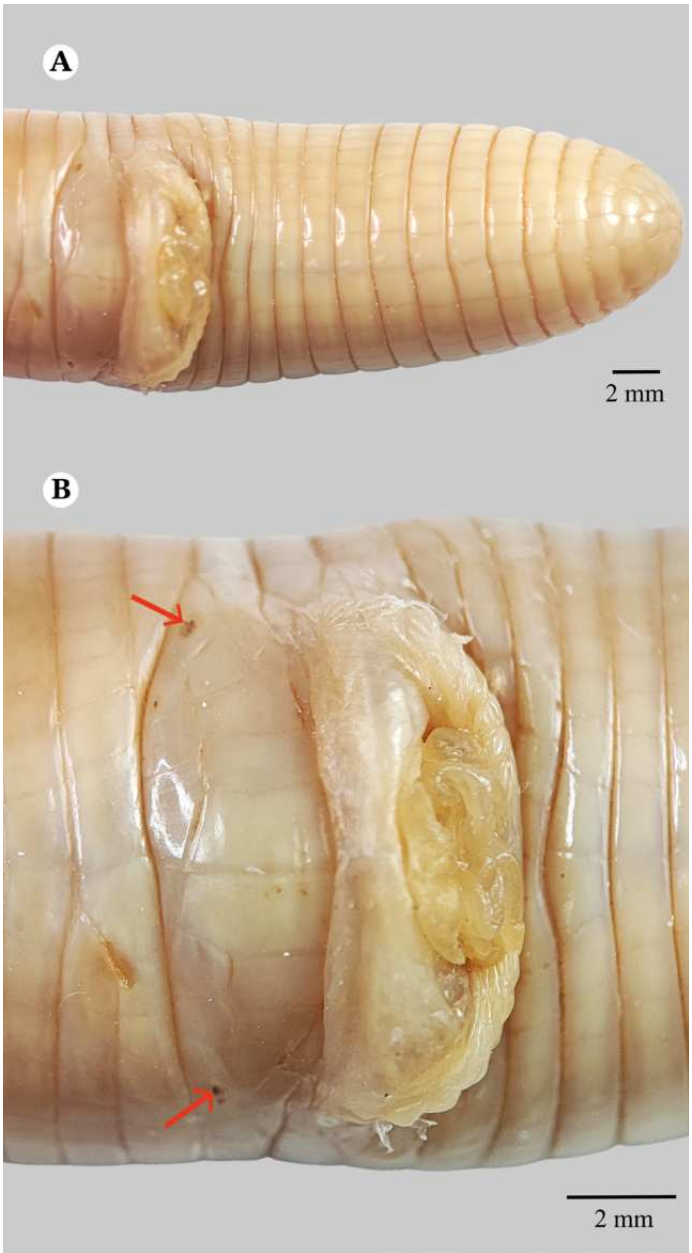


Figure 3. *Leposternon cerradense* (MCNR 7175, male) from the Aparecida do Rio Doce, state of Goiás, Brazil. A. Tail in ventral view (TL 20.5 mm). B. Detail of the cloacal region, with red arrows indicating the precloacal pores (red arrows).

27.91). Thus, *L. cerradense* is noticeably more slender than *L. infraorbitale* (Fig. 1). Given the metabolic cost of digging does not increase linearly with body diameter (Navas et al., 2004), slender species are expected to be more specialized for deep burrowing (Gans, 1968; Navas et al., 2004). It it is plausible that these sympatric species occupy different soil depths, i.e., *L. cerradense* inhabiting deeper layers and *L. infraorbitale* occurring nearer the surface.

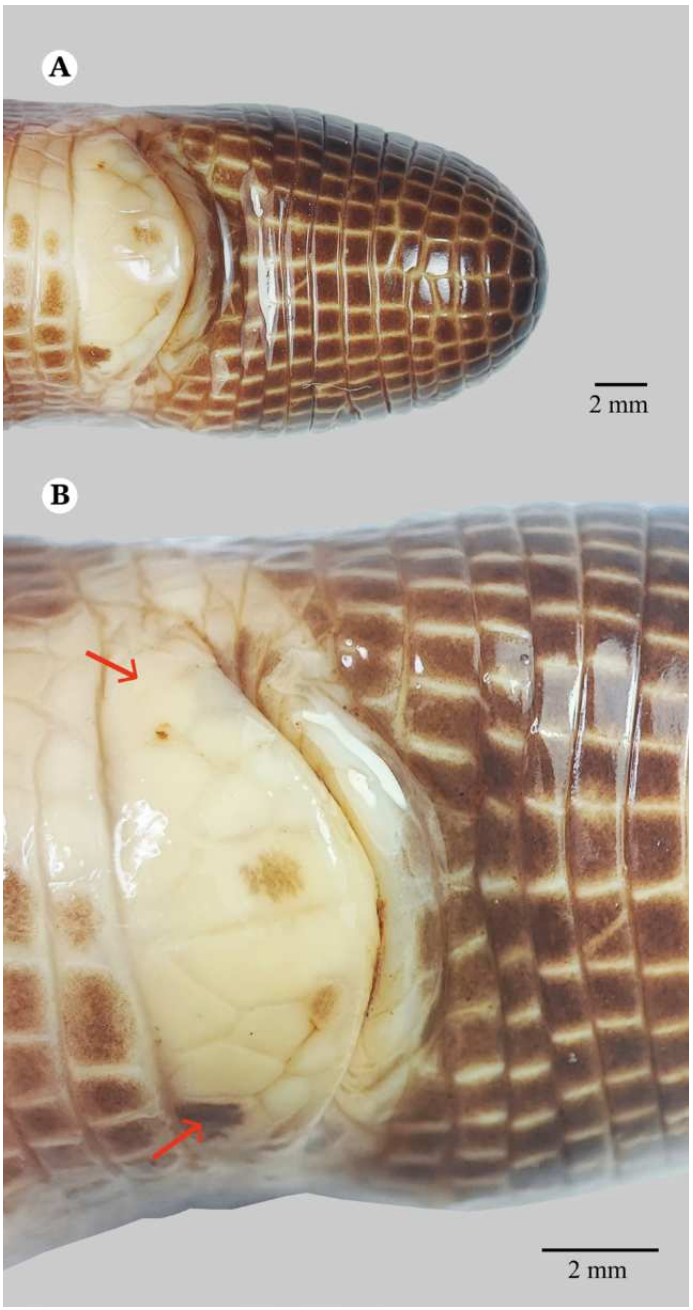


Figure 4. *Leposternon infraorbitale* (MCNR 7179, female) from the Aparecida do Rio Doce, state of Goiás, Brazil. A. Tail in ventral view (TL 13.4 mm). B. Detail of the cloacal region, without precloacal pores (red arrows).

The color pattern of the examined specimens supports this hypothesis, as *L. infraorbitale* is more pigmented dorsally, a trait associated with species that burrow shallower galleries (Gans, 1968).

We reviewed published records (excluding grey literature) of *Leposternon infraorbitale* and highlight here several occurrences that were not included in our distribution map (Fig. 5): i) the type locality of *L. infraorbitale* and its synonym *L. rostratum* Strauch, 1881 ("Bahia"); ii) records lacking precise locality data for Brazil as a whole (Gans, 1971), and for the states of Pará (Ribeiro et al., 2015, 2016, 2019), Pernambuco (Gans, 1971), and Rio de Janeiro (Gans, 1971); iii) a record attributed to "Ibipeba, Grande Sertão Veredas" (Colli et al., 2016), as these refer to two distinct and geographically distant localities, in Bahia (Ibipeba) and Minas Gerais (Grande Serrão Veredas) states (see discussion in Oliveira et al., 2022); iv) "Fazenda Paraopeba" (Gans, 1971) or "Paraopé" (Ribeiro et al., 2015, 2016, 2018) (state of Minas Gerais), an uncertain locality that could refer to either Conselheiro Lafaiete or Paraopeba (Silveira et al., 2025), municipalities nearly 200 km apart.

We also note that: i) specimen MZUSP 13752 (from Barra do Tapirapé, Mato Grosso; Ribeiro et al., 2008) has occasionally been cited as originating from "Paraopé" or "Paraopeba" (Minas Gerais) (Ribeiro et al., 2015, 2016, 2018); ii) Colli et al. (2016) include in their database a record from Fazenda Jatobá, Buritizeiro, Minas Gerais (CHUNB specimen, number not provided), which was likely later described as a paratype of *L. mineiro* (CHUNB 44482, Ribeiro et al., 2018); iii) specimens MCNR 1026 and MCNR 1027 originate from the area of the Queimado Hydroelectric Plant, Minas Gerais (as confirmed by examining the museum's catalog), and not from Cataguases, Minas Gerais as previously reported (Ribeiro et al., 2008, 2015, 2018). This correction removes Cataguases from the known distribution of *L. infraorbitale.* Consequently, the distribution of *L. infraorbitale* appears to be disjunct (Fig. 5), in contrast to the continuous pattern presented by Colli et al. (2016). This disjunction is consistent with the hypothesis that *L. infraorbitale* may represent a species complex (Ribeiro et al., 2015, 2018).

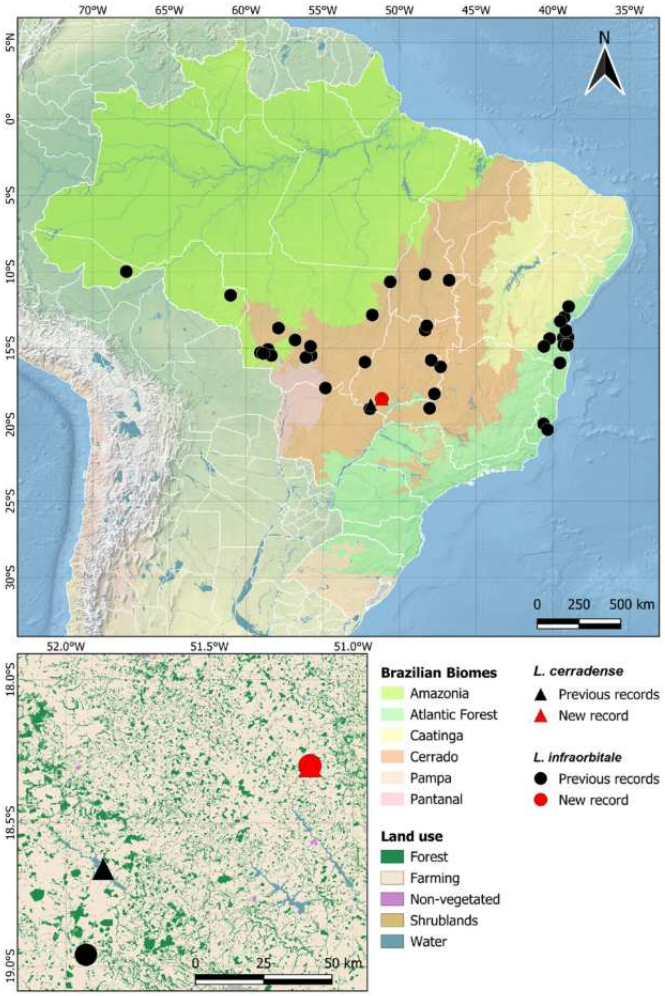


Figure 5. Larger map: Known distribution records of *Leposternon cerradense* (triangles) and *Leposternon infraorbitale* (circles); see text for comments on records not included. Smaller map: Close-up of the area from the new records, highlighting extensive agricultural land use and the severe fragmentation of native vegetation (MapBiomas, 2024).

The distribution of most amphisbaenian species is poorly understood, particularly in Brazil (Colli et al., 2016), but notable advances have been achieved in recent years (e.g., Assis & Costa, 2020; Assis et al., 2022; Oliveira et al., 2022, 2023; Sousa & Costa, 2022; Paiva et al., 2023; Costa, 2024). Our findings extend the known distribution of the poorly known, Cerrado-endemic species *L. cerradense*, and provide its first documented sympatry with *L. infraorbitale*, offering new insights about their distribution range and natural history. The specimens reported here were collected in 2008, but remained misidentified until now, highlighting the importance of constantly reviewing and redetermining specimens in herpetological collections. These results underscore the need for targeted surveys in the municipality of Aparecida do Rio Doce, including ecological monitoring and soil-profile investigations, to evaluate habitat use, microhabitat partitioning, and potential conservation concerns for these fossorial species.

ACKNOWLEDGMENTS

We are grateful to Luciana Nascimento (MCN) and Paulo Passos (MNRJ) for access to specimens under their care; to Andre F. Barreto-Lima, one anonymous reviewer, and editor Rodrigo C. Gonzalez for suggestions. This study was funded by Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), Brazil, through a PhD scholarship for M.O. Finance Code 001.

REFERENCES

Alencar A., Shimbo J., Lenti F., Marques C., Zimbres B., Rosa M., Arruda V., Castro I., Ribeiro J., Varela V. 2020. Mapping three decades of changes in the Brazilian savanna native vegetation using Landsat data processed in the Google Earth Engine Platform. *Remote Sensing* 12(6):924. doi:10.3390/rs12060924.

Assis C.L., Costa H.C. 2020. *Leposternon octostegum*: New record of an endangered worm lizard species, with comments on habitat and opportunistic predators (Squamata: Amphisbaenia). *Herpetologia Brasileira* 9:109–120.

Assis C.L., Mendonça L.R., Feio R.N., Costa H.C. 2022. *Amphisbaena mertensi*i (Squamata: Amphisbaenidae): Notes on natural history, distribution, and morphology. *Caldasia* 44:653–660.doi:10.15446/caldasia.v44n3.91800.

Barros-Filho J.D., Freitas M.A., Silva T.F.S., Valverde M.C.C., Loguercio M.F.C., Veríssimo D. 2013. On the Distribution and Habitat of *Leposternon octostegum* (Duméril, 1851) (Squamata: Amphisbaenidae). *Wildlife Biology in Practice* 9(1):1–6. doi:10.2461/wbp.2013.9.1.

Berthold A.A. 1859. Einige neue Reptilien des akad. zoolog. Museums in Göttingen. *Nachrichten von*

der Georg-Augusts-Universität und der Königlichen Gesellschaft der Wissenschaften zu Göttingen (17):179–181.

Colli G.R., Fenker J., Tedeschi L.G., Barreto-Lima A.F., Mott T., Ribeiro S.L.B. 2016. In the depths of obscurity: Knowledge gaps and extinction risk of Brazilian worm lizards (Squamata, Amphisbaenidae). *Biological Conservation* 204:51–62. doi:10.1016/j.biocon.2016.07.033.

Colli G.R., Guidorizzi C.E., Bataus Y.S.L., Anunciação P.R., Signorelli L., Ferrão M., Abrahão C.R., Ávila R.W., Bérnils R.S., Borges-Martins M., Caetano G.H.O., Cosendey B.N., Costa H.C., Faria R.G., Ferreira V.L., Ghizoni Jr. I.R., Kiefer M.C., Maciel R.P., Menezes V.A., Nogueira C.C., Oliveira R.B., Pantoja D.L., Ribeiro S.L.B., Santana D.J., Strüssmann C., Sturaro M.J., Viegas L.M., Vinas L.V., Winck G.R. 2023. *Leposternon cerradensis*. Sistema de Avaliação do Risco de Extinção da Biodiversidade - SALVE - Instituto Chico Mendes de Conservação da Biodiversidade - ICMBio. Available: https://salve.icmbio.gov.br.doi:10.37002/salve.ficha.34232.2. Accessed on 10 November 2025.

Costa H.C. 2024. Reidentification of a 19th century specimen reveals the first record of *Amphisbaena hogei* Vanzolini, 1950 (Squamata, Amphisbaenidae) in Minas Gerais, Brazil. *Evolutionary Systematics* 8:273–278. doi:10.3897/evolsyst.8.129984.

Costa H.C., Garcia P.C.A. 2019. Quem são as Anfisbênias? *Revista da Biologia* 19:19–30. doi:10.7594/revbio.19.01.03.

Costa H.C., Rigolon R.G. 2024. Etymology and pronunciation of the names of Brazilian Squamata. Part 1: *Amphisbaenia*. *Herpetologia Brasileira* 13:22–58. doi:10.5281/zenodo.13308105.

Costa H.C., Guedes T.B., Entiauspe-Neto O.M. 2026. Updated checklist of Brazilian Reptiles: celebrating twenty years of knowledge. *Herpetologia Brasileira* 15: in press.

Gans C. 1968. Relative success of divergent pathways in Amphisbaenian specialization. *The American Naturalist* 102(926):345–362. doi:10.1086/282548.

Gans C. 1971. Studies on amphisbaenians (Amphisbaenia, Reptilia). A review of the amphisbaenid genus *Leposternon*. *Bulletin of the American Museum of Natural History* 144(6):379–464.

Gardi C., Angelini M., Barceló S., Comerma J., Gaistardo C.C., Encina Rojas A., Jones A., Krasilnikov P., Mendonça-Santos M.L., Montanarella L., Muñiz Ugarte O., Schad P., V.R. M.I., Vargas R., Ravina da Silva M. 2015. *Atlas de Solos de América Latina e do Caribe.* Comissão Europeia – Serviço de Publicações da União Europeia, Luxembourg.

IBGE (Instituto Brasileiro de Geografia e Estatística). 2025. Biomas e Sistema Costeiro-Marinho do Brasil - 1:250.000. IBGE, Rio de Janeiro.

ICMBio (Instituto Chico Mendes de Conservação da Biodiversidade). 2025. Biodiversity Extinction Risk Assessment System – SALVE. Available: https://salve.icmbio.gov.br/. Accessed on 10 November 2025.

IUCN. 2025. The IUCN Red List of Threatened Species. Version 2025-2. Available: https://www.iucnredlist.org. Accessed on 10 November 2025.

Kearney M. 2003. Systematics of the Amphisbaenia (Lepidosauria: Squamata) based on morphological evidence from recent and fossil forms. *Herpetological Monographs* 17(1):1–74. doi:10.1655/0733-1347(2003)017[0001:SOTALB]2.0.CO;2.

Latrubesse E., Arima E., Ferreira M., Nogueira S., Wittmann F., Dias M., Dagosta F., Bayer M. 2019. Fostering water resource governance and conservation in the Brazilian Cerrado biome. *Conservation Science and Practice* 1(e77):1–8. doi:10.1111/csp2.77.

MapBiomas. 2024. Collection of the Annual Series of Land Cover and Land Use Maps of Brazil – Arinos.

Available: https://plataforma.brasil.mapbiomas.org/. Accessed on 15 November 2025.

MapBiomas. 2025. Mapeamento Anual de Cobertura e Uso da Terra no Brasil - Coleção 10. Available: https://brasil.mapbiomas.org/wp-content/uploads/sites/4/2025/10/Factsheet-Cerrado_C10_29.09_v2.pdf. Accessed on 28 March 2026.

Measey G.J. 2006. Surveying biodiversity of soil herpetofauna: towards a standard quantitative methodology. *European Journal of Soil Biology* 42:103–110. doi:10.1016/j.ejsobi.2006.07.034.

Mittermeier R.A., Turner W.R., Larsen F.W., Brooks T.M., Gascon C. 2011. Global biodiversity conservation: the critical role of hotspots. Pp. 3–22, in Zachos F.E., Habel J.C. (Eds.), *Biodiversity Hotspots*. Springer, Berlin, Germany.

Navas C.A., Antoniazzi M.M., Carvalho J.E., Chaui-Berlink J.G., James R.S., Jared C., Kohlsdorf T., Pai-Silva M.D., Wilson R.S. 2004. Morphological and physiological specialization for digging in amphisbaenians, an ancient lineage of fossorial vertebrates. *Journal of Experimental Biology* 207(14):2433–2441. doi:10.1242/jeb.01041.

Oliveira H.J., Oliveira G.A.V., Costa H.C. 2023. First record of *Amphisbaena anomala* (Squamata: Amphisbaenidae) in lowland Caatinga based on citizen science, with an updated distribution map. *Austral Ecology* 48:2253–2260. doi:10.1111/aec.13441.

Oliveira H.J., Sinani T.R.F., Silva R.H.M., Costa H.C. 2022. Robert's Wormlizard, *Amphisbaena roberti* (Squamata: Amphisbaenidae): attempted predation and an updated distribution map. *Reptiles & Amphibians* 29:169–174. doi:10.1761/randa.v29i1.16399.

Paiva C.L., Oliveira H.J., Costa H.C. 2023. Updated distribution map of *Amphisbaena mitchelli* Procter, 1923 (Squamata: Amphisbaenidae) with a new record in Maranhão, Brazil. *Revista Latinoamericana de Herpetología* 6:30–34. doi:10.22201/fc.25942158e.2023.4.748.

Perez R., Ramos A.R.L., Oliveira C.R., Ávila R.W. 2026. New species of *Amphisbaena* (Amphisbaenia: Amphisbaenidae) from the coastal zone of Northeast Brazil. *Zootaxa* 5763(3):421–434. doi:10.11646/zootaxa.5763.3.7.

Pinna P.H., Mendonça A.F., Bocchiglieri A., Fernandes D.S. 2014. A new species of *Amphisbaena* Linnaeus, 1758 from a Cerrado region in Bahia, northeastern Brazil (Squamata: Amphisbaenidae). *Herpetologica* 70(3):339–349. doi:10.1655/HERPETOLOGICA-D-13-00039.

Ribeiro S., Eleutério J.M.P. 2023. Anfisbênios do Brasil. Pp. 93–105, in Silva-Soares T., Monjardim M., Figueiredo R.G. (Eds.), *Herpetologia para todos*. Instituto Biodiversidade Neotropical, Guarapari, Espírito Santo, Brasil.

Ribeiro S., Gomes J.O., Silva H.L.R., Cintra C.E.D., Jr. N.J.S. 2016. A new two-pored species of Amphisbaena (Squamata, Amphisbaenidae) from the Brazilian Cerrado, with a key to the two-pored species of Amphisbaena. Zootaxa 4147:124–142. doi:10.11646/zootaxa.4147.2.2.

Ribeiro S., Nogueira C., Cintra C.E.D., Silva N.J., Zaher H. 2011. Description of a new pored *Leposternon* (Squamata, Amphisbaenidae) from the Brazilian Cerrado. *South American Journal of Herpetology* 6:177–188. doi:10.2994/057.006.0303.

Ribeiro S., Santos-Jr A.P., Zaher H. 2015. A new species of *Leposternon* Wagler, 1824 (Squamata, Amphisbaenia) from northeastern Argentina. *Zootaxa* 4034(2):309–324. doi:10.11646/zootaxa.4034.2.4.

Ribeiro S., Sá V., Santos-Jr A.P., Graboski R., Zaher H., Guedes A.G., Andrade S.P., Vaz-Silva W. 2019. A new species of the Amphisbaena (Squamata, Amphisbaenidae) from the Brazilian Cerrado with a key for the two-pored species. Zootaxa 4550:301–320. doi:10.11646/zootaxa.4550.3.1.

Ribeiro S., Silveira A.L., Santos-Jr A.P. 2018. A new species of *Leposternon* (Squamata: Amphisbaenidae) from Brazilian Cerrado with a key to pored species.

Journal of Herpetology 52(1):50–58. doi:10.1670/16-125.

Ribeiro S., Vaz-Silva W., Santos-Jr A.P. 2008. New pored *Leposternon* (Squamata, Amphisbaenia) from Brazilian Cerrado. *Zootaxa* 1930:18–38. doi:10.11646/zootaxa.1930.1.2.

Silveira A.L., Ribeiro L.S.V.B., Campos J.M., Fernandes T.N., Dornas T.T. 2025. *Répteis do Quadrilátero Ferrífero (Minas Gerais): atualização do conhecimento, lista comentada e guia fotográfico.* Belo Horizonte, Minas Gerais, Brasil.

Silveira A.L., Rocha C., Nogueira C.C., Werneck F., Moura G.J.B., Winck G., Ribeiro Junior M.A., Kiefer M., Freitas M.A., Hoogmoed M.S., Tinoco M.S.T., Valadao R., Vieira R.C., Maciel R.P., Faria R.G., Recoder R., D'Avila R., Silva S.T., Ribeiro S.B., Avila-Pires T.C.S. 2021a. *Leposternon cerradensis*. The IUCN Red List of Threatened Species 2021: e.T75159784A75159798. doi:10.2305/IUCN.UK.2021-3.RLTS.T75159784A75159798.pt. Accessed on 19 November 2025.

Silveira A.L., Rocha C., Nogueira C.C., Werneck F., Moura G.J.B., Winck G., Ribeiro Junior M.A., Kiefer M., Freitas M.A., Hoogmoed M.S., Tinoco M.S.T., Valadao R., Vieira R.C., Maciel R.P., Faria R.G., Recoder R., D'Avila R., Silva S.T., Ribeiro S.B., Avila-Pires T.C.S. 2021b. *Leposternon infraorbitale*. The IUCN Red List of Threatened Species 2021: e.T75160441A75160468. doi:10.2305/IUCN.UK.2021-3.RLTS.T75160441A75160468.pt. Accessed on 19 November 2025.

Souza M.D.A., Costa H.C. 2022. New southernmost record and an updated distribution map for the Serra da Mesa Wormlizard, *Amphisbaena anaemariae* (Squamata: Amphisbaenidae). *Reptiles & Amphibians* 29:141–145. doi:10.1761/randa.v29i1.16330.

Strauch A. 1881. Bemerkungen über die Eidechsenfamilie der Amphisbaeniden. *Mémoires de l'Académie Impériale des Sciences de St.-Pétersbourg* Serie 11:355–479.

Suzuki Y., Economo E. 2021. From species sorting to mass effects: spatial network structure mediates the shift between metacommunity archetypes. *Ecography* 44(5):715–726. doi:10.1111/ecog.05453.

Uetz P., Freed P., Hošek J. (Eds.). 2025. The Reptile Database. Available: http://www.reptile-database.org/. Access on 15 October 2025.

Wagler J. 1824. *Serpentum Brasiliensium* species novae, ou histoire naturelle des espèces nouvelles de serpens. In Spix J. (Ed.), Animalia nova sive species novae. Typis Franc. Seraph. Hübschmanni, Monaco.



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