

A new species of *Elachistocleis* (Anura: Microhylidae) from the Brazilian Pantanal

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Abstract

A new species of *Elachistocleis* (Anura: Microhylidae) from the Brazilian Pantanal.

A new species of *Elachistocleis* from the Brazilian Pantanal is described. The new species differs from all other *Elachistocleis* in having the following combination of characters: medium to large-sized species (26.9–40.3 mm); head length about 89% of head width; post-commissural gland poorly developed; dorsum in preservative (EtOH 70%) slightly rough, grayish, with minute, scattered white dots and a large, elongated dark gray spot on the mid-dorsum and posterior part of head; venter gray or brown with white spots separating dorsal and ventral regions; a single vocal sac dark gray; large, irregular, light cream spot on humerus; large, irregular light cream spots on groin; light cream, irregular stripe on posterior surfaces of thighs; and irregular, light cream spots on the proximal internal surface of each shank. This new species increases the number of Oval frogs for the state of Mato Grosso do Sul to four and demonstrates the value of the single protected area in Corumbá for biodiversity conservation. Continuing field investigations in the Maciço do Urucum are necessary to determine the diversity of the herpetofauna in that region.

Keywords: biodiversity, Corumbá, Oval frogs, systematics, taxonomy.

Resumo

Uma nova espécie de *Elachistocleis* (Anura: Microhylidae) do Pantanal Brasileiro. Uma nova espécie de *Elachistocleis* do Pantanal Brasileiro é descrita. A nova espécie difere de todos os outros *Elachistocleis* por ter a seguinte combinação de caracteres: espécie de médio a grande porte (26.9–40.3 mm); comprimento da cabeça com cerca de 89% da largura da cabeça; glândula pós-comissural

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pobrememente desenvolvida; dorso em preservativo (EtOH 70%) ligeiramente áspero, acinzentado, com pontos brancos pequenos e dispersos e uma mancha cinza escura alongada, grande no meio do dorso e na parte posterior da cabeça; ventre cinza ou marrom com manchas brancas separando as regiões dorsal e ventral; um único saco vocal cinza escuro; uma mancha creme claro grande e irregular no úmero; manchas creme claro grandes, irregulares na virilha; faixa creme claro irregular nas superfícies posteriores das coxas; e manchas creme claras irregulares na superfície interna proximal de cada membro posterior. Esta nova espécie aumenta o número de rãs ovais para o Estado de Mato Grosso do Sul para quatro e demonstra o valor da única área protegida em Corumbá para a conservação da biodiversidade e a importância de continuar as pesquisas de campo no Maciço de Urucum para determinar a diversidade da Herpetofauna.

Palavras-chave: biodiversidade, Corumbá, rã oval, sistemática, taxonomia.

Introduction

The genus *Elachistocleis* Parker, 1927 was rendered monophyletic with the transfer of *Relictivomer* Carvalho, 1954 to its synonymy, resurrecting the combination *Elachistocleis pearsei* (Ruthven, 1914), and by including *Chiasmocleis panamensis* Dunn, Trapido, and Evans, 1948 in *Elachistocleis* (de Sá *et al.* 2012). Currently, *Elachistocleis* comprises 17 species of Oval frogs, along with several species that have not been named (Caramaschi 2010, Toledo 2010, Toledo *et al.* 2010, de Sá *et al.* 2012). Two distinctive ventral color patterns are recognized in the genus. One has chest and belly immaculate, including *E. bicolor* (Guérin-Méneville, 1838); *E. haroi* Pereyra, Akmentins, Laufer, and Vaira, 2013; *E. helianneae* Caramaschi, 2010; *E. matogrosso* Caramaschi, 2010; and *E. mairaquitana* Nunes-de-Almeida and Toledo, 2012. A second pattern consists of variable blotches or vermiculations on the belly, encompassing *E. bumbameuhoi* Caramaschi, 2010; *E. carvalhoi* Caramaschi, 2010; *E. cesarii* (Miranda-Ribeiro, 1920); *E. erythrogaster* Kwet and Di-Bernardo, 1998; *E. magnus* Toledo, 2010; *E. panamensis* (Dunn, Trapido, and Evans, 1948); *E. pearsei* (Ruthven, 1914); *E. piauiensis* Caramaschi and Jim, 1983; *E. skotogaster* Lavilla, Vaira, and Ferrari, 2003; *E. surinamensis* (Daudin, 1802); and *E. surumu*

Caramaschi, 2010 (Toledo *et al.* 2010, Frost 2017). *Elachistocleis ovalis* (Schneider, 1799) was considered a *nomen dubium*, referred to as *species inquirenda* by Caramaschi (2010), but putatively it is included in the blotched belly group.

These moderately small frogs are found in Trinidad and from Panama and Colombia southward, east of the Andes, to southern Paraguay, southeastern Bolivia, central Argentina, central and southeastern Brazil, and Uruguay (Frost 2017). Although Oval frogs exhibit different degrees of intraspecific variation (Nunes-de-Almeida and Toledo 2012), most species are readily distinguished from one another by their color patterns (e.g., Lavilla *et al.* 2003, Jansen *et al.* 2011, Pereyra *et al.* 2013).

Until recently, only *Elachistocleis bicolor* and *E. ovalis* were thought to be present in the state of Mato Grosso do Sul. However, Caramaschi (2010) described *E. matogrosso* and applied alternate names to all populations previously referred to *E. ovalis* in Brazil. Toledo *et al.* (2010) removed *E. cesarii* from the synonymy of *E. bicolor*. Currently, only *E. bicolor*, *E. cesarii* and *E. matogrosso* are recorded in the Pantanal ecosystem. We use the name *E. bicolor sensu* Caramaschi (2010).

In 2012 and 2013, specimens of the new species were collected in the region of Parque Municipal de Piraputangas (PMP), in the

Pantanal of Mato Grosso do Sul, Brazil. The anuran fauna of PMP proved to be more diverse than most previously surveyed sites in the Pantanal of Mato Grosso do Sul, with 27 species recorded to date (Piva 2014). Twenty species from this collection were not recorded in the management plan for implementation of PMP [e.g., *Phyllomedusa sauvagii* Boulenger, 1882, and *Rhinella granulosa* (Spix, 1824)] and, among these were three Oval frogs that could not be assigned to any known species. Herein, we describe these individuals as a distinctive member of the genus *Elachistocleis*.

Materials and Methods

Three male frogs of the type series were collected in the Parque Municipal de Piraputangas (PMP) (19°16' S, 57°38' W; datum = WGS 84) by A. Piva on 18 December 2012 and 30 November 2013; the specimens are deposited in Coleção Zoológica de Referência da Universidade Federal de Mato Grosso do Sul, Campo Grande, MS, Brazil (ZUFMS) and Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brazil (MNRJ), with catalog numbers ZUFMS-AMP 924, MNRJ 9100 (formerly ZUFMS-AMP 922) and ZUFMS-AMP 923. PMP is a protected area of 1300 ha located approximately 25 km south of the urban area of Corumbá, state of Mato Grosso do Sul, Brazil. The climate classification of Köppen and Geiger (Peel *et al.* 2007), identified Corumbá as a tropical dry climate (savannah climate) with average monthly temperature above 18°C throughout the year and 1074 mm of annual precipitation. The current vegetation of the park is semi-deciduous forest; however, large areas have been cleared or heavily modified for pasture or mining activities. Male frogs were collected in a disturbed area of the PMP, characterized by rocky soils and herbaceous strata composed of grasses, and three permanent and several ephemeral ponds. We examined a single female that was collected in the Maciço do Urucum, which is adjacent to PMP.

We compared specimens of the new species with 253 museum specimens of the genus *Elachistocleis* from the following collections (Appendix I): Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brazil (MNRJ); Coleção Zoológica de Referência da Universidade Federal de Mato Grosso do Sul, Campo Grande, MS, Brazil (ZUFMS); Museu de Zoologia, Universidade de São Paulo, SP, Brazil (MZUSP); Museu de Zoologia “Prof. Adão José Cardoso”, Universidade Estadual de Campinas, SP, Brazil (ZUEC); United States National Museum, Smithsonian Institution, Washington, DC, USA (USNM). The description of the new species and comparisons were mostly based on meristic, morphometric, and coloration data, even though literature data (e.g., Ruthven 1914; Lavilla *et al.* 2003, Caramaschi 2010, Cole *et al.* 2013, Pereyra *et al.* 2013) were also considered.

The following measurements (in mm) were taken on each specimen of the type-series: snout–vent length; axilla–groin length; head length, measured diagonally from corner of mouth to tip of snout; head width, between jaw angles; eye diameter; upper eyelid width; eye–naris distance, from anterior corner of eye to center of naris; interorbital distance; naris–snout distance, from center of naris to tip of snout; internarial distance, between centers of nares; snout length, from anterior corner of eye to tip of snout; humerus length; forearm length, from flexed elbow to proximal edge of palmar tubercle; hand length, from proximal edge of palmar tubercle to tip of finger IV; thigh length, from vent to knee; shank length, from outer edges of flexed knee to heel; and foot length, from proximal edge of inner metatarsal tubercle to tip of toe IV. Measurements follows Cei (1980) and Heyer *et al.* (1990), except for axilla–groin length, eye–naris distance and naris–snout distance. We took all measurements (± 0.1 mm) with digital calipers. The type-series is composed only of adult individuals, as determined by examination of gonads and secondary sex characters.

Results

Elachistocleis corumbaensis sp. nov.

Figures 1–4, Table 1

Holotype.—Adult male (ZUFMS-AMP 924): BRAZIL, state of Mato Grosso do Sul, Corumbá (Parque Municipal de Piraputangas, 19°16' S, 57°38' W, datum = WGS 84), collected on 30 November 2013 by Alessandher Piva.

Paratypes.—Same data as holotype, two adult males (MNRJ 91001, formerly ZUFMS-AMP 922), collected on 18 December 2012, and ZUFMS-AMP 923, collected on 30 November 2013, by Alessandher Piva. An adult female (ZUFMS-AMP 2595): BRAZIL, state of Mato Grosso do Sul, Corumbá (Maciço do Urucum, Córrego das Pedras formation, 19°13' S, 57°38' W, datum = WGS 84), collected on 15 December 2007 by Liliana Piatti and Paulo Landgref Filho.

Diagnosis.—*Elachistocleis corumbaensis* is a medium to large-sized species (26.9–40.3 mm) that differs from its congeners by the following combination of characters: head length 89% of head width; post-commissural gland poorly developed; in preservative, dorsum slightly rough, grayish, with scattered minute white dots, and large, elongate darkish spot on the mid-dorsum and posterior part of head; venter gray or brown with white spots separating the dorsal and ventral regions; large, irregular, light cream spot on humerus; large, irregular, light cream spots on groin; irregular light cream stripe on posterior surface of each thigh; irregular, light cream spots on the proximal internal surface of each shank.

Comparisons with other species.—Only *Elachistocleis corumbaensis*, *E. bumbameuboi*, and *E. magnus* reach a snout–vent length greater than 40 mm. Furthermore, *E. corumbaensis* differs from its congeners in having a poorly developed post-commissural gland (well developed in *E. bumbameuboi*, *E. carvalhoi*, *E. erythrogaster*, *E. magnus*, and *E. piawaiensis*;

gland absent in *E. skotogaster*). The dorsum of *E. corumbaensis* in preservative is grayish, with a large, elongate darkish spot on the mid-dorsum and posterior part of head (elongate darkish spot absent in all other *Elachistocleis*; this color pattern, easily distinguishes the dorsum of the new species from those of all its congeners, except *E. haroi*). The dorsum of *E. corumbaensis* and *E. pearsei* are dotted in white. Otherwise, the dorsum of *E. pearsei* is bluish slate black or blackish slate (vs. grayish in *E. corumbaensis*). The dorsum of *E. corumbaensis* in live specimens is also grayish, with scattered, minute white dots (vs. dark gray with very light gray speckling in *E. surinamensis*). The venter is gray or brown with white spots (venter immaculate in *E. bicolor*, *E. haroi*, *E. helianneae*, *E. matogrosso*, and *E. muiiraquitana*; gray with whitish blotches or spots in *E. bumbameuboi*, *E. carvalhoi*, *E. cesarii*, *E. panamensis*, and *E. surumu*; yellow with black blotches in *E. erythrogaster*; mottled gold and gray in *E. surinamensis*; carrot red in *E. pearsei* and white with gray spots in *E. magnus*). *Elachistocleis corumbaensis* also has large, irregular light cream spots on its groin (vs. not spotted in *E. haroi*, *E. helianneae*, and *E. panamensis*) and a thin mid-longitudinal light stripe from the post-cephalic transverse skinfold to the vent may be present (vs. stripe absent in *E. bicolor*, *E. bumbameuboi*, *E. carvalhoi*, *E. piawaiensis*, and *E. surumu*).

Description of holotype.—Adult male. Measurements in Table 1. General aspect ovoid, skin slightly rough. Head small, head length 21.8% of snout–vent length, 91.3% of head width. Snout prominent, slightly projecting beyond mouth, protruding in lateral view. Snout sub-elliptical when viewed from above. Eyes small, dorsolateral, laterally directed, slightly prominent. Nostrils small, anterolateral. Canthus rostralis rounded, slightly convex. Loreal region slightly concave. Post-commissural glands poorly developed. Interorbital space slightly convex. Poorly defined incomplete occipital fold across back of

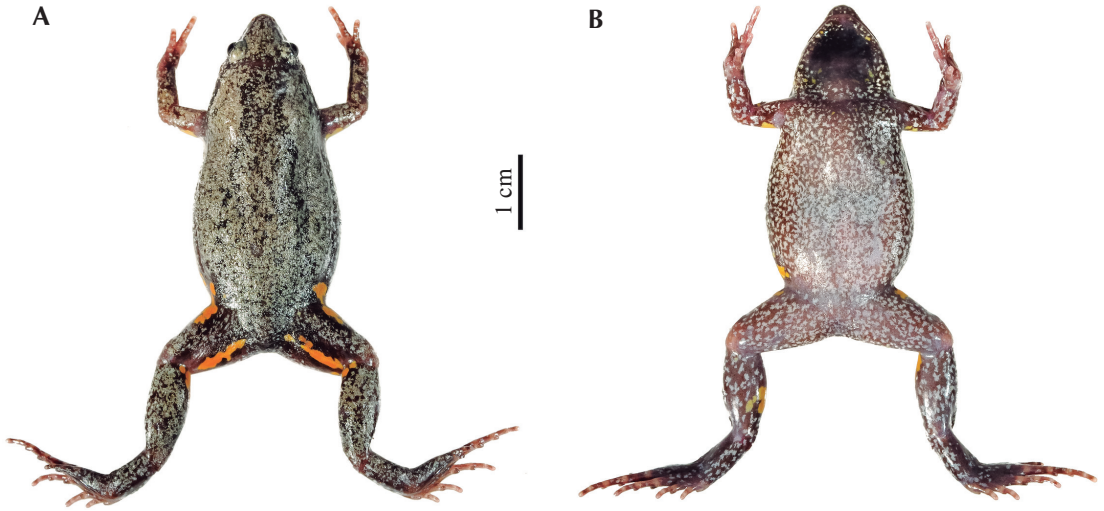


Figure 1. Dorsal (A) and ventral (B) views of the holotype of *Elachistocleis corumbaensis* (ZUFMS-AMP 924), Parque Municipal de Piraputangas (19°15'38" S, 57°37'56" W), Corumbá, Mato Grosso do Sul state, Brazil.

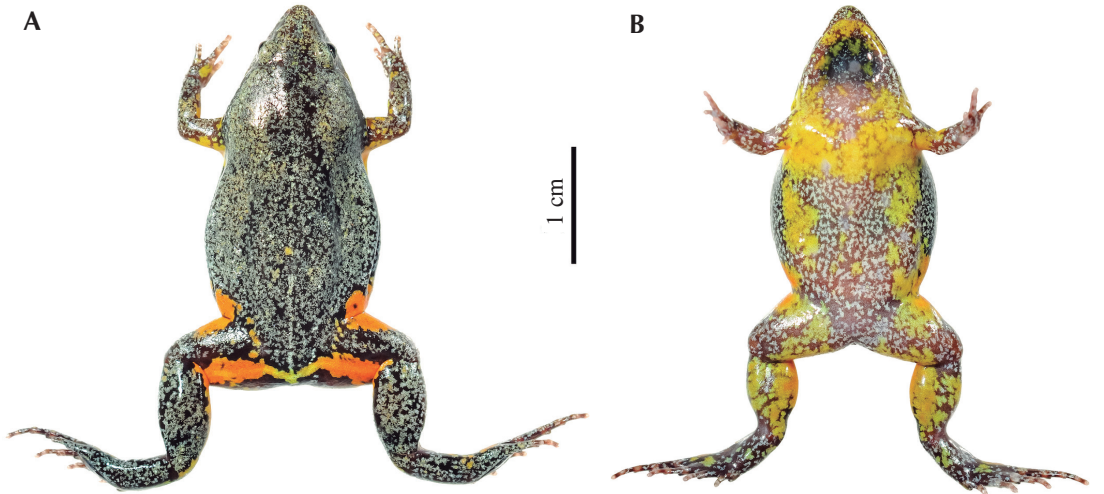


Figure 2. Dorsal (A) and ventral (B) views of the paratype of *Elachistocleis corumbaensis* (ZUFMS-AMP 923), Parque Municipal de Piraputangas (19°15'38" S, 57°37'56" W), Corumbá, Mato Grosso do Sul state, Brazil.

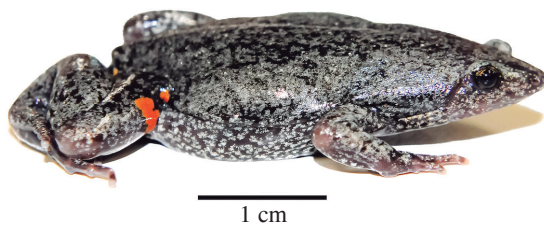


Figure 3. Lateral view of the paratype of *Elachistocleis corumbaensis* (MNRJ 91001), Parque Municipal de Piraputangas (19°15'38" S, 57°37'56" W), Corumbá, Mato Grosso do Sul state, Brazil.



Figure 4. Palmar (A) and plantar (B) views of left hand and foot of the paratype of *Elachistocleis corumbaensis* (ZUFMS-AMP 2595), Maciço do Urucum, Córrego das Pedras (19°13'18" S, 57°37'36" W), Corumbá, Mato Grosso do Sul state, Brazil.

notched posteriorly. Vocal slits present. Premaxillary, maxillary, and vomerine odontophores absent. Upper jaw projecting beyond lower jaw. Vocal sac distinct, subgular, not expanded externally.

Arms moderately robust, short. No tubercles or crests on forearm. Fingers robust, short, free. Relative lengths of fingers: $I < IV < II < III$. Fingers with round, flat subarticular tubercles. Palmar tubercle round, longitudinally divided, about two times larger than thenar tubercle. Supernumerary tubercles absent. Lateral fringe on fingers present as weak ridge. Prepollex not evident. Tubercles absent from knee, heel, and

tarsus. Tarsal fold absent. Legs short, robust. Thigh larger than shank, but shorter than foot length. Toes robust, free. Relative toes lengths: $I < II < V < III < IV$. Subarticular tubercles round, flat. Supernumerary plantar tubercles absent. Lateral fringe on toes present as weak ridge. Inner metatarsal tubercle longer than wide, oval, flat. Outer metatarsal tubercle absent. Toes tips not expanded into pads. Tips of fingers and toes without discs or terminal grooves.

Dorsum slightly rough in preservative, grayish, with scattered minute white dots, and large, elongate darkish spot on the mid-dorsum and posterior region of head; venter gray with

Table 1. Morphometric variation (in mm) of the holotype and paratypes of *Elachistocleis corumbaensis*.

	Holotype ZUFMS-AMP 923 male	Paratype MNRJ 91001 male	Paratype ZUFMS-AMP 924 male	Paratype ZUFMS-AMP 2595 female
Snout–vent length	31.4	30.8	26.9	40.3
Axilla–groin length	14.2	13.8	11.2	20.5
Head length	6.8	6.7	5.52	7.4
Head width	7.5	7.3	6.2	8.8
Eye diameter	1.9	1.9	1.7	2.0
Upper eyelid width	0.9	0.9	0.9	1.1
Eye–naris distance	2.4	2.4	2.0	2.7
Interorbital distance	3.8	3.6	3.5	4.3
Internarial distance	1.4	1.4	1.3	1.9
Snout length	3.3	3.4	2.9	3.9
Humerus length	4.8	4.2	3.7	3.1
Forearm length	5.0	4.9	4.0	6.3
Hand length	6.4	5.9	5.1	8.3
Thigh length	11.6	11.4	9.8	13.9
Shank length	10.5	10.4	9.1	13.0
Foot length	12.1	11.9	10.5	15.8

white spots separating the dorsal and ventral regions; vocal sac dark; a large, irregular light cream spot on humerus; large, irregular light cream spots on groin; irregular light cream stripe on posterior surface of each thigh; irregular, light cream spots on the proximal internal surface of each shank.

Color in life of holotype.—Grayish above with no distinct line or stripe, and with scattered minute white dots; two small yellow spots in anterior region of dorsum; single vocal sac darker than chest and venter; about 12 small yellow spots on vocal sac and lower maxilla; ventral and inguinal regions gray with white spots separating dorsum from venter; large, irregular light yellow spot on anterior surface of each humerus; large, irregular, light yellow spots on groin; narrow, irregular, light orange stripe on

posterior surface of thighs; irregular, light orange spots on proximal internal surface of shank.

Color pattern variation in live specimens.—The type series includes three adult males and one adult female, which resemble one another in shape, size, and color. Some variation is present in size of the spots and width of the orange stripes on the posterior surfaces of thighs. ZUFMS-AMP 923 (Figure 2 A, B) possesses a wide, irregular, and continuous light orange stripe on posterior surfaces of thighs and shanks; this stripe is reduced and discontinuous in the holotype and MNRJ 91001. The anterior surfaces of thighs and shanks of ZUFMS-AMP 923 are heavily pigmented with unevenly scattered yellow spots. Hands and feet of ZUFMS-AMP 923 have small yellow spots. MNRJ 91001 (Figure 3) and ZUFMS-AMP 923 bear a thin

mid-longitudinal light stripe from the post-cephalic transverse skinfold to the vent. The single female paratype (ZUFMS-AMP 2595) is the largest specimen. The female's dorsum and dorsal surfaces of the limbs are smooth, brown, with minute scattered pores in dorsolateral and inguinal regions. The dorsal surfaces bear numerous small dermal spines around the cloacal opening and the venter is brown with light spots. The throat is darker brown than the venter; three light spots are present above the inguinal region and a narrow, irregular, light cream spot is located on the posterior surface of the left thigh. Figure 4 A, B shows the typical number and distribution of tubercles on the hand and foot of *E. corumbaensis*, and Table 1 summarizes the morphometric variation among the holotype and the three paratypes.

Distribution and natural history.—*Elachistocleis corumbaensis* is known only from the Parque Municipal de Piraputangas and the Maciço do Urucum, located in the western part of the Pantanal (Figure 5). This region has high biological diversity and its natural habitats are threatened by anthropogenic activities, such as conversion to pasture or mining activities. Furthermore, the western border of the Pantanal and Maciço do Urucum are considered priority areas for biodiversity conservation (Tomas *et al.* 2010). Male specimens (MNRJ 91001, ZUFMS-AMP 923, ZUFMS-AMP 924) were found in small bodies of water accumulated in soils characterized by large rocks. Heavy rainfall has eroded much of the original habitat, converting the area into bare soil with scattered patches of shrubs and grass. Two permanent ponds with

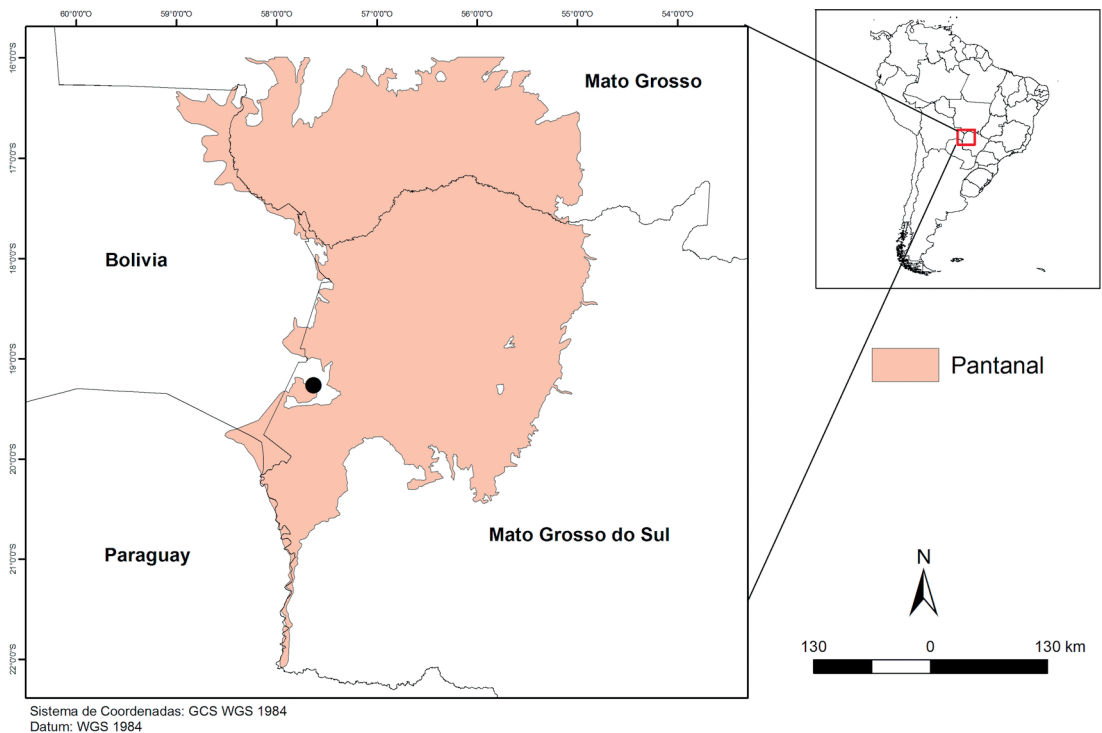


Figure 5. Distribution of *Elachistocleis corumbaensis*. The type locality and location from which the female paratype was collected are virtually the same.

herbaceous vegetation are predominantly composed of grasses, and several temporary ponds form occasionally by accumulation of rainfall. Male specimens were observed vocalizing at night (between 19:00 and 20:00 hr); vocalizations were not recorded. ZUFMS-AMP 2595 was collected in the seasonal alluvial forest of Córrego das Pedras formation (of unknown but probably late pre-Cambrian or early Paleozoic age, Dorr 1945).

Etymology.—The specific name, a noun in apposition, refers to the city of Corumbá, the westernmost and northernmost city in the state of Mato Grosso do Sul. Corumbá is the largest municipality in area in the state, composing 18% of its territory. Further, 95.6% of Corumbá is located within the Pantanal ecosystem (Silva and Abdon 1998).

Discussion

Despite the relatively high diversity of amphibians (44 species; Strüssmann *et al.* 2011 and references therein), the anuran fauna of Pantanal is still poorly known taxonomically (Souza *et al.* 2017). Pioneering works by Cope (1868), Parker (1928), and Bokermann (1962) and several recent works (e.g., Uetanabaro *et al.* 2008, Ávila *et al.* 2010, Caramaschi 2010, Souza *et al.* 2017) provided substantial information on the distribution, variation, and description of many species in the ecosystem. However, commonly anurans are identified only to the generic level in the literature (e.g., Strüssmann *et al.* 2000, 2011, Uetanabaro *et al.* 2007, 2008), which reinforces the necessity of further taxonomic studies.

The first comprehensive field guide to anurans of Pantanal and adjacent Cerrados reported 56 species representing nine families (Uetanabaro *et al.* 2008). Among these, one species of *Elachistocleis*, depicted and briefly described, was noted as undescribed. Based on the color pattern described (Uetanabaro *et al.* 2008: 173) for the species listed as “*Elachis-*


toleis sp.”, we assigned that specimen to *E. corumbaensis*.

Possibly *Elachistocleis* cf. *bicolor* and *Elachistocleis* cf. *ovalis*, as described in Uetanabaro’s field guide, represent other undescribed species. The Latin abbreviation “cf.” (= *compared to*) has been used extensively in reference to *Elachistocleis* in Pantanal (e.g., Strüssmann *et al.* 2000, 2011, Rodrigues *et al.* 2003, Uetanabaro *et al.* 2007, Piatti *et al.* 2010, Alho 2011), where identification of the species seems to be uncertain; see also Caramaschi (2010) for alternate names of all populations previously referred to *E. ovalis* in Brazil.

The description of *E. corumbaensis* increases the number of Oval frogs reported from Mato Grosso do Sul to four (see Souza *et al.* 2017), and the number of species of *Elachistocleis* in the Brazilian Pantanal to four species that are readily distinguished by their ventral coloration. The discovery of *E. corumbaensis* demonstrates the value of the single protected area in Corumbá for biodiversity conservation and the importance of continuing field work in the western part of the Pantanal to investigate its herpetofauna.

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Appendix I. Comparative material examined.

Elachistocleis bicolor: BRAZIL: MATO GROSSO DO SUL: Corumbá, Fazenda Santa Clara (ZUFMS-AMP 1703); Ponta Porã, Inhuverá (MNRJ 6955).

Elachistocleis bambameuboi: BRAZIL: MARANHÃO: São Luís, UHE Ponta da Madeira (MNRJ 53200, holotype; MNRJ 53201–53205, 53378, paratypes).

Elachistocleis carvalhoi: BRAZIL: TOCANTINS: Aragoínas (MNRJ 51384, holotype; MNRJ 51385, paratype); Nova Olinda (MNRJ 51386, paratype); Santa Fé do Araguaia (MNRJ 48220, paratype). PARÁ: Canaã dos Carajás, Mineração Serra do Sossego (MNRJ 52474, paratype); Marabá, Reserva Mãe Maria (MNRJ 52734, paratype); Parauapebas, Serra dos Carajás (MNRJ 58858, paratype); Piçarra (MNRJ 51387, paratype); São Geraldo do Araguaia (MNRJ 60285, paratype).

Elachistocleis cesarii: BRAZIL: SÃO PAULO: Botucatu, Fazenda Dinucci (MNRJ 61116, 66851); Botucatu (MNRJ 66858, 66860, 66862–66869); Campinas, Souza (MNRJ 34698); Pedro de Toledo (MNRJ 7020); Rubião Júnior (MNRJ 49643, 66854–66855, 66859); São Manuel, Estação Experimental de São Manoel (MNRJ 66857).

Elachistocleis erythrogaster: BRAZIL: RIO GRANDE DO SUL: São Francisco do Sul, Pró-Mato, Potreiro Novo (MNRJ 39098, ex-MCP 3142, paratype).

Elachistocleis helianneae: BRAZIL: AMAZONAS: Humaitá (MNRJ 6989, holotype; MNRJ 4818–4820, 4822, 6990–6993, 66870–66895, paratypes).

Elachistocleis magnus: BRAZIL: RONDÔNIA: Espigão do Oeste, Fazenda Jaburi (MNRJ 80024, ex-ZUEC 11381, paratype).

Elachistocleis matogrosso: BRAZIL: MATO GROSSO: Cuiabá (MNRJ 4812, holotype; MNRJ 4813, MNRJ 6994, MNRJ 43841, paratypes); Primavera (MNRJ 6977, paratype); Barão de Melgaço, RPPN SESC Pantanal (MNRJ 32880–32882, paratypes). MATO GROSSO DO SUL: Porto Murtinho, Fazenda Patolá (ZUFMS-AMP 1050).

Elachistocleis muraquitana: BRAZIL: ACRE: Xapuri (ZUEC 5666, holotype; ZUEC 5657–5665, ZUEC 5667, ZUEC 5742–5743, ZUEC 5751, paratypes).

Elachistocleis pearsei: COLOMBIA: META: (USNM 15167–15176); Villavicencio (USNM 152204–152208).

Elachistocleis piauiensis: BRAZIL: PIAUÍ: Picos, BR 316, km 312 (MNRJ 66848, ex-JJ 6024, holotype; MNRJ 14253, 60086, ex-JJ 6025–6026, paratypes); Brejo do Piauí (MNRJ 42073).

Elachistocleis surinamensis: SURINAME: Langamankondre (MZUSP 36418–36427).

Elachistocleis surumu: BRAZIL: RORAIMA: Pacaraima, Vila Surumu (MNRJ 25210, holotype; MNRJ 25211–25300, 25302–25305, 25307–25326, 25338–25344, paratypes).

Elachistocleis sp.: BRAZIL: MATO GROSSO DO SUL: Miranda, Fazenda São Francisco (ZUFMS-AMP 967), Porto Murtinho, Fazenda Patolá (ZUFMS-AMP 970, ZUFMS-AMP 1042), Corumbá, MS-184 (ZUFMS-AMP 1240). Corumbá, Fazenda Nhumirim (ZUFMS-AMP 1221).