

## New record and distribution map of *Lithobates palmipes* (Spix, 1824) (Anura, Ranidae) in the state of Mato Grosso, Brazil.

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The family Ranidae contains 347 described species and sixteen genera (Frost, 2013). This family is cosmopolitan, occurring mainly in the south of the United States and Mexico (Dubois, 1992; Frost, 2013), but it is restricted to some regions of South America and Australia (Frost, 2013). These frogs inhabit diverse environments, including deciduous forests, rainforests, temperate coniferous forests, savannah, deserts, wetlands, brackish water wetlands, streams, and freshwater lakes (Hillis and Wilcox, 2005). The genus *Lithobates* has 49 species (Frost, 2013) distributed around the world but, in Brazil, only two species of *Lithobates* can be found, namely, *Lithobates palmipes* (Spix, 1824), a native species, and *Lithobates catesbeianus* (Shaw, 1802) an introduced species from the northern hemisphere (Segalla et al., 2012). *Lithobates palmipes* is widely distributed in the Amazon basin of South America, including Bolivia, Brazil, Colombia, Ecuador, French Guiana (unspecified site), Guyana, Peru, Suriname, Trinidad and Tobago, and Venezuela (Acosta-Gavis, 1999; Gorzula and Señaris, 1998; Lescure and Marty, 2000; La Marca et al., 2004; Guayasamin and North, 2009; Souza, 2009; Oubober and Jairam, 2012). In Brazil, the species was recorded in the north (states of Acre in unspecified site, Tocantins, Amazonas and Pará), central (states of Mato Grosso

and Goiás), and northeastern (states of Alagoas, Bahia, Piauí, Sergipe, Paraíba, Pernambuco and Rio Grande do Norte) regions (Hillis and de Sá, 1988; Colli et al., 2002; Canedo and Bilate, 2005; Sousa, 2009; Oliveira et al., 2010; Ferreira and Faria, 2011; Ramalho et al., 2011; Rodrigues et al., 2011; Santos and Vaz-Silva, 2012).

During fieldwork in March 2010 and February 2012, we observed and collected individuals of *L. palmipes* (Figure 1) in the southern-most portion of the Amazon rainforest. One specimen was collected in the municipality of Santa Carmem (11°52'6.62"S; 55°22'12.60"W) and 15 individuals (adults and juveniles) were collected in Cotriguaçu (9°49'21.50"S; 58°16'46.17"W), both in the state of Mato Grosso, central Brazil. The specimens were deposited in the Herpetological Collection of the Universidade Federal de Mato Grosso, Campus Universitário de Sinop, with the voucher numbers ABAM-H 634 (snout-vent length: 103.60 mm; head length: 37.46 mm) and ABAM-H 77, 283, 290, 295, 523, 539, 540, 554, 612, 613, 614, 697, 703 1345 and 1356 (mean snout-vent length: 66.87±25.66 mm; range = 35.11 - 101.15; mean head length: 24.75 ± 9.63 mm; range = 14.48 - 43.73 ), respectively. The identification of the species was confirmed using morphological diagnoses provided by Hillis and De Sá (1988).

Due to the indeterminacy of the type locality (stagnant waters of the Amazon River, Brazil) (Frost, 2013), the distance of the new records were calculated by taking into account the closest records. Considering the closest registers (Figure 2), these new records extend the distribution of *L. palmipes* by 97 Km (Cotriguaçu-Juara) and 234 Km (Santa Carmem-Novo Mundo). *Lithobates palmipes* is not classified as an endangered species under the IUCN Red List of Threatened Species (IUCN, 2012). However, the populations under the specific name *L. palmipes* could comprise a species complex (La Marca et al., 2004). Thus, the knowledge about

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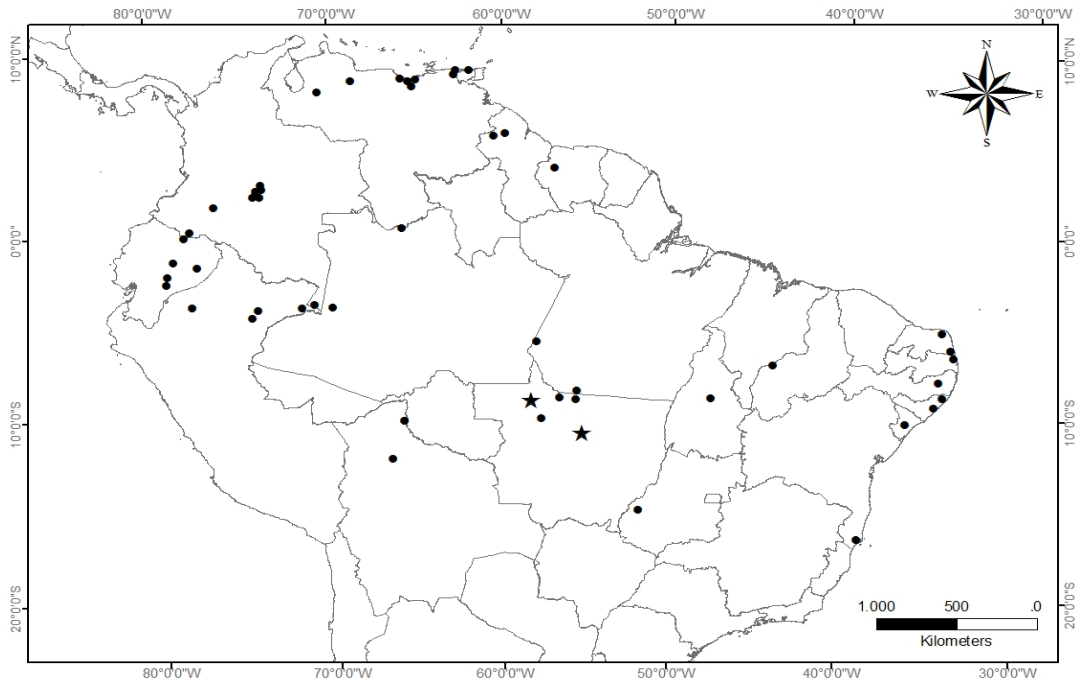
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**Figure 1.** *Lithobates palmipes* from São Nicolau Farm, Cotriguaçu (A; Juvenile, ABAM-H 539) and Santa Carmem (B; Adult, ABAM-H 634).

the natural history, distribution and genetic variability of this species in South America is important in order to clarify this information. According to Ramalho *et al.* (2011), detailed studies are needed to detect which environmental factors affect the abundance and distribution of *L. palmipes* in South America. The

new records of this species extend its distribution in the transition zone between Amazonia and Cerrado, which is threatened by deforestation (Rodrigues *et al.* 2011). This wide distribution minimizes the chances of extinction of this species.



**Figure 2.** Distribution map of *Lithobates palmipes* in South America showing the old (black filled circles) and the new (black filled stars) records.

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