

# *Arcovomer passarellii* Carvalho, 1954 (Amphibia: Anura: Microhylidae): Distribution extension in São Paulo state, Brazil and geographic distribution map

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**ABSTRACT:** The Passarelli's Frog, *Arcovomer passarellii* Carvalho, 1954, was registered for the first time in the city of Santos, on the seacoast of São Paulo state, extending 160 km to southwest of the distribution previously known for this species. Here we show a distribution map for an up-to-date map for *A. passarelli*.

*Arcovomer* is a monotypic genus occurring in lowlands of the Atlantic Forest from southeastern of Brazil. *Arcovomer passarelli* occurs up to 200m asl, in the primary and secondary lowland forest, living on the leaf-litter and breeding in temporary ponds inside the forest (Izecksohn and Carvalho-e-Silva 2001). The generic name is an allusion to its peculiar arched prevomer, what distinguishes it from other genera of the family Microhylidae (Carvalho 1954). The Passarellii's Frog is also characterized by having small body (SVL male 16 - 20 mm), dilated phalanges in "T" shape and brownish dorsum, decorated with a non-regular longitudinal dark brown mark with the shape of a baluster (Carvalho 1954; Giaretta and Martins, 2009; Izecksohn and Carvalho-e-Silva 2001).

Literature data reported the occurrence of this species in the Brazilian states of Espírito Santo, Rio de Janeiro and northeastern of São Paulo (Frost 2011). The species was described originally from the municipality of Duque de Caxias, State of Rio de Janeiro (Izecksohn and Carvalho-e-Silva 2001). Its occurrence in Espírito Santo state goes from the center to the south. Until the early 90s, the known distribution of the species covered the lowlands of the states of Rio de Janeiro and Espírito Santo. The first record for São Paulo state was provided by Pombal Jr. and Bastos (1992), from northeastern lowlands in Picinguaba, Parque Estadual da Serra do Mar, municipality of Ubatuba (23°22'00.19" S, 44°50'00.38" W). Further information about the Natural History of *A. passarellii*, for the municipality of Ubatuba, is presented in Giaretta and Martins (2009).

Herein, we report a new record for *Arcovomer passarellii* in São Paulo and provide a species distribution map based on the new record, published data, and specimens deposited in the following Brazilian scientific collections: Coleção de Anfíbios "Célio F. B. Haddad", Universidade Estadual Paulista Júlio de Mesquita Filho, Rio Claro (CFBH), São Paulo; Museu de Zoologia, Universidade de São Paulo (MZUSP), São Paulo; Coleção de Anfíbios do Museu de

Zoologia, Universidade Estadual de Campinas (ZUEC), São Paulo; Coleção Herpetológica do Museu Nacional (MNRJ), Rio de Janeiro, and Museu de Biologia Professor Mello Leitão (MBML), Espírito Santo.

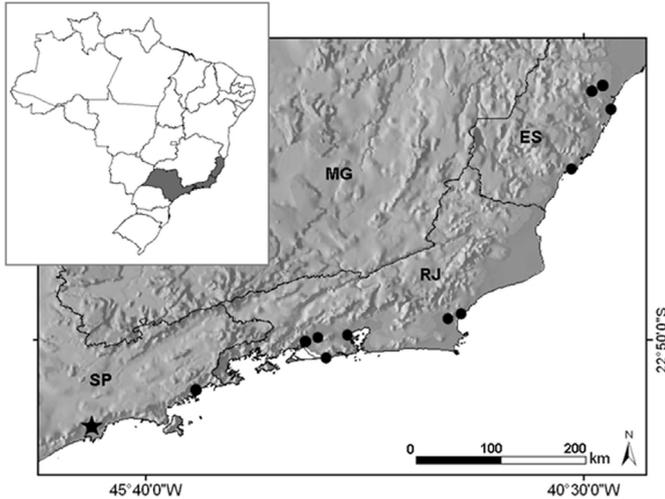
During a fieldwork at Sítio São José, municipality of Santos, south coast of São Paulo state (23°51'51.74" S, 46°18'22.57" W), we found an adult female of *Arcovomer passarellii* (Figure 1). The specimen was found on the leaf-litter, on 6 December, 2007. The locality is 54m above sea level and covered by lowland Atlantic Forest. The voucher specimen (SVL 22 mm) is deposited in Coleção de Anfíbios "Célio F. B. Haddad" (CFBH 19359). This record represents the southernmost register for the species in Brazil and extends the species distribution in approximately 160 km to the southwest of Picinguaba, municipality of Ubatuba (Figure 2).



**FIGURE 1.** Adult female of *Arcovomer passarellii* (CFBH 19359) from the municipality of Santos, state of São Paulo, Brazil. Photo by Leo R. Malagoli.

The IUCN conservation status of *A. passarellii* is Least Concern in view of its wide distribution, occurrence in several protected areas, tolerance for habitat modification, presumed large population, and because it is unlikely to

be declining fast enough to qualify for listing in a more threatened category (Carvalho-e-Silva and Peixoto 2004). According to Pombal Jr. and Bastos (1992), records from Espírito Santo probably represent a distinct species, which would result in the desirability of revising the conservation status of this species. The species is present in state list of threatened fauna as Deficient Data (São Paulo 2010). It inhabits lowland forests, typical target of threats in Atlantic Forest biome for construction and speculation of coastal plains. The distribution extension records highlight the importance of new sampling efforts in these environments and the creation of new protected areas of lowland forest in São Paulo state.



**FIGURE 2.** Distribution of *Arcovomer passarellii* in the Southeast of Brazil. Dots represent locations already presented in literature and collections. The star indicates the new location of occurrence for the species. ES: state of Espírito Santo; MG: state of Minas Gerais; RJ: state of Rio de Janeiro; SP: state of São Paulo.

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