

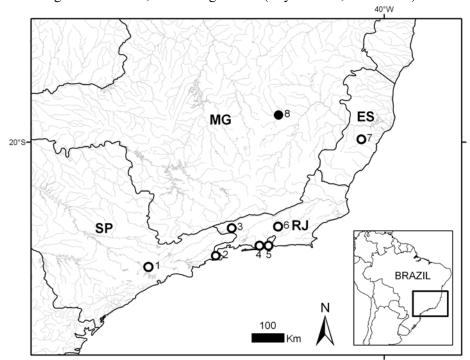
## NOTES ON GEOGRAPHIC DISTRIBUTION

## Amphibia, Gymnophiona, Caeciliidae, *Siphonops hardyi* Boulenger, 1888: Distribution extension, new state record and notes on meristic data

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Species of the genus Siphonops Wagler, 1828 are distributed in most of South America. Siphonops annulatus (Mikan, 1820) presents the largest range in the continent, occurring in Argentina, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Peru, Suriname and Venezuela (Dunn 1942; Taylor 1968; Lynch 1999; Frost 2009). Siphonops paulensis Boettger, 1892 also has a large distribution, occurring

in Argentina, Bolivia, Brazil, Paraguay and Uruguay (Taylor 1968; Aquino et al. 2004). Siphonops insulanus Ihering, 1911 and S. leucoderus Taylor, 1968 are known only from their type specimens, respectively from Ilha Victoria and Ilha de São Sebastião, state of São Paulo, Brazil (Ihering 1911) and from an indefinite type locality in the state of Bahia, Brazil (Taylor 1968; Frost 2009).



**Figure 1.** Distribution of *Siphonops hardyi*. 1 – Ipiranga, municipality of São Paulo, state of São Paulo; 2 – *Serra da Mantiqueira*, between municipality of Cunha, state of São Paulo and municipality of Parati, state of Rio de Janeiro; 3 – Type-locality, municipality of Porto Real, state of Rio de Janeiro; 4 – *Parque Estadual da Pedra Branca*, municipality of Rio de Janeiro, state of Rio de Janeiro; 5 – *Parque Nacional da Tijuca*, municipality of Rio de Janeiro; 6 – *Serra dos Órgãos*, municipality of Teresópolis, state of Rio de Janeiro; 7 – *Reserva Biológica Augusto Ruschi*, municipality of Santa Tereza, state of Espírito Santo; 8 – municipality of Ferros, state of Minas Gerais.

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Siphonops hardyi Boulenger, 1888 was described from a single specimen collected in the municipality of Porto Real, state of Rio de Janeiro, Brazil. Here we report an additional record of *S. hardyi* in the municipality of Ferros (19°13' S, 42°58' W), located in *Rio Doce* basin, state of Minas Gerais, Brazil, and provide a map of its distribution (Figure 1) using data from Taylor (1968; 1973) and Caramaschi et al. (2004).

A specimen of S. hardyi (MZUFV 8748; collection permits #079/2008 NUFAS-MG, process #02015.013455/2007-36, by Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis [IBAMA]) was collected on 20 March 2008 in an area of Atlantic Rainforest while DJS and ETS were moving rotten logs on the forest floor, during an environmental impact assessment for a hydroelectric dam project. MZUFV 8748 (Figure 2) is an adult male with 109 mm of total length, and 101 primary annuli. Our report extends the distribution of Siphonops hardyi in 250 km northwest of the record in the municipality of Santa Tereza, state of Espírito Santo, being also the most septentrional and inland known record for the species.

Taylor (1968) presented a table of morphometric and meristic data for ten specimens from six localities in southern Brazil, showing a range of 92 to 101 primary annuli. The senior author analyzed a specimen of *S. hardyi* (MZUSP 944), from Ipiranga, municipality of São Paulo, state of São Paulo and found 89 primary annuli instead of 93 as mentioned by Taylor (1968) for the same specimen. Probably Taylor (1968) included in the sum, the two nuchal collars and their dorsal transverse grooves miscounting the annuli of MZUSP 944. Thus we found that the variation on primary annuli in *Siphonops hardyi* actually is from 89 to 101.

Caecilians are hard to collect due to their subterranean or aquatic habits and thus many aspects of their biology are poorly known (Oommen et al. 2000). Currently there are many hydroelectric projects in the *Rio Doce* basin in Atlantic Rainforest domain. Thus, negative impacts on populations of amphibians may be occurring, due to the landscape alterations promoted by dam flooding. Our record was made in a forest fragment located in the vicinity of an area directly affected by a possible dam flooding.



Figure 2. Siphonops hardyi (MZUFV 8748) in life. Photo: D. J. Santana

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