

# First record of the Lesser Snouted Treefrog *Scinax nasicus* (Cope, 1862) in Brazilian coast and new species records for the state of Rio Grande do Sul

D. A. Dalmolin<sup>a\*</sup>, F. O. Rosa<sup>b</sup>, M. D. Freire<sup>c</sup>, L. F. M. Fonte<sup>a</sup>, I. F. Machado<sup>d</sup>, C. N. Paula<sup>e</sup>, D. Loebmann<sup>e</sup> and E. Périco<sup>f</sup>

<sup>a</sup>Programa de Pós-graduação em Biologia Animal, Laboratório de Herpetologia, Universidade Federal do Rio Grande do Sul – UFRGS, Avenida Bento Gonçalves, 9500, Agronomia, CEP 91501-970, Porto Alegre, RS, Brazil

<sup>b</sup>Departamento Nacional de Infraestrutura de Transportes – DNIT, Serviços Técnicos de Engenharia S.A. – STE, Praça 7 de Julho, 36, Sala 02, CEP 96020-010, Pelotas, RS, Brazil

<sup>c</sup>Teia Projetos Ambientais Ltda, Rua Amazonas 180, CEP 95520-000, Osório, RS, Brazil

<sup>d</sup>Instituto Boitatá, Avenida 136, Qd. F-44, Lojas 01 e 02, Setor Sul, CEP 74093-250, Goiânia, GO, Brazil

<sup>e</sup>Laboratório de Vertebrados, Instituto de Ciências Biológicas, Universidade Federal do Rio Grande – FURG, Avenida Itália, Km 8, Vila Carreiros, CEP 96203-900, Rio Grande, RS, Brazil

<sup>f</sup>Laboratório de Ecologia e Sensoriamento Remoto, Centro Universitário – UNIVATES, Rua Avelino Talini, 171, CEP 95900-000, Lajeado, RS, Brazil

\*e-mail: diego.anura@gmail.com

Received: March 15, 2016 – Accepted: May 21, 2016 – Distributed: August 31, 2017  
(With 1 figure)

## Abstract

Herein, we provide new occurrence records of *Scinax nasicus* (Cope, 1862) for the state of Rio Grande do Sul, Southern Brazil. All new records here provided are located on Southern half of the state. Besides this, we provide the first record for species in Brazilian coastal zone. Those records improve considerably our knowledge regarding species distribution in Southern Brazil.

**Keywords:** Brazil subtropical, Pampa Domain, *Scinax ruber* clade.

## Primeiro registro da perereca-de-banheiro *Scinax nasicus* (Cope, 1862) na costa do Brasil e novos registros para o estado do Rio Grande do Sul

## Resumo

Aqui, nós fornecemos novos registros de ocorrência de *Scinax nasicus* (Cope, 1862) para o estado do Rio Grande do Sul, Sul do Brasil. Todos os novos registros aqui fornecidos estão localizados na metade sul do estado. Além disso, nós fornecemos o primeiro registro para a espécie na zona costeira brasileira. Esses registros melhoraram consideravelmente o nosso conhecimento sobre a distribuição da espécie no Sul do Brasil.

**Palavras-chave:** Brasil subtropical, Domínio do Pampa, clado *Scinax ruber*.

*Scinax nasicus* (Cope, 1862) is morphologically characterized by having a flattened body, rounded snout in dorsal view and truncated in side view, and it has a relatively small body size (~35 mm CRC) by comparison with other species of the *Scinax ruber* clade (Pombal Junior et al., 1995). Even so, species may be confounded with other sympatric species of *S. ruber* clade, such *Scinax fuscovarius* (Lutz, 1925), *Scinax granulatus* (Peters, 1871) and *Scinax perereca* (Pombal Junior et al., 1995). When available, advertisement call is one of the more effective tools to confirm species identification once that it has

shorter duration composed by a single note by comparison with their congeners.

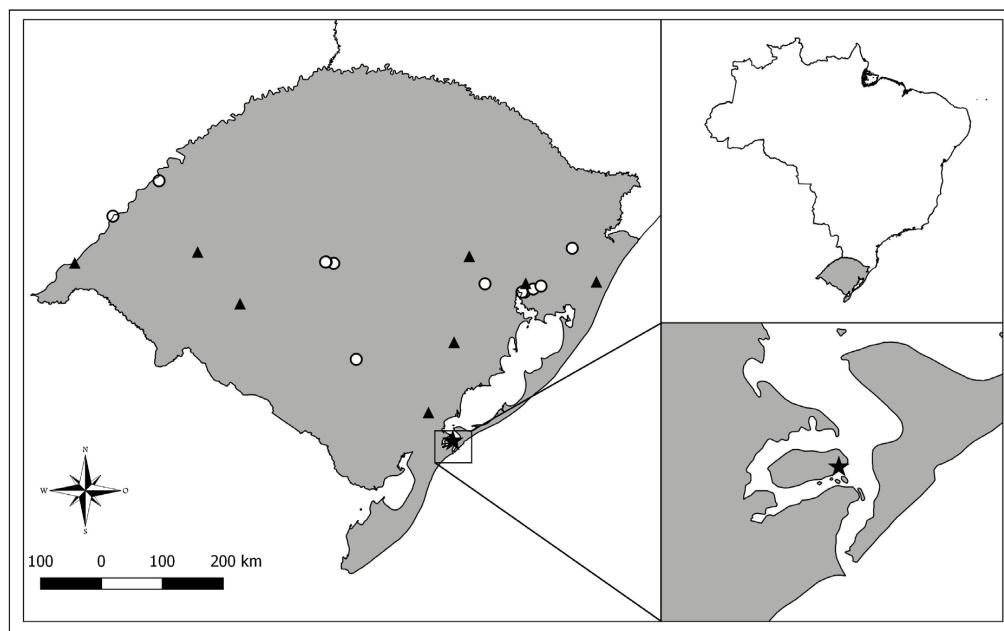
*Scinax nasicus* is widely distributed in open areas of South America, including Atlantic Forest, Cerrado, Chaco, Pampa, and Pantanal domains (for example, Mato Grosso, Mato Grosso do Sul, southern Goiás, western Minas Gerais, São Paulo, Paraná, Rio de Janeiro, Santa Catarina and Rio Grande do Sul) (Frost, 2016), between 12° to 35° S latitude. At the political distribution point of view species has been recorded to North and Central Argentina, eastern Bolivia, Central, South-Southeastern Brazil, Paraguay, and extreme Northwestern Uruguay (Giménez and Gallego,

2000; Salas and Di Tada, 2001; Candioti et al., 2004; Carezzano and Cabrera, 2010; Maneyro and Carreira, 2012; Kwet et al., 2004; Frost, 2016). For the state of Rio Grande do Sul, previous records are known for the municipalities of Caçapava do Sul (Both et al., 2011), Itaqui (Giasson, 2001), Santa Maria (Cechin et al., 2002), Alvorada, Esteio, Gravataí, Porto Alegre, and Triunfo (Fonte et al., 2013). Herein, we provide a updated map of distribution for species in Rio Grande do Sul with new records unpublished so far. Also, a new record for coastal zone Brazil is here presented.

New records of *Scinax nasicus* were obtained throughout sampling fields carried out in the state of Rio Grande do Sul, Southern Brazil at three distinct campaigns, as follow. For confirm species identification we used Pombal Junior et al. (1995) and Maneyro and Carreira (2012) as well as advertisement call of males recorded in field collections. On October 26, 2014, five specimens were found at Moinhos do Campo farm, municipality of Bom Retiro do Sul ( $29^{\circ}34'38''$  S,  $51^{\circ}55'41''$  W). On November 6<sup>th</sup>, 2014, at the Monte Bonito, municipality of Pelotas ( $22^{\circ}37'01''$  S,  $64^{\circ}93'66''$  W) two specimens were collected. Finally, on February 15<sup>th</sup>, 2016, at Ilha dos Marinheiros, municipality of Rio Grande ( $31^{\circ}59'52.30''$  S,  $52^{\circ}06'06''$  W), three specimens were collected. Voucher specimens are deposited on the UFRGS Herpetological Collection (7103-7107) and Herpetological Collection at FURG (CHFURG 3213, 3214, 4447-4449). Collecting permits was authorized by Instituto Chico Mendes de Conservação da Biodiversidade (Licence Number 43658-1).

In addition to the sampling fields, we examined deposited material in the scientific collections of the state. We found *S. nasicus* specimens at Museu de Ciências e Tecnologia da Pontifícia Universidade Católica do Rio Grande do Sul (MCP) and Coleção Zoológica de Referência da Universidade Federal de Santa Maria (ZUFMS). Therefore, unpublished records were found to the municipalities of Canoas (MCP 8440), Dom Feliciano (ZUFSM 2918), Manoel Viana (UFRGS 4078, 4457-4460), Rosário do Sul (MCP 5718-5721, 5769) and Uruguaiana (MCP 7593-7595, 7597).

The new records here provided increases from seven to 15 the number of municipalities with confirmed presence of *Scinax nasicus* (Figure 1). Based on previous record for the state and species distribution in Uruguay (see Maneyro and Carreira, 2012) western records should be considered predictable. Eastwards records, however, should be considered unexpected once that Rio Grande do Sul coastal plan has been sampled over the past 30 years with no previous records for species so far (e.g. Gayer et al., 1988; Loebmann and Figueiredo, 2004; Loebmann and Vieira, 2005; Quintela et al., 2011), including inventories at the same are that species was found (Quintela et al., 2009). Likewise, although species is widely distributed in Brazilian territory this is the first record of *S. nasicus* to Brazilian coast. Data presented here provides evidence that *Scinax nasicus* is widespread distributed in the state, although it seems to be relatively rare in eastern wards of the state. Our records improve considerably the knowledge of species distribution at Southern Brazil.



**Figure 1.** Distribution of *Scinax nasicus* in Rio Grande do Sul, Brazil, where previous records are characterized by circle and the new records are triangles in inland and star in coastal Ilha dos Marinheiros, municipality of Rio Grande record.

## Acknowledgements

We thank the Centro Universitário UNIVATES to the financial support, to Rafael Schuler and Elizabeth Farias for helped in field collection. Patrick Colombo, Tiago Gomes dos Santos for their valuable contributions and for encouraging this work. To Luis F. Marin da Fonte for has helped in the reviews of scientific collections and this manuscript. CNP are grateful to CAPES for providing MSc. Scholarship.

## References

- BOTH, C., MELO, A.S., CECHIN, S.Z. and HARTZ, S.M., 2011. Tadpole co-occurrence in ponds: when do guilds and time matter? *Acta Oecologica*, vol. 37, no. 2, pp. 140-145. <http://dx.doi.org/10.1016/j.actao.2011.01.008>.
- CANDIOTI, M.F.V., LAVILLA, E.O. and ECHEVERRÍA, D.D., 2004. Feeding mechanisms in two Treefrogs, *Hyla nana* and *Scinax nasicus* (Anura: Hylidae). *Journal of Morphology*, vol. 261, no. 2, pp. 206-224. PMid:15216525. <http://dx.doi.org/10.1002/jmor.10239>.
- CAREZZANO, F.J. and CABRERA, M.R., 2010. Amphibia, Anura, Hylidae, *Scinax nasicus* (Cope, 1862): distribution extension. *Check List*, vol. 6, no. 3, pp. 390-391.
- CECHIN, S.Z., SANTOS, T.G., KOPP, K.A., SPIES, M.R. and TREVISAN, R., 2002. *Scinax nasicus*. *Herpetological Review*, vol. 33, no. 3, pp. 222-222.
- FONTE, L.F.M., ZANK, C., VOLKMER, G., FUSINATTO, L.A., FREIRE, M.D. and COLOMBO, P., 2013. Anfíbios. In: J. LUTZEMBERGER. *Fauna e flora da Reserva Biológica do Lami*, ed. Porto Alegre: Secretaria Municipal do Meio Ambiente, pp. 1-308.
- FROST, D.R., 2016 [viewed 15 March 2016]. *Amphibian species of the world: an online reference: version 6.0* [online]. New York: American Museum of Natural History. Available from: <http://research.amnh.org/herpetology/amphibia/index.html>
- GAYER, S.M.P., KRAUSE, L. and GOMES, N., 1988. Lista preliminar dos anfíbios da Estação Ecológica do Taim, Rio Grande do Sul, Brasil. *Revista Brasileira de Zoologia*, vol. 5, no. 3, pp. 419-425. <http://dx.doi.org/10.1590/S0101-81751988000300007>.
- GIASSON, L.O.M., 2001. Geographic distribution. *Scinax nasicus*. *Herpetological Review*, vol. 32, no. 4, pp. 273.
- GIMÉNEZ, C.R. and GALLEGOS, F., 2000. Distribución geográfica de *Scinax nasicus* (Cope, 1862) (Anura: Hylidae). *Cuadernos de Herpetología*, vol. 14, no. 2, pp. 169.
- KWET, A., AQUINO, L., REICHLE, S., SILVANO, D., LAVILLA, E., DI TADA, I. and LANGONE, J., 2004 [viewed 24 November 2014]. *Scinax nasicus: version 2014.3*. The IUCN Red List of Threatened Species. Available from: [www.iucnredlist.org](http://www.iucnredlist.org)
- LOEBMANN, D. and VIEIRA, J.P., 2005. Relação dos anfíbios do Parque Nacional da Lagoa do Peixe, RS, Brasil. *Revista Brasileira de Zoologia*, vol. 22, no. 2, pp. 339-341. <http://dx.doi.org/10.1590/S0101-81752005000200006>.
- LOEBMANN, D., FIGUEIREDO, M.R.C., 2004. Lista dos anuros da área costeira do município de Rio Grande, Rio Grande do Sul, Brasil. *Comunicações do Museu de Ciências da PUCRS. Série Zoologia*, vol. 17, no. 2, pp. 91-96.
- MANEYRO, R. and CARREIRA, S., 2012. *Guia de anfíbios del Uruguay*. Montevideo: Ediciones de la Fuga. 207 p.
- POMBAL JUNIOR, J.P., HADDAD, C.F.B. and KASAHARA, S., 1995. New species of *Scinax* (Anura: Hylidae) from Southeastern Brazil, with comments in the genus. *Journal of Herpetology*, vol. 29, no. 1, pp. 1-6. <http://dx.doi.org/10.2307/1565078>.
- QUINTELA, F.M., NEVES, L.F.M., MEDVEDOVSKY, I.G., SANTOS, M.B., OLIVEIRA, M.C.L.M. and FIGUEIREDO, M.R.C., 2009. Relação dos anfíbios da Ilha dos Marinheiros, estuário da Lagoa dos Patos, Rio Grande do Sul, Brasil. *Revista Brasileira de Biociências*, vol. 7, no. 2, pp. 231-233.
- QUINTELA, F.M., PINHEIRO, R.M. and LOEBMANN, D., 2011. Composição e uso do habitat pela herpetofauna em uma área de mata paludosa da Planície Costeira do Rio Grande do Sul, extremo sul do Brasil. *Revista Brasileira de Biociências*, vol. 9, no. 1, pp. 6-11.
- SALAS, N.E. and DI TADA, I.E., 2001. Geographic distribution: *Scinax nasicus*. *Herpetological Review*, vol. 32, no. 3, pp. 190-191.