

NOTES ON GEOGRAPHIC DISTRIBUTION

Anura, Bufonidae, *Melanophryniscus simplex*: Distribution extension.

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The genus *Melanophryniscus* currently includes 20 species distributed in southern Brazil, southern Bolivia, Paraguay, Uruguay, and central and northern Argentina (Di-Bernardo et al. 2006). To date, nine species of *Melanophryniscus* are known to occur in the state of Rio Grande do Sul, Brazil. Following Caramaschi and Cruz (2002), three species, *M. atroluteus*, *M. dorsalis*, and *M. montevidensis* (see Braun and Braun 1980; Tedros et al. 2001), are included in the *Melanophryniscus stelzneri* species group; five, *M. macrogranulosus*, *M. cambaraensis*, *M. tumifrons*, *M. pachyrhynchus*, and *M. devincenzii* (see Braun and Braun, 1973; 1979; 1980; Caramaschi and Cruz 2002; Zanella et al. 2007), are in the *Melanophryniscus tumifrons* group; and *M. admirabilis* is unassigned to any group (Di-Bernardo et al. 2006).

Here we report the first record of another species, *Melanophryniscus simplex*, for the state of Rio Grande do Sul, Brazil. We found the species in a South Brazilian highlands locality at Aratinga, municipality of São Francisco de Paula, state of Rio Grande do Sul, (29°19'12.6" S, 50°12'13.3" W; ca. 775 m). An individual of *M. simplex* was first observed in August 2002, around 23:00 h (Figure 1), in a temporary stream at the edge of a forest. It is deposited in the collection of the

Departamento de Zoologia da Universidade Federal do Rio Grande do Sul (DZ 02371), Porto Alegre, Rio Grande do Sul. On 7 December 2002, we observed four calling males at the same site, between 22:50 and 23:20 h (air temperature 12 °C; water temperature 14.5 °C). Males were calling from small shallow pools (ca. 100 cm²) of a slow temporary flowing stream. Two males were in the water holding emerging grasses and the others were hidden under shrubs of *Baccharis* sp., which had fallen into the stream. We observed two amplexant pairs close to calling males, one of which deposited eggs during immersions in one of the small shallow pools.

We visited the study area again in October 2005, when rainfall is scarce in the region. Only one individual was found and it was amidst the vegetation at the edge of a temporary stream. We also observed several tadpoles (identified by Diego Baldo) in small pools.

Other anurans sympatric with *Melanophryniscus simplex* are: *Dendropsophus minutus*, *Hypsiboas bischoffi*, *H. leptolineatus* (Hylidae); *Physalaemus gracilis*, *P. lisei* (Leiuperidae); *Eleutherodactylus henselii* (Brachycephalidae); and *Leptodactylus araucaria*, *L. plaumanni* (Leptodactylidae).

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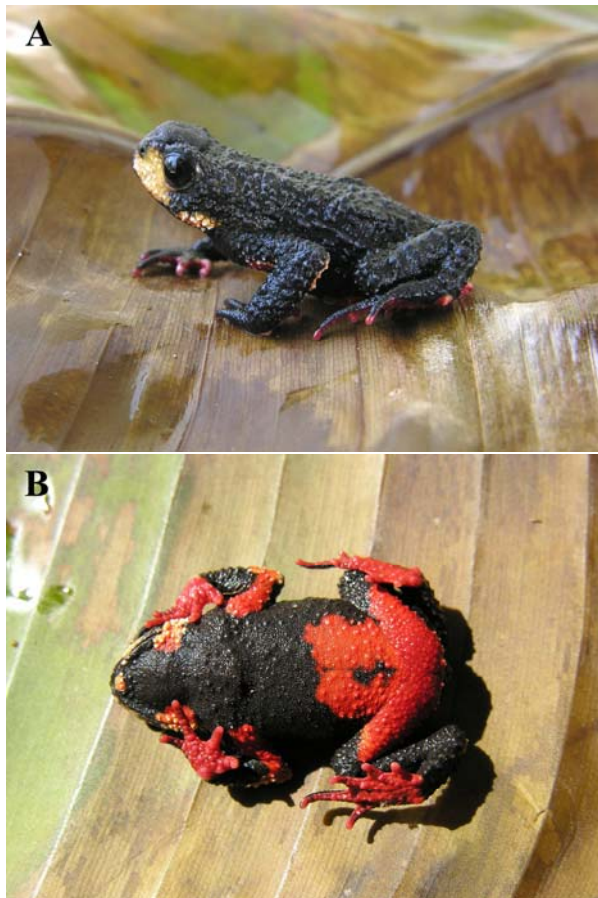


Figure 1. *Melanophryniscus simplex*, adult from Aratinga, municipality of São Francisco de Paula, state of Rio Grande do Sul, Brazil; A, dorsal view; B, ventral view. Photos by Diego Baldo.

Previous reports indicate that *Melanophryniscus* species are diurnal and breed in small and shallow temporary water bodies (lentic or lotic) formed after heavy rains (Langone 1994; Kwet and Di-Bernardo 1999; Kwet and Miranda 2001; Baldo and Basso 2004; Kwet et al. 2005). Our observations suggest that *M. simplex* uses the same habitat for reproduction but has nocturnal activity, not previously described for the genus. Additional data must be collected to determine if the species has diurnal activity as well.

The new record of *M. simplex* extends the species' range at about 180 km southeast from the type-locality (Boca da Serra, municipality of São Joaquim, state of Santa Catarina, Brazil; 28°20' S, 49°38' W) (Caramaschi and Cruz 2002). It is likely that this species has a wider distribution in

the states of Rio Grande do Sul and Santa Catarina, as previous records of *M. tumifrons* from nearby localities probably correspond to *M. simplex* (e.g. Cambará do Sul and Canela, Braun and Braun 1980, and Aparados da Serra National Park, Deiques et al. 2007).

Three species of *Melanophryniscus* were considered threatened in Rio Grande do Sul (*M. cambaraensis*, *M. macrogranulosus*, and *M. dorsalis*) because of habitat destruction for large scale alien plant cultivation, urbanization pressures, and the use of fire in grassland management (Garcia and Vinciprova 2003). Populations of *M. simplex* are probably in the same situation, as *Pinus* crops and the use of fire in pasture management are common in the region.

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