



A new species of *Ischnocnema* (Anura: Eleutherodactylinae) from open areas of the Cerrado Biome in southeastern Brazil

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Abstract

We describe a new species of *Ischnocnema* from the Cerrado (Brazilian savanna) of the Triângulo Mineiro region, state of Minas Gerais. Comparisons were made with those species historically thought to be closely related to *I. juipoca*. Topotype males (14.9–18.7 mm SVL) of the new species are smaller than those of *Ischnocnema juipoca*, *I. octavioi*, *Eleutherodactylus heterodactylus*, *Pristimantis dundeei*, and *P. crepitans*. Different from *E. heterodactylus* and *P. crepitans*, the new species does not have expanded discs on finger III and IV. The new species is different from *P. dundeei* by lacking finger/toe discs and nuptial pads. A marked sexual dimorphism in size is absent in *P. crepitans* and present in the new species. Different from the new species, *I. verrucosa* is coarsely tuberculate on dorsal surfaces. *Ischnocnema verrucosa*, *I. octavioi*, and *P. dundeei* are primarily forest dwellers while the new species is common in open areas. The advertisement call of the new species has more (1.5–2.5 times) pulses and higher (1.3–1.8 times) pulse repetition rate than that of *I. juipoca*.

Key words: Amphibia, Anura, *Ischnocnema* new species, *I. juipoca*, *Eleutherodactylus*, Cerrado Biome, Brazil

Introduction

Based on molecular data, Heinicke *et al.* (2007) have transferred most *Eleutherodactylus* species from southeastern Brazil to the genus *Ischnocnema* and, at present, morphological definitions of most genera of Eleutherodactylinae are lacking. Most Eleutherodactylinae are forest dwellers (Lynch & Duellman 1997; Rodrigues & Duellman 1994; Heyer *et al.* 1990) and exceptions include a few species (about 30) of open areas such as Andean highlands (Lynch & Mayorga 2002; J. D. Lynch pers. comm.); even rarer are those species from lowland (< 1500 m a.s.l.) open areas such as central South American savannas (Cerrado). Padial & De La Riva (2005) and Heyer & Muñoz (1999) cited *Pristimantis dundeei* (Heyer & Muñoz) as an example. For Brazil, Bokermann (1965) described *Pristimantis crepitans* from open areas. *Ischnocnema juipoca* (Sazima & Cardoso) was described from human generated grass-land areas which were originally (> 150 years ago) covered by Atlantic Forest (Sazima & Cardoso 1978) but is also known to occur at forest edges (Cardoso *et al.* 1989; Giaretta *et al.* 1997; Giaretta *et al.* 1999) and Bastos & Pombal (2001) briefly reported on its presence in Brazilian Cerrado. Caramaschi & Canedo (2006) judged appropriate to differentiate *Ischnocnema verrucosa* (Reinhart & Lütken) in relation to *I. juipoca* and *I. octavioi* (Bokermann).

Here we report on an *Ischnocnema* species from the state of Minas Gerais related to, but different from, *I. juipoca*, which we describe as a new species. Comparisons were restricted to those species historically thought to be closely related to *I. juipoca*, now allocated in the genera *Eleutherodactylus*, *Ischnocnema*, and