

## Multiple amplexus on *Phyllomedusa bahiana* (Hylidae: Phyllomedusinae) in the Caatinga Northeast Brazil

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Male anuran amphibians may adopt a number of different reproductive strategies, the most common of which is the mating call, which is found in almost all species (Duellman and Trueb, 1986). However, a number of alternative strategies can be observed in these animals (Howard, 1978), including (i) satellite male; (ii) displacement of rivals; (iii) active searching for females, and (iv) polyandry. The adoption of such strategies in a given species may depend primarily on the timing of reproduction (Wells, 1977), and the availability of receptive females at breeding sites at any given moment (Haddad, Cardoso and Castanho, 1990; Pombal Jr. and Haddad, 2005). This report describes the occurrence of multiple amplexus (polyandry) in *Phyllomedusa bahiana*.

The event was observed at 03.33h on February 26, 2011, at a site (-9.916944°S, -38.698611°W, elevation 444 m, Datum SAD-69) in the caatinga scrublands of the Raso da Catarina Ecological Station in the Brazilian state of Bahia. This conservation unit covers an area of 1501 hectares, and is characterized by a mosaic of different habitats growing on sandy soils at altitudes exceeding 500 m asl.. The local climate is semi-arid (Köppen type Bhs), with scarce and irregular precipitation, high mean temperatures (approximately 27°C), and low relative humidity of the air (Sick, Gonzaga and Teixeira, 1987).

Three male *P. bahiana* were observed engaging in amplexus simultaneously with the same females (Fig. 1) in a bush (*Croton* sp.) located at the margin of a temporary pond. The amplexus appeared to occur continuously until monitoring ceased at 05.00 h

(observations at 15 min intervals), although spawning was not observed. The photographic images are deposited in the herpetology laboratory of Universidade Federal de Sergipe, Brazil.

Similar mating behavior has been observed in five other phyllomedusine species (Pyburn, 1970; Roberts, 1994; Wogel et al., 2005; Prado et al., 2006), although this is the first record for *P. bahiana*. The species presented a relatively prolonged breeding season at the study site, but the multiple amplexus was observed during the rainiest months, when a relatively large number of males (N = 19) were active at the margin of the pond. This suggests that the adoption of an alternative reproductive strategy, i.e., polyandry, was stimulated by increased population density (Pombal Jr. and Haddad, 2005).

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**Figure 1.** Multiple amplexus in *Phyllomedusa bahiana* involving three males (smaller animals below the larger female) at the Raso da Catarina Ecological Station in the Brazilian state of Bahia.