

AMEEREGA PLANIPALEAE: COLOR PATTERN VARIATION AND ITS RELEVANCE TO AMEEREGA TAXONOMY (AMPHIBIA: DENDROBATIDAE)

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Ameerega planipaleae (Morales and Velasco, 1998) is an endemic poison frog (Dendrobatoidea: Dendrobatidae) from the vicinity of Oxapampa (10°39'S, 75°28'W, ca 2100 masl) on the western slope of the Cordillera Yanachaga-Chemillen, Provincia Oxapampa, Departamento Pasco, Peru. Most *Ameerega* species are relatively impoverished in diagnostic characters other than color pattern in life, which have been used commonly to distinguish species. This especially refers to the colors of the dorsum and the presence/absence of bright dorsolateral stripes as well as bright axillary, inguinal or calf spots (e.g. Lötters *et al.* 2007). According to the original description of *A. planipaleae*, the few type specimens in life were dorsally dark brown grading into yellow on head with yellow dorsolateral stripes on each side from posterior part of the head to groin where they turned into a red inguinal spot. The adjacent upper thigh showed one to several additional red spots bordered by black that in part reached to the groin (Morales and Velasco 1998).

During field surveys between June 2007 and April 2008 at the type locality of *A. planipaleae*, we observed color variation. Eleven individuals (including two juveniles) were found by G. Chávez, R. von May and M. Medina-Müller. No specimens were collected as vouchers as this species was relatively rare and has IUCN Red List status 'Critically Endangered' (www.globalamphibians.org, accessed 15 July 2008). Photographs of frogs taken by G. Chávez are deposited in the Museo de Historia Natural San Antonio de Abad in Cusco, Peru (MHNC (F) 402, 403). To the best of our knowledge, they represent the first ever live photographs taken of *A. planipaleae* (Figs. 1-2).

Specimens found by us largely matched the living color description by Morales and Velasco (1998) including ventral color pattern (i.e. black throat, rest largely bluish). However, ten of the specimens lacked red spots on the thigh at all (Fig. 1) and one juvenile had a single spot on the left thigh only. Only four individuals exhibited a black line in the groin bordering the red large inguinal spot; in addition, one specimen had a small orange spot on the left forearm. Four individuals showed variation in the dorsolateral stripe, i.e. turning from yellow to blue just anterior to the red spot of the groin (Fig. 2).

In terms of *Ameerega* taxonomy, we consider our observations as noteworthy because: (i) red spots on the thigh and color of the dorsolateral stripes were suggested as a diagnostic characters of *A. planipaleae* by Morales and Velasco (1998); (ii) they suggest that color pattern variation at the population level can be larger than perhaps expected compared to other *Ameerega* species. The genus is well known for intraspecific color pattern variation; however, between rather than within populations (Lötters *et al.* 2007).

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FIG. 1. Dorsolateral view of *Ameerega planipaleae*, MHNC (F) 402. Photo taken by G. Chávez.

Vista dorsolateral de *Ameerega planipaleae*, MHNC (F) 402. Foto tomada por G. Chávez.



FIG. 2. Ventral view of *Ameerega planipaleae*, MHNC (F) 403. Photo taken by G. Chávez.

Vista ventral de *Ameerega planipaleae*, MHNC (F) 403. Foto tomada por G. Chávez.

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