

The Glass Frogs (Centrolenidae) from the "Río Palenque" Science Center, western Ecuador, with the description of a new species

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Ecuador has the biggest number of amphibian species per unit of area in the world (425 species in 276,840 km²). In the last decade, conservative estimates indicate that at least 26 species of Ecuadorian amphibians have declined or gone extinct. The reasons for this crisis are not clear but have been related to habitat destruction, climate change, and/or fungal disease such as the chytridiomycosis. The Río Palenque Science Center (RPSC) was among the last remnants of tropical rainforest in the western lowlands of Ecuador. Twenty years ago, investigations done by R. McDiarmid and others lead to the discovery of an amazing herpetofauna, including several undescribed species. However, the expansion of the agricultural frontier and transformation of the forest remnants into oil palm and banana plantations destroyed this site. Among the species identified from RPSC were five species of glass frogs (Family Centrolenidae): *Centrolene prosoblepon*, *Cochranella spinosai*, *Hyalinobatrachium fleischmanni*, *Hyalinobatrachium valerioi*, and an undescribed species of the genus *Centrolene* restricted to the RPSC. This research analyzed the morphological characters and natural history of the five glass frogs of RPSC in order to describe the new species of *Centrolene* from RPSC which is critically endangered, if not extinct. The new species is characterized by combination of the following characters: 1) a distinctive coloration with yellow dorsolateral stripes; 2) the presence of an exposed prepollical spine; 3) a humeral spine in the males; and, 4) a unique nuptial pad between the fingers II and I.

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