A NEW SPECIES OF GLASS FROG (ANURA: CENTROLENIDAE) FROM THE VENEZUELAN GUAYANA

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ABSTRACT: A new species of Centrolene is named from the La Escalera Region in Estado Bolívar, Venezuela. The three species known from the Guianan Region of northeastern South America represent a single clade characterized by a white bib-like parietal peritoneum; this clade is referred to as the Centrolene gorzulai species group. Centrolenella auyantepuiana is placed in the synonymy of Centrolene gorzulai.

Key words: Anura; Centrolenidae; Centrolene; Guianan Region, Venezuela

GLASS frogs of the genus Centrolene are most diverse in the Andes of Colombia, Ecuador, and Peru. Only two named species have been recognized in the Guayana Highlands—C. gorzulai from the summit of Auyán-tepui at 1850 m above sea level in Estado Bolívar, Venezuela (Ayarzagüena, 1992) and C. papillahallicum from the Pácaraima Mountains in western Guyana at 600 m above sea level (Noonan and Harvey, 2000). A single specimen of a third species was reported from the La Escalera Region in Estado Bolívar, Venezuela, by Duellman (1997); this specimen was not named at the time because it had not been compared with C. gorzulai. We have now made the necessary comparisons and provide a description of a new species.

MATERIALS AND METHODS

Specimens were preserved in 10% buffered formalin and later transferred to 70% ethanol. Measurements were taken to the nearest 0.1 mm using dial calipers. Webbing formulae follow the methodology of Savage and Heyer (1967) as modified by Myers and Duellman (1982) and Ruiz-Carranza and Lynch (1998). The numerical diagnosis follows the format of Lynch and Duellman (1973) as modified by Ruiz-Carranza and Lynch (1991a). Snout–vent length is abbreviated SVL. Coloration of peritonea was determined from field notes and dissection of preserved specimens.

Abbreviations for museum collections are: EBD = Estación Biológica de Doñana, Sevilla, Spain; KU = Museum of Natural History, University of Kansas; MHNLS = Museo de Historia Natural La Salle, Caracas, Venezuela; and UT = University of Texas at Arlington.

In addition to the holotype of the new species, the following specimens were examined: Centrolene gorzulai—VENEZUELA: Bolívar: Auyán-tepui centro (05° 56’ N, 62° 34’ W, 1850 m), MHNLS 11221 (holotype), MHNLS 12482 (holotype of C. auyantepuiana), EBD 28824–25 (paratypes of C. auyantepuiana). Centrolene papillahallicum—GYANA: Administrative Region 7: Peters Mountain, 3.6 km N Imbaimadai, UT A-52232, A-52237.

DESCRIPTION

Centrolene lema sp. nov.

Holotype.—KU 181128, an adult male, from Km 127 on the road from El Dorado to Santa Elena de Uairén (05° 59’ N, 61° 24’ W, 1250 m), north slope of Sierra de Lema, Estado Bolívar, Venezuela, collected 27 January 1979 by William E. Duellman.

Diagnosis.—Centrolene lema differs from other species in the genus by the following combination of characters: (1) vomerine teeth absent; (2) bones green in life; (3) parietal peritoneum white, covering anterior part of abdomen (heart not visible); pericardial and hepatic peritoneum white; visceral peritoneum clear; (4) dor-