



A new species of fringe-limb frog, genus *Ecnomiohyla* (Anura: Hylidae), from the Atlantic slope of Costa Rica, Central America

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Abstract

A new moderate-sized species of fringe-limb treefrog of the genus *Ecnomiohyla* is described from the Atlantic premontane slope of central Costa Rica. It differs primarily from other members of the genus in having the combination of cephalic and dorsal osteoderms, extensive digital webbing, a pointed prepollical bony projection in adult males, and the fleshy scalloped fringe on the hindlimb continuing across the heel. Additional material of the related but much larger species, *Ecnomiohyla miliaria*, is documented from localities of virtual sympatry for the two taxa. The presence or absence of sexually dimorphic male features: bony humeral projection, prepollical bony projection, and keratinized black spines on the thumb and prepollex are summarized for the ten members of the genus. *Hyla tuberculosa*, recently referred to the genus does not belong to this clade and is regarded as *incertae sedis*.

Key words: Anura, Central America, Costa Rica, Guayacán, *Ecnomiohyla miliaria*, *Ecnomiohyla sukia* **sp. nov.**, new species

Resumen

Describimos una nueva especie de rana del género *Ecnomiohyla* de la vertiente Atlántica central de Costa Rica. Esta nueva especie se diferencia de las otras especies del género por la combinación de las siguientes características: osteodermos cefálicos y dorsales presentes; membranas interdigitales extensas; presencia de una estructura prepólica ósea y protuberante en machos adultos; un pliegue ondulado que se extiende desde el talón hasta la parte distal del dedo V. Reportamos material adicional de la especie relacionada y de mayor tamaño, *Ecnomiohyla miliaria*, de localidades donde aparece en simpatria con la nueva especie. También presentamos un resumen sobre la presencia o ausencia de la estructura prepólica, característica sexualmente dimórfica, para las diez especies del género *Ecnomiohyla*. Además, concluimos que la especie *Hyla tuberculosa*, que fue recientemente incluida en *Ecnomiohyla*, no pertenece a este género y debe ser considerada como *incertae sedis*.

Palabras Claves: América Central, Anura, Costa Rica, *Ecnomiohyla miliaria*, *Ecnomiohyla sukia* **sp. nov.**, especie nueva, Guayacán

Introduction

Among the most distinctive members of the Neotropical anuran fauna are the moderate to very large species of canopy inhabiting frogs of the genus *Ecnomiohyla* Faivovich, Haddad, Garcia, Frost, Campbell, and Wheeler, 2005. Members of the genus, as currently understood following Mendelson *et al.* (2008), are immediately recognizable by having immense hands and feet, large digital disks, scalloped fleshy fringes along the outer margins of the forearm and foot, and enlarged prepollices in adult males. The first species of this group to be recognized was described as *Hypsiboas miliarius* by Cope (“1885”, 1886) from a single moderate sized male (USNM 14193) collected by Dr. John F. Bransford of the Nicaragua Canal Surveying Expedition of 1885 along the Río San Juan between El Castillo and San Juan del Norte, southern Nicaragua