

Studies on the genus *Leptodactylus* (Amphibia: Leptodactylidae). II. Diagnosis and distribution of the *Leptodactylus* of Costa Rica

by

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(Received for publication November 15, 1967)

This paper serves a dual purpose. It is an updating of TAYLOR'S (17, 18) evaluation of the diagnosis and distribution of the *Leptodactylus* of Costa Rica. Many new locality records are available; the specimens at hand indicate re-evaluations of certain species' status, and the tadpoles of all Costa Rican forms are now known. Second, the analysis of intra- and inter-population morphological variation forms part of the groundwork of my projected long-term study on the biosystematics of the genus *Leptodactylus*.

Adults of the genus *Leptodactylus* are distinguished from members of other frog families found in Costa Rica as follows (*Leptodactylus* characters in parentheses): representatives of the families Centrolenidae and Hyliidae usually have a membranous web between the toes, and all phalanges terminate in an expanded disk (no toe webbing, no disks); members of the Bufonidae and Atelopodidae have a fleshy web between the toes, members of the Ranidae have a membranous web between the toes (no toe webbing); the representatives of the Dendrobatidae are distinguished by the presence of pairs of dermal scutes above the expanded finger and toe disks (no scutes, no disks); the representatives of the family Microhylidae of Costa Rica usually have an obvious amount of toe webbing and always have a fleshy fold across the palate (no web, no palatal fold); the monotypic Rhinophrynidae has four toes on each foot (five).

From other genera of leptodactylids, the genus *Leptodactylus* is distinguished as follows: *Erythronops* lacks vomerine teeth, and has a prominent tubercle on the mid-tarsus (vomerine teeth present, no tarsal tubercle); almost

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