

DOP

NUMBER 231  
JUNE 23, 1972

THE STATUS OF *LEPTODACTYLUS PUMILIO*  
BOULENGER (AMPHIBIA, LEPTODACTYLIDAE)  
AND THE DESCRIPTION OF A NEW SPECIES  
OF *LEPTODACTYLUS* FROM ECUADOR

By W. RONALD HEYER

CONTRIBUTIONS IN SCIENCE



NATURAL HISTORY MUSEUM • LOS ANGELES COUNTY

CONTRIBUTIONS IN SCIENCE is a series of miscellaneous technical papers in the fields of Biology, Geology and Anthropology, published at irregular intervals by the Natural History Museum of Los Angeles County. Issues are numbered separately, and numbers run consecutively regardless of subject matter. Number 1 was issued January 23, 1957. The series is available to scientific institutions and scientists on an exchange basis. Copies may also be purchased at a nominal price. Inquiries should be directed to Virginia D. Miller, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, California 90007.

#### INSTRUCTIONS FOR AUTHORS

Manuscripts for CONTRIBUTIONS IN SCIENCE may be in any field of Life or Earth Sciences. Acceptance of papers will be determined by the amount and character of new information. Although priority will be given to manuscripts by staff members, or to papers dealing largely with specimens in the collections of the Museum, other technical papers will be considered. All manuscripts must be recommended for consideration by the curator in charge of the proper section or by the editorial board. Manuscripts must conform to those specifications listed below and will be examined for suitability by an Editorial Committee including review by competent specialists outside the Museum.

Authors proposing new taxa in a CONTRIBUTIONS IN SCIENCE must indicate that the primary type has become the property of a scientific institution of their choice and cited by name.

MANUSCRIPT FORM.—(1) The 1964 AIBS Style Manual for Biological Journals is to be followed in preparation of copy. (2) Double space entire manuscript. (3) Footnotes should be avoided if possible. Acknowledgments as footnotes will not be accepted. (4) Place all tables on separate pages. (5) Figure legends and unavoidable footnotes must be typed on separate sheets. Several of one kind may be placed on a sheet. (6) An abstract must be included for all papers. This will be published at the head of each paper. (7) A Spanish summary is required for all manuscripts dealing with Latin American subjects. Summaries in other languages are not required but are strongly recommended. Summaries will be published at the end of the paper. (8) A diagnosis must accompany any newly proposed taxon. (9) Submit two copies of manuscript.

ILLUSTRATIONS.—All illustrations, including maps and photographs, will be referred to as figures. All illustrations should be of sufficient clarity and in the proper proportions for reduction to CONTRIBUTIONS page size. Consult the 1964 AIBS Style Manual for Biological Journals in preparing illustration and legend copy for style. Submit only illustrations made with permanent ink and glossy photographic prints of good contrast. Original illustrations and art work will be returned after the manuscript has been published.

PROOF.—Authors will be sent galley proof which should be corrected and returned promptly. Changes in the manuscript after galley proof will be billed to the author. Unless otherwise requested, page proof also will be sent to the author. One hundred copies of each paper will be given free to each author or divided equally among multiple authors. Orders for additional copies must be sent to the Editor at the time corrected galley proof is returned. Appropriate order forms will be included with the galley proof.

VIRGINIA D. MILLER  
*Editor*

THE STATUS OF *LEPTODACTYLUS PUMILIO* BOULENGER  
(AMPHIBIA, LEPTODACTYLIDAE) AND THE DESCRIPTION OF A  
NEW SPECIES OF *LEPTODACTYLUS* FROM ECUADOR<sup>1</sup>

By W. RONALD HEYER<sup>2</sup>

ABSTRACT: *Leptodactylus pumilio* Boulenger, 1920, is shown to be a junior synonym of *Eleutherodactylus parvus* (Girard). The Pentadactylus species group of *Leptodactylus* is redefined and a new species of this group is described from Amazonian Ecuador. The presence of dorsolateral folds combined with the uniformly black coloration of the posterior surface of the thigh distinguish the new species from the other members of the group. The karyotype of the new species has a diploid number of 22 bi-armed chromosomes with no secondary constrictions. A key to the species of the Pentadactylus group is provided.

INTRODUCTION

A preliminary analysis of a cross sectional representation of the genus *Leptodactylus* indicated that the species could be grouped into five species assemblages (Heyer, 1968). I am presently analyzing each of these groups in detail (e.g., Heyer, 1970). As in all long-term projects, data are gathered continuously on all groups. The purpose of this paper is to report two findings that are outside of my current main project. First, examination of the holotype of *Leptodactylus pumilio* indicates a nomenclatural change is necessary. Second, a new species of the Pentadactylus group is described from specimens recently collected in Amazonian Ecuador.

ACKNOWLEDGMENTS

Several people have helped in the research and preparation of this report. Alice G. C. Grandison was a gracious hostess during my brief visit to the British Museum (Natural History) (BMNH). Philip A. Silverstone, Natural History Museum of Los Angeles County (LACM), kindly photographed the type of *Leptodactylus pumilio*. Keith A. Berven, Pacific Lutheran University, helped with the field work in Ecuador. Don Johnson, Director of the Summer Institute of Linguistics in Ecuador, allowed us to undertake field work at their institute base camp of Limoncocha during the summer of 1971. John W.

<sup>1</sup>EDITORIAL COMMITTEE FOR THIS CONTRIBUTION

Robert L. Bezy  
Roy W. McDiarmid  
Ian R. Straughan

<sup>2</sup>Research Associate, Section of Herpetology, Natural History Museum of Los Angeles County; and Biology Department, Pacific Lutheran University, Tacoma, Washington 98447.