



<http://dx.doi.org/10.11646/zootaxa.3994.2.2>

<http://zoobank.org/urn:lsid:zoobank.org:pub:41A8AD52-D7E1-4242-87D1-C7819433FA22>

Revision of the genus *Lepidoblepharis* (Reptilia: Squamata: Sphaerodactylidae) in Central America, with the description of three new species

ABEL BATISTA^{1,2,5,6}, MARCOS PONCE⁵, MILAN VESELY⁴, KONRAD MEBERT³, ANDREAS HERTZ^{1,2}, GUNTHER KÖHLER¹, ARCADIO CARRIZO⁵ & SEBASTIAN LOTZKAT^{1,2}

¹Senckenberg Forschungsinstitut und Naturmuseum Frankfurt, Senckenberganlage 25, 60325 Frankfurt am Main, Germany

²Johann Wolfgang Goethe-University, Institute for Ecology, Evolution & Diversity, Biologikum, Building C, Max-von-Laue-Straße 13, 60438 Frankfurt am Main, Germany

³Section of Conservation Biology, Department of Environmental Sciences, University of Basel, St. Johans-Vorstadt 10, CH-4056 Basel, Switzerland

⁴Department of Zoology, Faculty of Natural Sciences, Palacký University, 17. Listopadu 50, 77146 Olomouc, Czech Republic

⁵Universidad Autónoma de Chiriquí, David, Panama

⁶Corresponding autor. E-mail: abelbatista@hotmail.com

Table of contents

Abstract	188
Introduction	189
Material and methods	189
Results	190
<i>Lepidoblepharis emberawoundule</i> sp. nov.	195
<i>Lepidoblepharis rufigularis</i> sp. nov.	198
<i>Lepidoblepharis victormartinezi</i> sp. nov.	202
Discussion	205
Key to the species of <i>Lepidoblepharis</i> in Panama	213
Acknowledgements	214
References	214
Appendix I	218
Appendix II	219
Appendix III	221
Appendix IV	222
Appendix V	222
Appendix VI	222

Abstract

Based on morphological and molecular data, we describe three new species of the genus *Lepidoblepharis* with granular dorsals from Panama (*Lepidoblepharis emberawoundule* sp. nov., *Lepidoblepharis rufigularis* sp. nov., and *Lepidoblepharis victormartinezi* sp. nov.). The results of our molecular analyses confirm the existence of five deeply differentiated genealogical lineages among Panamanian *Lepidoblepharis*. We present detailed descriptions of their morphology, including some new valuable scalation characters (ventral and subfemoral escutcheon) and hemipenes, as well as comparisons with the other two species of the genus known to occur in Panama (*L. sanctaemartae* and *L. xanthostigma*) and their South American congeners. Last, we provide an updated identification key for the genus *Lepidoblepharis* in Central America.

Key words: Biogeography, Central America, integrative taxonomy, *Lepidoblepharis*, Sphaerodactylidae, new species, Panama, taxonomy