



<http://dx.doi.org/10.11646/zootaxa.3710.5.2>

<http://zoobank.org/urn:lsid:zoobank.org:pub:320B08B5-CCB5-41C7-8120-BE111FE71246>

## A new species of *Lygodactylus* (Squamata: Gekkonidae) endemic to Mount Namuli, an isolated ‘sky island’ of northern Mozambique

DANIEL M. PORTIK<sup>1,6</sup>, SCOTT L. TRAVERS<sup>2,3</sup>, AARON M. BAUER<sup>2</sup> & WILLIAM R. BRANCH<sup>4,5</sup>

<sup>1</sup>Museum of Vertebrate Zoology and Department of Integrative Biology, 3101 Valley Life Sciences Building, University of California, Berkeley, California 94720, United States

<sup>2</sup>Department of Biology, Villanova University, 800 Lancaster Avenue, Villanova, Pennsylvania 19085, United States

<sup>3</sup>Biodiversity Institute and Department of Ecology and Evolutionary Biology, University of Kansas, 1345 Jayhawk Boulevard, Lawrence, Kansas 66045, United States

<sup>4</sup>Port Elizabeth Museum, P.O. Box 13147, Humewood 6013, South Africa

<sup>5</sup>Department of Zoology, P.O. Box 77000, Nelson Mandela Metropolitan University, Port Elizabeth 6031, South Africa

<sup>6</sup>Corresponding author. E-mail: [daniel.portik@berkeley.edu](mailto:daniel.portik@berkeley.edu)

### Abstract

A new species of high elevation dwarf gecko (Gekkonidae: *Lygodactylus*) is described from Mount Namuli, northern Mozambique. This new species is distinguished from other closely related species in the genus *Lygodactylus* by body size, scalation, and color, and is genetically divergent from congeners. The species is most similar genetically and morphologically to *Lygodactylus rex*, the King Dwarf Gecko, which is endemic to Mount Mulanje, Malawi. Mount Mulanje and Mount Namuli are two of several understudied inselbergs forming the southern limit of the Afromontane archipelago in Malawi and Mozambique. The sister taxon relationship of the dwarf gecko species on Mount Mulanje and Mount Namuli illustrates the historical biogeographic connections between these inselbergs, a pattern which is emerging with continued work in this region. The discovery of this new species adds to a growing list of species unique to Mount Namuli, and further establishes this montane region as a conservation priority.

**Key words:** Gekkonidae, *Lygodactylus*, Mt. Namuli, Mozambique, dwarf gecko

### Introduction

The fauna of northern Mozambique remains poorly studied, despite being a major biogeographic link between southern Africa and East Africa. This lack of study can be attributed to limited infrastructure and an extended civil war (1977–1992), making field research largely unfeasible. This paucity of knowledge is especially relevant for the herpetofauna of the region, as the provinces of Cabo Delgado, Nampula, Niassa, and Zambézia lack even preliminary herpetological surveys (Poynton & Broadley 1991; Schneider *et al.* 2005). Branch *et al.* 2005a conducted a critically needed survey in Niassa Game Reserve, at the northern border of Mozambique, in Niassa Province (Fig. 1). Whereas much of the reserve is low elevation woodland or savannah, the Serra Mecula Plateau sits between 800–1000 m elevation, with granite peaks rising to 1442 m elevation, and supports several unique habitats including evergreen moist forest, an element common to Afromontane forests. Here Branch *et al.* 2005a recorded the highest diversity of reptiles occurring in Mozambique, discovered a new species of cordylid lizard (Branch *et al.* 2005b), identified many taxa of equivocal taxonomic status, and recognized faunal elements linked to other Afromontane isolates in Zimbabwe (Eastern Highlands), Malawi (Mt. Mulanje), and Tanzania (Eastern Arc Mountains). This study initially highlighted the role of inselbergs in supporting high herpetological diversity in Mozambique and demonstrated the need to sample additional montane regions further south.

Northern and central Mozambique are dotted with montane inselbergs similar to the Serra Mecula Plateau, many of which have not been studied. Several of these inselbergs, including Mt. Chiperone, Mt. Inago, Mt. Mabu, and Mt. Namuli, occur in Zambézia Province, Mozambique, adjacent to Mt. Mulanje, Malawi (Fig. 1). These four