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Two additional new species of *Sphaerodactylus* (Reptilia, Squamata, Gekkonoidea, Sphaerodactylidae) from the Honduran Bay Islands

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Abstract

Recently, we described two new species of geckos of the genus *Sphaerodactylus* from the Bay Islands of Honduras. After further collections, and morphological and molecular analyses, we describe two additional species here. One of the new species belongs to the *S. millepunctatus* species group, which is centered in Middle America. The other new species belongs to the *S. copei* species group, which is centered in the Greater Antilles.

Key words: Bay Islands, Honduras, *Sphaerodactylus poindexteri* **sp. nov.**, *Sphaerodactylus alphus* **sp. nov.**, morphology, mtDNA, 12S, cytochrome b

Introduction

We (McCranie & Hedges 2012) recently provided a review of the *Sphaerodactylus millepunctatus* complex in Honduras based on combined morphological and molecular data. Those authors also relied heavily on the thorough systematic review by Harris & Kluge (1984) of the *S. millepunctatus* complex in Mexico and Central America. McCranie & Hedges (2012) described new species of that complex from Roatán (*S. leonardovaldesi*) and Guanaja (*S. guanajae*) islands in the Honduran Bay Islands. Molecular data were not available for the Utila Island population of the *S. millepunctatus* complex, which at time was known only from four specimens in the SMF collection. Consequently, the morphology of that population also had not been thoroughly studied.

Parker (1940) described *Sphaerodactylus rosaurae* based on one adult male "collected on Helene Island [= Santa Elena, Roatán Island], Bay Islands, Honduras." Santa Elena is not actually an island, but represents the eastern end of Roatán Island that is separated from the remaining portion of Roatán by mangrove swamps and a channel. Parker (1940: 264) considered his new species to be allied with Antillean geckos he called the "*anthracinus*, *fantasticus* group of species." Wilson & Hahn (1973) reported *S. rosaurae* from Guanaja Island (based on two specimens), a few additional specimens from Roatán, and two specimens from Utila Island. Unfortunately, all specimens placed in the LSUMZ collections by those two authors were destroyed when the alcohol in their container evaporated (McCranie personal observation January 2009).

Wilson & Hahn (1973) described the history of the study of the *Sphaerodactylus anthracinus* and *S. fantasticus* groups and noted color pattern differences of a single adult female *S. rosaurae* from Guanaja Island compared to those from Roatán and Utila islands. Wilson & Hahn (1973) concluded that *S. rosaurae* closely resembles *S. copei* Steindachner of the West Indies and mentioned the possibility that *S. rosaurae* was conspecific with *S. copei*. Schwartz (1975) and Schwartz & Garrido (1981) studied the *Sphaerodactylus* species allied with *S. copei* and concluded that *S. rosaurae* was a species distinct from *S. copei*, but was a member of the *S. copei* species group.

During September 2012, McCranie visited Utila Island and collected three additional adults of the *Sphaerodactylus millepunctatus* species group and two adults and a single juvenile of *S. rosaurae*. Also, during November 2011 and September 2012, McCranie collected additional specimens of *S. rosaurae* from Guanaja and

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