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## The genus *Loxosceles* Heineken & Lowe (Araneae: Sicariidae) in Cuba and Hispaniola, West Indies

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### Abstract

The three known species of the genus *Loxosceles* Heineken & Lowe from Cuba and Hispaniola are revised and two new species, *Loxosceles maisi* sp. nov. and *Loxosceles mogote* sp. nov., are described from the eastern region of Cuba. These new species are included in the *reclusa* group, and are considered close to *Loxosceles taino* Gertsch & Ennik as they have a greatly thickened male palpal tibia, a projecting cymbium, and large receptacles in the female genitalia. The distribution ranges of the known Cuban and Hispaniolan species are extended.

**Key words:** taxonomy, morphology, haplogynae, new species, Caribbean

### Introduction

The genus *Loxosceles* Heineken & Lowe, 1832 currently includes 115 species widely distributed in America, Europe, Asia, Africa and Australia (Platnick, 2013). Seven species have been reported from the West Indies, but just three (*L. caribbaea* Gertsch, 1958, *L. cubana* Gertsch, 1958, *L. taino* Gertsch & Ennik, 1983) occur in Cuba and Hispaniola, the largest and most diverse islands of the Caribbean.

The Caribbean members of the genus *Loxosceles* have not been studied since the revision of Gertsch & Ennik (1983). Nevertheless, considering the high number of endemic species occurring in this region, a biodiversity hotspot (Reid, 1998; Mittermeier *et al.* 1998; Myers *et al.* 2000), we suspect that this genus might be more diverse than it appears. In this study, we describe two new eastern Cuban endemic species: *L. mogote* sp. nov., from caves in the north of the Santiago de Cuba province, and *L. maisi* sp. nov., from a semiarid area in the southeaster of the Guantanamo province. The latter region is among the driest areas of this island and is characterized by a high number of endemic spider species (Alayón, 2006).

These new species are included in the *reclusa* group proposed by Gertsch (1958) due to the prolatally developed palpal tarsus in males. Both are considered close to *Loxosceles taino*, from Hispaniola, as they have a greatly thickened male palpal tibia, a projecting cymbium, and large receptacles in the female genitalia.

### Material and methods

Specimens were studied in 70% ethanol, all morphological observations and measurements were made using a Leica MZ12 stereomicroscope. Multifocal photos were taken with a Leica DFC500 digital camera attached to a Leica MZ16A stereomicroscope, using Leica Application Suite ver. 3.3 software. All figures were edited using Adobe Photoshop CS3 ver.10.0. Soft tissues were digested during 72 hours with ULTRAENZIME enzymatic eye lens cleaner, diluted with distilled water. Descriptions follow Gertsch & Ennik (1983). All measurements are in millimeters, made using a microscope micrometer eyepiece. The scale line in all figures is 1 mm. The material examined is deposited in the Instituto Butantan, São Paulo, Brazil (IBSP, D.M. Barros Battesti) and the Centro Oriental de Ecosistemas y Biodiversidad, Santiago de Cuba, Cuba (BSC, B. Lauranzon).

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