

A NEW GENUS OF LONG-LEGGED CRICKETS FROM THE FORESTS  
OF EASTERN BRAZIL (ORTHOPTERA: GRYLLOIDEA: PHALANGOPSIDAE)

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INTRODUCTION

*Guabamima*, a new genus of crickets belonging to the family Phalangopsidae is described from the forests of Eastern Brazil. *Guabamima saiva* sp.n., the type-species of the genus was collected in the Paraíba river valley, South Rio de Janeiro State. Another species *G. lordelloi* is described from Mucuri, extreme South of the State of Bahia.

Due to characteristics of the phallic complex, *Guabamima* is placed in DESUTTER'S (1990) group C for the sub-family Luzarinae.

The numbers in **Figure 1** refer to the following structures: 1) main lobe of epiphallus; 2) epiphallic spine; 3) epiphallic parameters; 4) rami; 5) ectophallic apodeme; 6) endophallic sclerite. Terminology after DESUTTER (1987, 1988, 1990).

. *Guabamima*, gen. n.  
(Figures 1A to K; 2A to F)

Type species: *G. saiva*, n.sp.

**Diagnosis:** dorsal field of male right forewing coriaceous, no more than 2.0 times longer than pronotum, without any specialized area; stridulatory vein present; inferior face of both forewings with a densely pilose area along the distal margins; lateral fields of both wings low, coriaceous, bearing only one or two longitudinal

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veins; dorsal field of male left forewing a delicate, transparent, membrane on its median area and slightly pigmented close to the borders. Female forewings reduced to a very small scale. Metanotal glands absent. Foretibia with one inner and one outer tympanum. Median inner apical spur of hindtibia longer than superior, inferior the smallest. Phallic complex: main lobe of epiphallus with a pair of lateral spines; epilhallic parameres completely uncovered (Fig. 1F, G, H; 2A, B, C).

**Ethymology:** the name of the genus is a composition of two words from the native Brazilian Tupi-Guarani language: "guab", which means hair and "mima", meaning to hide. The name is given in allusion to the dense pilosity, hidden under the forewings.

. *Guabamima saiva*, sp. n.  
(Figure 1A to K)

**Recognition.** Males: size medium, general dorsal coloration dark brown with yellowish-brown legs; ventral surface of abdomen pale yellow. Top of head dark brown with yellowish spots on the occiput area: inferior portion of gena yellowish, superior portion medium brown, separated from the also yellowish frons by a broad medium brown band which runs from beneath each eye to the mandibles; central portion of frons with some longitudinal medium brown pigmentation; clypeus whitish to pale yellow; antenna dark brown with isolated white annuli along its length; maxillary palpi light to median brown on the lateral surfaces of each joint but white on superior and inferior surfaces, apical truncation occupying less than 1/3 the length of 5<sup>th</sup> joint. Pronotum dark brown, drop-shaped markings medium brown. Forewings dark brown (except for the dorsal field of left wing) with a distinctive yellow margin which is broader along the distal border of the wing; forewing length/pronotum length = more than 1.5; file with ca. 21 teeth. Fore and middlefemora yellowish; fore and middletibia light brown, the latter slightly more conspicuously banded; hindfemora long, yellowish, with

weak oblique light brown stripes on its anterior portion and medium to dark brown towards the apex; hindtibia dark to very dark brown. Phallic complex as in Figure 1F, G and H; epiphallic spine relatively short.

**Females:** color patterns similar to those of males with the following differences — top of head light brown or yellowish — brown, with medium brown markings in some specimens. Dorsal surface of abdomen spotted medium and yellowish-brown. Hindfemora yellowish anteriorly and medium to dark brown towards the apex, with a poorly defined longitudinal light brown bar on its upper outer face. Ovipositor long. Copulatory papilla without longitudinal sulcation (Fig. 1I, J, K).

**Mean measurements** (mm, males/females, N = 10 of each sex) body length- 13.92/18.54; pronotum length- 2.66/2.89; forewing length- 4.92; head width- 3.54/3.64; interocular space- 1.83/1.77; pronotum width- 4.21/4.68; forewing width- 3.67; hindfemora length- 15.69/16.01; hindtibia length- 16.9/17.21; ovipositor length- 16.14.

**Material examined.** Brazil, State of Rio de Janeiro: Rio Claro, 2 km E. of the State of São Paulo order, 01-ii-1990, F.A.G. MELLO, col. (13 male, 13 female paratypes); Rezende, distrito de Penedo, Fazenda Saiva, 01-ii-1990, F.A.G. MELLO - A. TOSTERUD, col. (*Holotype male*, 5 male, 10 female paratypes). 1 male and 1 female paratypes from each locality will be sent to the Academy of Natural Sciences of Philadelphia and to the Museum National d'Histoire Naturelle, Paris. *Holotype male* and remaining paratypes are kept at the Museu de Zoologia da Universidade de São Paulo (MZUSP).

**Note:** *G. saiva* is also present in the lower, forested portions of the Itatiaia National Park which is very close to type locality.

. *Guabamima lordelloi*, sp. n.  
(Figure 2A to F)

**Recognition.** Holotype male: quite similar to males

of the preceding species with the following differences - much larger size; forewing length/pronotum length = 1.31; file with 23 teeth. Foretibia more conspicuously banded. Phallic complex as in Figure 2A, B, C; epiphallic spine long.

**Females:** similar to females of the preceding species but slightly larger. Copulatory papilla more strongly depressed, heart-shaped, bearing several longitudinal sulci (Fig. 2D, E, F).

**Mean measurements** (mm, male/female, N=1 male, 4 females): body length- 18.86/19.37; pronotum length- 3.61/3.04; forewing length- 4.75; head width- 4.02/4.04; interocular space - 2.02/2.02; pronotum width- 5.67/5.57; forewing width - 4.56; hindfemora length- 19.87/18.86; hindtibia length- 21.14/19.56; ovipositor length- 15.82.

**Material examined.** Brazil, Bahia, Mucuri, Fazenda Farol, 14-16-vii-1989, F.A.G. MELLO, col. (*Holotype male*, 5 female paratypes, one of which is completely damaged). All material kept at the Museu de Zoologia da Universidade de São Paulo (MZUSP).

The present species is named in honor of the distinguished Brazilian nematologist, Dr. Luiz Gonzaga E. Loredello.

#### ABSTRACT

A new genus with two species of crickets belonging to the family Phalangopsidae is described from the forests of Eastern Brazil

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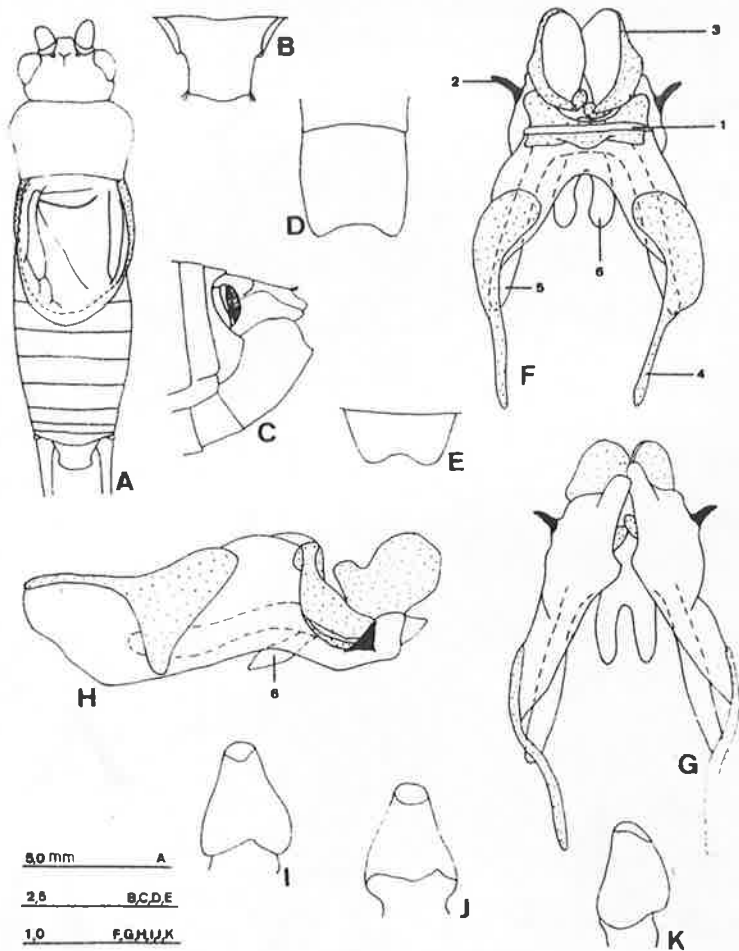


Figure 1. *Guabamima saiva*, sp. n., A - dorsal view of male; B - male supra-anal plate; C - male terminalia, lateral; D - male subgenital plate; E - female subgenital plate; F, G and H, phallic complex in dorsal, ventral and lateral views, respectively; I, J and K, female copulatory papilla dorsal, ventral and lateral.

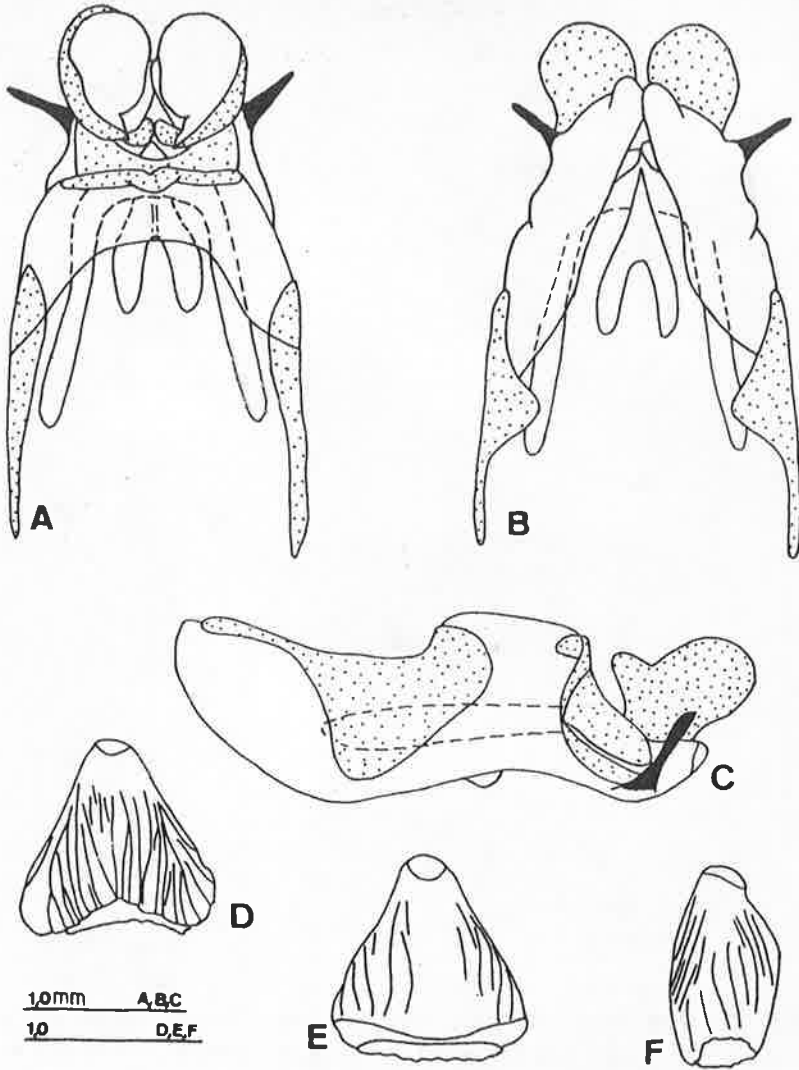


Figure 2. *Guabamima lordelloi*, sp. n. A, B and C, phallic complex in dorsal, ventral and lateral views, respectively; D, E and F, female copulatory papilla, dorsal, ventral and lateral.

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Key words: Orthoptera, Grylloidea, Phalangopsidae, cricket, new genus.

Palavras chave: Orthoptera, Phalangopsidae, grilo, gênero novo.

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