

A NEW GENUS OF PHALANGOPSID CRICKETS FROM SOUTH AMERICA
(ORTHOPTERA: GRYLLOIDEA: PHALANGOPSIDAE)

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INTRODUCTION

In a recent trip to the Serra dos Órgãos region (Rio de Janeiro, Brazil), two new species of crickets belonging to the family Phalangopsidae were collected on the forest ground. Both species are placed in a single genus, here named *Endophallusia* in allusion to the great development of the endophallus.

The new genus seems to be closely related to *Eidmanacris* (CHOPARD, 1956) on basis of body morphology and phallic structure and, according to DESUTTER'S (1988) classification, it belongs to the tribe Luzarini of the subfamily Phalangopsinae.

The numbers of the phallic elements on figures 1 and 2 refer to the following structures: 1, median lobe of epiphallus; 2, lateral lobe of epiphallus; 3, epiphallic paramere; 4, ectophallic apodeme; 5, ectophallic arch; 6, endophallic sclerite; 7, endophallic apodeme. (The terminology follows DESUTTER (1987, 1988)).

Endophallusia, new genus

Type species: *E. minuta* n.sp.

Diagnosis: - body pubescent, bearing short setae; dorsal surface of abdomen with blackish dots; head small, narrower than frontal margin of pronotum, bearing 3 blackish longitudinal stripes, one in front and one beneath each eye; maxillary palpi relatively short, 5th Joint enlarged distally (cf. fig. 2 A); male forewings

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lobiform, shorter than pronotum (sometimes concealed under it), without any specialized vein; legs relatively short for the group, mainly the hind ones; foretibiae without tympana; apical spur of hindtibiae as follows: internal ones - superior and median subequal in length, inferior very small; external ones - superior the longest, median intermediate in size, inferior very small; phallic complex: lateral lobes of epiphallus well developed; endophallus long to extremely long; distal tip of endophallic sclerite projected well beyond the distal limit of the epiphallic parameres (surpassing quite much the ectophallic arch) (cf. figs 1 C, D, E; 2 D, E, F); female apterous.

The following characteristics, present in *Eidmanacris* (CHOPARD, 1956) differentiates it from the new genus: - body velvety, covered by micropile; maxillary palpi long and thin (cf. fig 1 J); very long legs; median apical spur of hindtibiae the longest on both sides; phallic complex: endophallus not as long as in *Endophallusia*; distal tip of endophallic sclerite not reaching distal limit of epiphallic parameres (surpassing very little the ectophallic arch (cf. fig. 1 G, H, I).

Endophallusia minuta n.sp.
(fig. 1 A to F)

♂. Size small, marbled brown. Last joint of maxillary palpi white. Internal margins of forewings touching each other (fig. 1 A). Supra-anal and subgenital plates as in figure 1 B, F. Phallic complex as in figure 1 C, D, E.

♀. Similar to ♂.

Mean measurements (mm, ♂/♀): body length, 10.8/11.7; head width, 2.2/2.6; pronotum length, 2.2/2.4; pronotum width, 2.4/3.3; forewings length, 1.2; hindfemora length 8.2/9.0; hindtibiae length, 8.1/9.1; ovipositor length, 9.2.

Material examined. Brazil, Rio de Janeiro, Teresópolis, Fazenda Revolta, 31/vii/1989 (holotype σ^7 , 5 σ^7 , 5 f^0 , paratypes), F.A.G. MELLO, col.. A pair of paratypes (1 σ^7 , 1 f^0) sent to the Academy of Natural Sciences of Philadelphia and Museum National d'Histoire Naturelle, Paris. Holotype σ^7 and remaining paratypes deposited at the Museu de Zoologia da Universidade de São Paulo.

Endophallusia endophallica n.sp.

(fig. 2 A to F)

σ^7 . Size larger. 5th joint of maxillary palpi white. Forewings hidden by pronotum, their internal margins not touching each other. Dorsum of abdomen marbled, yellowish-brown; lateral sides of abdomen dark brown with yellowish marks. Supra-anal and subgenital plates as in figure 2 B, C. Phallic complex with an extremely long endophallus which occupies a large portion of the abdomen (fig. 2 D, E, F).

f^0 . Similar to σ^7 .

Mean measurements (mm, σ^7/f^0): body length, 16.3/16.4; head width, 3.0/3.3; pronotum length, 3.2/3.4; pronotum width, 4.4/4.7; hindfemora length, 13.7/14.5; hindtibiae length, 14.8/14.6; ovipositor length, 12.7.

Material examined. Brazil, Rio de Janeiro, Teresópolis, Fazenda Revolta, 31/vii/1989 (holotype σ^7 , 2 σ^7 , 2 f^0 paratypes), F.A.G. MELLO, col.. All specimens deposited at the Museu de Zoologia da Universidade de São Paulo.

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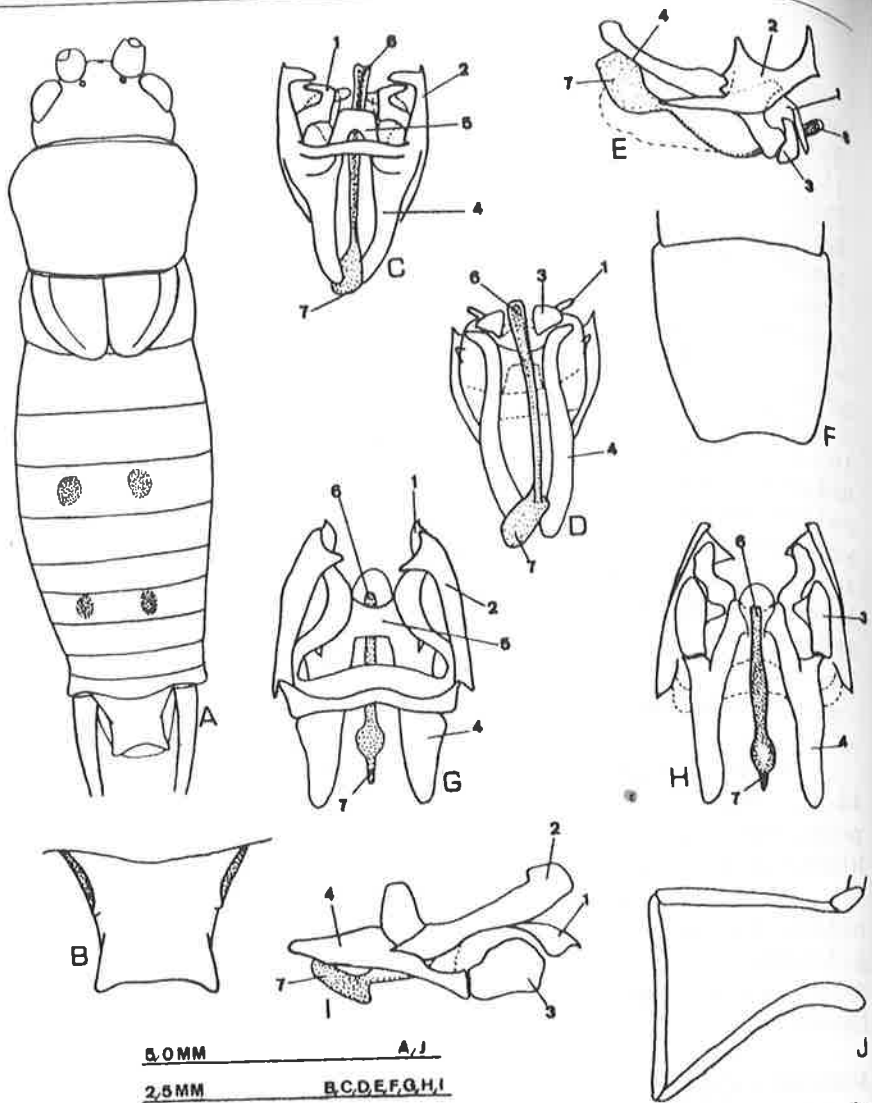


Figura 1 A - F. *Endophallusia minuta*, n. sp: A, male dorsal outline; B, male supra-anal plate; C, D, E, phallic complex in dorsal, ventral and lateral views respectively; F, male subgenital plate. G - J, *Eidmanacris* sp: G, H, I, phallic complex; J, male maxillary palpi.

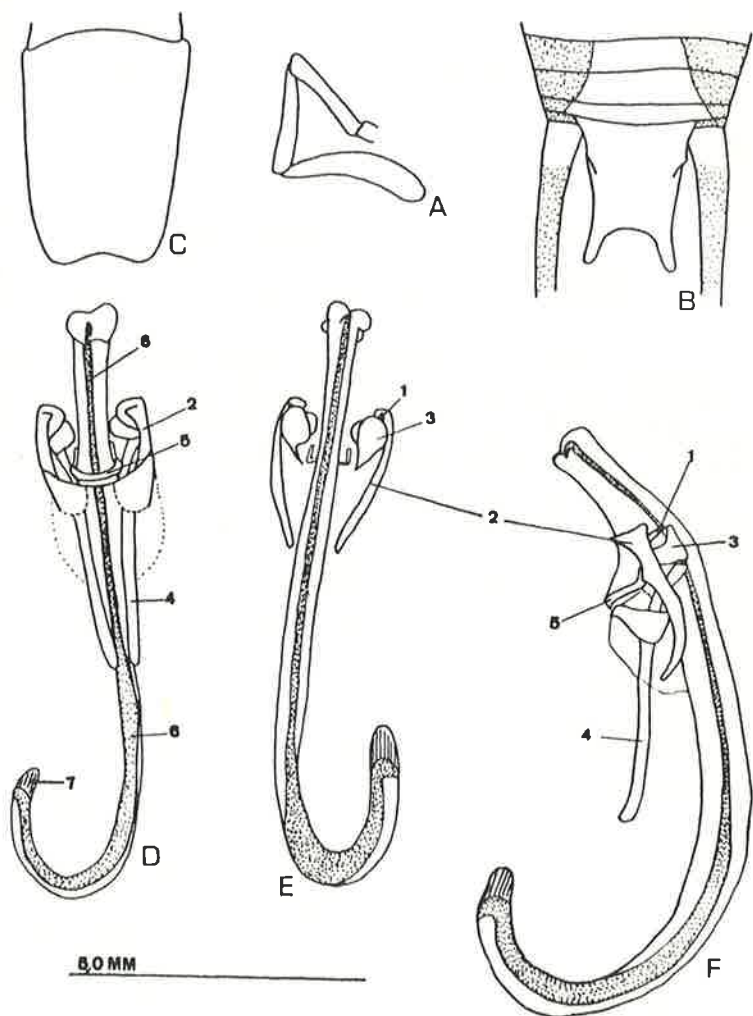


Figura 2 A - F. *Endophallusia endophallica*, n.sp: A, male maxillary palpi; B, male distal abdominal segments; C, male subgenital plate; D, E, F, phallic complex in dorsal, ventral and lateral views respectively.

SUMMARY

A new genus and two species of phalangopsid crickets are described from the Brazilian Atlantic Forest.

LITERATURE CITED

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