

Proceedings of the Zoological Institute RAS Vol. 314, No. 3, 2010, pp. 318–322

УДК 595.729

A REVIEW OF THE GENUS *PROLANDREVA* GOROCHOV (ORTHOPTERA: GRYLLIDAE: LANDREVINAE)

A.V. Gorochov

Zoological Institute of the Russian Academy of Sciences, Universitetskaya Emb. 1, 199034 Saint Petersburg, Russia; e-mail: orthopt@zin.ru

ABSTRACT

The genus *Prolandreva* is briefly redescribed. Its species are reviewed; a new species from South Africa (*P. mirabilis* sp. nov.) and a new subspecies from Swaziland (*P. aenigmatosa borealis* subsp. nov.) are described. **Key words:** descriptions, Gryllidae, Landrevinae, new taxa, Orthoptera, *Prolandreva*

ОБЗОР РОДА *PROLANDREVA* GOROCHOV (ORTHOPTERA: GRYLLIDAE: LANDREVINAE)

А.В. Горохов

Зоологический институт Российской академии наук, Университетская наб. 1, 199034 Санкт-Петербург, Россия; e-mail: orthopt@zin.ru

РЕЗЮМЕ

Кратко переописывается род *Prolandreva*. Его виды ревизуются; один новый вид из Южной Африки (*P. mirabilis* sp. nov.) и один новый подвид из Свазиленда (*P. aenigmatosa borealis* subsp. nov.) описываются. **Ключевые слова:** описания, Gryllidae, Landrevinae, новые таксоны, Orthoptera, *Prolandreva*

INTRODUCTION

The genus *Prolandreva* was described by Gorochov (2005) for a single male from South Africa (Eastern Cape). *Prolandreva* is very different from the other genera of Landrevinae; in this connection, the special tribe Prolandrevini was suggested in the paper cited above. This genus was monotypical and without known female up to now. At present a new species from South Africa (Kwazulu-Natal) and a new subspecies from Swaziland were collected; the material studied includes males and females of *Prolandreva*. These finds allow me to revise of this genus.

MATERIAL AND METHODS

The specimens described here were collected at night in the forest stations on branches of bushes and small trees and on trunks of more large trees (on bark) not far from soil. So, their habits are more or less similar to those of the tribe Landrevini Saussure, 1878.

The material considered here (including types) are deposited at the Zoological Institute of the Russian Academy of Sciences, Saint Petersburg. The specimens are dry and pinned; the preparations of male genitalia are worked up by KOH solution and deposited in glycerin. The photographs were made by Leica M216.

SYSTEMATICS

Family Gryllidae Laicharting, 1781 Subfamily Landrevinae Saussure, 1878 Tribe Prolandrevini Gorochov, 2005 Genus *Prolandreva* Gorochov, 2005 (Figs 1–20)

Type species. *Prolandreva aenigmatosa* Gorochov, 2005 (South Africa: Eastern Cape), by original designation.

Diagnosis. Head dorsoventrally depressed, more or less prognatous in male and almost hypognatous in female; in male, both epicranium under each eye and proximal half of upper (anterior) surface of each mandible with distinct or weak longitudinal keel; in female, head without such keels. Male tegmina shortened (their visible part not longer than pronotum), with widely rounded hind edge and a few distinct and almost straight longitudinal veins (stridulatory apparatus completely lost); coloration of these tegmina with dark and vellowish white parts (Figs 1, 5, 7); female tegmina very small, scale-like, partly or completely covered with pronotum; hind wings absent in both sexes. Fore legs without tympana. Male genitalia with elongate epiphallus, not very deep notch at its apex, and more or less lamellar ectoparameres which significantly shorter than epiphallus (Figs 9-11, 15-20); ovipositor long, with widened and dorsoventrally depressed apical part; this part of upper valves acute at apex and with denticulate lateral edges (Figs 12-14).

Included species. Type species and *P. mirabilis* sp. nov.

Comparison. This genus is a single genus of the tribe. The differences of Prolandrevini from all the other taxa of Landrevinae were given in the Russian and English diagnoses published by Gorochov (2005).

Prolandreva mirabilis sp. nov.

(Figs 1-4, 9-14)

Etymology. The name originates from *mirabilis* (Lat.) – strange.

Type material. Holotype – male, SOUTH AFRICA: Kwazulu-Natal state, 50–60 km SW of Durban city, nature reserve Vernon Crookes, 200–

400 m, small forest along brook among savanna-like landscape, 23–26 January 2008, coll. A. Gorochov & A. Sotshivko. Paratypes: 2 females, same data.

Description. Male (holotype). Coloration (Fig. 1) dark brown with following marks: lateral ocelli, V-shaped stripe between them, small spot behind median ocellus, upper part of eyes, most part of clypeus and labrum, membrane of antennal cavities, most part of tegmina, and large area on dorsal part of metanotum yellowish white; transverse stripe between antennal cavities and clypeus, median area of distal part of labrum, most part of maxillae and of labrum, and ventral surface of prothorax yellowish; short oblique stripes on hind part of vertex, stripes along medial edges of eyes and of rostrum, small spot on each mandible, two proximal antennal segments, numerous small spots on antennal flagellum, most part of legs, dorsal part of abdominal tergites, anal plate, cerci, abdominal pleurites, and several spots on abdominal sternites light brown; spot under and partly behind each eye, subgenae, small spots on two proximal antennal segments, most part of antennal flagellum, a pair of spots near apex of labrum, stripes on maxillary palpi, large transverse spot near base of labium, small median spot on prothoracic venter, sternites of pterothorax, small spots and dots on dorsal part of abdominal tergites, most part of abdominal sternites, weak spots on fore and middle legs, reticular ornament on outer surface of hind femora and two stripes on inner one (along ventral edge of these femora), spots on distal part of hind femora and on hind tibiae and tarsi brown; pronotum and medial part of tegmina blackish; most part of eyes grey. Head hardly wider than pronotum, almost prognatous with weakly lengthened mouthparts, wide proximal part of clypeus, strong transverse keel along proximal edge of clypeus, and short and weak keel on proximal part of each mandible (Fig. 2). Visible part of tegmina much shorter than pronotum; tegminal crossveins almost indistinct (Fig. 1). Anal plate simple, with roundly truncate apex; genital plate elongate, gradually narrowing to rather narrow and almost truncate apex; genitalia with long rami, moderately deep notch at apex of epiphallus, and small ectoparameres (Figs 9-11).

Female. General appearance (Figs 3, 4) more or less similar to that of male, but coloration and structure of body with following differences: almost all light areas, spots, and stripes larger and lighter than in male; pronotum with dark brown disc having yel-

A.V. Gorochov



Figs 1–8. *Prolandreva* Gorochov: 1–4 – *P. mirabilis* sp. nov. (1, 2 – male; 3, 4 – female); 5, 6 – *P. aenigmatosa borealis* subsp. nov. (male); 7, 8 – *P. ae. aenigmatosa* Gorochov (male, holotype). Anterior half of body from above (1, 3, 5, 7); head from side (2, 4, 6, 8).

320



Figs 9–20. *Prolandreva* Gorochov: 9–14 – *P. mirabilis* sp. nov.; 15–17 – *P. aenigmatosa borealis* subsp. nov.; 18–20 – *P. ae. aenigmatosa* Gorochov (holotype). Male genitalia from above (9, 15, 18), from below (10, 16, 19), and from side (11, 17, 20); distal part of ovipositor from above (12), from below (13), and from side (14). Abbreviation: *m* – medial lobe of ventral epiphallic part.

lowish or light brown spots on anterolateral, median, and hind parts; head not wider than pronotum; keel along proximal edge of clypeus weaker; genital plate short, transverse, with widely and roundly notched hind edge. Ovipositor with apex as in Figs 12–14.

Length (mm). Body: male 21.5, female 18–22; pronotum: male 3, female 2.7–3.1; visible part of tegmina: male 2, female (only one of tegmina visible in one of females) 0.6; hind femur: male 11.5, female 11.5–12.8; ovipositor 12.5–13.

Comparison. The new species is clearly distinguished from *P. aenigmatosa* by the shorter male mouthparts with distinctly smaller keels on mandibles, presence of transverse keel along proximal edge of clypeus, shorter male tegmina with clearly larger light area, less uniform coloration of male abdomen, longer rami, deeper epiphallic notch, and smaller ectoparameres.

Prolandreva aenigmatosa borealis subsp. nov. (Figs 5, 6, 15–17)

Etymology. The name originates from *borealis* (Lat.) – northern.

Type material. Holotype – male, SWAZILAND: nature reserve Mlawula [=Mlavula], 26°12′37″S, 32°00′04″E, 150 m, forest, 14–15 October 2009, coll. A. Sotshivko.

Description. Male (holotype). Structure and coloration of body very similar to those of nominotypical subspecies, but head somewhat wider (distinctly wider than pronotum; in *P. ae. aenigmatosa*, head slightly wider than pronotum) and more prognatous (Fig. 5), keel of mandibles clearly rounded (not almost angular) in profile (Fig. 6), coloration of pronotum and most part of abdominal tergites blackish (not dark brown), and epiphallus with less concave lateral edges near apex, with apical notch slightly deeper, and with medial lobes (*m*) of ventral part (situated between proximal parts of ectoparamees, if to see from below) distinctly shorter (Figs 15–17).

Female unknown.

Length (mm). Body 22; pronotum 3.4; visible part of tegmina 3; hind femur 12.

Comparison. Differences from the nominotypical subspecies are listed above.

Prolandreva aenigmatosa aenigmatosa Gorochov. 2005

(Figs 7, 8, 18-20)

Remarks. This subspecies was described as a species from Pondoland Coast (Eastern Cape state of South Africa). Its original description is sufficient for determination of this subspecies (Gorochov 2005), and its differences from the other subspecies are listed in the description of P. ae. borealis (for comparison see also Figs 5, 6, 15–17 and 7, 8, 18–20). In the collection of Zoological Institute (Saint Petersburg), there is a single undetermined female from the nature reserve Vernon Crookes (Kwazulu-Natal state of South Africa) with the partly blackish coloration more similar to that of the subspecies from Swaziland. So, it is possible that northern subspecies is distributed in the more tropical regions (Swaziland and Kwazulu-Natal), but the nominotypical one, in more southern and almost subtropical regions.

ACKNOWLEDGMENTS

Collections of the Zoological Institute (Saint Petersburg) are supported by Rosnauka for UFC No. 2-2.20, and the present study is supported by the Russian Foundation for Basic Research (grant No. 10-04-00682_a) and by the Presidium of the Russian Academy of Sciences (Program "Biosphere Origin and Evolution").

REFERENCE

Gorochov A.V. 2005. New and little known crickets of the subfamilies Phaloriinae, Phalangopsinae and Landrevinae (Orthoptera, Gryllidae) from Indonesia and South Africa. *Proceedings of the Russian Entomological Society*, 76: 25–46. [in Russian]

Submitted April 10, 2010; accepted September 1, 2010.

322