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***Stalacris* Desutter-Grandcolas n. gen., an amazing cricket from South Africa (Orthoptera, Grylloidea, Phalangopsidae)**

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Abstract

Stalacris n. gen. (Insecta, Grylloidea, Phalangopsidae) is described from South Africa using characters of morphology and male genitalia. This taxon, known from only two species, *Stalacris meridionalis* n. gen., n. sp. and *Stalacris* sp, is characterized by the unique structure of its forewings. These are prolonged distally as long, acute and more or less articulated processes, forming a kind of forceps when forewings are opened.

Key words: new genus, new species, taxonomy, Africa, Ensifera

Introduction

Crickets (Orthoptera, Grylloidea) are fundamentally acoustic insects, that sing by rubbing their raised forewings together. Males sing to attract females at long range (calling song), to engage copulation (courting song), or deter other males (aggressive song). Other songs have been documented, as intercopolatory songs (Alexander 1962, Zefa *et al.* 2008, Narvaes & Robillard 2012; see also Mays 1971) or disturbance stridulation (Desutter-Grandcolas 1998), but these are less common, or at least less frequently documented.

In this general frame of acoustic communication, crickets show a wide diversity of forewing modification, with many intermediate situations involving various patterns of venation. If many species show a mere reduction of forewing length without drastic change in venation, others can present a venation which is so modified that it may become difficult to identify the different veins and cells (see Robillard & Desutter-Grandcolas 2004 for Eneopterinae for example). In the same way, many cricket species call while they have a corneous right forewing, which cannot vibrate and work as a coupled oscillator with the left forewing, as demonstrated in model cricket (Montealegre-Z *et al.* 2011): this is the case for example of the neotropical *Luzarida* Hebard, 1928 (Desutter-Grandcolas 1992), among many other phalangopsid crickets. Finally, many crickets are just unable to sing, either because they have lost the stridulum, or because they are apterous (Chopard 1938, Walker & Huber 1989, Otte 1992).

Apart from variations in wing length and stridulum development, cricket forewings may be deeply modified because they are involved in communication means other than acoustics. The most famous example is the African phalangopsid *Phaeophilacris spectrum* Saussure, 1878, which males communicate *via* air vortex, more or less charged with pheromonal products, by turning its forewings over its head (Dambach & Lichtenstein 1978, Heinzel & Dambach 1987, Heidelberg & Dambach 1991).

More common is the presence of glandular structures on the forewings. These structures are licked by the females during, or after copulation, in the same way as the more widespread metanotal or tibial glands (e.g., Otte 1992, Vahed 1998). In the extreme, forewings are short, corneous, and deeply modified by the presence of glandular structures. This is the case, for example, of the neotropical phalangopsid genera *Eidmanacris* Chopard, 1956 or *Unithema* Desutter-Grandcolas, 1991 (Desutter-Grandcolas 1991, 1994(1995)), or the genus *Mikluchomaklaia* Gorochoy, 1986 from Oceania (Gorochoy 2003). In these taxa, forewings may be used during copulation only and may have lost their signalling function.

Here I described a new genus of African Phalangopsidae, which presents a unique structure of its forewings.