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Revision of the Southern African leafhopper genus *Pravistylus* (Hemiptera, Cicadellidae, Deltocephalinae)

M. STILLER

ARC-Plant Protection Research Institute, Private Bag X134, Queenswood 0121, Pretoria, South Africa. E-mail: stillerm@arc.agric.za



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M. Stiller

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Table of contents

Abstract	4
Introduction	4
Material and methods	4
Generic redescription	5
<i>Pravistylus</i> Theron	5
Key to males and some associated females of <i>Pravistylus</i> species	6
Species descriptions	9
<i>Pravistylus bidentidiscus</i> sp. n.	9
<i>Pravistylus brachyphysis</i> sp. n.	10
<i>Pravistylus brachyplacus</i> sp. n.	11
<i>Pravistylus caenophallus</i> sp. n.	12
<i>Pravistylus deltoplacus</i> sp. n.	13
<i>Pravistylus dentidiscus</i> sp. n.	15
<i>Pravistylus digitidiscus</i> sp. n.	16
<i>Pravistylus eductus</i> (Naudé).....	18
<i>Pravistylus exquadratus</i> (Naudé).....	19
<i>Pravistylus indistinctidiscus</i> sp. n.	21
<i>Pravistylus interdiscus</i> sp. n.	23
<i>Pravistylus lobus</i> sp. n.	24
<i>Pravistylus longitrunculus</i> sp. n.	26
<i>Pravistylus macropygeus</i> sp. n.	28
<i>Pravistylus mecistoplacus</i> sp. n.	29
<i>Pravistylus mecophysis</i> sp. n.	30
<i>Pravistylus micropygeus</i> sp. n.	31
<i>Pravistylus mollidiscus</i> sp. n.	32
<i>Pravistylus mutilidiscus</i> sp. n.	33
<i>Pravistylus odontiphallus</i> sp. n.	36
<i>Pravistylus odontopygeus</i> sp. n.	37
<i>Pravistylus oxyphysis</i> sp. n.	38
<i>Pravistylus pelorophallus</i> sp. n.	41
<i>Pravistylus pollediscus</i> sp. n.	42
<i>Pravistylus scolophallus</i> sp. n.	43
<i>Pravistylus scolopygeus</i> sp. n.	44
<i>Pravistylus serratus</i> sp. n.	45
<i>Pravistylus tanyoplacus</i> sp. n.	46
<i>Pravistylus trunculidiscus</i> sp. n.	47
<i>Pravistylus varicudiscus</i> sp. n.	49
Discussion	49
Acknowledgements	53
References	53

Abstract

Descriptions are provided for the following 28 new species of *Pravistylus* (Naudé) from Southern Africa: *P. bidentidiscus* sp. n., *P. brachyphysis* sp. n., *P. brachyplacus* sp. n., *P. caenophallus* sp. n., *P. deltoplacus* sp. n., *P. dentidiscus* sp. n., *P. digitidiscus* sp. n., *P. indistinctidiscus* sp. n., *P. interdiscus* sp. n., *P. lobus* sp. n., *P. longitrunculus* sp. n., *P. macropygeus* sp. n., *P. mecistoplacus* sp. n., *P. mecophysis* sp. n., *P. micropygeus* sp. n., *P. mollidiscus* sp. n., *P. mutilidiscus* sp. n., *P. odontophallus* sp. n., *P. odontopygeus* sp. n., *P. oxyphysis* sp. n., *P. pelorophallus* sp. n., *P. pollediscus* sp. n., *P. scolophallus* sp. n., *P. scolopygeus* sp. n., *P. serratus* sp. n., *P. tanyoplacus* sp. n., *P. trunculidiscus* sp. n. and *P. varicudiscus* sp. n. Redescribed species include the type species, *P. eductus* (Naudé, 1926) and *P. exquadratus* (Naudé, 1929). *Deltocephalus africanus* Naudé, 1926 is a new synonym of *P. exquadratus* (Naudé, 1929). *Pravistylus* is assigned to the tribe Paralimnini. A key is provided for the identification of species.

Key words: Paralimnini, phytophagous grassland fauna, Grassland Biome, Fynbos Biome, South Africa

Introduction

This is the fourth contribution to the taxonomy of grass associated leafhoppers mainly from the Fynbos, Grassland and Savanna Biomes of South Africa. The first three contributions dealt with *Nicolaus* Lindberg (Stiller, 1998), *Drakensbergena* Linnavuori (Stiller, 2009a) and *Elginus* Theron (Stiller 2009b). *Pravistylus* Theron, dealt with in this study consists of 30 species, and is the most speciose genus in the tribe Paralimnini known from Southern Africa. All members of this tribe are grass-feeders and recognized by the presence in the male genitalia of a linear connective that articulates with the aedeagus (Zahniser & Dietrich, 2008).

Most species of *Pravistylus* have reduced hind wings. Some however exhibit alary polymorphism, and one species is known with fully developed wings. Species that exhibit wing polymorphism appear to have wider distributions than brachypterous species. The only consistently macropterous species is *P. exquadratus* (Naudé) which has the widest known distribution. This species has the pronotum and head slightly narrower than most other species and varies more in colour than the other species. The second most common species, *P. eductus* (Naudé), is polymorphous. Most of the species are restricted to the Grassland Biome (80% of all recorded localities), some occur in the Fynbos Biome (14% of all localities), and 5% occur in the Savanna Biome. Definitions of biomes of South Africa follow those of Mucina & Rutherford (2006).

Pravistylus Theron (1975) was described to accommodate *Deltocephalus eductus* Naudé (1926) and *D. exquadratus* Naudé (1929). *Deltocephalus*, however, is a Holarctic genus in the tribe Deltocephalini, characterised by the connective being fused with the preatrium of the aedeagus (Zahniser & Dietrich, 2008; Webb & Viraktamath, 2009). The colour of *Pravistylus* is generally brown, with or without various configurations of fuscous markings. Size in males is 2.4–3.3 mm long and females are 2.7–3.5 mm long. In this regard *Pravistylus* resembles *Vilargus* Theron, and sometimes *Elginus* Theron. Generally the species of *Pravistylus* are recognized by the shape of the subgenital plate of the male, sometimes on internal and external features of the pygofer lobe and the aedeagus and, in associated females, by the shape of sternite 7. *Vilargus* has a similar colour and size range, and shares similarities in the shape of the male subgenital plate, but the aedeagus bears spines or processes.

None of the species of *Pravistylus* have been noted as pests of cereals or cultivated pastures, but might occasionally feed on such crops, as indicated by single records of *P. exquadratus* on Korog wheat cultivar and on rye grass.

Material and methods

More than 5000 specimens were examined. Drawings were made with the aid of a drawing tube on a transmission light microscope. Abdomens were cleared in cold KOH, and stored in glycerine. Drawings and images are arranged alphabetically (Figs 1, 7, 8) or by shape (Figs 2, 3, 4, 5, 6) for easy identification. A number of measurements are made as follows: Plate, length and width, measured as the greatest medial length