



Revision of *Elginus* Theron (Hemiptera: Cicadellidae: Deltocephalinae) with the description of two new genera and comments on the grassland leafhopper fauna in South Africa

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Abstract

The previously monotypic South African leafhopper genus, *Elginus* Theron, 1975, is revised. Its type species, *E. saltus* (Naudé, 1926), is redescribed, and the following 24 species are described as new: *E. acutus*, *E. bispinus*, *E. cavatus*, *E. contradens*, *E. cultellus*, *E. denticulatus*, *E. dexteruncus*, *E. eccentricus*, *E. extrinsecus*, *E. falcatus*, *E. furcillatus*, *E. latus*, *E. levilobus*, *E. matarei*, *E. minutulus*, *E. recavus*, *E. malotiensis*, *E. oriens*, *E. semialatus*, *E. theroni*, *E. tortuosus*, *E. tubulus*, *E. unispinus* and *E. vulgaris*. A key is provided for the identification mainly of males. These species are all grass-feeding and assigned to the tribe Paralimnini of the Deltocephalinae. Two new genera and species are described, namely *Micropedeticus ochrus* gen.n. & sp.n. in the tribe Paralimnini, from the Grassland Biome and *Theronus priapus* gen.n. & sp.n. in the tribe Deltocephalini, from the Fynbos Biome. Most species of *Elginus* and *Micropedeticus* are more common in the Grassland Biome in climax grassland under lower grazing pressure. Species of *Elginus* in the Fynbos Biome are more migratory and colonize new habitats such as grasses that appear after fire. These three genera are endemic to the Grassland and Fynbos Biomes of South Africa. A brief discussion on leafhoppers associated with grasses in the Fynbos, Grassland and Savanna Biomes of South Africa, is provided.

Key words: Grassland herbivore guild, Fynbos, Grassland, Savanna Biomes, African leafhopper fauna, Paralimnini, Deltocephalini

Introduction

The paralimnine genus, *Elginus*, was described from the Fynbos Biome of the Western Cape Province of South Africa by Theron (1975). To date the genus has been monotypic; 24 new species are described here. They are all grass-feeding, occurring mainly in the Grassland and Fynbos Biomes and probably endemic to these regions. Most species are associated with climax grassland in less or undisturbed conditions, and not with crops, pioneers or ornamentals. The two new monotypic paralimnine genera, *Micropedeticus* and *Theronus* that are described below, are also associated with grass in the Grassland and Fynbos Biomes respectively. In contrast, grass-feeding genera that are pests of cereals, maize and rice such as *Aconurella* Ribaut (Doraturini), *Cicadulina* China (Macrostelini), *Macrosteles* Fieber (Macrostelini), *Nephotettix* Matsumura (Athysanini) and *Nesoclutha* Evans (Macrostelini) (Ghuri, 1971, 1981, Knight, 1987, Webb, 1977) are polyphagous and distributed throughout the Afrotropical Region.

Material and methods

More than 1000 specimens of *Elginus*, 220 of *Micropedeticus* and 74 of *Theronus* were examined. Most of this material was collected with the DVac over a relatively short period, from long and short grass, inaccessible grass between rocks, and probably was more efficient than the sweepnet. The vacuum sample was collected in a soft or rigid net, from which specimens were collected individually with an aspirator, or the vacuum samples were placed into large self-extractors with specimens collected into alcohol. Holotypes and paratypes are deposited in the South African National Collection of Insects, Pretoria (SANC), and additional paratypes in the American Museum of Natural History, New York (AMNH), the Natural History Museum, London (BMNH) and the University of Stellenbosch, Stellenbosch (USIC), as designated in the species accounts. Terminology follows Nault and Rodriguez (1985) and Zahniser and Dietrich (2008). Drawings were made with the aid of a drawing tube, with consistent magnification for the same structures. Images were captured through a Leica microscope with IM software and CombineZ software was used to assemble individual images to achieve greater depth of field. Vector lengths were taken as a means of interpreting relative size of structures, such as in the aedeagus and style. For the aedeagus, a straight-line distance was measured from the apex of the preatrium to the apex of the aedeagal shaft and to the apex of the dorsal apodeme, as depicted in Figs 81, 83, 88, 89 and 103. For the style, the vector length was measured from the