

A revision of the South African endemic humicolous beetle genus *Discozantaena* Perkins and Balfour-Browne (Coleoptera: Hydraenidae)

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Abstract

The South African endemic humicolous beetle genus *Discozantaena* Perkins and Balfour-Browne is revised, based of the study of 1,735 specimens. Ten new species are described: *D. brevicollis*, (S. Cape Mt., Helderfontein S.), *D. drakensbergensis* (Lesotho: Drakensberg, Sani Pass Valley), *D.*

endroedyi (Cape-Cederberg, jeep track, 32° 28' S, 19° 14' E), *D. galea* (Cape Province, Swartberg Pass, 33° 54' S–22° 01' E), *D. karroo* (Cape Province, Little Karroo, Raubenheimer Dam, 33° 25' S, 22° 19' E), *D. leleupi* (Cape Province, Muizenberg), *D. ovata* (SW Cape, Groot Toren farm, 31° 20' S, 19° 44' E), *D. sepiola* (S. Cape, Harkerville Forest, 34° 4' S, 23° 10' E), *D. sequentia* (Cape-Cederberg, jeep track, 32° 28' S, 19° 14' E), and *D. tibiovela* (Natal, 75km WSW Estcourt, Cathedral Peaks Forest Station). A key to the 11 known species is given. High resolution digital images of all holotypes are presented (*Zootaxa* online version in color), the male genitalia are illustrated, and geographic distributions are mapped. The vast majority of specimens were collected by sifting litter, especially marsh shore litter. Four of the species are flightless, the wings being reduced to small lobes. One species has both normal and reduced winged individuals.

Key words: Coleoptera, Hydraenidae, *Discozantaena* Perkins and Balfour-Browne, new species, South Africa, humicolous insects, wing polymorphism, holotype digital images

Introduction

Discozantaena Perkins and Balfour-Browne is a member of the tribe Parhydraenini of the subfamily Hydraeninae. The tribe comprises the genera *Discozantaena*, *Parhydraena* Orchymont, *Pneuminion* Perkins, and *Protozantaena* Perkins (Perkins, 1997). Members of *Discozantaena* can be distinguished from other Parhydraenini by the morphology of the antennal pocket, which is wide and lacks a border of stiff hypomeral setae, and by aedeagal morphology. Also, most species (all except *D. sequentia*) are recognized by the widely explanate habitus.

Distribution and Microhabitats

Eleven species of *Discozantaena* are now known, eight of which are endemic to Cape Province. Nine species have been collected in Cape Province, two each in Transvaal and Natal Provinces, and one in Lesotho. These beetles are relatively rarely collected, although one of the species can be locally very abundant. Of the more than 40,000 hydraenid specimens from southern Africa that I have identified and databased, 1,735 represent species of *Discozantaena*. However, one collecting event, made by Sebastian Endrödy-Younga, accounts for 1,169 specimens of *D. endroedyi*. The remaining 566 *Discozantaena* specimens were collected at 51 localities during 61 collecting events, 33 of which were made by Endrödy-Younga.

These beetles are almost always collected by sifting moist litter. The long series of *D. endroedyi* noted above was collected by sifting marsh shore litter, and the majority of microhabitat notes on specimen labels indicate humicolous habitats. The shore washing method, a standard method for collecting aquatic species, is given as the collecting technique for only 22 specimens of *Discozantaena*; in contrast I have studied more than 6,000 other southern African hydraenids that were collected by this method.