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**New species and new collection records of Prosthetopine water beetles  
from southern Africa (Coleoptera: Hydraenidae)**

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## New species and new collection records of Prosthetopine water beetles from southern Africa (Coleoptera: Hydraenidae)

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## Abstract

New species of Hydraenidae are described in the genera *Prosthetops* Waterhouse (1), *Pterosthetops* Perkins (1), *Parasthetops* Perkins & Balfour-Browne (13), and *Mesoceration* Janssens (24). New collecting locality data are given for the following species described by Perkins & Balfour-Browne (1994): *Parasthetops aeneus*, *P. nigrinus*, *P. spinipes*, *P. curidius*, *Mesoceration distinctum*, *M. rivulare*, *M. jucundum*, *M. splendorum*, *M. rubidum*, *M. fusciceps*, *M. languidum*, *M. dissonum*, *M. rufescens*, and *M. brevigranum*. High resolution digital images of the holotypes of new species are presented (online version in color), and male genitalia are illustrated. Distribution maps are provided for all prosthetopine species in the genera *Prosthetops*, *Pterosthetops*, *Parasthetops*, and *Mesoceration*. The following 39 new species are described (type locality in South Africa unless otherwise given): *Prosthetops gladiator* (Eastern Cape Province, summit of Prentjiesberg); *Pterosthetops hawequas* (Western Cape Province, Hawaquas radio tower); *Parasthetops benefossus*

(Western Cape Province, Wiedouw farm), *P. buunicornus* (Lesotho: Drakensberg, Sani Pass Valley), *P. confluentus* (Eastern Cape Province, Little Karroo, Baviaanskloof N valley), *P. lemniscus* (Lesotho: Drakensberg, Sani Pass Valley), *P. namibiensis* (Namibia: Windhoek, Eros Mt.), *P. pampinus* (Western Cape Province, Dorps River into Prins Albert, Swartbergpas), *P. parallelus* (Northern Cape Province, Richtersveld, Oemsberg), *P. propitius* (Lesotho: Drakensberg, Sani Pass Valley), *P. retinaculus* (Eastern Cape Province, Sundays River system, Letskraal), *P. sebastiani* (Lesotho: Drakensberg, Sani Pass Valley), *P. semiplanus* (Eastern Cape Province, Sundays River system, Letskraal), *P. striatus* (Northern Cape Province, Namaqualand, Kamieskroon), *P. unicornus* (Eastern Cape Province, Naudes Nek, 12 miles ENE Rhodes); *Mesoceration barriotum* (Western Cape Province, Cape-Swartberg, Seweweekspoort Kloof), *M. bicurvum* (Eastern Cape Province, Wildebees River), *M. bispinum* (KwaZulu-Natal Province, Weza, Impetyene Forest), *M. compressum* (Eastern Cape Province, S. coast, Dwesa forest reserve), *M. concavum* (Mpumalanga Province, Blyderiver Canyon), *M. curvosum* (KwaZulu-Natal Province, Umtamvuna River), *M. disjunctum* (Eastern Cape Province, Nature's Valley Reserve), *M. drakensbergensis* (Lesotho, Drakensberg, Sani Pass Valley), *M. durabilis* (Western Cape Province, 2 miles SW of Citrusdal), *M. granulovestum* (Western Cape Province, Cederberg, Eikenboom), *M. incarinum* (Lesotho, Drakensberg, Sani Pass Valley), *M. integer* (KwaZulu-Natal Province, Busheladi Stream on Lundy's Hill near Deepdale), *M. littlekarroo* (Western Cape Province, Little Karroo, Rus-en-vredewaterf), *M. longipennis* (Western Cape Province, W. Wiedouw farm), *M. maluti* (Lesotho, Drakensberg, Sani Pass Valley), *M. natalensis* (KwaZulu-Natal Province, Umkomaas River, where crossed by Himeville to Impendhle road), *M. periscopum* (Western Cape Province, Cederberg, Eikenboom), *M. piceum* (Western Cape Province, Cederberg, Eikenboom), *M. rapidensis* (Western Cape Province, S. W. Cape Mts., Hawequas SE), *M. repandum* (Western Cape Province, Cederberg, Eikenboom), *M. reticulatum* (Western Cape Province, Nuweberg Forest Station), *M. semicarinulum* (Western Cape Province, Groot Toren farm), *M. tabulare* (Western Cape Province, Platteklip Gorge, north face of Table Mountain), *M. umbrosum* (Western Cape Province, Wiedouw farm).

**Key words:** Coleoptera, Hydraenidae, *Prosthetops* Waterhouse, *Pterosthetops* Perkins, *Parasthetops* Perkins & Balfour-Browne, *Mesoceration* Janssens, new species, Africa, aquatic insects, aquatic microhabitats, holotype digital images

## Introduction

This is the seventh contribution in a series of papers revising afrotropical Hydraenidae. Previous papers have included a general taxonomic work on the fauna of southern Africa (Perkins & Balfour-Browne 1994), a comprehensive morphological and systematic study of the family, including African taxa (Perkins 1997), and revisionary studies of the genera *Pneuminion* Perkins (Perkins 2004a), *Nucleotops* Perkins & Balfour-Browne (Perkins 2004b), *Discozantaena* Perkins & Balfour-Browne (Perkins 2005a), and *Coelometopon* Janssens (Perkins 2005b). The remaining revisions, of *Parhydraena* Orchymont, *Ochthebius* Leach, *Aulacochthebius* Kuwert, *Limnebius* Leach and *Hydraena* Kugelann are nearing completion. About 45,000 specimens have been identified and databased, representing about 210 hydraenid species. Revisions will include digital images of the holotypes of new species.

In this paper, new species are described in the genera *Prosthetops* Waterhouse (1), *Pterosthetops* Perkins (1), *Parasthetops* Perkins & Balfour-Browne (13), and *Mesoceration* Janssens (24). In addition, new collecting locality data are given for the following species described by Perkins & Balfour-Browne (1994): *Parasthetops aeneus*, *P. nigritus*, *P. spinipes*, *P. curidius*, *Mesoceration distinctum*, *M. rivulare*, *M. jucundum*, *M. splendorum*, *M. rubidum*, *M. fusciceps*, *M. languidum*, *M. dissonum*, *M. rufescens*, and *M. brevigranum*. These four genera are now known from a total of 7,899 specimens, collected at about 422 localities/events.

Generic diagnoses and keys to the genera of Prosthetopinae are given in Perkins & Balfour-Browne (1994) and Perkins (1997). The key characters distinguishing the genera *Parasthetops* and *Mesoceration* deserve additional remarks because of the elytral morphology of some of the new species. Placing species in one or the other of these two genera is readily apparent for 57 of the 64 known species: members of *Mesoceration* have the eighth elytral interval carinate or tectiform, whereas in members of *Parasthetops* the eighth interval is not raised.