



New Afrotropical species of the bee subgenus *Patellapis* (*Chaetalictus*) with notes on additional species (Hymenoptera: Halictidae)

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Abstract

For the African bee subgenus *Patellapis* (*Chaetalictus*) five species are here described as new: *P. (Ch.) itigiensis* sp. n., *P. (Ch.) kahuziensis* sp. n., *P. (Ch.) knersvlaktei* sp. n., *P. (Ch.) rutshuruensis* sp. n., and *P. (Ch.) upembae* sp. n. The recently discovered female of *P. (Ch.) namaquensis* Timmermann 2009 is described here for the first time and the nomenclatural status of *P. (Ch.) pulchrinitens* (Cockerell 1942) is corrected to *P. (Ch.) pulchrilucens* (Cockerell 1943).

Key words: new species, systematics, nomenclature, Africa, Halictinae, Halictini

Introduction

The bee subgenus *Patellapis* (*Chaetalictus*) comprises 46 species and has recently been revised (Timmermann & Kuhlmann 2009). Its centre of species diversity is in southern Africa (Kuhlmann 2009) and only three of the species are known to occur in tropical Africa: *P. (Ch.) andrenoides* (Friese) from the Kilimanjaro, *P. (Ch.) corallina* (Benoist) from Cameroon and *P. (Ch.) virungae* Timmermann from Kenya, Tanzania and the Democratic Republic of the Congo. It was unexpected to receive another four undescribed species from this region with some of them showing unusual morphological features.

In this paper we describe these new species and the hitherto unknown female of *P. (Ch.) namaquensis* to complement the revision of the subgenus by Timmermann and Kuhlmann (2009). Additionally, another new species from western South Africa is described and the nomenclatural status of *P. (Ch.) pulchrinitens* (Cockerell) is corrected.

Material and methods

Terminology for the description of species is based on Michener (2007) for general morphology. Puncture density is expressed as the relationship between puncture diameter (*d*) and the space between them (*i*), such as $i = 1.5d$ or $i < d$. The following abbreviations were used for morphological structures: A—antennal flagellum (A1 = first flagellomere after pedicel), Bp—basitibial plate, Ts—inner hind tibial spur, T—metasomal tergum, S—metasomal sternum, Bl—body length, L—maximum length, W—maximum width, ITS—intertegular span. Measurements follow the guidelines of Michener (2007: 46). Body lengths were measured from the vertex to the apex of the pygidial plate for the male and from the vertex to the apex of the pygidial plate for the female.

Species are grouped according to proposals presented in Timmermann and Kuhlmann (2009).

Material examined was obtained from or deposited in the following collections: California Academy of Sciences, San Francisco, USA (CAS); Musée Royal de l’Afrique Centrale, Tervuren, Belgium (RMCA);