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The bee genus *Colletes* Latreille 1802 in Ethiopia (Hymenoptera: Apoidea: Colletidae)

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Abstract

The Ethiopian species of the bee genus *Colletes* are revised and redescribed to facilitate their identification and future research. *Colletes langano* Kuhlmann **sp. n.**, *C. aethiopicus* Kuhlmann **sp. n.** and *C. senkelensis* Kuhlmann **sp. n.** are described as new. The females of *C. abessinicus* Friese 1915 and *C. microdontus* Cockerell 1937 and the males of *C. rothschildi* Vachal 1909 and *C. somereni* Cockerell 1947 are described for the first time. *Colletes rufitarsis* Friese 1909 is removed from the list of Ethiopian species so currently a total of eight *Colletes* species are known from this country. A key is provided to facilitate species identification.

Key words: Northeast Africa, bee fauna, taxonomy

Introduction

In sub-Saharan Africa the bee genus *Colletes* comprises 62 described species (Kuhlmann 1998, 2002, 2005, 2007) with the real number of species at least twice as high (Kuhlmann unpubl.). A comprehensive taxonomic treatment of the Afrotropical *Colletes* fauna is still missing and only the *C. fasciatus* species-group (all species of which are endemic to western South Africa and SW Namibia) has been revised (Kuhlmann 2006, 2007). The *Colletes* species of NE Africa and Ethiopia are particularly poorly studied and the only available published information is more than 80 years old (Friese 1915; Alfken 1932). Presumably, the bee fauna of Ethiopia is rich due to the huge geographical and climatic diversity of the country while the Afrotropical centre of bee diversity certainly is in southern Africa (Kuhlmann 2009). In Ethiopia Palaearctic and Afrotropical faunal elements meet forming an endemic fauna as shown for the genera *Nomada* (Eardley & Schwarz 1991), *Melitta* (Michez & Eardley 2007), *Dasypoda* (Michez & Pauly 2012) and *Colletes* (Kuhlmann 2004). Thus, the specimens recently collected in Ethiopia by one of us (AP) opened up the opportunity for a more comprehensive study of the interesting fauna of this region establishing a starting point for future taxonomic studies of *Colletes* in NE and E Africa. However, four specimens (two females, two males), all collected at different localities, are disregarded here. They each probably represent a different and undescribed species of the taxonomically very difficult and species-rich *C. rufitarsis* species-group. Many species of this group are rarely collected and often as isolated single specimens as in this case, thus, more material is required before decisions can be made on their taxonomic status.

The goal of this paper is to report the *Colletes* species recently collected in Ethiopia including the description of three new species. As a base for future taxonomic studies the few published *Colletes* records from Ethiopia (Friese 1915; Alfken 1932) are revisited, all species are redescribed and records of Ethiopian species from other parts of Africa are included. The hitherto unknown sexes of four species are described for the first time. A key is provided to facilitate the identification of the species treated in this paper.