



Monograph

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Revision of the *nitidus* species group of the bee genus *Scapter* Lapeletier & Serville, 1828 (Hymenoptera: Apoidea)

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Abstract. The *nitidus* species group of the bee genus *Scapter* Lapeletier & Serville, 1828 is redefined, revised and 15 species are described as new for science: *S. caeruleus* sp. nov. ♀, *S. confusus* sp. nov. ♀♂, *S. convexoides* sp. nov. ♂, *S. convexus* sp. nov. ♀♂, *S. crassipunctatus* sp. nov. ♀♂, *S. felicitis* sp. nov. ♀♂, *S. flavipunctatus* sp. nov. ♀♂, *S. imparilis* sp. nov. ♀♂, *S. littoralis* sp. nov. ♀, *S. longicornis* sp. nov. ♂, *S. montanus* sp. nov. ♀♂, *S. mpumalangensis* sp. nov. ♀♂, *S. obtusus* sp. nov. ♀♂, *S. perpunctatulus* sp. nov. ♂ and *S. variabilis* sp. nov. ♀♂. The previously unknown males of *S. divergens* (Friese, 1925), *S. semirufus* Cockerell, 1932 and *S. perpunctatus* Cockerell, 1933 are described for the first time. All currently known 28 species of the *S. nitidus* species group are redescribed, imaged and included in a key to facilitate their identification.

Keywords: *Scapter*, bees, South Africa, new species, taxonomy.

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Introduction

In this paper, we redefine and revise the *Scapter nitidus* species group, which has the most complicated taxonomic history of the genus, as already recognized by Cockerell (1935). Currently, *Scapter* Lapeletier & Serville, 1828 comprises 77 described species (Eardley 1996; Davies *et al.* 2005; Davies & Brothers 2006; Kuhlmann 2014, 2021; Kuhlmann & Friehs 2020; Bossert & van Noort 2022) and is readily recognizable in sub-Saharan Africa because it is the only abundantly hairy colletid bee genus with two submarginal cells in the forewing (Michener 2007). Eardley (1996) first introduced and defined species groups in *Scapter* based on a relatively small number of species and specimens available in those days. However, he was aware of the flaws of the species group concept he introduced and stated (Eardley 1996: 37): “As it has not been possible to arrange the species into meaningful species groups, the groupings included are conglomerates of species that share similar characters.” Fortunately, today much more material is available for study that has been mainly collected in the last 20 years.

These specimens allow for a broader and more comprehensive taxonomic analysis particularly of the challenging *S. nitidus* group and inevitably revealed inconsistencies in the system developed by Eardley (1996). In the original definition of the *S. nitidus* group Eardley (1996: 42–43) applied a wide species concept of three “variable species” (*S. nitidus* (Friese, 1909), *S. opacus* (Friese, 1909), *S. ruficornis* (Cockerell, 1916)) and consequently synonymized nine taxa with them. Although the close relationship of the *S. nitidus* group and the *S. basutorum* group was already recognized by Eardley (1996: 43), he preferred to keep them as separate entities.

This revision comprises in a consistent way all taxa that exhibit the newly defined characters of the *S. nitidus* group. Thus, *S. basutorum* (Cockerell, 1915) and *S. flavipes* (Friese, 1925) of the former *S. basutorum* group and *S. flavostictus* Cockerell, 1934) from the morphologically very heterogeneous *S. flavostictus* group are now included which is also supported by preliminary molecular phylogenetic data (unpubl.). In the course of the present study, Kuhlmann (2021) had already clarified some of the pending taxonomic problems in the *S. nitidus* group. Based on the examination of type material of all available species, the status of valid species of eight out of the nine taxa previously synonymized by Eardley (1996) was restored. Thus, currently the *S. nitidus* group contains 13 described taxa and an additional 15 species are here described as new.

Scrapper is a morphologically highly diverse genus (Davies & Brothers 2006) but the majority of species can be clearly assigned to groups of apparently closely related taxa. However, some species seem to combine characters of different species groups which is an obstacle for an unequivocal taxonomic subdivision of this large genus. To overcome this problem, a phylogeny and revision of the remaining taxa is required, many of them undescribed. A better understanding of the intra-generic systematics is also needed before a comprehensive and reliable key for the identification of *Scrapper* species groups can be provided. Fortunately, the species of the *S. nitidus* group are quite easily recognizable as a group and some of them belong to the most common species of the genus that can be locally abundant. However, it is a species-rich complex of closely related taxa that often show only subtle, although constant and reliable, morphological characters which makes their identification at species level difficult. For this reason, in the present study all 28 currently recognized species of the *S. nitidus* group are redescribed in a standardized way accompanied by comprehensive illustrations and a key for identification.

Material and methods

In this study a morphological species concept is applied. Terminology of bee morphology follows Michener (2007) and for surface sculpture Harris (1979). Specimens were examined with a stereo microscope Zeiss Stemi 508 (Carl Zeiss AG, Oberkochen, Germany). For measurements a measuring eyepiece was used. Body length was measured from vertex to apex of the body.

The puncture density is indicated by the relation between the puncture distance (i) and the puncture diameter (d). The position of the posterior ocelli in relation to the posterior margin of the compound eyes is species-specific (Fig. 1). The posterior ocelli can lie behind a virtual line between the posterior margin of the compound eyes (Fig. 1A) or in front of it (Fig. 1B). Transitional forms, in which the posterior ocelli are in line with the posterior margin of the compound eyes, also occur.

Images were taken with the digital microscope Keyence VHX-5000 (KEYENCE DEUTSCHLAND GmbH, Neu-Isenburg, Germany) using the VH-Z20R/Z20T (20× to 200×) zoom lens and the OP-42305 super diffused illumination adapter. For image processing GIMP ver. 2.10.22 (GNU Image Manipulation Program, Copyright© 1995–2020) was used.

Coordinates of localities that are not given on the original specimen label were identified using Google Earth (Google Earth Pro, ver. 7.3.4.8248, Copyright© 2021) and presented in square brackets (e.g.,

[31°22"S], [19°07"E]). Due to frequent misidentifications in the past, only records of specimens studied by us are considered.

Permits for fieldwork and wild bee collecting in South Africa were granted by Cape Nature for Western Cape Province (permit numbers 202/1999, 250/2000, 368/2001, AAA004-00212-0035, AAA004-00446-0035, AAA004-01055-0035, 0056-AAA008-00076, CN44-87-21440) and by Northern Cape Department of Environment and Nature Conservation for Northern Cape Province (025/2002, 056/2003, 0055/04, 0332/05, 0648/06, 0317/07, FAUNA 074/2008, FAUNA 1299/2008, FAUNA 082/2010, FAUNA 557/2011, FAUNA 638/2012, FAUNA 155/2013, FAUNA 1213/2014, FAUNA 0529/2016, FAUNA 0345/2017, FAUNA 0461/2022).

Abbreviations used for morphological structures:

S = metasomal sternum
T = metasomal tergum

Acronyms used for collections where specimens are deposited:

NHML = Natural History Museum, London, UK
OÖLM = Oberösterreichisches Landesmuseum, Linz, Austria
RCMK = Research collection of Michael Kuhlmann, Zoologisches Museum Kiel, Germany
SAMC = Iziko South African Museum, Cape Town, South Africa
SANC = South African National Collection of Insects, Pretoria, South Africa
USDA = United States Department of Agriculture, Logan, Utah
ZMHB = Museum für Naturkunde, Berlin, Germany

Abbreviations used for collectors:

AM = A. Mackie
CE = C. Eardley
CK = C. Kok
CM = C. Mayer



Fig. 1. Vertex of male of *S. caeruleus* sp. nov. (A) and female of *S. felicis* sp. nov. (B). The dotted line shows the position of the posterior ocelli in relation to the posterior margin of the compound eyes. **A.** Ocelli are behind posterior margin of the compound eyes. **B.** Ocelli are slightly in front of posterior margin of the compound eyes.

DB	=	D. J. Brothers
DM	=	D. Macbillivray
GP	=	G. Peringuey
GT	=	G. Tribe
HB	=	H. Brauns
HE	=	H. Erhardt
HT	=	H. P. Thomasset
JO	=	J. Oglivie
KT	=	K. Timmermann
LP	=	L. Packer
MH	=	M. Halada
MK	=	M. Kuhlmann
MS	=	M. Snizek
MT	=	M. Struck
RJ	=	R. Jubb
RN	=	R. Nel
RT	=	R. E. Turner
TG	=	T. Griswold
UR	=	Univ. Rhodes
VW	=	V. Whitehead

Results

Class Hexapoda Blainville, 1816
Order Hymenoptera Linnaeus, 1758
Superfamily Apoidea Latreille, 1802
Epifamily Anthophila Latreille, 1804
Family Colletidae Lepeletier, 1841
Subfamily Scraptrinae Ascher & Engel, 2005

Genus *Scapter* Lepeletier & Serville, 1828

The *Scapter nitidus* species group

A brief summary of *Scapter* species group concepts, in particular the problematic history of the *S. nitidus* species group, was provided in the introduction. The focus here is on a revised and more consistent morphological definition of this taxon to accommodate species previously placed in other groups. The new broadened concept is also supported by unpublished preliminary molecular phylogenetic data. Eardley's (1996: 42–43) detailed diagnosis of the *S. nitidus* species group mostly refers to characters of limited diagnostic value when critically assessed based on the far richer *Scapter* material available today. Exceptions are the medio-longitudinal depression of the clypeus and the narrow facial fovea.

Following the new definition, species of the *S. nitidus* species group are:

- A) Medium-sized bees of usually 7–9 mm (range about 6–11 mm) body length and
- B) characterized by deep and coarse punctation of head and mesosoma (e.g., Figs 26B, 39B–C).

In combination with at least three of the following features:

- C) Clypeus with medio-longitudinal depression (e.g., Figs 13B, 15C) (clypeus convex: *S. flavipes*, *S. convexus* sp. nov.; clypeus flat: *S. flavostictus*, *S. caeruleus* sp. nov.).

Table 1. Subgroups and species of the *Scapter nitidus* group listed in the order of treatment in the revision.

<i>S. basatorum</i> subgroup	<i>S. nitidus</i> subgroup	<i>S. divergens</i> subgroup	<i>S. ruficornis</i> subgroup	<i>S. confusus</i> subgroup
<i>S. basatorum</i> (Cockerell, 1915)	<i>S. caeruleus</i> sp. nov.	<i>S. divergens</i> (Friese, 1925)	<i>S. felicis</i> sp. nov.	<i>S. confusus</i> sp. nov.
<i>S. flavipes</i> (Friese, 1925)	<i>S. convexoides</i> sp. nov.	<i>S. montanus</i> sp. nov.	<i>S. flavipunctatus</i> sp. nov.	
<i>S. flavostictus</i> Cockerell, 1934	<i>S. convexus</i> sp. nov.	<i>S. pallidicinctus</i> Cockerell, 1933	<i>S. ruficornis</i> (Cockerell, 1916)	
	<i>S. crassipunctatus</i> sp. nov.			
	<i>S. flavitarsis</i> Cockerell, 1936			
	<i>S. fuscipennis</i> (Friese, 1912)			
	<i>S. glaberrimus</i> (Friese, 1912)			
	<i>S. imparilis</i> sp. nov.			
	<i>S. littoralis</i> sp. nov.			
	<i>S. longicornis</i> sp. nov.			
	<i>S. mpumalangensis</i> sp. nov.			
	<i>S. nitidus</i> (Friese, 1909)			
	<i>S. obtusus</i> sp. nov.			
	<i>S. perpunctatulus</i> sp. nov.			
	<i>S. perpunctatus</i> Cockerell, 1933			
	<i>S. semirufus</i> Cockerell, 1932			
	<i>S. sphecodoides</i> (Friese, 1912)			
	<i>S. variabilis</i> sp. nov.			

D) Facial fovea almost linear and narrow, bottom barely visible (e.g., Figs 5B, 39B) (facial fovea broader: *S. basatorum*, *S. flavipes*).

E) Basal part of propodeum ± horizontal.

F) Males: Metasoma slender ± parallel-sided, about three times as long as broad (less distinct in *S. basatorum* subgroup and *S. confusus* subgroup).

G) Males: S7 apicolateral lobes reduced (e.g., Figs 6F, 18F) (S7 with small apicolateral lobes: *S. felicis* sp. nov., *S. flavipunctatus* sp. nov., *S. montanus* sp. nov., *S. pallidicinctus*).

Transitional forms exist that link the *S. nitidus* group to the closely related “euryglossiform” *Scapter* and the relatives of *S. aureiferus* Cockerell, 1932 and *S. calx* Eardley, 1996 respectively (the latter form a species group of their own). But species of these two groups are generally distinctly smaller (usually < 6 mm) with much finer punctation than in the *S. nitidus* group and males have a broader and shorter

metasoma. Furthermore, “euryglossiform” *Scrapper* are the smallest bees of the genus and have an even narrower groove-like facial fovea with an invisible bottom but share with the *S. nitidus* group reduced apicolateral lobes of S7 and the general shape of male genitalia (Kuhlmann 2014; Kuhlmann & Friehs 2020).

The *Scrapper nitidus* group can be divided into five subgroups (Table 1) which differ in morphological characters and partly in distribution patterns. Since the phylogeny of the taxa of the *Scrapper nitidus* species group is unknown, species are listed alphabetically within the subgroups with the latter defined before the species are treated.

Species of the Scrapper nitidus species group

***Scrapper basatorum* subgroup**

In both sexes species in this subgroup can be distinguished from other subgroups by the yellowish or whitish pronotal lobe. The subgroup includes three species (Table 1) that are widespread in the east of South Africa.

***Scrapper basatorum* (Cockerell, 1915)**

Figs 2–4

Capicola basatorum Cockerell, 1915: 342–343, holotype ♂ (type locality: Basutoland, Lesotho) (NHML), examined.

Polyglossa (Strandiella) luteipennis Friese, 1925: 516, holotype ♂ (type locality: Rikatla, Mozambique) (ZMHB), examined (synonymized by Eardley 1996).

Diagnosis

The female of *S. basatorum* can be separated from that of all other species of this group by the following character combination: pronotal lobe yellow (Fig. 3A); facial fovea 3.5 times as long as wide (Fig. 2B) and sparse punctation ($i = 1–2$ d) on the scutum (Fig. 2C). The male is characterized by a yellow pronotal lobe (Fig. 3A); flagellum of antenna slightly longer than the compound eye (Fig. 3A); hind femur partly yellow (Fig. 3A) and facial fovea 3.5 times as long as wide.

Material examined (2 specimens)

LESOTHO • 1 ♂; Basutoland, Teyateyaneng; [29°09' S], [27°44' E]; 16 Dec. 1964; DB leg.; RCMK.

SOUTH AFRICA • 1 ♀; O.F.S. Adullam Farm near Clarens; 28°32' S, 28°28' E; 20–26 Feb. 1980; CK leg.; RCMK.

Description

Female

BODY LENGTH. 10.7 mm.

HEAD. Slightly wider than long. Integument brownish, mandibles dark brownish. Face irregularly and sparsely covered with light brownish hair, more densely around the basis of the antennae. Facial fovea about 3.5 times as long as wide. Ocelli slightly in front of posterior margin of compound eyes. Clypeus medial with shallow longitudinal depression; coarse punctation, apically sparse ($i = 1–2$ d), laterally dense ($i = 1$ d). Surface between punctures relatively smooth and shiny (Fig. 2B). Malar area medially

narrow, slightly curved. Antennal flagella ventrally and distal third completely yellow, dorsally black. Supraclypeal area at upper margin flat to slightly convex.

MESOSOMA. Integument black, pronotal lobe yellow. Scutum coarsely and irregularly punctate ($i = 1-2.5$ d); surface between punctures with very fine punctation. Metanotum about a third of length of scutellum (Fig. 2C). Propodeum basally broadly, coarsely carinate, posterior coarsely coriaceous, laterally carinae

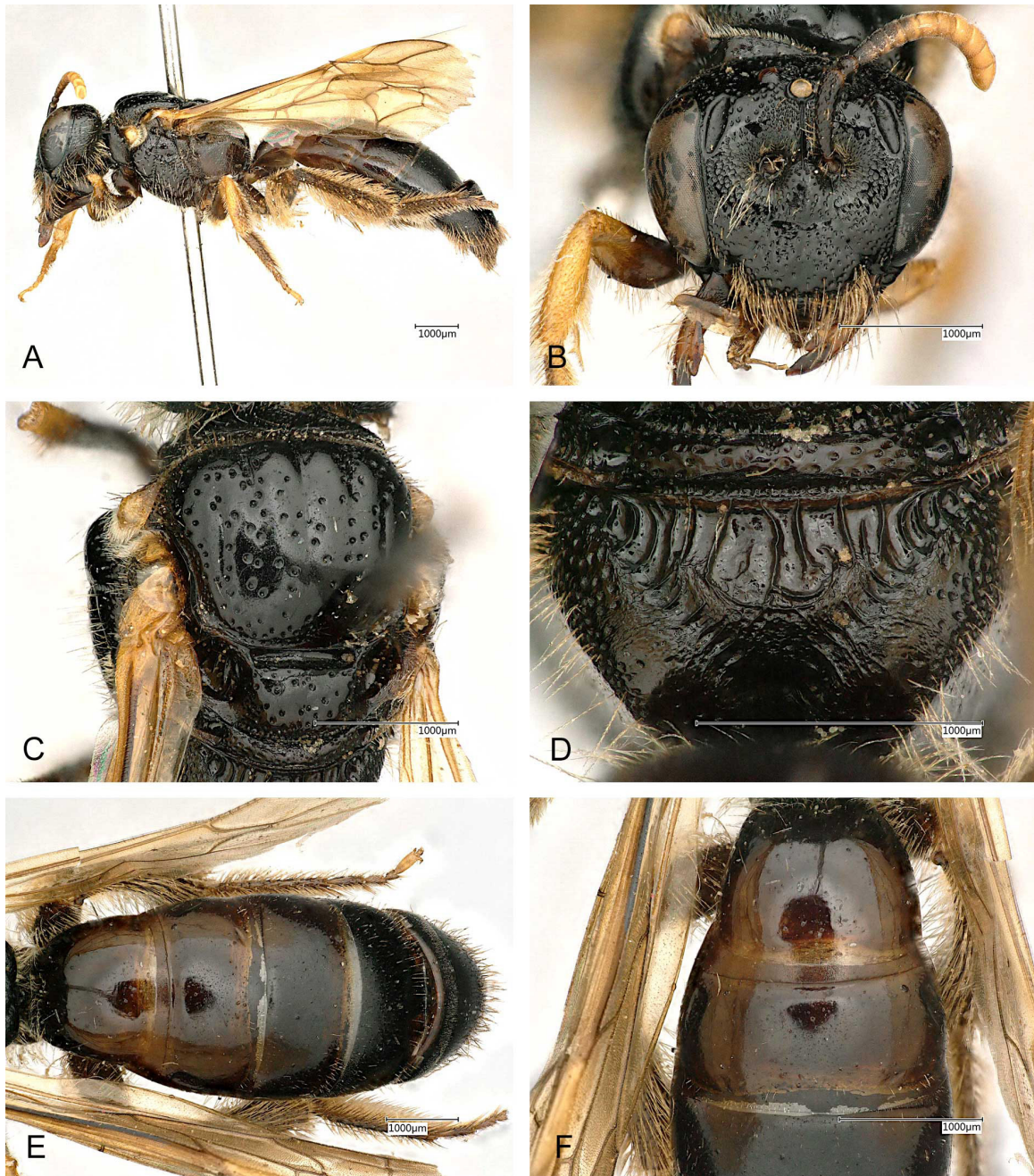


Fig. 2. *Scrapper basutorum* (Cockerell, 1915), ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

(Fig. 2D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, greyish, erect hair.

WINGS. Yellowish-brown, stigma yellow, wing venation brownish (Fig. 2A).

LEGS. Integument brownish, hind femur completely dark brown to black. Vestiture greyish-white, scopa greyish-brown (Fig. 2A).

METASOMA. Integument brownish, marginal zones yellowish-brown. No hair bands on basally terga. T3 anterior of premarginal line with hair band of long greyish-brownish, erect hair. Prepygidial and pygidial fimbriae greyish-brown. Discs of T1–T4 punctulate; surface between punctures smooth and shiny (Fig. 2E–F).

Male

BODY length. 11 mm.

HEAD. Slightly wider than long. Integument brownish, mandibles yellowish proximal and reddish distal. Facial fovea about 3.5 times as long as wide. Face densely covered with long, white, erect hair. Ocelli slightly in front of posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally and distal half completely yellow, dorsally black.

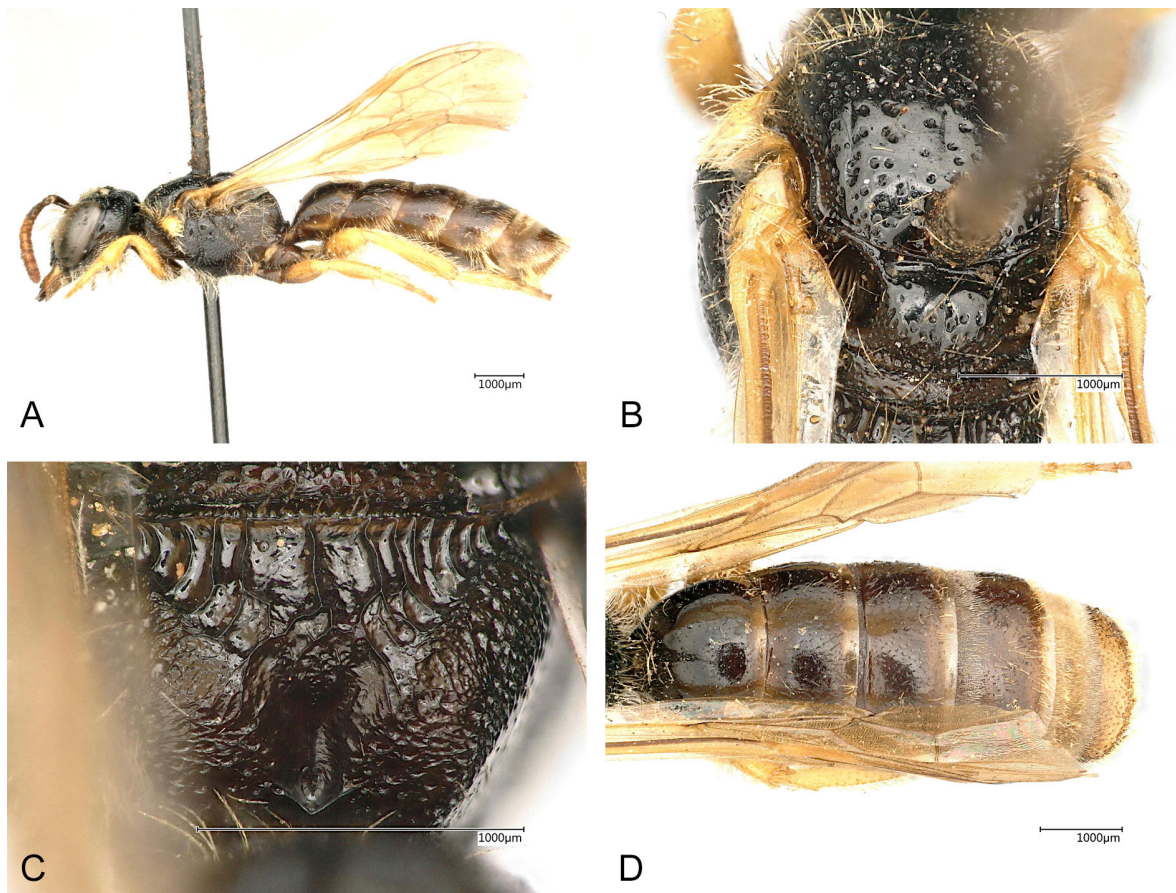


Fig. 3. *Scapter basutorum* (Cockerell, 1915), ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

MESOSOMA. Integument brownish to black, pronotal lobe yellow. Scutum irregularly and densely ($i = 1-2.5$ d) punctate, mixed with very fine punctures (Fig. 3B). Basal half of the propodeum with coarse carinae, posterior half rugulose (Fig. 3C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma yellow, wing venation brownish (Fig. 3A).

LEGS. Integument on basis brownish, hind femur partly yellow. Vestiture greyish-white (Fig. 3A).

METASOMA. Integument brownish, marginal zone brownish. T2–T4 sparsely covered with long, yellowish-brown, erect hair; T4–T5 basally with short, very dense, light brownish, erect hair, covering about sixth of T4 and half of T5. T3–T4 row of short, erect, light brownish hair. Disc of T1 finely, shallowly, sparsely ($i = 3-5$ d) punctate (Fig. 4A), discs of T2–T4 terga shallowly, finely, and sparsely ($i = 2$ d), but regularly punctate. Surface between punctures matt (Fig. 3D).

TERMINALIA. Genitalia (Fig. 4B), S7 (Fig. 4C) and terminal plate of S8 (Fig. 4D) as illustrated.

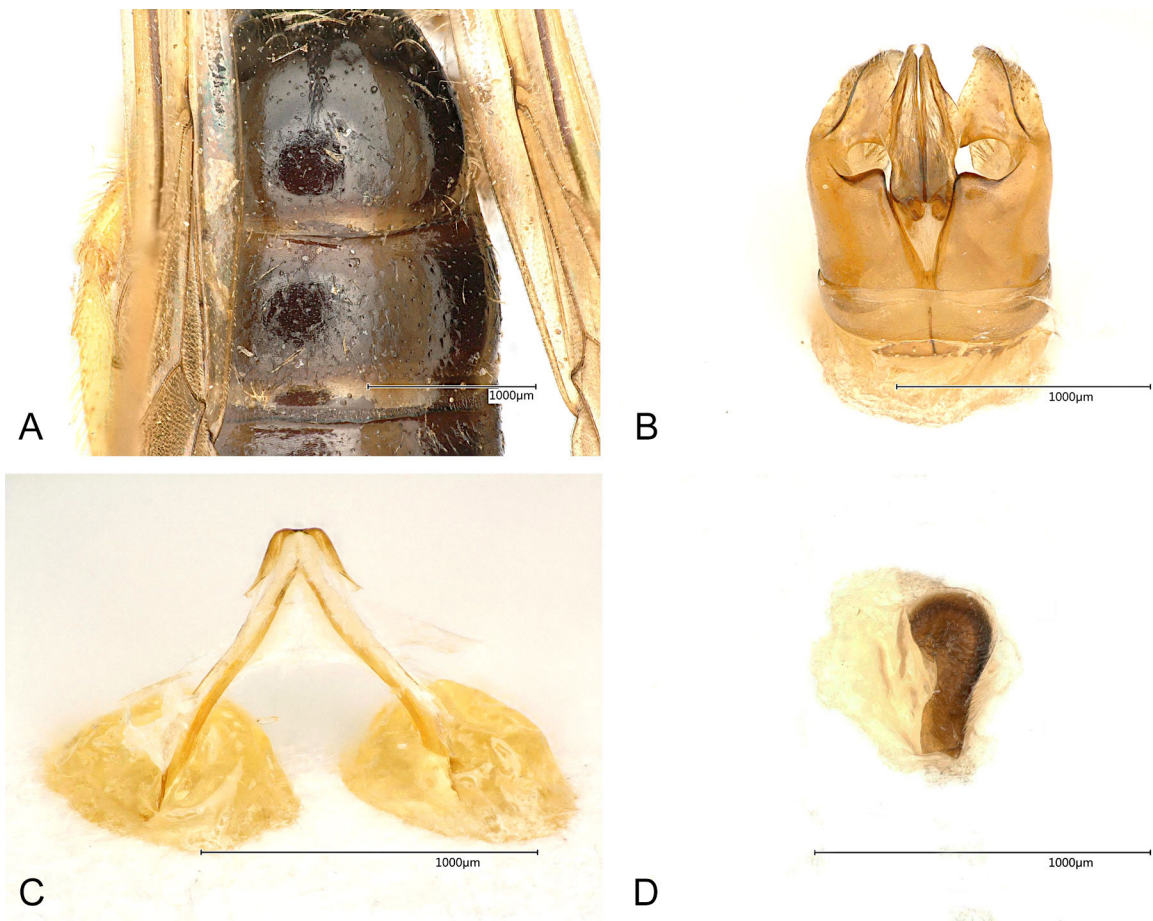


Fig. 4. *Scapter basutorum* (Cockerell, 1915), ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

Distribution

A montane species that is only known from the Drakensberg region of South Africa and Lesotho. According to Eardley (1996), a single record from Mozambique is doubtful.

Floral hosts

Unknown.

Seasonal activity

December–February.

Scapter flavipes (Friese, 1925)

Figs 5–7

Polyglossa (Strandiella) flavipes Friese, 1925: 516–517, lectotype ♀ [designated by Eardley 1996] (type locality: Mfongosi, South Africa) (ZMHB), examined.

Diagnosis

The female of *S. flavipes* can be separated from that of all other species of this group by the following character combination: pronotal lobe yellow (Fig. 5A); facial fovea 3.5 times as long as wide; punctation on scutum dense ($i = 0.3$ d) (Fig. 5C). The male is characterized by a yellow pronotal lobe (Fig. 6A); narrow facial fovea; hind femur completely dark brown to black (Fig. 6A); anterior of premarginal line long and multi-rowed hairs (Fig. 6F); punctation of scutum dense ($i = 0.5$ d) (Fig. 6B) and form of S7 (Fig. 7C).

Additional material examined (2 specimens)

SOUTH AFRICA • 1 ♀, 1 ♂; Natal, Weenen; [28°51' S], [30°06 E]; Jan. 1925; HT leg.; RCMK.

Description

Female

BODY LENGTH. 8.5 mm.

HEAD. Wider than long. Integument brownish, mandibles yellowish-brown to reddish. Face irregularly and sparsely covered with greyish hair, more densely around basis of antennae. Facial fovea about 3.5 times as long as wide. Ocelli in front of the posterior margin of the compound eyes. Clypeus convex with fine punctation, apically sparse ($i = 1–2$ d), laterally dense ($i = 0.5$ d). Surface between punctures smooth and shiny (Fig. 5B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area delimited by sharp edges and definite.

MESOSOMA. Integument brownish, pronotal lobe yellow. Scutum finely and densely ($i = 0.3$ d) punctate; surface between punctures smooth and shiny (Fig. 5C). Metanotum less than half as long as scutellum. Propodeum basally and laterally coarsely carinate, apically coriaceous, matt (Fig. 5D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma yellow and wing venation yellowish-brown (Fig. 5A).

LEGS. Integument brownish, hind femur completely dark brown to black. Vestiture and scopa greyish-white (Fig. 5A).

METASOMA. Integument brownish, T2–T3 completely and T1 and T4 partly yellow (Fig. 5E). T2–T4 anterior of pre-marginal line at least laterally row of short, greyish, erect hair. Hair on T4 dense, getting longer towards posterior. Prepygidial and pygidial fimbriae greyish. Discs of T1–T4 completely impunctate, surface abrasive and matt (Fig. 5E–F).

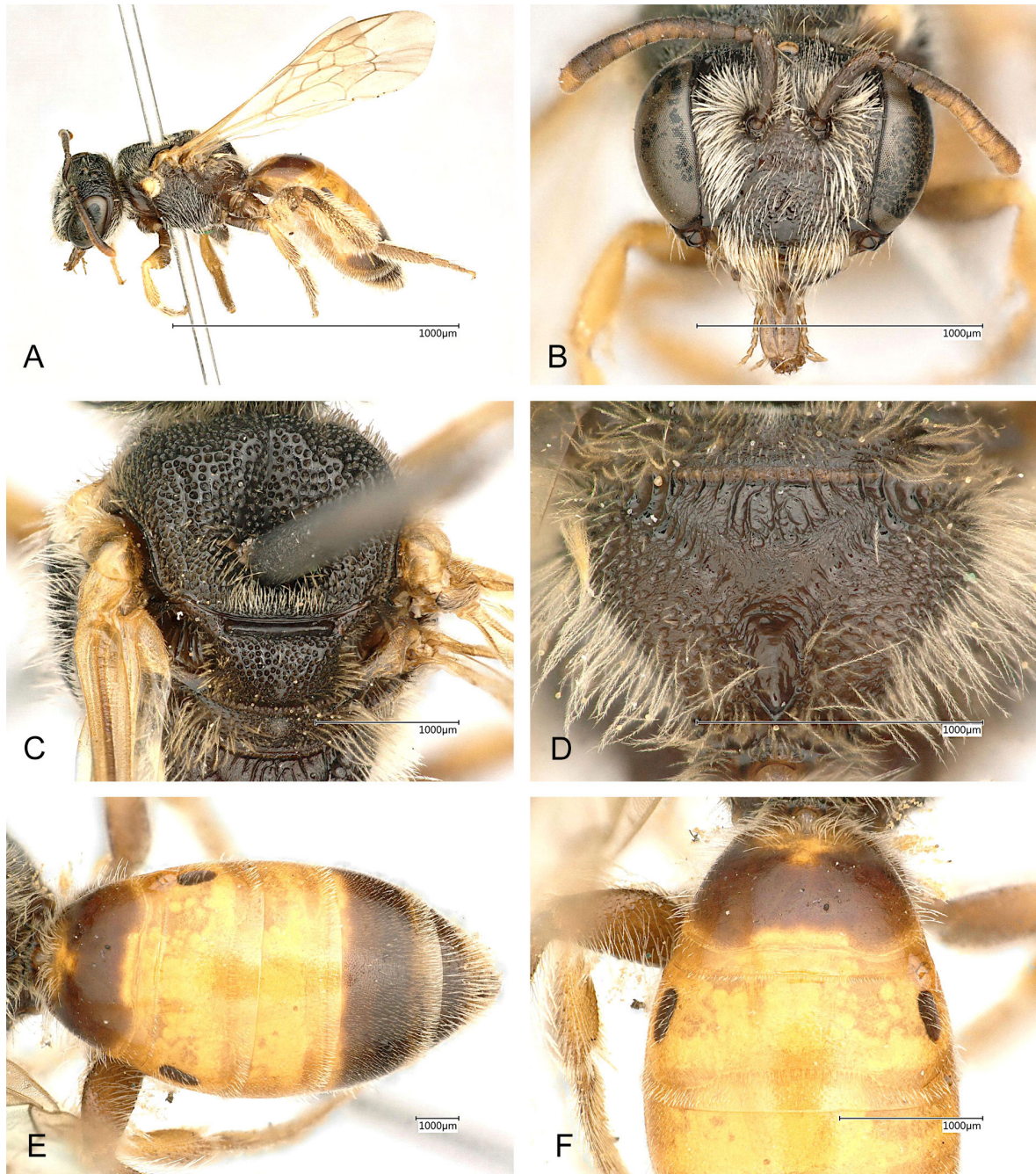


Fig. 5. *Scapter flavipes* (Fries, 1925), ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

Male

BODY LENGTH. 7.8 mm.

HEAD. Wider than long. Integument brownish, mandibles brownish to reddish. Face densely covered with long, yellowish-grey, erect hair. Ocelli slightly in front of posterior margin of compound eyes. Facial fovea at least 5 times as long as wide. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument brownish, pronotal lobe yellow. Scutum regularly and densely ($i = 0.5 d$) punctate (Fig. 6B). Propodeum basolaterally carinate, medially coarsely areolate (Fig. 6C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, yellowish-grey, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 6A).

LEGS. Integument brown, hind femur partly dark brown to black. Vestiture greyish (Fig. 6A).

METASOMA. Integument black, marginal zone brownish. Disc of T1 without hair (Fig. 7A); T3 basally greyish, sparse, short, erect hair band, covering sixth of the tergum; hair of T4 basally short, getting longer towards posterior. T2–T4 anterior of premarginal line with row of short, erect, greyish hair (Fig. 6D). T1–T4 impunctate, surface abrasive and matt (Fig. 6D).



Fig. 6. *Scapter flavipes* (Friese, 1925), ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

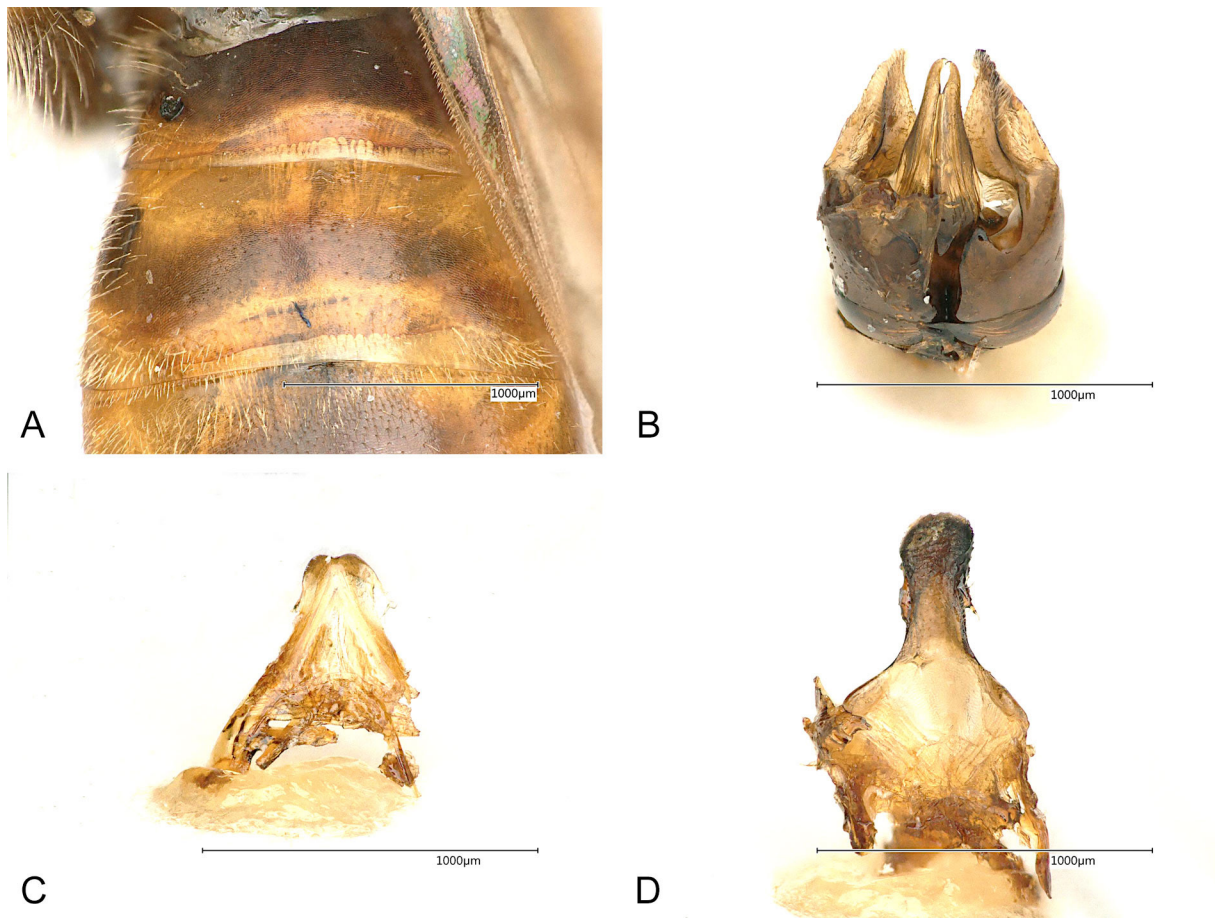


Fig. 7. *Scapter flavipes* (Friese, 1925), ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

TERMINALIA. Genitalia (Fig. 7B), S7 (Fig. 7C) and terminal plate of S8 (Fig. 7D) as illustrated.

Distribution

Only known from a narrow strip in SE South Africa from Barberton in the north to Jeffreys Bay in the south (Eardley 1996).

Floral hosts

Unknown.

Seasonal activity

January.

***Scapter flavostictus* Cockerell, 1934**

Figs 8–10

Scapter flavostictus Cockerell, 1934: 453–454, holotype ♀ (type locality: Natal National Park, South Africa) (NHML), examined.

Diagnosis

The female of *S. flavostictus* can be separated from that of all other species of this group by the following character combination: pronotal lobe whitish-yellow (Fig. 8A); facial fovea narrow (Fig. 8B); punctation on discs of T2–T3 shallow (Fig. 8E). The male is characterized by a yellow pronotal lobe (Fig. 9A); narrow facial fovea; T3 anterior of premarginal line with a row of hairs implied (Fig. 9D); punctation of scutum coarse and dense ($i = 0.5 d$) (Fig. 9C) and form of S8 (Fig. 10D).

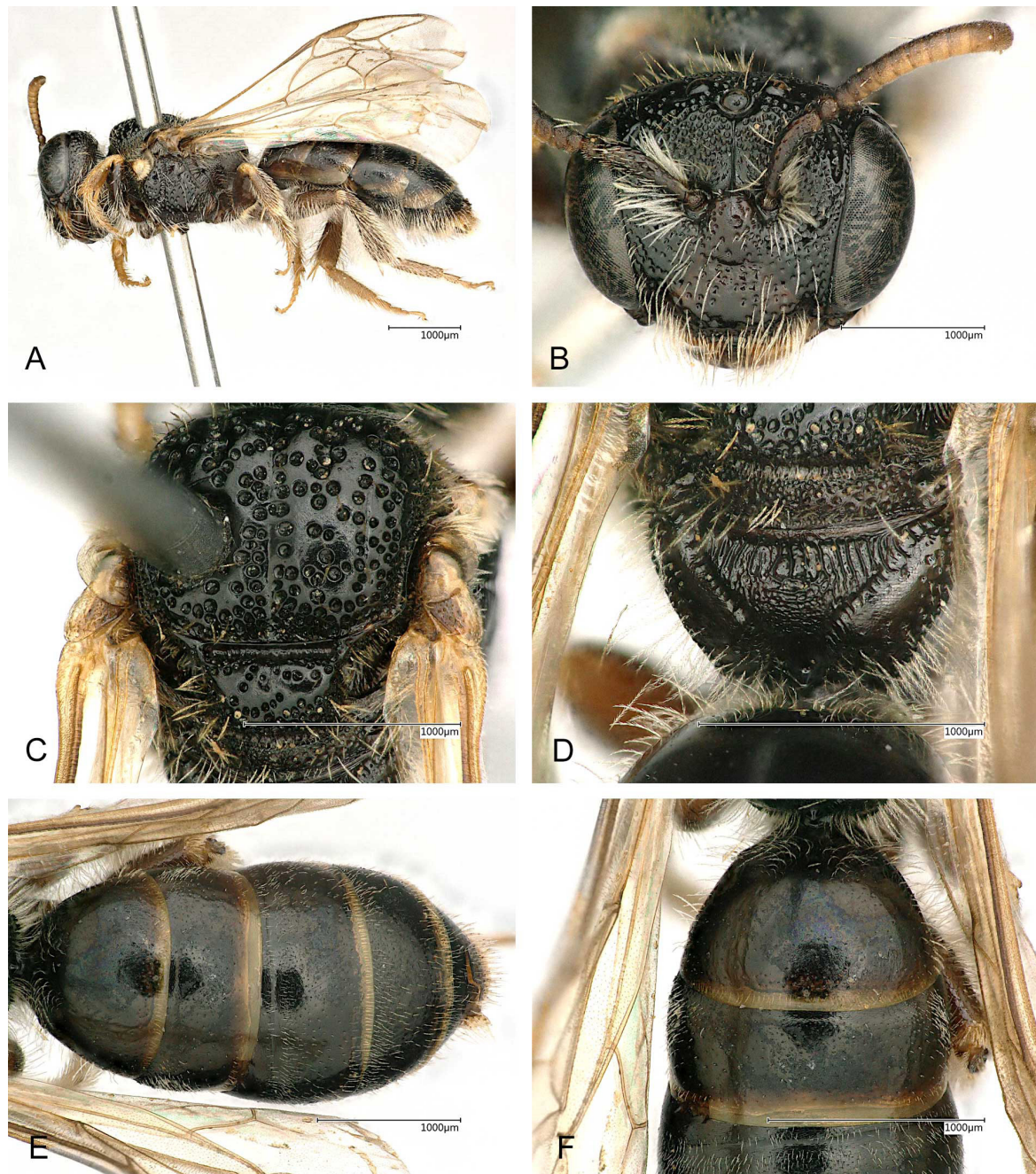


Fig. 8. *Scrapper flavostictus* Cockerell, 1934, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

Material examined (7 specimens)

SOUTH AFRICA • 1 ♀; Natal, Van Reenen, Drakensberg; [28°21' S], [29° 22 E]; Nov. 1926; RT leg.; RCMK • 1 ♂; same collection data as for preceding; 7 Mar. 1927; RT leg.; RCMK • 2 ♀♀; N Cape, 1 km S of Campbell; 28°48'20" S, 23°43'29" E; 7 Mar. 2010; LP leg.; RCMK • 1 ♂; N Cape, 1 km S of Campbell; 28°48'12" S, 23°43'18" E; 1250 m a.s.l.; 7 Mar. 2010; CE leg.; SANC • 1 ♂; Natal, Cathedral Peak Area, above Mike's Pass; 28°59' S, 29°14' E; 1973 m a.s.l.; 28–29 Mar. 1985; CE leg.; SANC • 1 ♂; Natal; 6 Apr. 1948; unknown leg.; SANC.

Description

Female

BODY LENGTH. 6–6.7 mm.

HEAD. Wider than long. Integument brownish, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli in line with posterior margin of compound eyes. Facial fovea narrow, at least 5 times as long as wide. Clypeus flat and coarsely punctate ($i = 1-2$ d), in the middle impunctate. Surface between punctures smooth and shiny (Fig. 8B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area completely triangularly elevated.

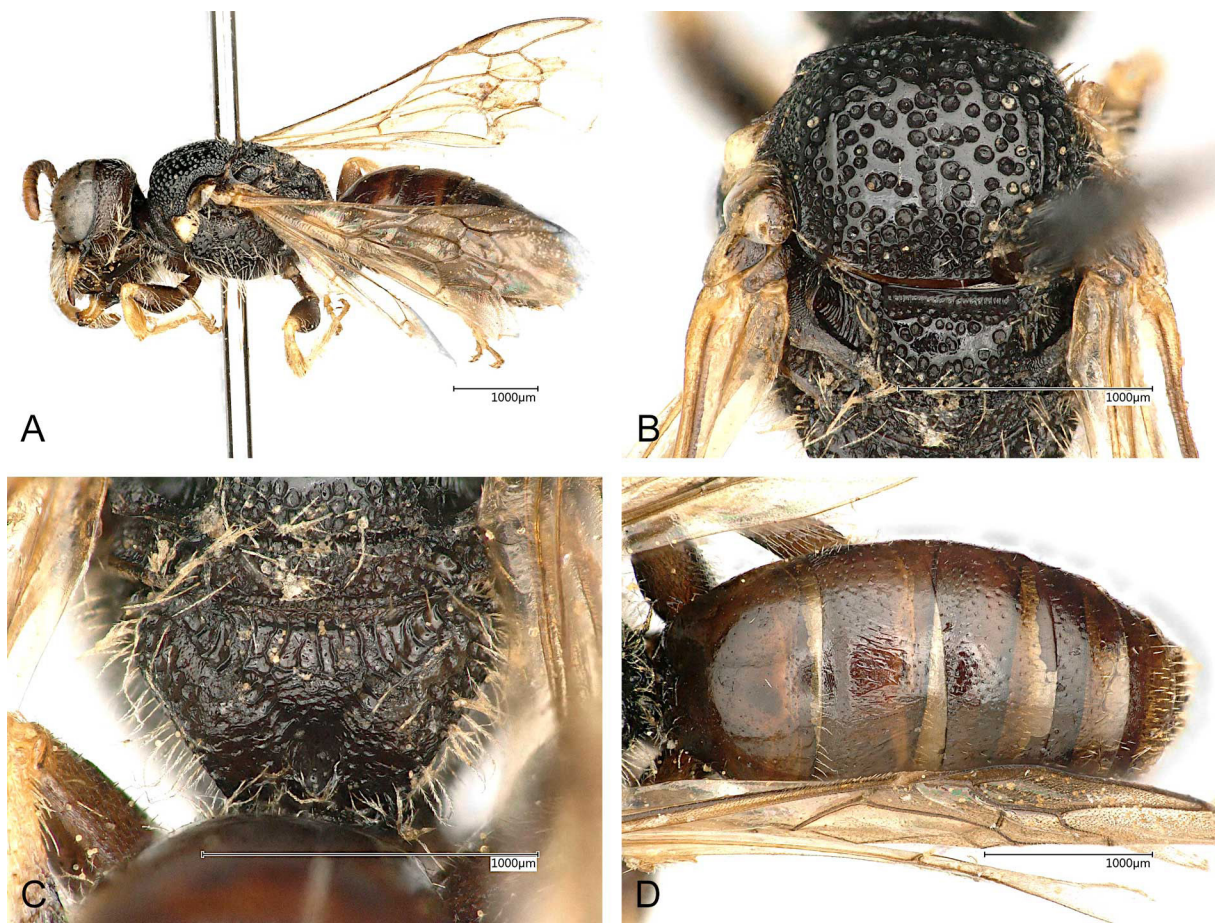


Fig. 9. *Scapter flavostictus* Cockerell, 1934, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

MESOSOMA. Integument brownish-black to black, pronotal lobe yellowish-white. Scutum coarsely and irregularly punctate ($i = 0.2\text{--}1$ d), surface between punctures matt (Fig. 8C). Metanotum less than half as long as scutellum. Propodeum basally broadly, coarsely carinate, posterior half finely areolate (Fig. 8D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 8A).

LEGS. Integument black, hind femur completely dark brown to black. Vestiture and scopa greyish-white (Fig. 8A).

METASOMA. Integument dark brownish, marginal zones yellowish-brown. Hair field anterolaterally on T2–T3; T4 nearly completely sparsely haired with short, greyish-yellow, erect hair. T3 anterior of premarginal line with row of hairs across the whole width of the tergum (Fig. 8E). Prepygidial and pygidial fimbriae yellowish-grey. Disc of T1 finely puncticulate (Fig. 8F); discs of T2–T4 finely and shallowly punctate. Surface between punctures matt (Fig. 8E).

Male

BODY LENGTH. 6.1 mm.

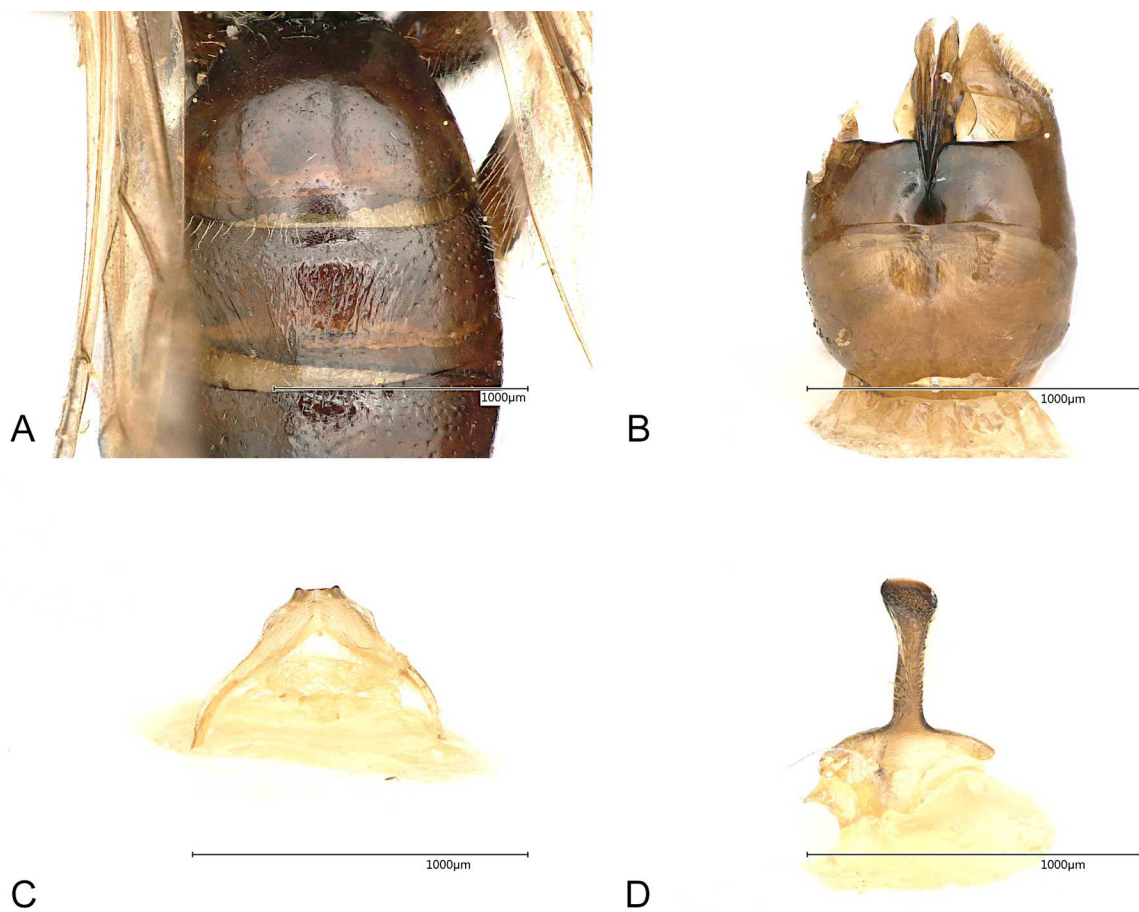


Fig. 10. *Scapter flavostictus* Cockerell, 1934, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

HEAD. Wider than long. Integument brownish, mandibles dark brownish to reddish. Face densely covered with long, greyish-white, erect hair. Ocelli in line with posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum relatively regularly and densely ($i = 0.5$ d) punctate; surface between punctures smooth and shiny with very fine und shallow punctation (Fig. 9C). Propodeum basally broadly, coarsely carinate, posterior half areolate (Fig. 9D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 9A–B).

LEGS. Integument brownish, hind femur completely dark brown to black. Vestiture greyish-white (Fig. 9A–B).

METASOMA. Integument brownish, marginal zone yellowish. Disc of T1 without hair (Fig. 10A); basally on T2–T4 row of short, yellowish-grey, erect hair (Fig. 9D). Disc of T1 punctulate (Fig. 10A); discs of T2–T4 finely, shallowly, and sparsely ($i = 2$ d) punctate; surface between punctures matt (Fig. 9D).

TERMINALIA. Genitalia (Fig. 10B), S7 (Fig. 10C) and terminal plate of S8 (Fig. 10D) as illustrated.

Distribution

Widespread, particularly in eastern South Africa (Eardley, 1996).

Floral hosts

Unknown.

Seasonal activity

November–March.

***Scapter nitidus* subgroup**

Species of the *S. nitidus* subgroup are defined by the following character combination: in both sexes facial fovea narrow but with a visible bottom and pronotal lobe dark brown to black. Females: propodeum partly carinate, discs of T2 and T3 finely and sparsely punctate. Males: T2–T3 with dense punctation that covers at least a third of the terga and antennal flagellum longer than compound eye.

The *S. nitidus* subgroup comprises 18 species (Table 1) that are mostly morphologically very similar, so that species identification can be difficult. Especially identification of the females can be a problem without reference material.

***Scapter caeruleus* sp. nov.**

[urn:lsid:zoobank.org:act:C6DA50AF-A9B6-430D-ADD3-CB428B3BCB7B](https://zoobank.org/urn:lsid:zoobank.org:act:C6DA50AF-A9B6-430D-ADD3-CB428B3BCB7B)

Figs 11–12

Diagnosis

The female of *S. caeruleus* sp. nov. can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line impunctate (Fig. 12C); discs of T1–T4 almost impunctate (Fig. 12C); basal part of propodeum coriaceous, posterior part smooth (Fig. 12B); body oily-bluish shimmering (Fig. 11B). The male is unknown.

Etymology

Named after its unique oily-bluish shine of the integument.

Type material (1 specimen)

Holotype

SOUTH AFRICA • ♀; Ouberg Pass, 27 km SE of Vanrhynsdorp, Fynbos; 31°48'07" S, 18°55'00" E; 380 m a.s.l.; 24 Sep. 2014; MK leg.; SAMC.

Description

Female

BODY LENGTH. 6.3 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli in front of posterior margin of compound eyes (Fig. 11D). Clypeus flat; punctation regular, fine, and dense ($i = 1-1.5 d$); surface between punctures smooth and shiny (Fig. 11C). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin slightly emarginated and edges slightly extended.

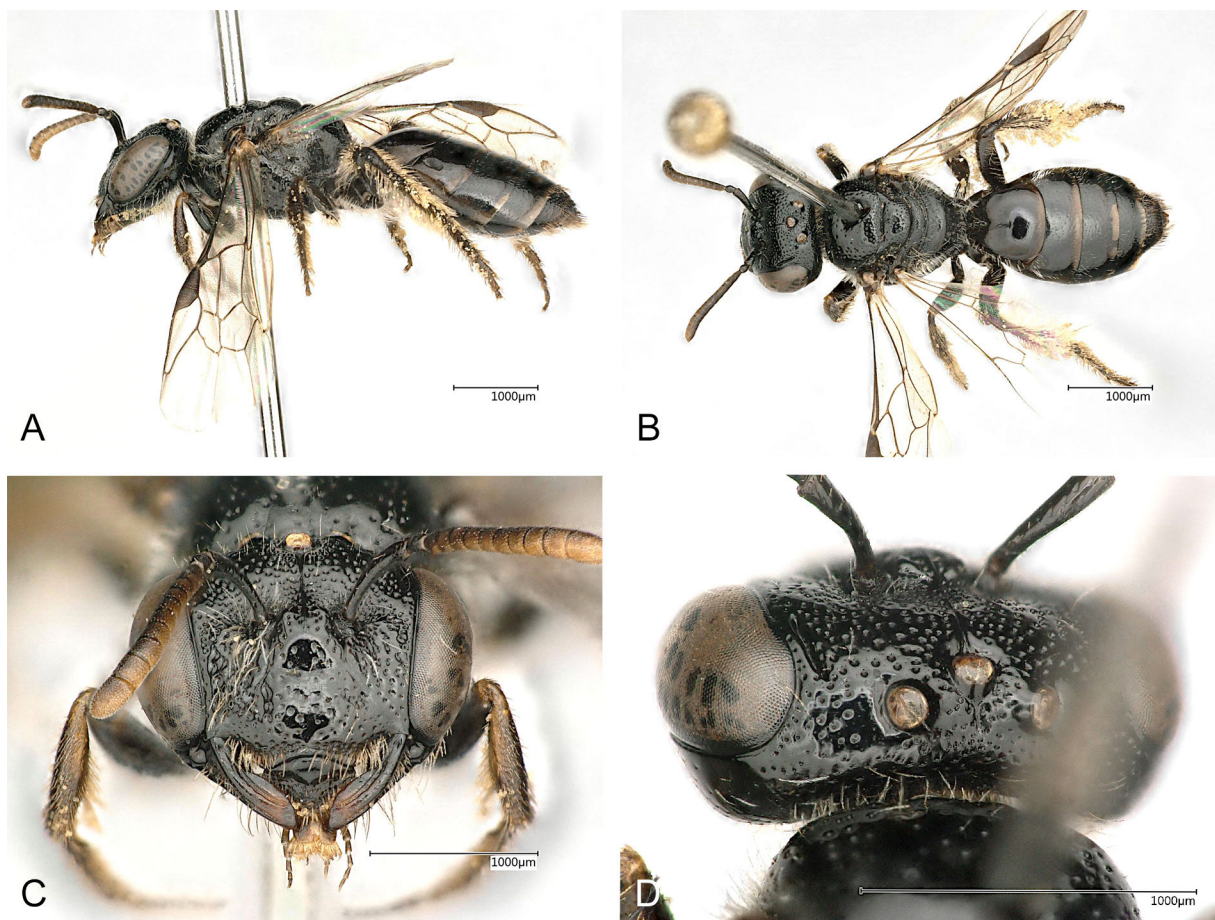


Fig. 11. *Scapter caeruleus* sp. nov., holotype, ♀. **A.** Lateral view. **B.** Dorsal view. **C.** Head (dorsal view). **D.** Vertex (dorsal view).

MESOSOMA. Integument black, pronotal lobe black. Scutum coarsely and irregularly punctate, laterally dense ($i = 1-1.5$ d), medially sparse ($i = 1-4$ d) (Fig. 12A). Metanotum about half as long as scutellum. Propodeum basolaterally with very short and fine carinae, basal margin coriaceous, posterior part smooth and shiny (Fig. 12B). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 11A–B).

LEGS. Integument brownish, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish (Fig. 11A–B).

METASOMA. Integument black, marginal zones yellowish-brown. Basolaterally on T2–T3 hair patches of short, greyish, erect hair; T2–T3 anterior of premarginal line at least laterally row of hairs; prepygidial and pygidial fimbriae brownish (Fig. 12C). Discs of T1–T4 almost impunctate. Surface smooth and shiny, oily-bluish shimmering (Fig. 12C–D).

Male

Unknown.

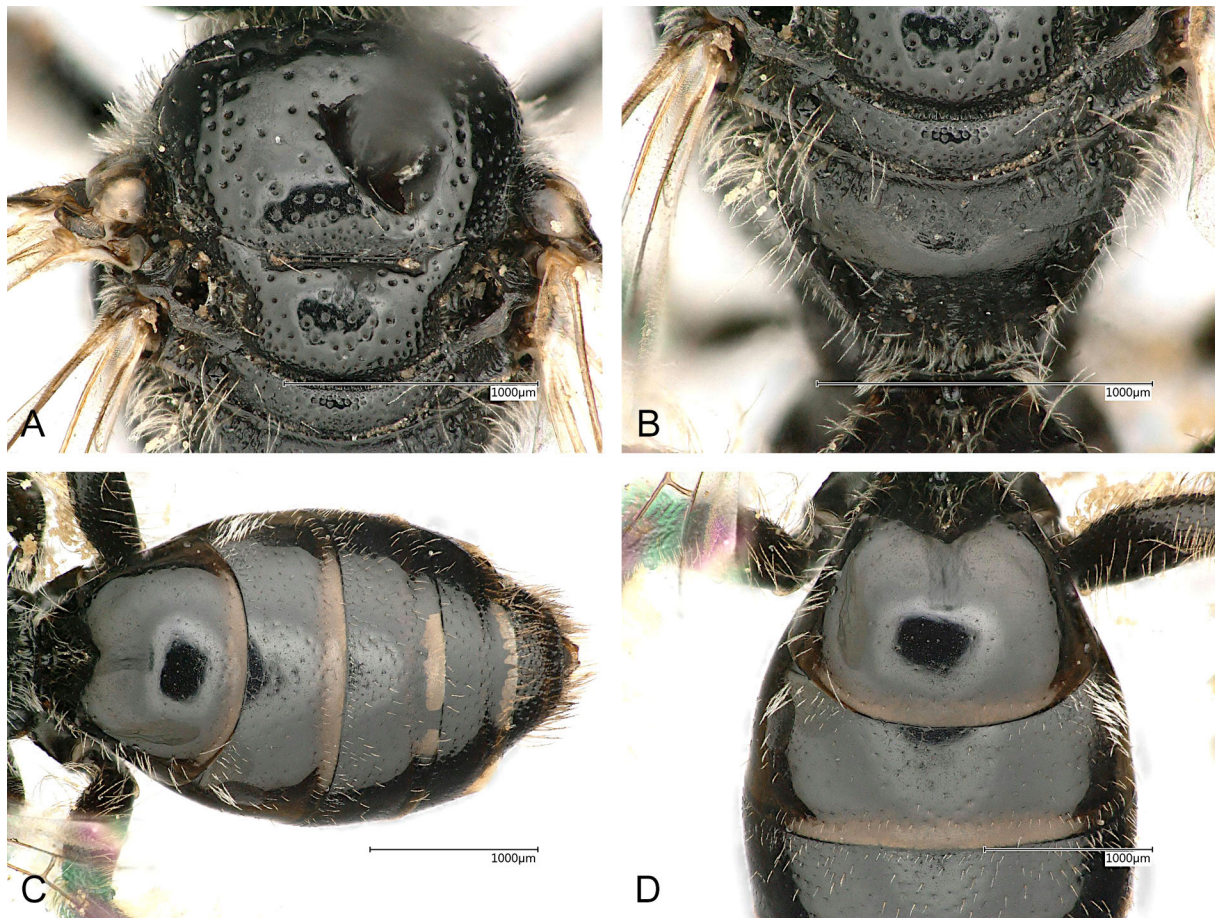


Fig. 12. *Scapter caeruleus* sp. nov., holotype, ♀. **A.** Scutum and scutellum (dorsal view). **B.** Metanotum and propodeum (dorsal view). **C.** Metasoma (dorsal view). **D.** Terga 1–2 (dorsal view).

Distribution

Only known from the type locality.

Floral hosts

Unknown.

Seasonal activity

September.

Scrapter convexoides sp. nov.

[urn:lsid:zoobank.org:act:C5906DDB-F342-4622-A86D-13D30A94463F](https://zoobank.org/act:C5906DDB-F342-4622-A86D-13D30A94463F)

Figs 13–14

Diagnosis

The male of *S. convexoides* sp. nov. can be separated from that of all other species of this group by the following character combination: dense ($i = 0.3 d$) punctation of discs of T1–T4 (Fig. 13D); dense ($i = 0.3 d$) punctation on disc of T2 covers more than half of the tergum (Fig. 14A); each tergum curved from anterior to posterior (Fig. 13A) and form of S7 (Fig. 14C). The female is unknown.

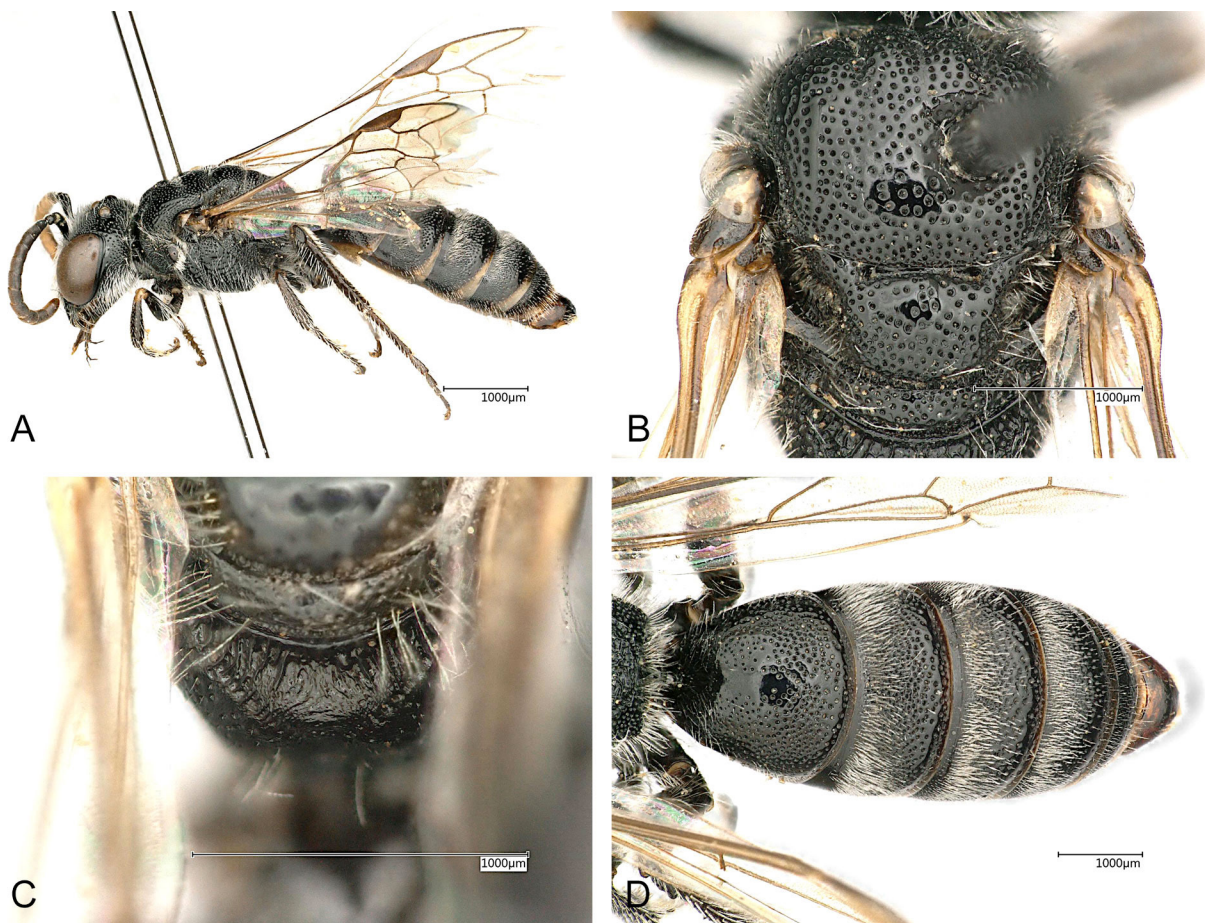


Fig. 13. *Scrapter convexoides* sp. nov., paratype, ♂ (RCMK). **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

Etymology

The name refers to the conspicuously (in lateral view) convex metasomal terga of the male.

Type material (3 specimens)

Holotype

SOUTH AFRICA • ♂; Keiski Mts, 3 km E of Farm M'Vera, shale; 31°45'29" S, 19°54'13" E; 1190 m a.s.l.; 13 Sep. 2016; MK leg.; SAMC.

Paratypes

SOUTH AFRICA • 1 ♂; same collection data as for holotype; 15 Sep. 2016; MK leg.; RCMK • 1 ♂; Roggeveld Mts, 2 km SE of Farm Allemansdam, burnt area; 31°49'32" S, 19°59'55" E; 1290 m a.s.l.; 29 Aug. 2018; MK leg.; RCMK.

Description

Female

Unknown.

Male

BODY LENGTH. 7.4–8.2 mm.

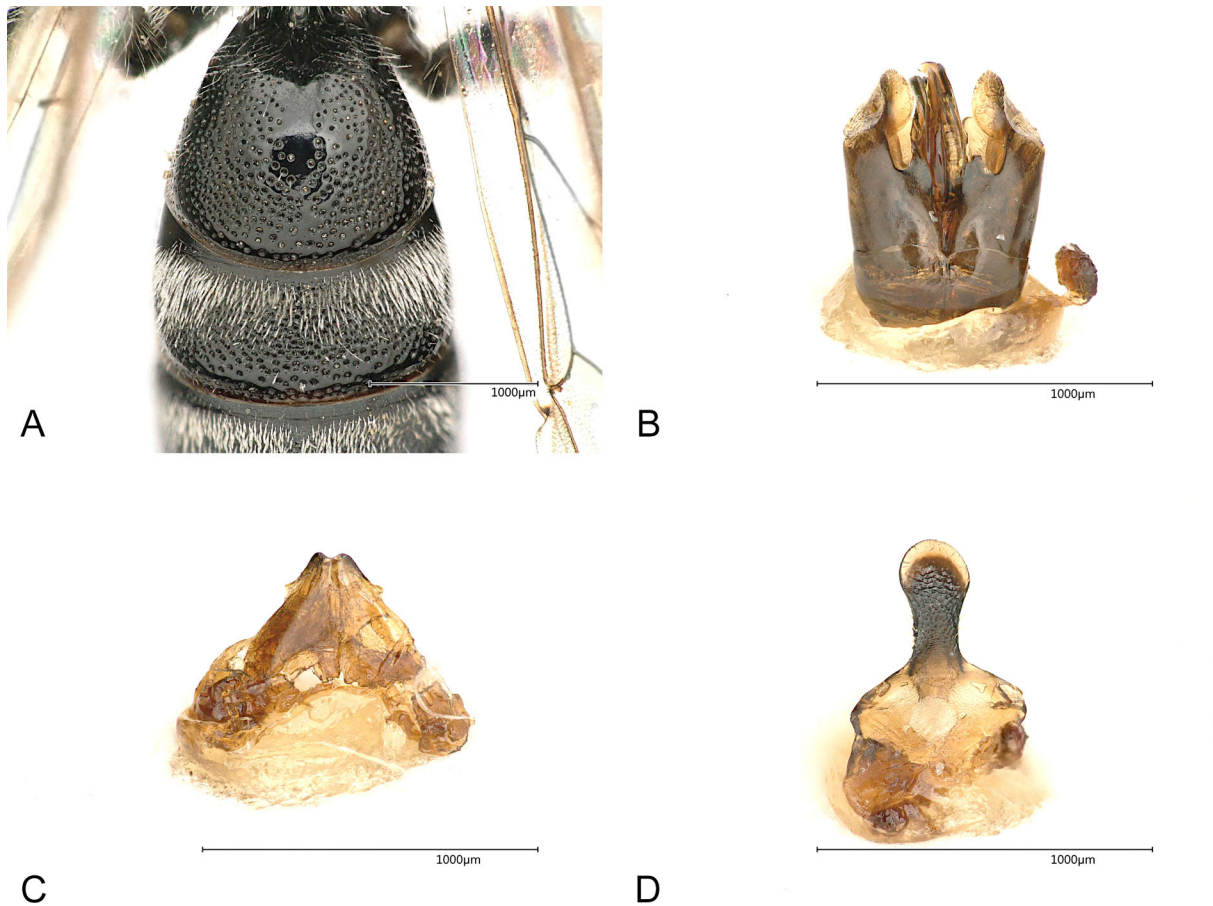


Fig. 14. *Scapter convexoides* sp. nov., paratype, ♂ (RCMK). **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

HEAD. Slightly wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli in line with posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum finely and densely ($i = 0.3\text{--}1.5$ d) punctate; surface between punctures smooth and shiny (Fig. 13B). Propodeum completely rugulose-areolate (Fig. 13C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 13A).

LEGS. Integument brownish, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 13A).

METASOMA. Integument brownish-black, marginal zone yellowish-brown. Each tergum curved from anterior to posterior (Fig. 13A). Disc of T1 without hair (Fig. 14A), T2–T4 basally greyish, dense, short, erect hair band, covering about half of the terga. T3–T4 anterior of premarginal line with a hair band of short, erect, greyish hair. Punctuation on discs of T2–T4 basally dense ($i = 0.3$ d) (Fig. 13D); dense ($i = 0.3$ d) punctuation on disc of T2 covers more than half of the tergum; apical half of terga sparsely punctate to impunctate (Fig. 14A). T2–T4 anterior of premarginal line with row of points.

TERMINALIA. Genitalia (Fig. 14B), S7 (Fig. 14C) and terminal plate of S8 (Fig. 14D) as illustrated.

Distribution

Only known from the type locality (Keiski Mts) south of Calvinia.

Floral hosts

On unidentified Asteraceae.

Seasonal activity

September.

***Scapter convexus* sp. nov.**

[urn:lsid:zoobank.org:act:34E2A8A5-446B-4D0B-BBEC-0A547C8D97CF](https://zoobank.org/act:34E2A8A5-446B-4D0B-BBEC-0A547C8D97CF)

Figs 15–17

Diagnosis

The female of *S. convexus* sp. nov. can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line with a row of points (Fig. 15E); basal half of the propodeum areolate to carinate, medially areolate, apically carinate (Fig. 15D); ocelli slightly behind posterior margin of the compound eyes. The male is characterized by dense ($i = 0.2$ d) punctuation on discs of T1–T4 (Fig. 16D); dense ($i = 0.2$ d) punctuation of T2 covers third of the tergum (Fig. 17A); each tergum curved from anterior to posterior (Fig. 16A) and form of S7 (Fig. 14C).

Etymology

Named after the convex metasomal terga of both males and females.

Type material (7 specimens)

Holotype

SOUTH AFRICA • ♂; Roggeveld Mts, 1.5 km S of Farm Allemansdam, Renosterveld; 31°49'25" S, 19°59'38" E; 1285 m a.s.l.; 11 Sep. 2018; MK leg. SAMC.

Paratypes

SOUTH AFRICA • 1 ♀; Roggeveld Mts, 2 km S of Farm Perdekloof, river, dolerite; 31°47'35" S, 19°58'16" E; 1220 m a.s.l.; 2 Sep. 2017; MK leg.; RCMK • 2 ♀♀, 3 ♂♂; same collection data as for holotype; 11 Sep. 2018; MK leg.; RCMK.

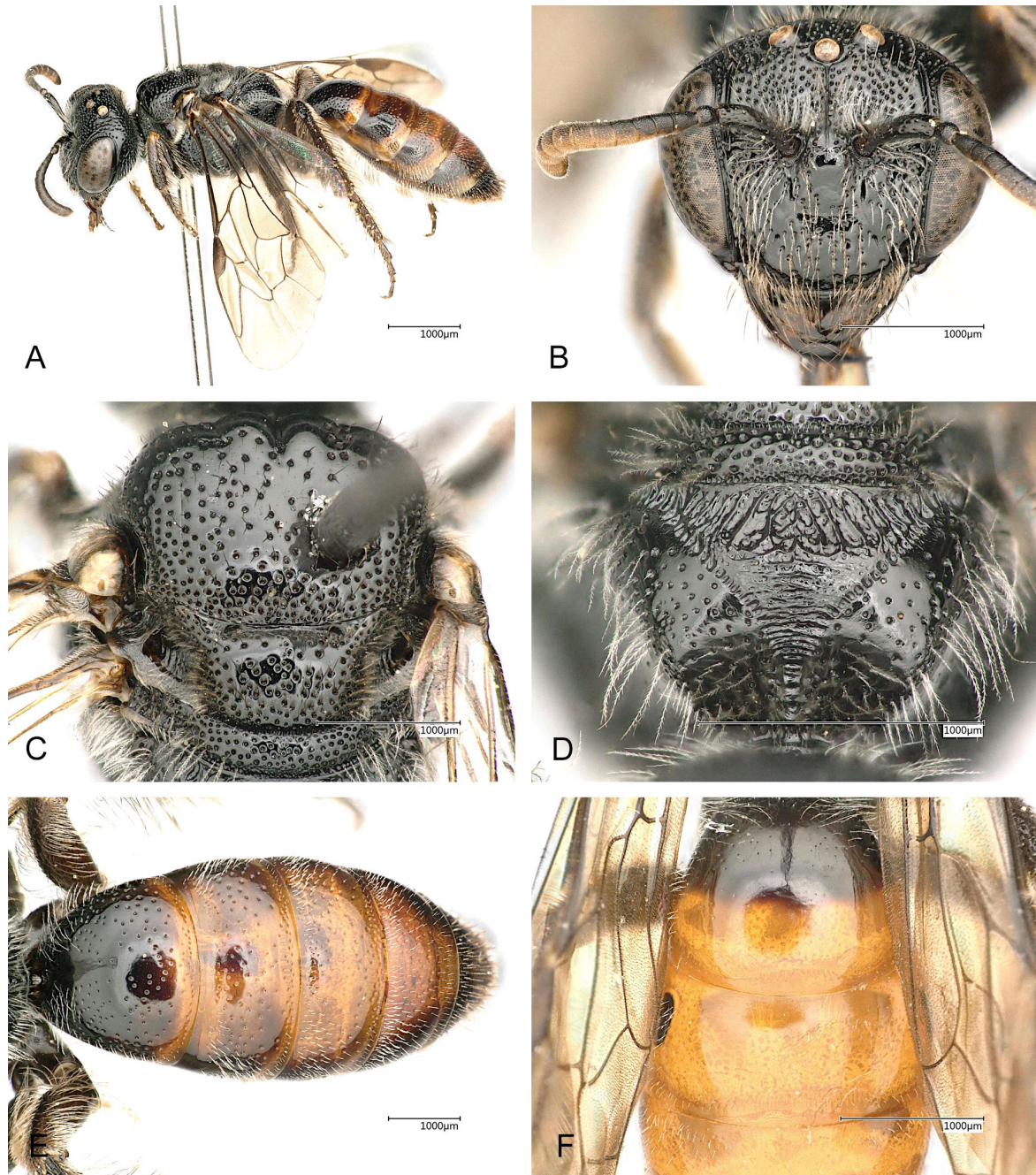


Fig. 15. *Scapter convexus* sp. nov., paratype, ♀ (RCMK). **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

Description

Female

BODY LENGTH. 7.5–7.6 mm.

HEAD. Slightly wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli slightly behind posterior margin of compound eyes. Clypeus slightly convex and medially with shallow longitudinal depression; punctation coarsely and irregularly ($i = 1-3$ d); surface between punctures smooth and shiny (Fig. 15B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin distinctly emarginated and edges slightly extended.

MESOSOMA. Integument black, pronotal lobe dark brown to black. Scutum coarsely and irregularly punctate; laterally dense ($i = 0.5-1$ d), medially sparse ($i = 1-2.5$ d) (Fig. 15C). Metanotum about half as long as scutellum. Propodeum broad and coarse longitudinal carinae and posterior finely transverse carinate to areolate, medially areolate (Fig. 15D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short to middle long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation dark brownish (Fig. 15A).

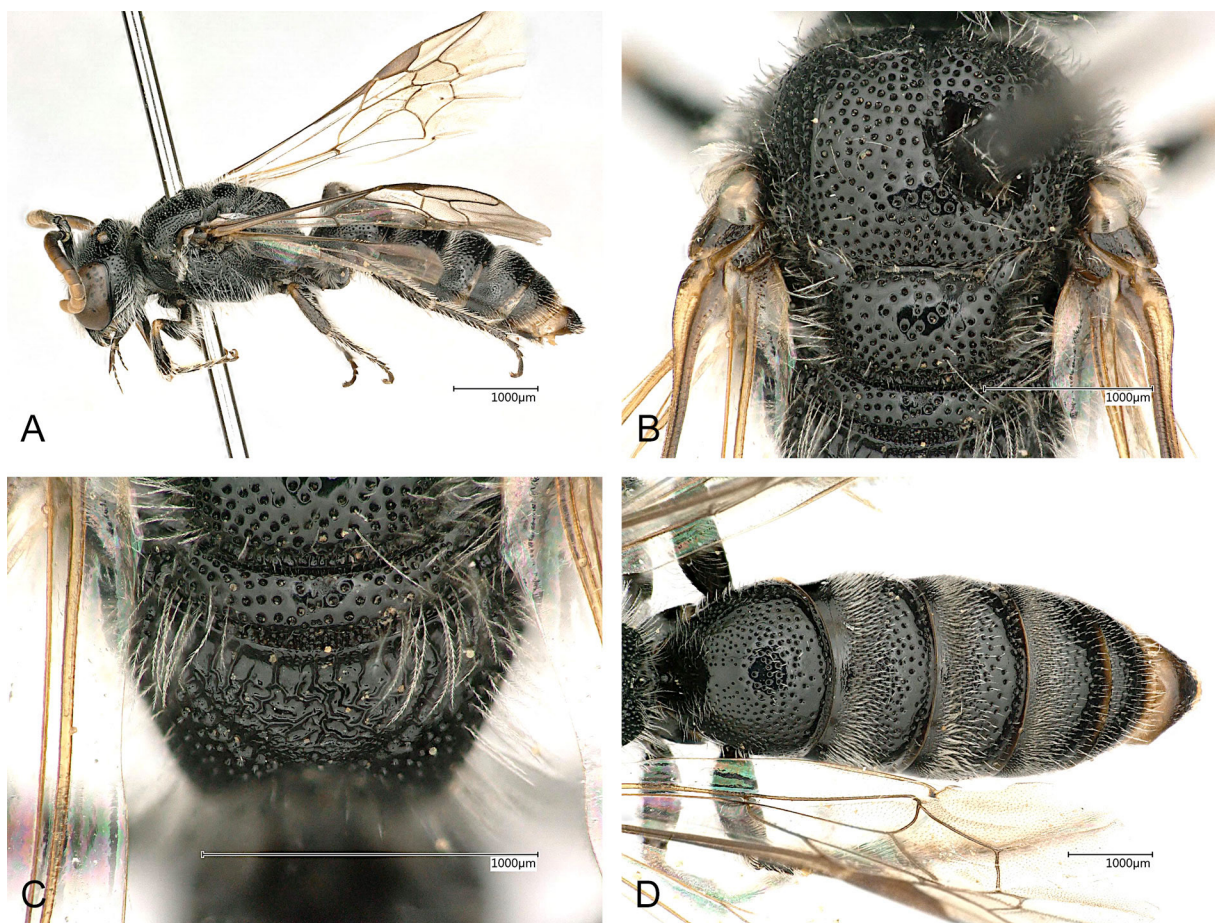


Fig. 16. *Scapter convexus* sp. nov., paratype, ♂ (RCMK). **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

LEGS. Integument black, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig 15A).

METASOMA. Integument brownish-black, T1 and T4 partly and T2–T3 completely yellowish-brown (Fig. 15E). Hair field of sparse, greyish, short, erect hair basolaterally on T2–T4, getting more continuous and narrower towards posterior; narrow and sparse hair band basally on T3–T4; T3 anterior of premarginal line laterally row of hairs (Fig. 15E). Prepygidial and pygidial fimbriae dark brownish to black. Disc of T1 finely, sparsely ($i = 1-2$ d) and regularly punctate (Fig. 15F); punctation on discs of T2–T4 regular, T2–T3 anterior of premarginal line with row of points across the complete width. Surface between punctures smooth and shiny (Fig. 15E).

Male

BODY LENGTH. 7.4–7.7 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli slightly in front of the posterior margin of the compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum finely and densely ($i = 0.3-0.8$ d) punctate; surface between punctures smooth and shiny (Fig. 16B). Propodeum completely coarsely rugulose-areolate (Fig. 16C).

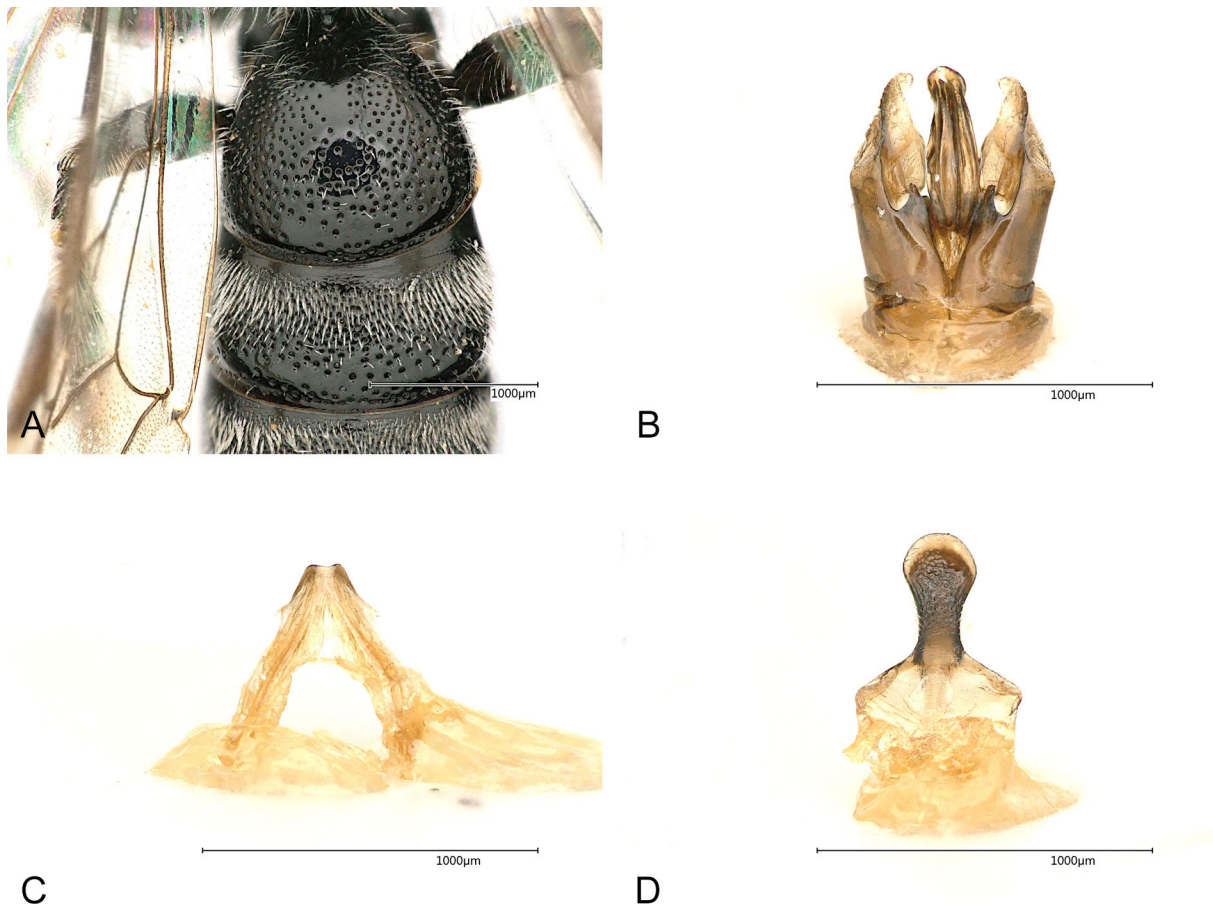


Fig. 17. *Scapter convexus* sp. nov., paratype, ♂ (RCMK). **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 16A).

LEGS. Integument black, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 16A).

METASOMA. Integument dark brownish to black, marginal zone brownish shimmering. Each tergum curved from anterior to posterior (Fig. 16A). Disc of T1 without hair (Fig. 17A), T2–T4 basally greyish, dense, short, erect hair band, covering third of terga. T3–T4 anterior of premarginal line with row of short, erect, greyish-brown hair (Fig. 16D). Discs of T2–T4 basally more densely ($i = 0.2$ d) and finer punctate than apically ($i < 1$ d); medially more densely than laterally; lateral dense punctation of T2 covers third of the tergum; T1–T3 anterior of premarginal line with row of points (Fig. 16D).

TERMINALIA. Genitalia (Fig. 17B), S7 (Fig. 17C) and terminal plate of S8 (Fig. 17D) as illustrated.

Distribution

Only known from two sites at the northern extension of the Roggeveld Mts south of Calvinia.

Floral hosts

On yellow *Senecio* sp. (Asteraceae).

Seasonal activity

September.

Scapter crassipunctatus sp. nov.

[urn:lsid:zoobank.org:act:7C308682-3343-46BC-8F57-4658B8C7CE62](https://zoobank.org/act:7C308682-3343-46BC-8F57-4658B8C7CE62)

Figs 18–20

Diagnosis

The female of *S. crassipunctatus* sp. nov. can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line with a row of points (Fig. 18E–F); punctation on discs of T1–T4 mostly dense ($i < 0.5$ – 1 d), disc of T3 often basally more densely punctate than apically (Fig. 31E–F); punctation of scutum relatively dense ($I < 1.5$ d) (Fig. 18C); propodeum with carinae, smooth stripes laterally possible (Fig. 31D). The male is characterized by punctation of meso- and metasoma completely fine and very dense ($i = 0.1$ d) (Fig. 19B–D), no stripe on T3 parallel to posterior margin without punctation (Fig. 19D) and form of S7 (Fig. 20C).

Etymology

The species is named after the unusual very dense punctation of meso- and metasoma in both sexes.

Type material (30 specimens)

Holotype

SOUTH AFRICA • ♀; W Cape, Rondeberg; 32°00'06" S, 18°46'21" E; 180 m a.s.l.; 21 Sep. 2011; CE leg.; SANC.

Paratypes

SOUTH AFRICA • 2 ♀♀, 2 ♂♂; 12 km NW of Nieuwoudtville, Farm Avontuur, Fynbos; 31°16'18" S, 19°02'55" E; 770 m a.s.l.; 25 Aug. 2010; MK leg.; RCMK • 1 ♂; same collection data as for preceding;

16 Aug. 2011; MK leg.; RCMK • 3 ♀♀; 20 km S of Nieuwoudtville, Farm Papkuilsfontein, Fynbos; 31°33'16" S, 19°08'31" E; 680 m a.s.l.; 20 Sep. 2014; MK leg.; RCMK • 1 ♀; same collection data as for preceding; NHML • 1 ♀; same collection data as for preceding; 7 Sep. 2007; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 9 Sep. 2007; KT leg.; RCMK • 1 ♀; Lamberts Bay, Strandveld, sand; 32°06'19" S, 18°18'16" E; 5 m a.s.l.; 7 Sep. 2017; MK leg.; RCMK • 7 ♀♀; N Cape, 15 km NW of Nieuwoudtville, Farm Engelsepunt, Fynbos; 31°14'30" S, 18°59'13" E; 830 m a.s.l.; 29 Sep. 2006; MK leg.; RCMK • 1 ♀; same collection data as for preceding; NHML • 2 ♀♀; same collection data as for preceding;

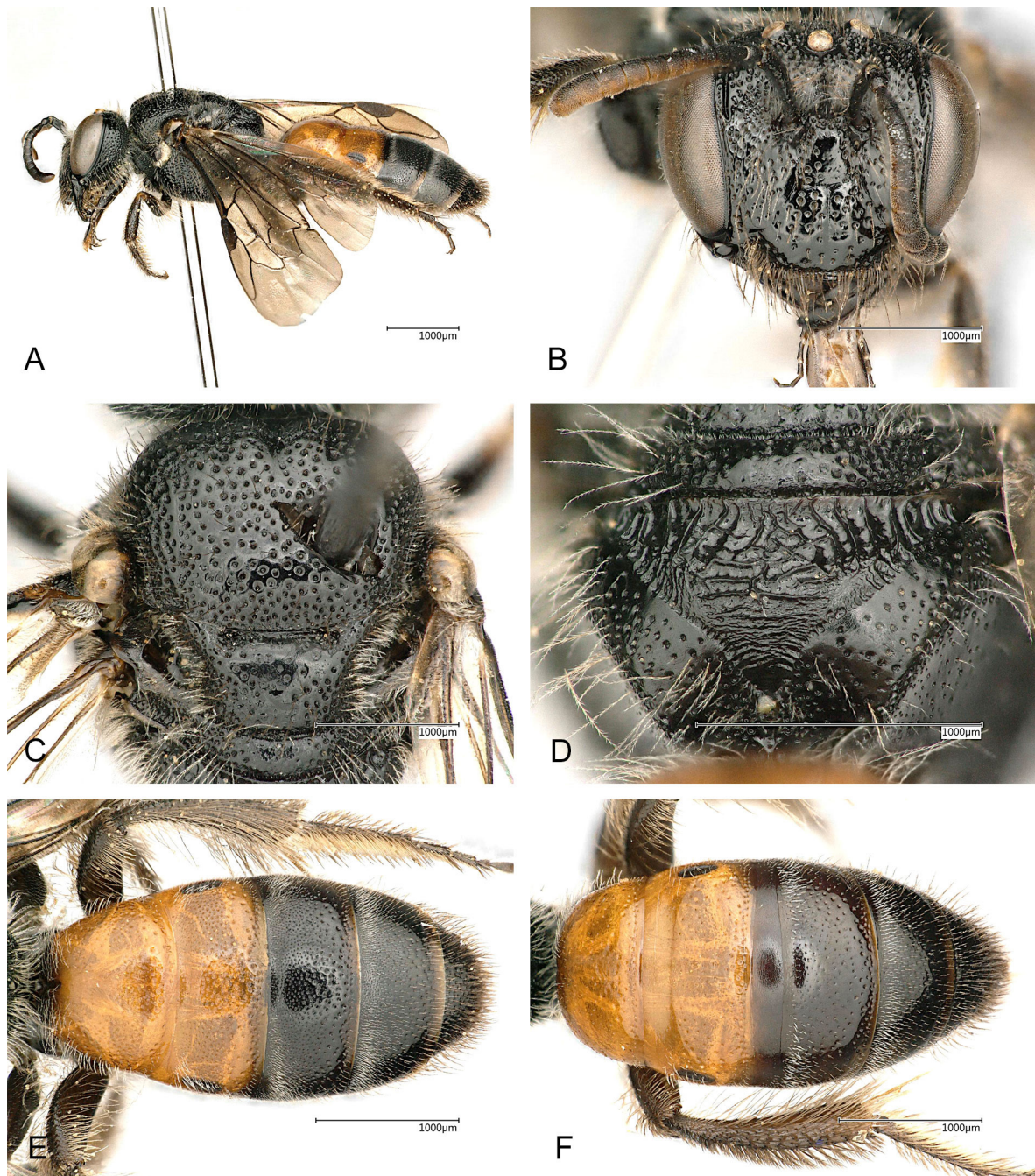


Fig. 18. *Scapter crassipunctatus* sp. nov., paratype, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Metasoma (dorsal view).

for preceding; 10 Oct. 2006; MK leg.; RCMK • 2 ♂♂; N Cape, Fynbos, 15 km NW of Nieuwoudtville, Farm Engelsepunt; 31°14'31" S, 18°59'08" E; 830 m a.s.l.; 23 Jul. 2003; KT leg.; RCMK • 2 ♀♀; same collection data as for preceding; 24 Sep. 2003; KT leg.; RCMK • 1 ♀; same collection data as for preceding; 6 Oct. 2003; KT leg.; RCMK • 1 ♀; same collection data as for preceding; 28 Aug. 2003; KT leg.; RCMK • 1 ♂; same collection data as for preceding; 22 Jul. 2003; KT leg.; RCMK • 1 ♀; Roggeveld Mts, 2 km S of Farm Perdekloof, river, dolerite; 31°47'35", 19°58'16" E; 1220 m a.s.l.; 2 Sep. 2017; MK leg.; RCMK • 1 ♀; 10–20 km E Lamberts Bay; 32°08' S, 18°28' E; 180 m a.s.l.; 3 Oct. 1990; CE leg.; SANC.

Description

Female

BODY LENGTH. 7.2–8 mm.

HEAD. Slightly wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli in line with posterior margin of compound eyes.

CLYPEUS. Medially with longitudinal depression; coarse punctation, apically sparse ($i = 2-4$ d), laterally dense ($i = 1$ d); surface between punctures smooth and shiny (Fig. 18B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin distinctly emarginated and edges slightly extended.

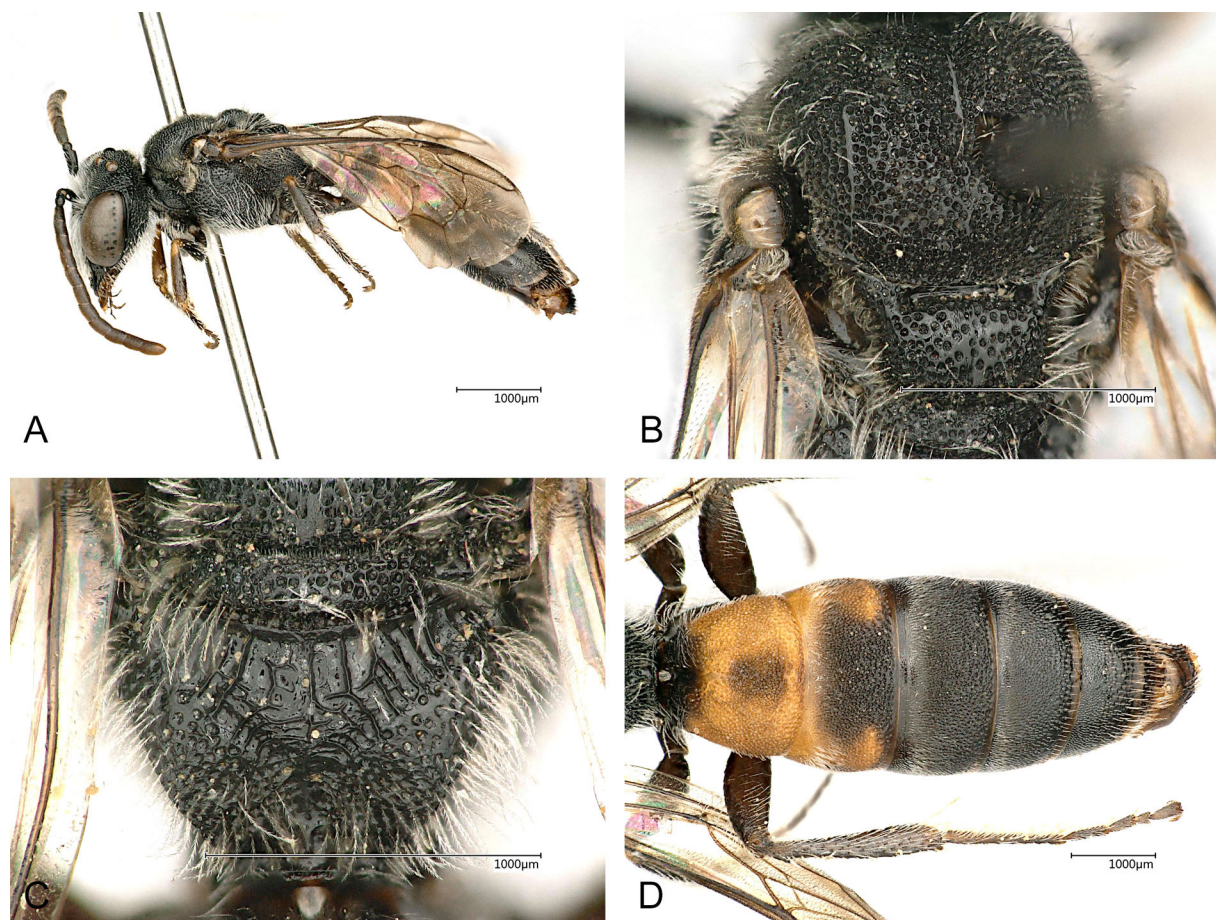


Fig. 19. *Scrapper crassipunctatus* sp. nov., paratype, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

MESOSOMA. Integument black, pronotal lobe dark brown to black, marginal zones yellowish-brown shimmering. Scutum finely and irregularly punctate ($I < 1.5$ d); surface between punctures smooth and shiny (Fig. 18C). Metanotum about half as long as scutellum. Propodeum anterolaterally longitudinally, broadly, coarsely carinate, posterior half with finer transverse carinae, laterally narrow coriaceous stripe possible, medially rugulose-areolate (Fig. 18D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with middle long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation dark brownish (Fig. 18A).

LEGS. Integument brownish-black, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig. 18A).

METASOMA. Integument black, T1–T2 yellow, marginal zones yellowish-brown shimmering. Basal half of T2–T3 with hair patches of greyish-white, erect, sparse, short hair, broader towards posterior; T3 anterior of premarginal line at least laterally row of hairs; T4 completely haired, basally more shortly and more densely than apically; prepygidial and pygidial fimbriae dark brownish to black (Fig. 18E–F). Disc of T1 shallowly, coarsely, and densely ($i = 1–2$ d) punctate; discs of T2–T4 densely ($i = 0.5–1$ d) and shallowly punctate; punctation on discs of T2–T3 often basally more densely than apically; T3 anterior of premarginal line with row of points; surface between punctures smooth and shiny (Fig. 18E–F).

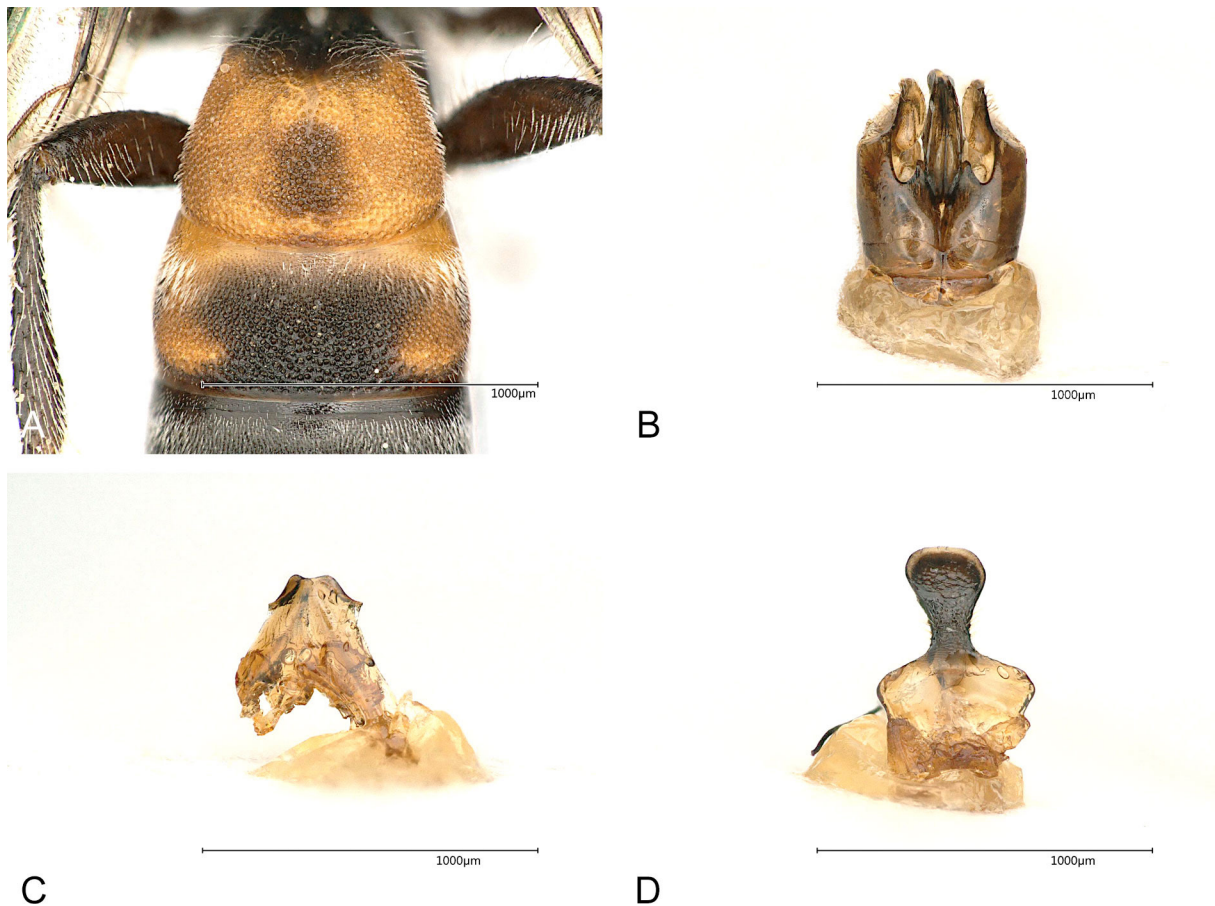


Fig. 20. *Scapter crassipunctatus* sp. nov., paratype, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

Male

BODY LENGTH. 7.2–7.5 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli in line with the posterior margin of the compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum completely densely ($i = 0.1$ d) punctate (Fig. 19B). Basal half of propodeum laterally coarsely carinate, medially and posterior half rugulose-areolate (Fig. 19C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation dark brownish (Fig. 19A).

LEGS. Integument brownish-black, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 19A).

METASOMA. Integument brownish, T1–T2 partly yellow, marginal zone yellowish-brown (Fig. 20A). Disc of T1 without hair (Fig. 20A), T2–T4 basally greyish-white, dense, short, erect hair band, covering about third of the tergum, T3 anterior of premarginal line with row of short, erect, greyish hair (Fig. 19D). Punctuation of T1–T4 completely dense ($i = 0.1$ d) (Fig. 19D).

TERMINALIA. Genitalia (Fig. 20B), S7 (Fig. 20C) and terminal plate of S8 (Fig. 20D) as illustrated.

Distribution

Found at numerous sites in southern Namaqualand from the coast (Lamberts Bay) to the northern extension of the Roggeveld Mts south of Calvinia.

Floral hosts

On unidentified yellow Asteraceae and yellow *Senecio* sp. (Asteraceae).

Seasonal activity

August–September.

Scapter flavitarsis Cockerell, 1936

Figs 21–23

Scapter flavitarsis Cockerell, 1936: 481, lectotype ♂ [designated by Eardley 1996] (type locality: Cape Town, South Africa) (NHML), examined.

Diagnosis

The female of *S. flavitarsis* can be separated from that of all other species of this group by the following character combination: no T3 anterior of premarginal line no row of points (Fig. 21E); punctuation of scutum dense ($i = 0.5$ – 1 d) (Fig. 21C); propodeum partly with carinae, matt (Fig. 21D). The male of the species *S. flavitarsis* can be separated from that of all other species of this group by the combination of the following characters: basal punctuation of discs of T1–T4 dense ($i = 1$ d), apically shallower, finer, and sparse ($i = 1$ – 2 d) (Fig. 22D); tarsi yellow (Fig. 22A) and form of S7 (Fig. 23C).

Material examined (4 specimens)

SOUTH AFRICA • 1 ♂; E Cape, Riet River; 33°34' S, 27°01' E; 5 m a.s.l.; 19 Apr. 1983; UR leg.; SANC
• 1 ♂; Cape Town; 33°57' S, 18°27' E; 5 m a.s.l.; 1914; GP leg.; RCMK • 1 ♀, 1 ♂; Cape Town; Zeekoe
Vlei; 34°03' S, 18°31' E; 25 m a.s.l.; 9 Jun. 1934; JO leg.; NHML.

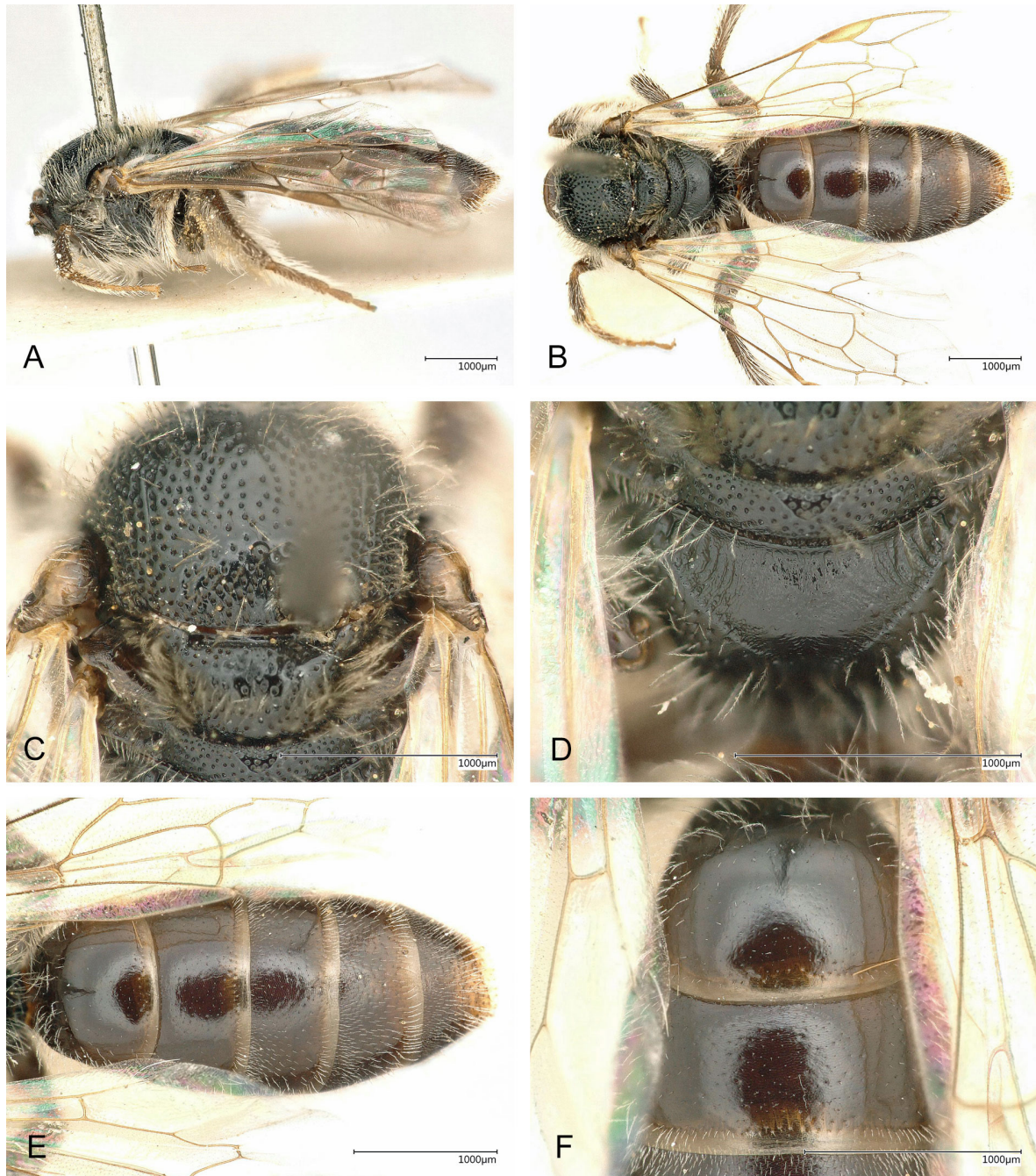


Fig. 21. *Scapter flavitarsis* Cockerell, 1936, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Dorsal view. **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

Description

Female

BODY LENGTH. 8 mm.

HEAD. Missing.

MESOSOMA. Integument brownish-black to black, pronotal lobe yellowish-white. Scutum irregularly punctate, laterally denser ($i = 0.5$ d) than medially ($i = 1-2$ d), surface between punctures smooth and shiny (Fig. 21C). Metanotum less than half as long as scutellum. Propodeum basally broadly, finely carinate, surface with fine punctation, causing shimmering (Fig. 21D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 21A).

LEGS. Integument brownish, tarsi yellowish-brown. Vestiture and scopa greyish-white (Fig. 21A).

METASOMA. Integument brownish, marginal zones yellowish-brown. Anterolaterally on T2–T3 hair field; T4 nearly completely sparsely haired with short, greyish-yellow, erect hair. T3 anterior of premarginal line with row of hairs across whole width of tergum (Fig. 21E). Prepygidial and pygidial fimbriae yellowish-grey. Discs of T1–T3 finely punctulate (Fig. 21F); surface between punctures matt (Fig. 21E).

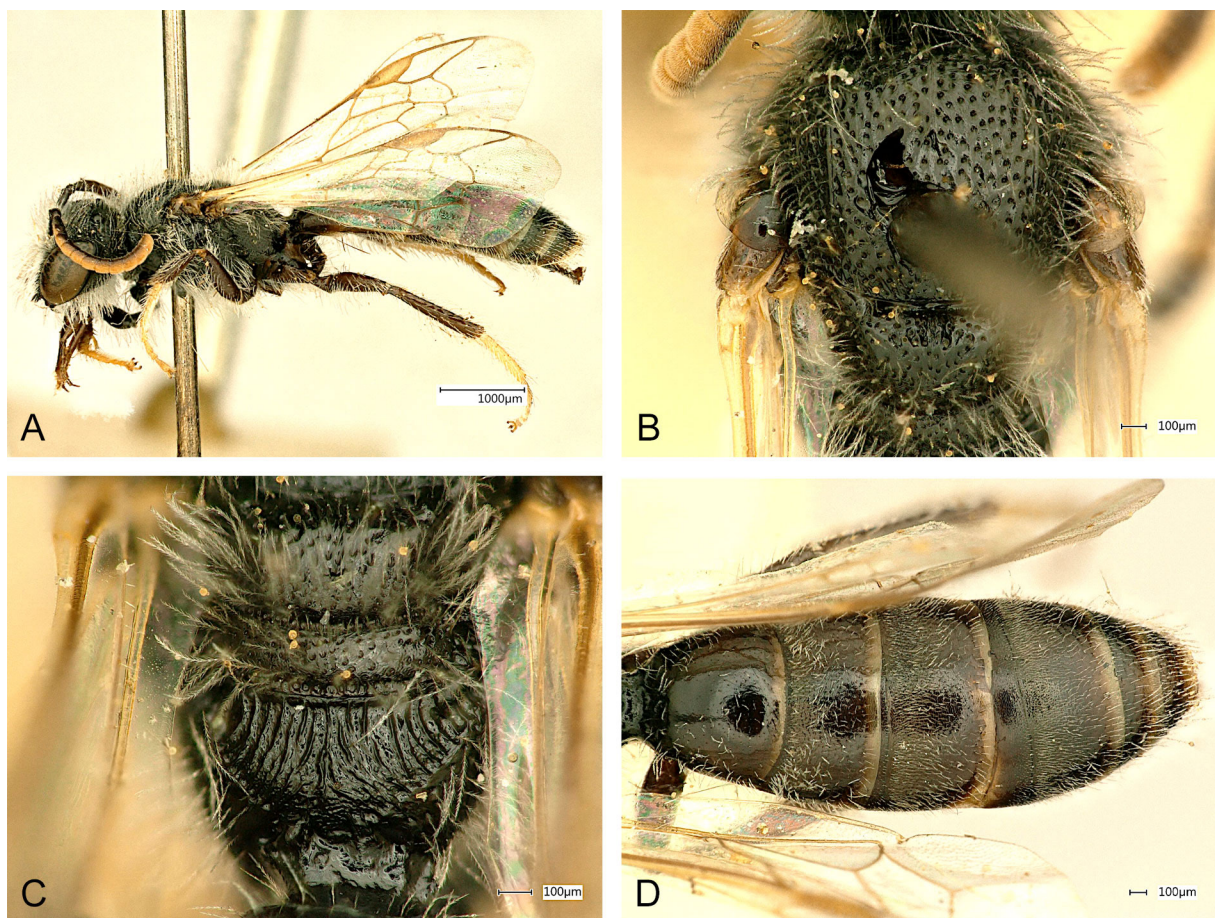


Fig. 22. *Scapter flavitarsis* Cockerell, 1936, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

Male

BODY LENGTH. 6.5 mm.

HEAD. Slightly wider than long. Integument black, mandibles dark brownish. Face densely covered with long, white, erect hair. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum densely ($i = 1-2$ d) punctate, surface between punctures matt (Fig. 22B). Propodeum basally coarsely carinate, posterior third with finer carinae (Fig. 22C). Scutum, scutellum, metanotum, mesepisternum and propodeum densely covered with long, greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation light brownish (Fig. 22A).

LEGS. Integument black, fore and mid tibia with yellow spot. Vestiture greyish-white. Tarsi yellow (Fig. 22A).

METASOMA. Integument black, marginal zone light brownish. Disc of T1 with single greyish-white, erect middle-long hairs (Fig. 23A), T2–T4 basally greyish, dense, middle-long, erect hair band, covering three quarters of terga (Fig. 22D). T3 anterior of premarginal line with row of erect, greyish hair which gets shorter the farther posterior it is. Punctuation on disc of T1 fine, sparse ($i = 3-4$ d) and

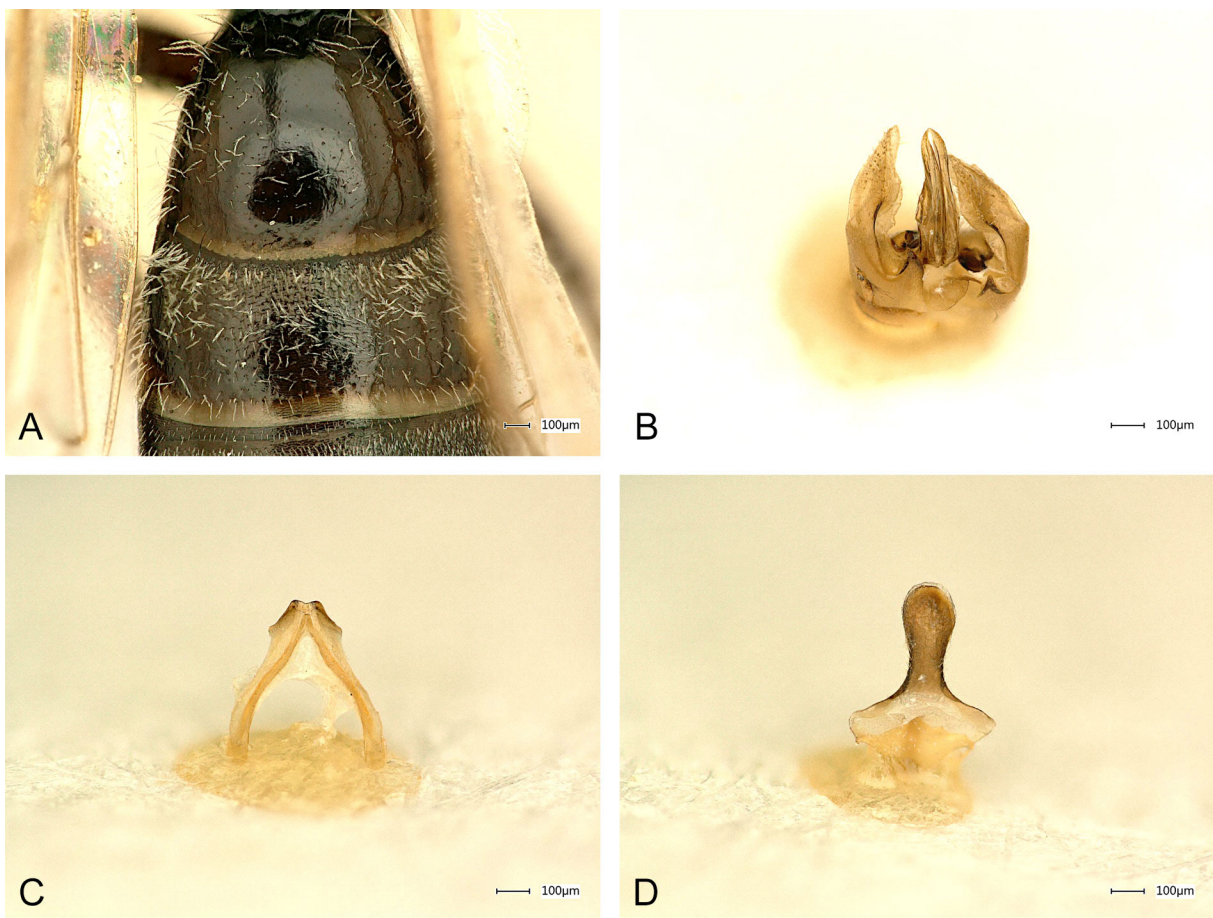


Fig. 23. *Scapter flavitarsis* Cockerell, 1936, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

shallow (Fig. 23A). Discs of T2–T4 basally more densely ($i = 1$ d) and finer punctate than apically ($i = 2–3$ d); medially more densely than laterally (Fig. 22D). T1–T4 anterior of premarginal line with row of points (Fig. 22D).

TERMINALIA. Genitalia (Fig. 23B), S7 (Fig. 23C) and terminal plate of S8 (Fig. 23D) as illustrated.

Distribution

There are only four specimens that at present can be clearly assigned to this species. They have been recorded from the south coast of South Africa between Cape Town and Riet River east of Port Alfred.

Floral hosts

Unknown.

Seasonal activity

April–June.

Remarks

Eardley (1996) synonymized this species with *S. opacus*.

The only female specimen of *S. flavitarsis* available to us is damaged. In addition, a large series of females was examined by us that morphologically correspond to *S. flavitarsis* but were collected in November instead of April/June. It seems unusual and unlikely to us that a single species is active in very different seasons so we preliminarily refrain from assigning these bees to *S. flavitarsis* and instead label them as *S. sp. flavitarsis* until the situation can be clarified. Material examined of this taxon is recorded below:

SOUTH AFRICA • 71 ♀♀; same collection data as for holotype; 6 Nov. 1999; MS/MH leg.; OÖLM • 9 ♀♀; same collection data as for holotype; RCMK • 1 ♀; same collection data as for holotype; SANC.

Scapter fuscipennis (Friese, 1912)

Fig. 24

Strandiella fuscipennis Friese, 1912: 183, lectotype ♀ [designated by Eardley 1996] (type locality: Kapland, South Africa) (ZMHB), examined.

Diagnosis

The female of *S. fuscipennis* can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line impunctate (Fig. 24F); propodeum with coarse carinae, not smooth (Fig. 24E); anterior margin of apical depression straight (Fig. 24F); punctation on discs of T1–T4 fine and shallow (Fig. 24F). The male is unknown.

Additional material examined

No additional material examined.

Description

Female

BODY LENGTH. 5.5 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish. Face irregularly and sparsely covered with greyish hair, more densely around basis of antennae and laterally. Clypeus medially with shallow longitudinal depression; coarse punctation, apically sparse ($i = 2-4$ d), laterally dense ($i = 1-2$ d). Surface between punctures smooth and shiny (Fig. 24C). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin distinctly emarginated and edges slightly extended.

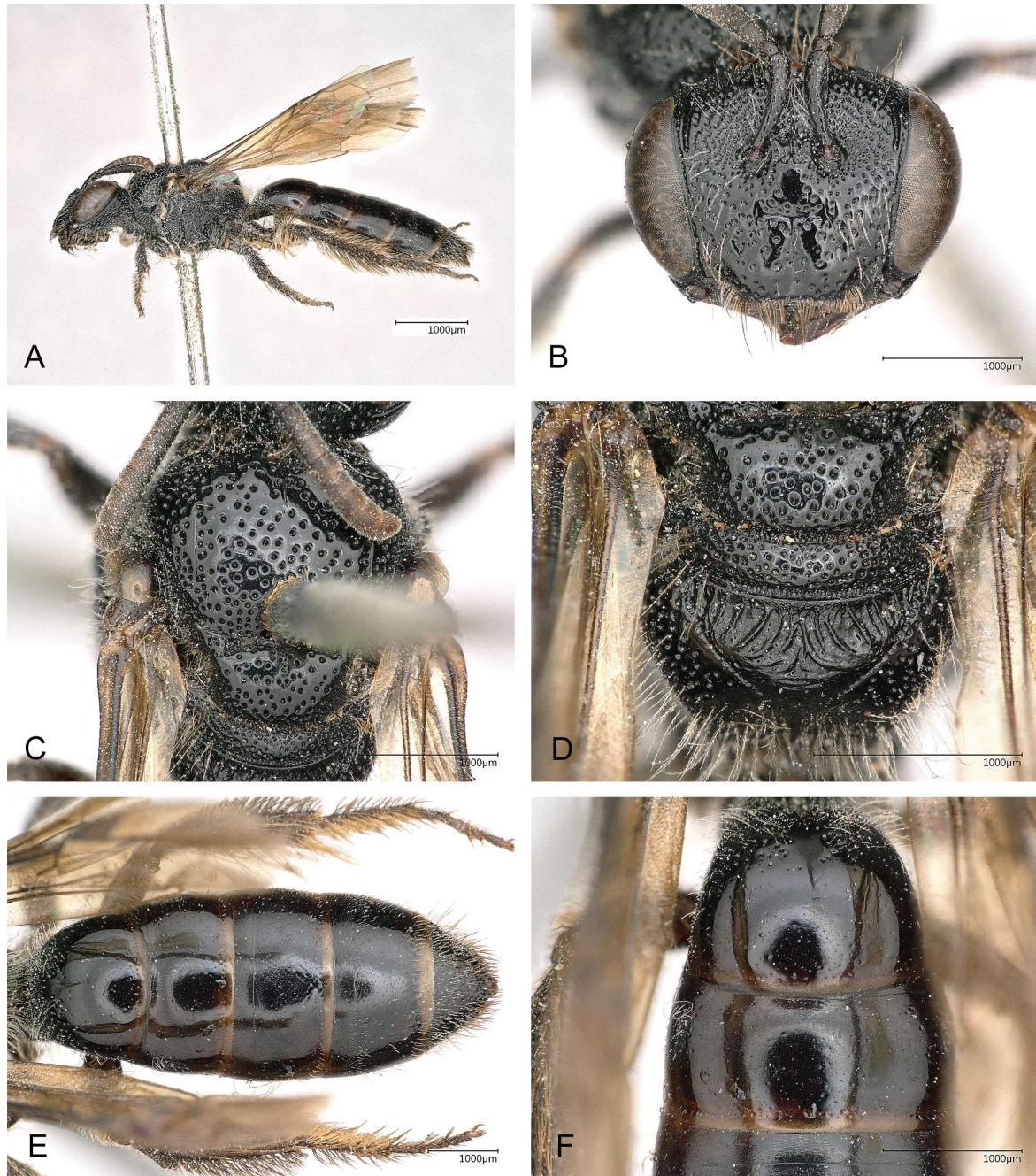


Fig. 24. *Scapter fuscipennis* (Frieese, 1912), ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

MESOSOMA. Integument black, pronotal lobe dark brownish to black. Scutum coarsely and irregularly punctate ($i = 1-2$ d) (Fig. 24D). Metanotum about half as long as scutellum. Propodeum anterior wide and coarse longitudinal carinae and posterior finer transverse carinae (Fig. 24E). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation dark brownish (Fig. 24A–B).

LEGS. Integument black, fore tibia with yellow spot. Vestiture brown, scopa brownish, partly black (Fig. 24A–B).

METASOMA. Integument black, marginal zone brownish, generally darkening apically. No basal hair bands on T2–T4, laterally small patches of white, short, erect hair. Prepygidial and pygidial fimbriae dark brownish to black (Fig. 24F). Disc of T1 sparsely, shallowly, and finely punctate; punctation on discs of T2–T4 shallower and finer than on T1. Surface between punctures matt. T3–T4 anterior of premarginal line with row of hairs; no row of points anterior of premarginal line (Fig. 24F).

Male

Unknown.

Distribution

Only known from the type that was collected at an unspecified place in the Cape Province (“Kapland”).

Floral hosts

Unknown.

Seasonal activity

September.

Remarks

Eardley (1996) synonymised this species with *S. nitidus*.

***Scapter glaberrimus* (Friese, 1912)**

Figs 25–26

Strandiella glaberrima Friese, 1912: 183, lectotype ♂ [designated by Eardley 1996] (type locality: Port Nolloth, South Africa) (SAMC), examined.

Diagnosis

The male of *S. glaberrimus* can be separated from that of all other species of this group by the following character combination: dense ($i = 0.2$ d) punctation on basal third to half of disc of T2 (Fig. 26A), apically at most 15 points medially of this tergum (Fig. 26A), punctation coarse; anteriorly on propodeum carinae, apically coriaceous (Fig. 25C); each tergum slightly curved from anterior to posterior (Fig. 25A). The female is unknown.

Additional material examined

No additional material examined.

Description

Female

Unknown.

Male

BODY LENGTH. 6.6 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Malar area medially narrow, slightly curved.

MESOSOMA. Integument black. Scutum regularly and densely ($i = 1-1.5$ d) punctate; surface between punctures smooth and shiny (Fig. 25B). Anterior half of propodeum coarsely areolate, posterior half coriaceous, matt (Fig. 25C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation dark brownish (Fig. 25A).

LEGS. Integument dark brownish, fore and mid tibia with yellow spot. Tarsi slightly lighter than rest of the legs. Vestiture greyish-white (Fig. 25A).

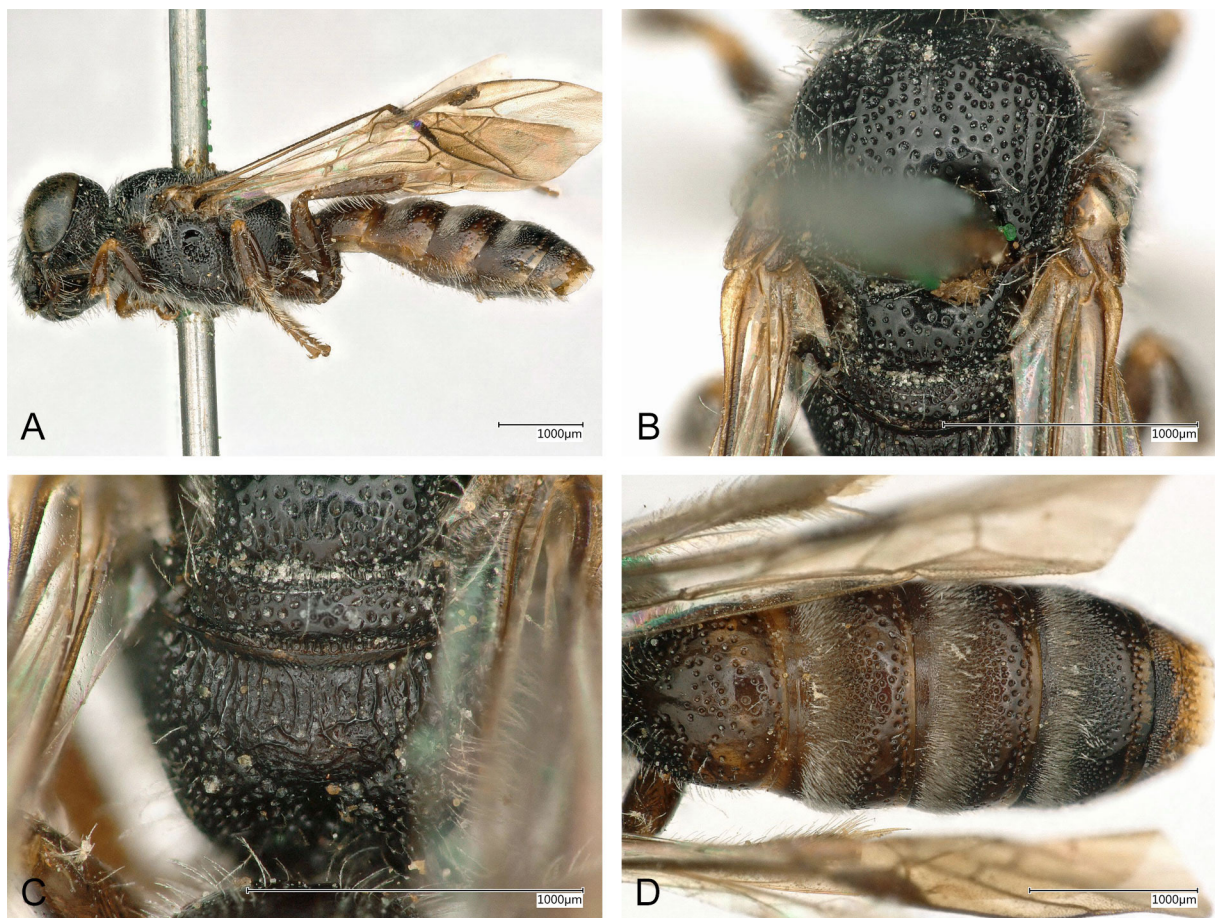


Fig. 25. *Scapter glaberrimus* (Fries, 1912), lectotype, ♂ (SAMC). **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

METASOMA. Integument brownish, marginal zones narrow and light brownish. Disc of T1 without hair (Fig. 26A), T2–T4 basally greyish, dense, short, erect hair band, covering third to half of terga, which covers more of terga the farther posterior it is. T3–T4 anterior of premarginal line with row of short, erect, greyish hair (Fig. 25D). T2–T4 basally more densely ($i = 0.3$ d) and much finer punctate than apically ($i = 1-4$ d); medially more densely than laterally. About 10 points medially on T2 (Fig. 26A). T3 anterior of premarginal line with a dispersed row of points (Fig. 25D).

TERMINALIA. Genitalia (Fig. 26B), S7 (Fig. 26C) and terminal plate of S8 (Fig. 26D) as illustrated.

Distribution

Only known from NW Namaqualand.

Floral hosts

Unknown.

Seasonal activity

September.

Remarks

Eardley (1996) synonymised this species with *S. opacus*.

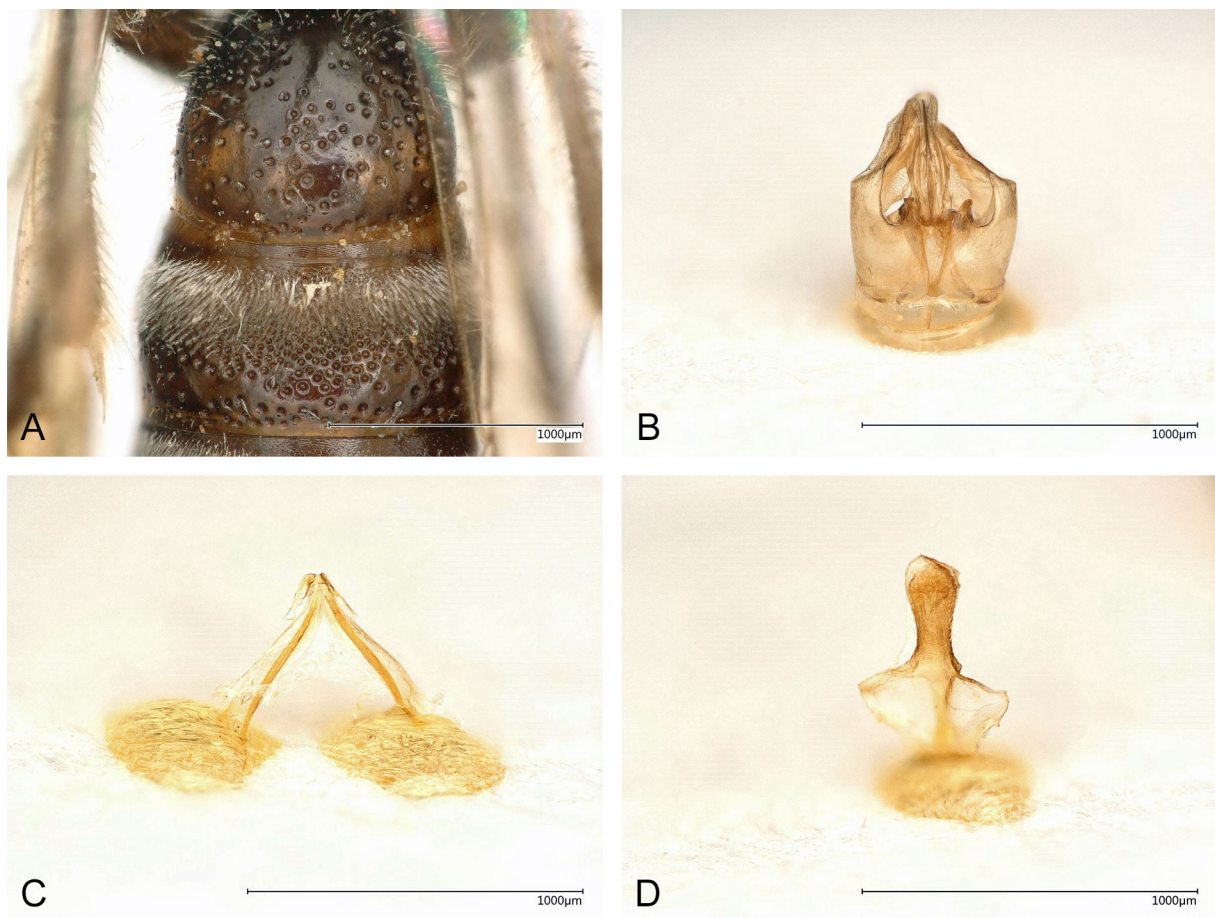


Fig. 26. *Scrapper glaberrimus* (Fries, 1912), lectotype, ♂ (SAMC). **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

Scapter imparilis sp. nov.

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Figs 27–29

Diagnosis

The female of *S. imparilis* sp. nov. can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line impunctate (Fig. 27E); propodeum

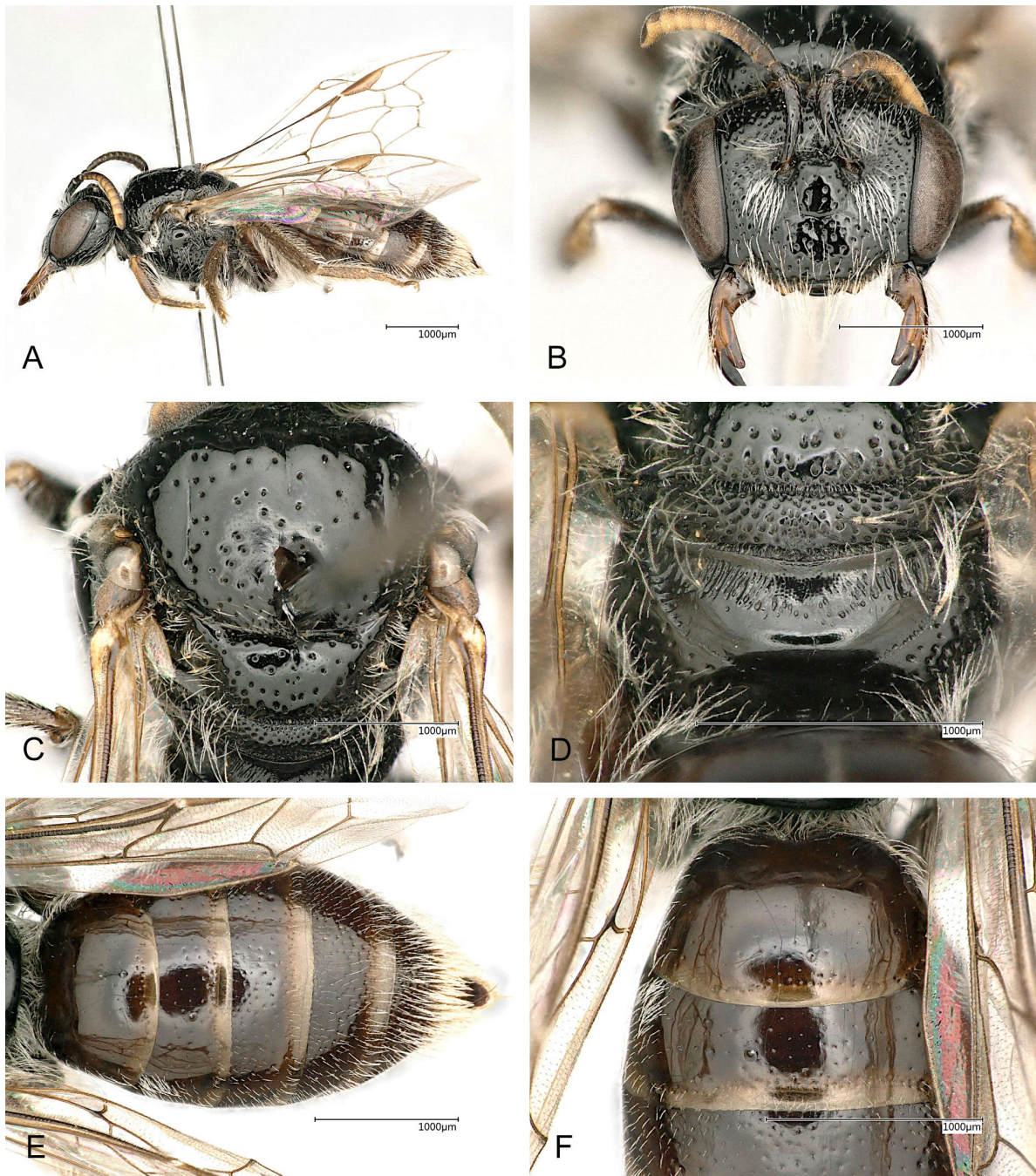


Fig. 27. *Scapter imparilis* sp. nov., paratype, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

basally v-shaped carinate, apically smooth and shiny (Fig. 27D); discs of T1–T4 with shallow punctation (Fig. 27E); prepygidial and pygidial fimbriae brownish (Fig. 27E). The male is characterized by the form of S7 (Fig. 29C); dense punctation on disc of T2 covers $\frac{1}{2}$ of this tergum (Fig. 28F); more than 15 points medially of T2 (Fig. 28F); ocelli behind posterior margin of compound eyes (Fig. 28B); dense ($i < 1 d$) punctation of mesosoma (Fig. 28C).



Fig. 28. *Scapter imparilis* sp. nov., paratype, ♂. A. Lateral view. B. Vertex (dorsal view). C. Scutum and scutellum (dorsal view). D. Metanotum and propodeum (dorsal view). E. Metasoma (dorsal view). F. Terga 1–2 (dorsal view).

Etymology

The name '*imparilis*' (Latin for 'irregular') refers to the medially much broadened apical tergal depressions particularly in the female that are unique in this the *S. nitidus* group.

Type material (17 specimens)

Holotype

SOUTH AFRICA • ♀; W Cape, Cape Point Nature Res.; 34°14' S, 18°26' E; 250 m a.s.l.; 29 Sep. 2011; CE leg.; SANC.

Paratypes

SOUTH AFRICA • 3 ♀♀; 20 km S of Nieuwoudtville, Farm Papkuilsfontein, waterfall; 31°33'01" S, 19°07'24" E; 680 m a.s.l.; 12 Sep. 2008; HE leg.; RCMK • 1 ♀; Remhoogte, slope; 30°14'46" S, 18°10'23" E; 5 Sep. 2003; CM leg.; RCMK • 1 ♀; same collection data as for preceding; 7 Sep. 2003; CM leg.; RCMK • 1 ♂; 5 km S of Grabouw; 34°18' S, 19°01' E; 29 Sep. 2001; CE leg.; RCMK • 5 ♀♀; Farm Dassiefontein near Kamieskroon; 30°09' S, 17°59' E; 1100 m a.s.l.; 1 Oct. 1990; CE leg.; SANC • 4 ♀♀; Namaqualand, Hester Malan; 29°38' S, 17°58' E; 500 m a.s.l.; 4 Sep. 1985; MT leg.; SANC • 1 ♀; N Cape Province, Studer's Pass near Garies; 30°26' S, 18°03' E; 400 m a.s.l.; 16 Sep. 2007; CE leg.; SANC.

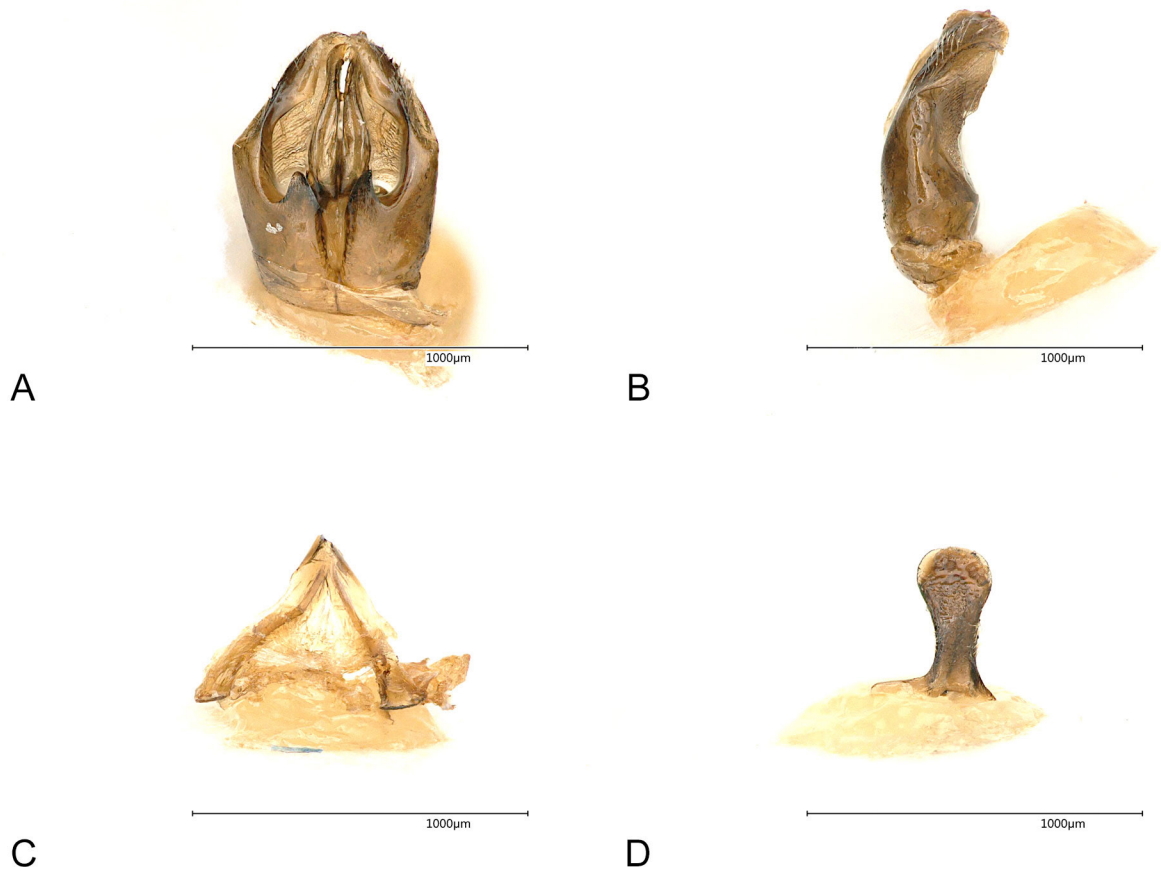


Fig. 29. *Scapter imparilis* sp. nov., paratype, ♂. **A.** Genitalia (dorsal view). **B.** Genitalia (lateral view). **C.** Sternum 7. **D.** Sternum 8.

Description

Female

BODY LENGTH. 7.1–7.3 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish proximal to reddish distal. Face irregularly and sparsely covered with greyish hair, more densely around the basis of the antennae. Ocelli in line with posterior margin of compound eyes. Clypeus medially with shallow longitudinal depression, punctation apically fine and relatively sparse ($i = 2-4$ d). Surface between punctures smooth and shiny (Fig. 27B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area triangularly shaped, convex, upper margin flat to slightly convex.

MESOSOMA. Integument black, pronotal lobe black. Scutum coarsely, sparsely ($i = 2-4$ d) and irregularly punctate; surface between punctures smooth and shiny (Fig. 27C). Metanotum about half as long as scutellum. Propodeum basally with fine v-shaped carinae, posterior without sculpture, very smooth and shiny (Fig. 27D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 27A).

LEGS. Integument brownish, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish (Fig. 27A).

METASOMA. Integument brownish, marginal zones yellowish. Transitional line between disc and marginal zone curved. Basally on T2–T4 patches of hair of middle long, brownish, erect hair. T4 sparsely covered with middle long, brownish, erect hair, T3 at least laterally covered with hair (Fig. 27E). Prepygidial and pygidial fimbriae brownish. Discs of T1–T4 sparsely, finely and shallowly punctulate (Fig. 27F). Surface between punctures smooth and shiny.

Male

BODY LENGTH. 7.8 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish proximal to reddish distal. Face densely covered with long, white, erect hair. Ocelli behind posterior margin of compound eyes (Fig. 28B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum densely ($I < 1$ d) punctate; surface between punctures matt (Fig. 28C). Propodeum completely areolate (Fig. 28D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 28A).

LEGS. Integument black, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 28A).

METASOMA. Integument dark brownish, marginal zone yellowish to brownish. Disc of T1 without hair (Fig. 28F), T2–T4 basally greyish, dense, short, erect hair band, covering quarter of terga (Fig. 28E). T2–T4 anterior of premarginal line laterally row of short, erect, greyish hair. Discs of T2–T4 basally more densely ($i = 0.1$ d) and more finely punctate than apically ($I < 1$ d); medially more densely than laterally (Fig. 28E); basally dense punctation on discs of T2 covers half of the tergum, medially more than 15 points (Fig. 28F). T2–T4 anterior of premarginal line with row of points. Surface between punctures matt.

TERMINALIA. Genitalia (Fig. 29A–B), S7 (Fig. 29C) and terminal plate of S8 (Fig. 29D) as illustrated.

Distribution

A few scattered records from the Fynbos biome, south of Cape Town to the Succulent Karoo in the Springbok vicinity in the north.

Floral hosts

Unknown.

Seasonal activity

September.

Scapter littoralis sp. nov.

[urn:lsid:zoobank.org:act:0FD26BDC-86E5-4200-AF79-BC1FD1525B2F](https://doi.org/10.3896/BI.2017.15252B2F)

Fig. 30

Diagnosis

The female of *S. littoralis* sp. nov. can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line with a row of points (Fig. 30E); no or almost no punctation on discs of T1–T2 (Fig. 30F); punctation on disc of T3 (Fig. 30E); metasoma matt (Fig. 30E); dense hairs basally on T4 (Fig. 30E); punctation of scutum relatively regular and dense ($i = 0.5–2$ d) (Fig. 30C); propodeum with carinae, transitional line between anterior longitudinal and posterior transverse carinae curved (Fig. 30D). The male is unknown.

Etymology

The species is named after the collection site of the holotype at the shoreline near Lamberts Bay.

Type material (13 specimens)

Holotype

SOUTH AFRICA • ♀; Lamberts Bay, Strandveld; 32°06'19" S, 18°18'16" E; 5 m a.s.l.; 7 Sep. 2017; sand; MK leg.; SAMC.

Paratypes

SOUTH AFRICA • 9 ♀♀; same collection data as for holotype; 7 Sep. 2017; MK leg.; RCMK 1 ♀; same collection data as for preceding; SANC • 1 ♀; Cederberg Mts, road to Algeria, Olifants River bridge; 32°21'55" S, 18°57'06" E; 150 m a.s.l.; 8 Sep. 2017; MK leg.; RCMK • 1 ♀; N Cape, Fynbos, 15 km NW of Nieuwoudtville, Farm Engelsepunt; 31°14'31" S; 18°59'08" E; 700 m a.s.l.; 27 Aug. 2003; MK leg.; RCMK.

Description

Female

BODY LENGTH. 8–8.5 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around the basis of antennae. Ocelli in line with posterior margin of compound eyes. Clypeus medially with shallow longitudinal depression; punctation fine, sparse ($i = 1–3$ d) and irregular; surface between punctures smooth and shiny (Fig. 30B). Malar area

medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin distinctly emarginated and edges slightly extended.

MESOSOMA. Integument black, pronotal lobe dark brownish-black. Scutum coarsely and irregularly punctate ($i = 0.5\text{--}2\text{ d}$); surface between punctures smooth and shiny (Fig. 30C). Metanotum less than half as long as scutellum. Propodeum basally broadly, coarsely carinate, anterior longitudinal

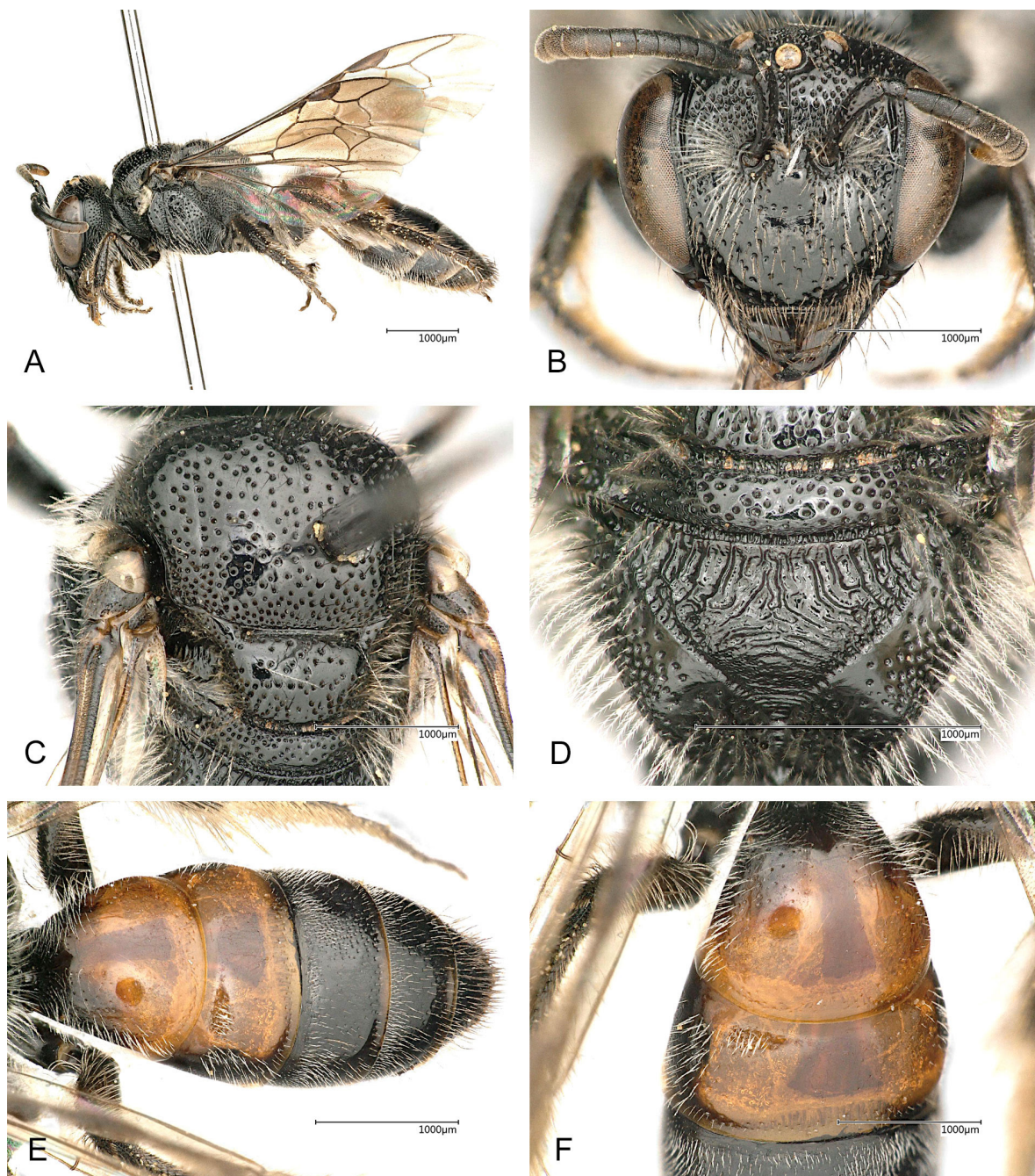


Fig. 30. *Scapter littoralis* sp. nov., paratype, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

carinae more finely carinate than posterior transverse carinae, laterally areolate (Fig. 30D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation dark brownish (Fig. 30A).

LEGS. Integument brownish-black, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig. 30A).

METASOMA. Integument black, T1–T2 partly yellowish-brown (Fig. 30F), marginal zones yellowish-brown shimmering. Basolaterally hair patches on T2–T3 of greyish-white, sparse, middle long, erect hair; T4 completely haired, basally shorter than apically; T3 anterior of premarginal line at least laterally row of hairs. Prepygidial and pygidial fimbriae dark brownish to black (Fig. 30E). Discs of T1–T2 almost impunctate (Fig. 30F); punctation on disc of T3 shallow, density varying ($i = 0.5\text{--}4$ d); T3 anterior of premarginal line with row of points across complete width. Surface of metasoma matt (Fig. 30E).

Male

Unknown.

Distribution

Only found at three sandy sites at the coast, the Cederberg Mts and the Bokkeveld Plateau.

Floral hosts

On unidentified yellow Asteraceae.

Seasonal activity

August–September.

Scapter longicornis sp. nov.

[urn:lsid:zoobank.org:act:5CB151CF-94AD-489C-AFBA-1F19EB582474](https://doi.org/10.21203/rs.3.rs-1111111/v1)

Figs 31–32

Diagnosis

The male of *S. longicornis* sp. nov. can be separated from that of all other species of this group by the following character combination: flagella of antennae are twice as long as the compound eye (Fig. 31A); gonocoxites are medially angular-shaped (Fig. 32B); scutum is completely densely ($i < 1$ d) punctate (Fig. 31B); discs of T1–T3 unevenly punctate, basally denser ($i < 1$ d) than apically ($i > 1$ d) (Fig. 31D). The female is unknown.

Etymology

Named after the unique long antenna of the male.

Type material (1 specimen)

Holotype

SOUTH AFRICA • ♂; Montagu; 33°47' S, 20°07' E; 220 m a.s.l.; 23–30 Sep. 1924; RT leg.; NHML.

Description

Male

BODY LENGTH. 7.4 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli at level of posterior margin of complex eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black, twice as long as compound eye.

MESOSOMA. Integument brownish-black. Scutum densely ($i < 1 d$) punctate; surface between punctation smooth and shiny (Fig. 31B). Propodeum laterally coarsely carinate, in middle rugulose-areolate (Fig. 31C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 31A).

LEGS. Integument brownish, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 31A).

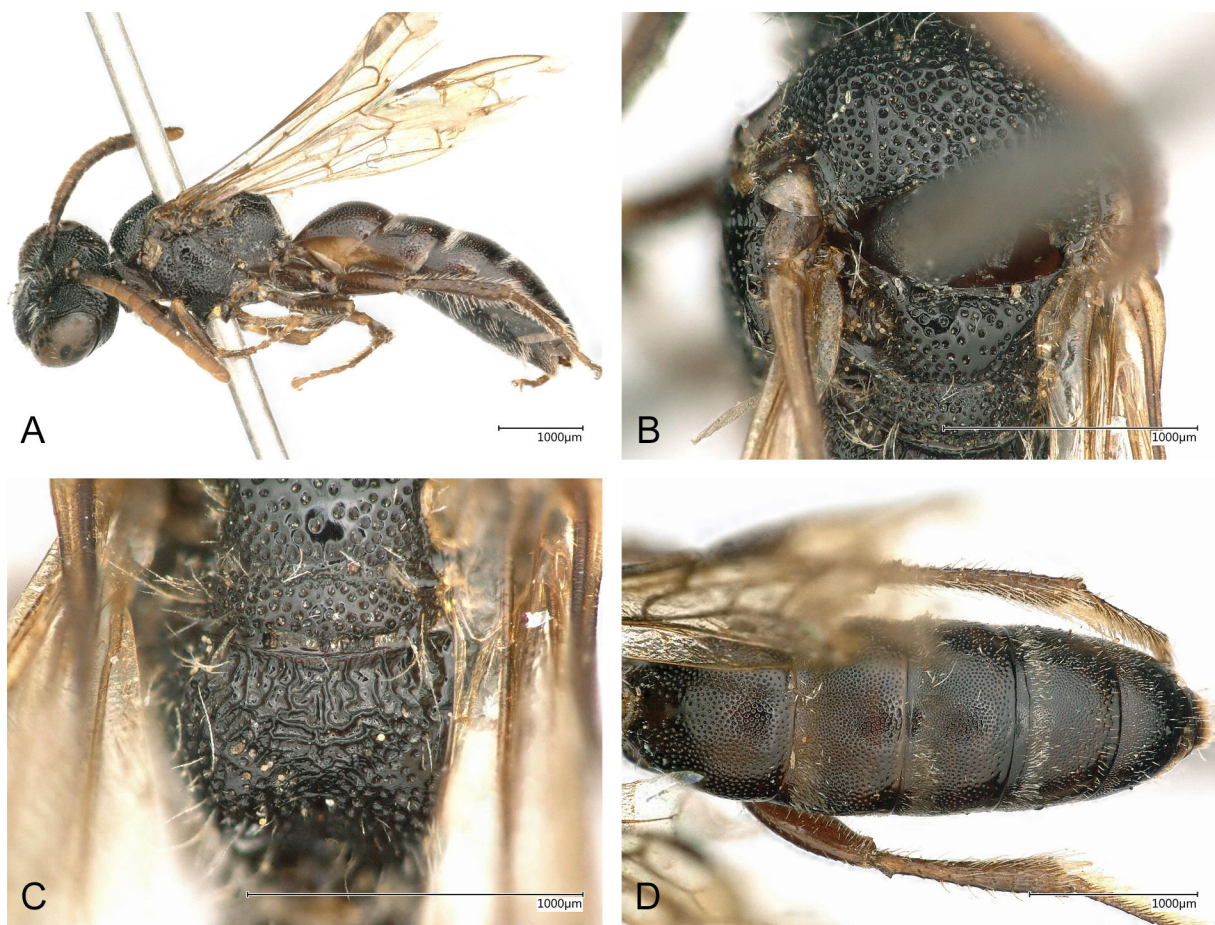


Fig. 31. *Scapter longicornis* sp. nov., holotype, ♂ (NHML). **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

METASOMA. Integument brownish. Disc of T1 without hair (Fig. 32A), T2–T4 basally greyish, dense, short, erect hair band, covering third of tergite. Posterior margins of T3–T4 at least laterally with single hair row of short, erect, greyish hair (Fig. 31D). Discs of T1–T3 unevenly punctate, basally denser ($i < 1 d$) than apically ($i > 1 d$); medially slightly denser than laterally; surface between punctation smooth and shiny (Fig. 31D).

TERMINALIA. Genitalia (Fig. 32B), S7 (Fig. 32C) and terminal plate of S8 (Fig. 32D) as illustrated.

Distribution

Only known from the type locality, the town Montagu.

Floral hosts

Unknown.

Seasonal activity

September.

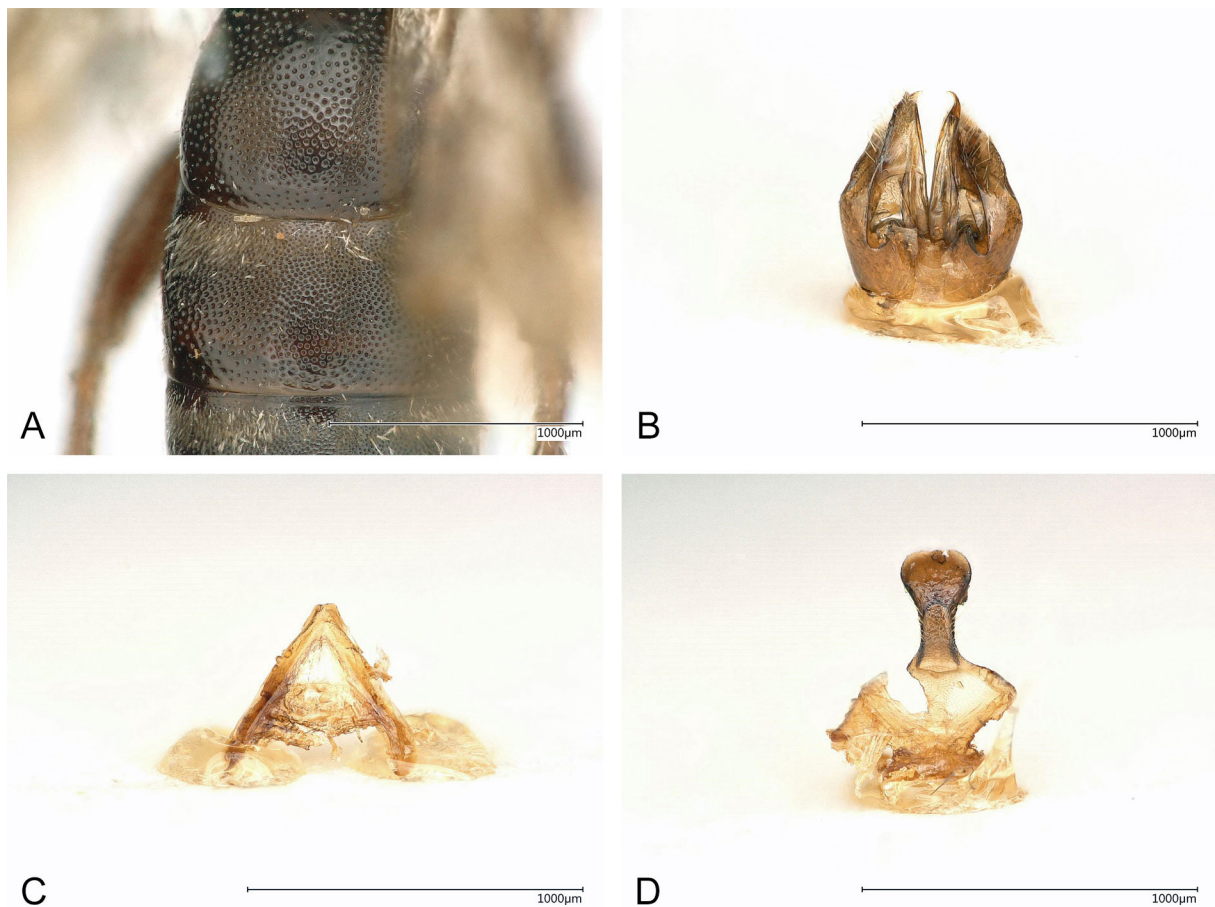


Fig. 32. *Scapter longicornis* sp. nov., holotype, ♂ (NHML). **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

Scapter mpumalangensis sp. nov.

urn:lsid:zoobank.org:act:F020ECFB-9F0B-4C5D-9E73-D1751F185D30

Figs 33–35

Diagnosis

The female of *S. mpumalangensis* sp. nov. can be separated from that of all other species of this group by the following character combination: pronotal lobe dark (Fig. 33A); T3 anterior of premarginial line

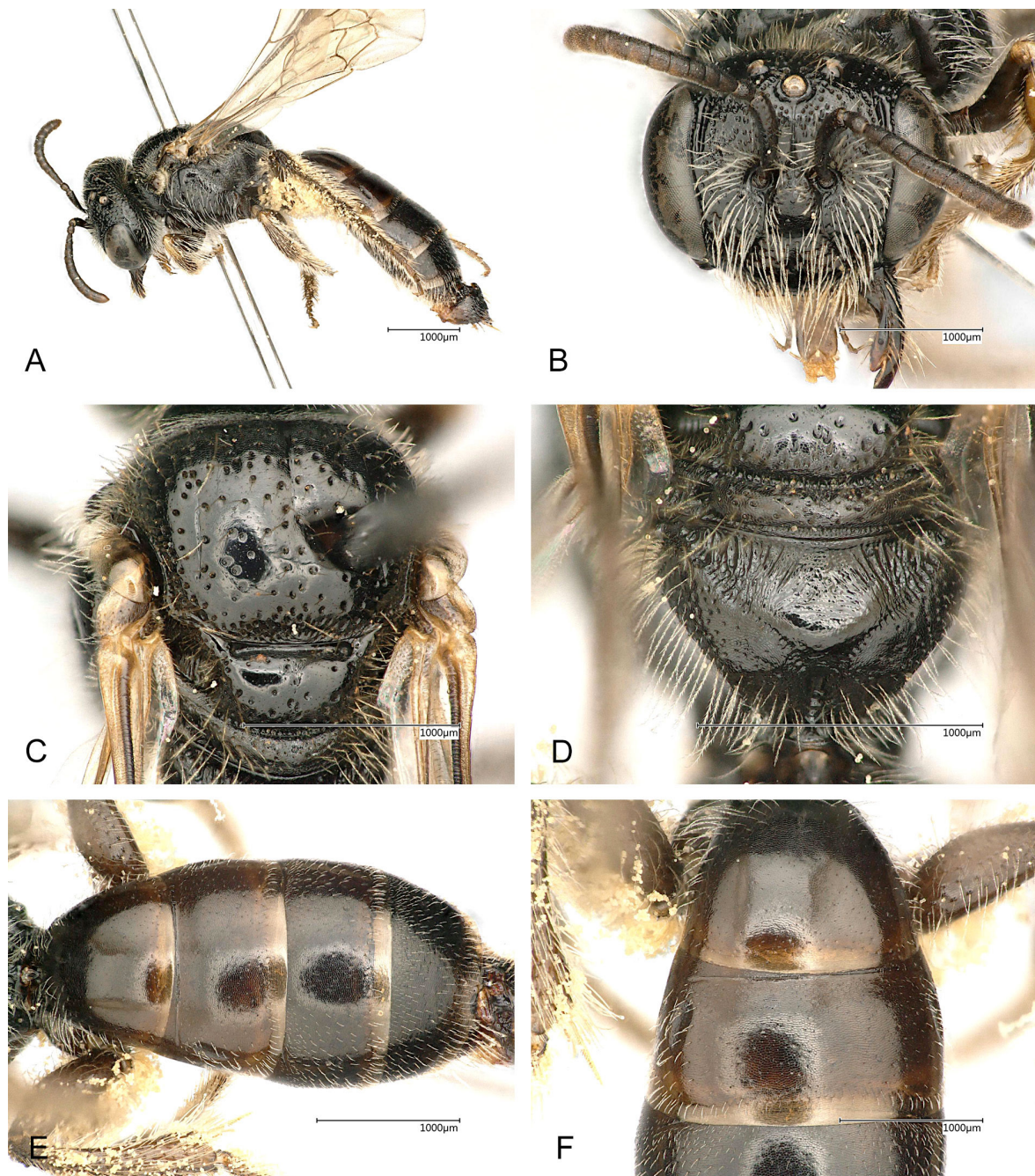


Fig. 33. *Scapter mpumalangensis* sp. nov., paratype, ♀ (RCMK). **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

impunctate (Fig. 33E); propodeum basally carinate, apically smooth (Fig. 5D); shallow punctation on discs of T1–T3 (Fig. 33E). The male is characterized by fine and sparse ($i = 2\text{--}3$ d) punctation on discs of T1–T3 (Fig. 34D); ocelli behind posterior margin of compound eyes and the form of S7 (Fig. 35C).

Etymology

The name is derived from the South African province Mpumalanga where the type specimens were collected.

Type material (2 specimens)

Holotype

SOUTH AFRICA • ♂; Mpumalanga 7 km S of Graskop, along road to Sabie; 24°57'39" S, 30°48'45" E; 1300 m a.s.l.; 21 Mar. 2001; SAMC.

Paratype

SOUTH AFRICA • 1 ♀; same collection data as for holotype; 21 Mar. 2001; RCMK.

Description

Female

BODY LENGTH. 6.6 mm.

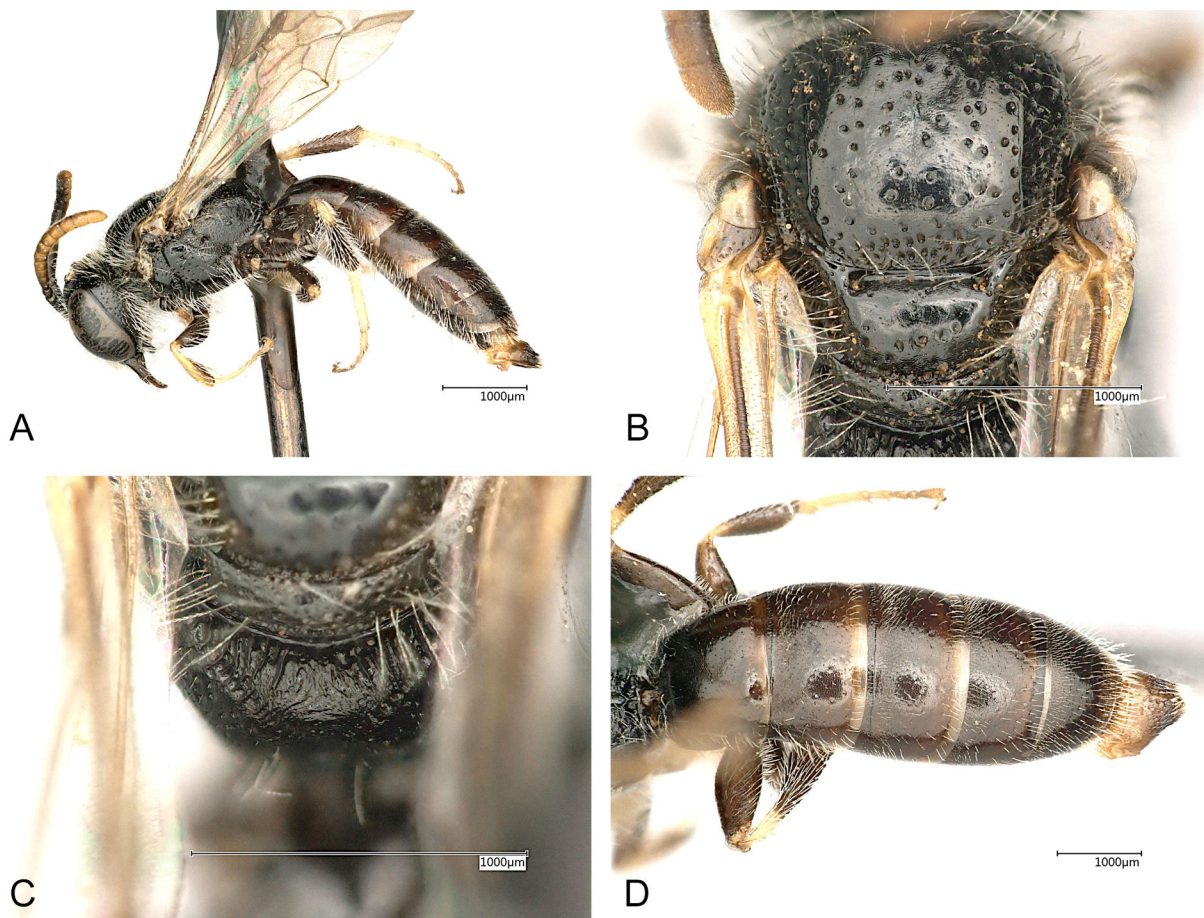


Fig. 34. *Scapter mpumalangensis* sp. nov., holotype, ♂ (SAMC). **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face regularly and densely covered with light brownish hair. Ocelli on level of posterior margin of compound eyes. Clypeus medially with longitudinal depression, punctation coarse, apically sparse ($i = 2-3$ d), laterally dense ($i = 1$ d). Surface between punctures smooth and shiny (Fig. 33B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin straight to slightly convex.

MESOSOMA. Integument black, pronotal lobe dark brown to black. Scutum relatively coarsely and irregularly punctate ($i = 2-4$ d); surface between punctures with very fine punctation (Fig. 33C). Metanotum about half as long as scutellum. Basolateral corners of the propodeum coarsely carinate, posterior and medial coriaceous (Fig. 33D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 33A).

LEGS. Integument brownish, fore and mid tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig. 33A).

METASOMA. Integument brownish, marginal zones yellowish. Basolaterally on T2 hair patches of middle long, greyish erect hair (Fig. 33F). Greyish hair on anterior margin of T3–T4 fine and dense, towards

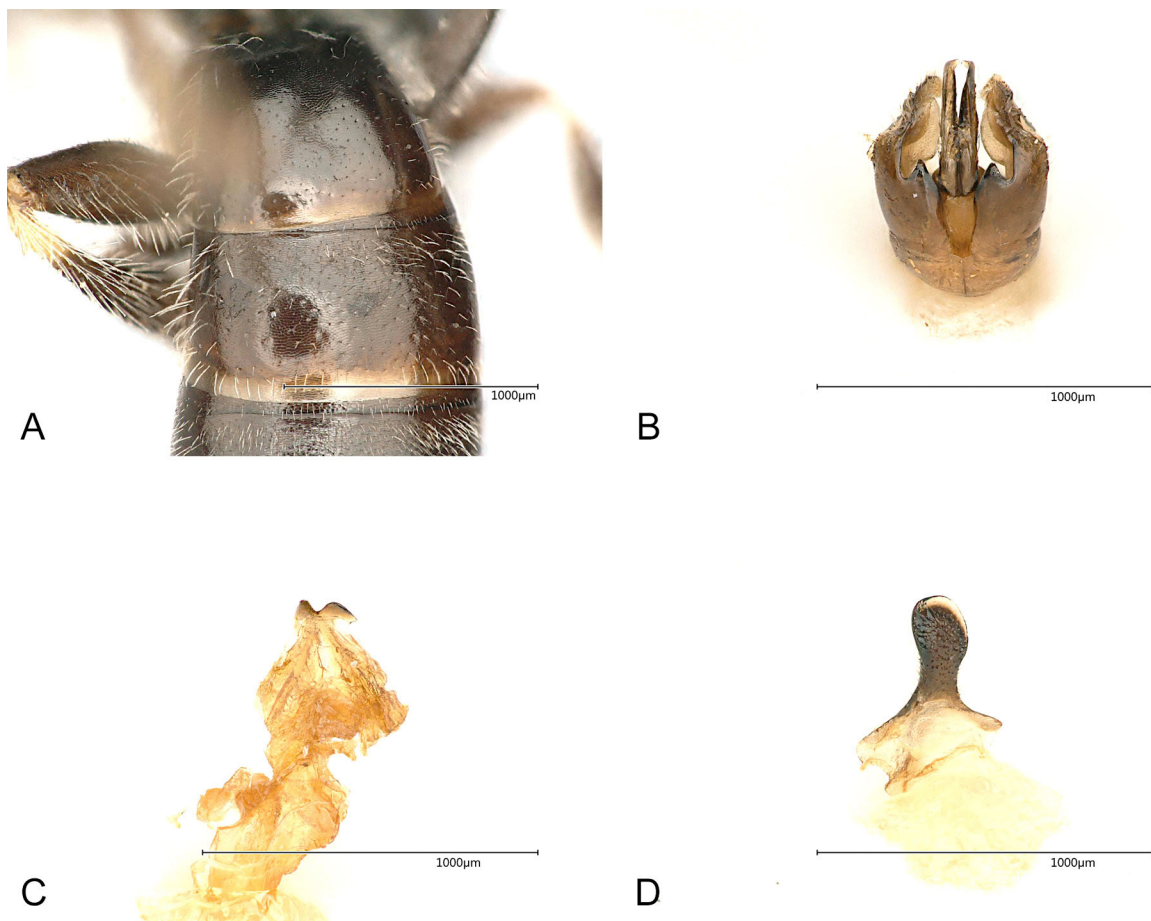


Fig. 35. *Scapter mpumalangensis* sp. nov., holotype, ♂ (SAMC). **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

posterior coarser and sparser. T3 anterior of premarginal line with hair band of middle long greyish hair across complete width. Prepygidial and pygidial fimbriae brownish. Discs of T1–T3 sparsely, and finely puncticulate. Surface between punctures matt (Fig. 33E).

Male

BODY LENGTH. 6.7 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli behind posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum relatively regularly and densely ($i = 1-2.5$ d) punctate; surface between punctures with very fine punctation (Fig. 34B). Propodeum basolaterally carinate, medially and apically coriaceous (Fig. 34C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 34A).

LEGS. Integument black, fore and mid tibia with long yellow spot, tarsi yellow. Vestiture greyish-white (Fig. 34A).

METASOMA. Integument brownish, marginal zone yellowish. Disc of T1 without hair (Fig. 35A), T2–T4 basally greyish, relatively sparse, short, erect hair band, covering fifth of terga; discs of T1–4 with middle long, greyish, erect hairs, more densely towards posterior. T2–T4 anterior of premarginal line with row of short, erect, greyish hair (Fig. 34D). Discs of T1–T4 completely regularly finely puncticulate. Surface between punctures matt (Fig. 34D).

TERMINALIA. Genitalia (Fig. 35B), S7 (Fig. 35C) and terminal plate of S8 (Fig. 35D) as illustrated.

Distribution

Only known from the type locality in the South African province Mpumalanga.

Floral hosts

Unknown.

Seasonal activity

March.

Scapter nitidus (Friese, 1909)

Figs 36–38

Polyglossa nitida Friese, 1909: 125, holotype ♂ (type locality: Steinkopf, South Africa) (ZMHB), examined.

Polyglossa opaca Friese, 1909: 125, holotype ♂ (type locality: Steinkopf, South Africa) (ZMHB), examined (synonymized by Kuhlmann 2021).

Diagnosis

The female of *S. nitidus* can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line with a row of points (Fig. 36E); propodeum

completely marked with fine carinae (Fig. 36D); disc of T4 barely hairy (Fig. 36E); punctuation on T1–T4 shallow (Fig. 36E); punctuation on disc of T1 as fine as punctuation of posterior margin of T1 (Fig. 36F). The male is characterized by dense ($i = 0.2 d$) punctuation on discs of T1–T4 (Fig. 37D); dense hair of T2 covers about half of the tergum (Fig. 37F); ocelli slightly behind posterior margin of compound eyes; small stripe on T3 parallel to posterior margin without dense punctuation (Fig. 37E) and form of S7 (Fig. 38B–D).

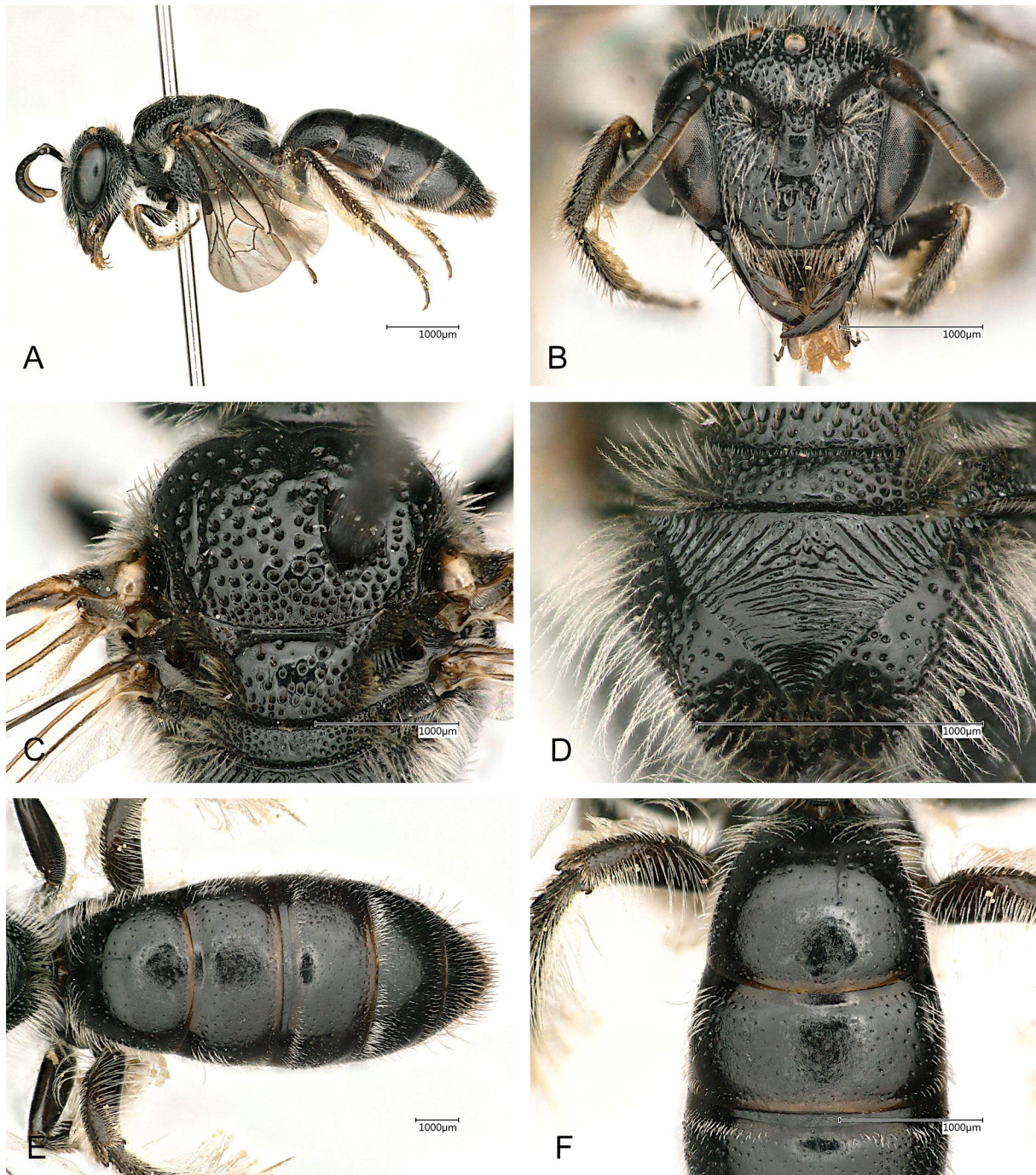


Fig. 36. *Scapter nitidus* (Fries, 1909), ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

Additional material examined (99 specimens)

SOUTH AFRICA • 3 ♂♂; Roggeveld Mts, 2 km SE of Farm Allemansdam, burnt area; 31°49'32" S, 19°59'55" E; 1290 m a.s.l.; 29 Aug. 2018; MK leg.; RCMK • 1 ♂; Kamiesberg Mts, 5 km SE of Leliefontein, road side; 30°20'09" S, 18°06'24" E; 1400 m a.s.l.; 10 Sep. 2017; MK leg.; RCMK • 1 ♀; same collecting data as for preceding; 11 Sep. 2016; MK leg.; RCMK • 1 ♂; 3 km NW of Farm

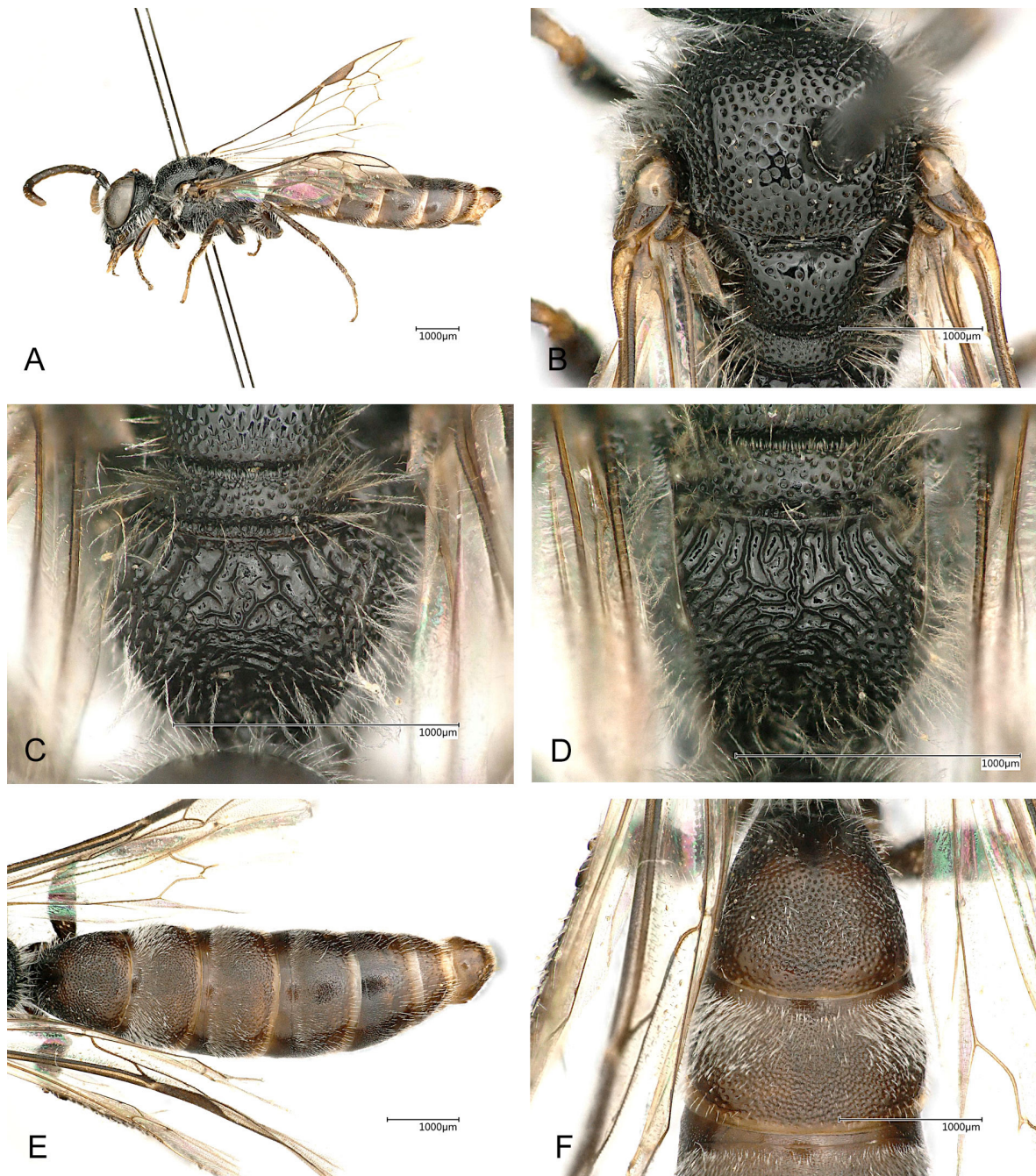


Fig. 37. *Scapter nitidus* (Frieze, 1909), ♂. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

Kanolfontein, 22 km W of Sutherland, road side; 32°23'17" S, 20°26'32" E; 1350 m a.s.l.; 18 Sep 2017; MK leg.; RCMK • 4 ♂♂; Roggeveld Mts, 1 km S of Farm Allemansdam, road side; 31°49'05" S, 19°59'15" E; 1270 m a.s.l.; 1 Sep. 2017; MK leg.; RCMK • 1 ♂; Lamberts Bay, Strandveld, sand; 32°06'19" S, 18°18'16" E; 5 m a.s.l.; 7 Sep. 2017; MK leg.; RCMK • 4 ♂♂; Keiski Mts, 3 km E of Farm M'Veera, shale; 31°45'29" S, 19°54'13" E; 1190 m a.s.l.; 13 Sep. 2016; MK leg.; RCMK • 1 ♂; same collection data as for preceding; 15 Sep. 2016; MK leg.; RCMK • 4 ♂♂; same collection data as for preceding; 19 Aug. 2017; MK leg.; RCMK • 1 ♂; Roggeveld Mts, 2 km S of Farm Perdekloof, river, dolerite; 31°47'35" S, 19°58'16" E; 1220 m a.s.l.; 24 Aug. 2018; MK leg.; RCMK • 6 ♂♂; same collection data as for preceding; 1 Sep. 2017; MK leg.; RCMK • 1 ♂; same collection data as for preceding; SANC • 1 ♀; same collection data as for preceding; 2 Sep. 2017; MK leg.; RCMK • 1 ♀; 10 km N of Nieuwoudtville, Farm Grasberg, dolerite hill; 31°18'01" S, 19°05'42" E; 800 m a.s.l.; 12 Sep. 2009; MK leg.; RCMK • 1 ♀; 20 km S of Nieuwoudtville, Farm Papkuilsfontein, Fynbos; 31°33'16" S, 19°08'31" E; 680 m a.s.l.; 20 Sep. 2014; MK leg.; RCMK • 2 ♀♀; Cederberg Mts, road to Algeria, Olifants River bridge; 32°21'55" S, 18°57'06" E; 150 m a.s.l.; 8 Sep. 2017; MK leg.; RCMK • 1 ♂; Gemsbokrivier-Pad, 4.5 km NE of Grootdrif, road side; 31°25'54" S, 18°55'16" E; 170 m a.s.l.; 4 Sep. 2016; MK leg.; RCMK • 1 ♂; same collection data as for preceding; 10 Jun. 2016; MK leg.; RCMK • 2 ♂♂; same collection data as for preceding; 15 Aug. 2011; MK leg.; RCMK • same collection data as for preceding; 20 Aug. 2011; MK leg.; RCMK • 2 ♂♂; 20 Aug. 2010; MK leg.; RCMK • 1 ♂; same collection data as for preceding; 17 Aug. 2010; MK leg.; RCMK • 1 ♂; same collection data as for preceding; 19 Aug. 2010; MK leg.; RCMK • 2 ♂♂; Keiski Mts, 5 km S of Farm Nooiensrivier, dolerite

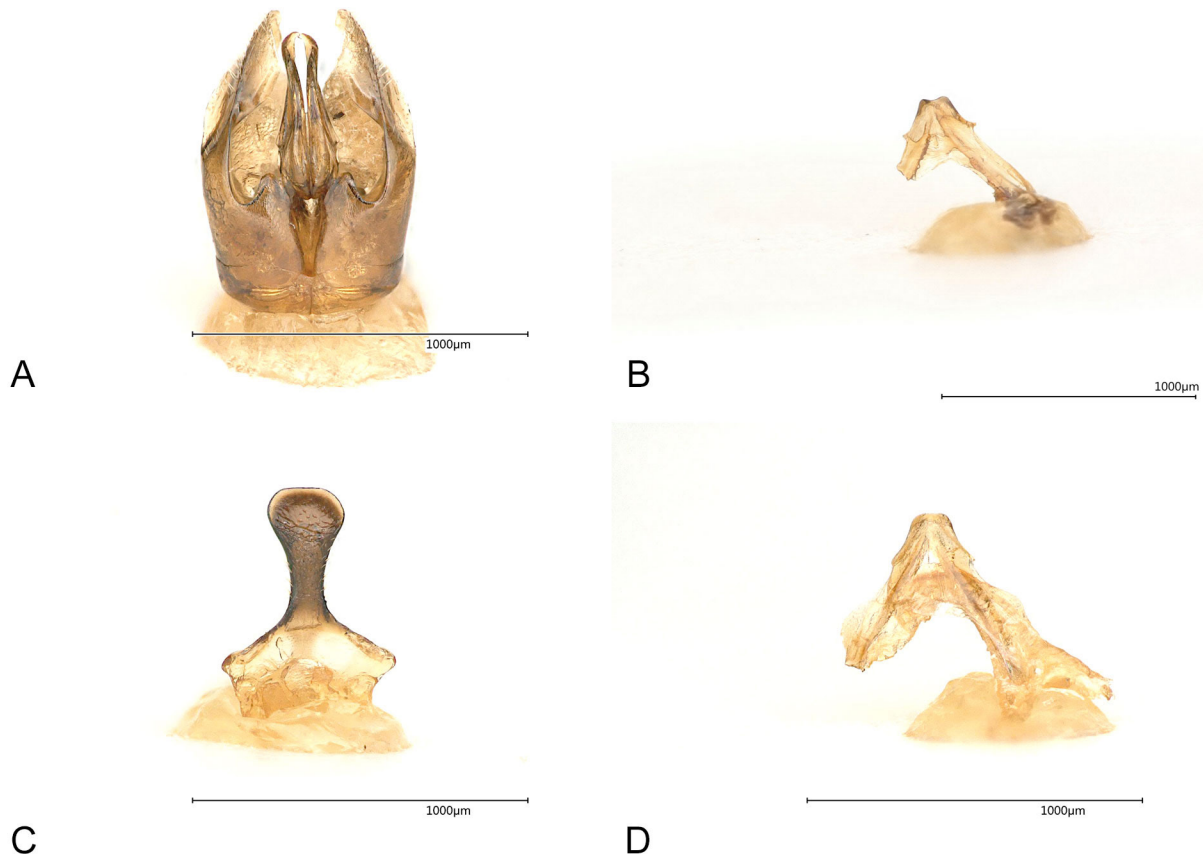


Fig. 38. *Scapter nitidus* (Fries, 1909), ♂. **A.** Genitalia (dorsal view). **B.** Sternum 7. **C.** Sternum 8. **D.** Sternum 7.

hill; 31°45'54" S, 19°50'17" E; 1270 m a.s.l.; 29 Aug. 2011; MK leg.; RCMK • 1 ♂; same collection data as for preceding; NHML • 1 ♂; Knersvlakte, along Gembokrivier-Pad; 31°26'40" S, 18°56'23" E; 195 m a.s.l.; 5 Jun. 2013; MK leg.; RCMK • 1 ♂; same collection data as for preceding; 20 May 2013; MK leg.; RCMK • 2 ♂♂; N Cape, Fynbos, 15 km NW of Nieuwoudtville, Farm Engelsepunt; 31°14'31" S, 18°59'08" E; 830 m a.s.l.; 22 Jul. 2003; KT leg.; RCMK • 1 ♂; same collection data as for preceding; 6 Aug. 2003; KT leg.; RCMK • 1 ♂; same collection data as for preceding; 26 Jul. 2003; KT leg.; RCMK • 1 ♂; same collection data as for preceding; 26 Jul. 2003; KT leg.; RCMK • 1 ♂; same collection data as for preceding; 7 Aug. 2003; KT leg.; RCMK • 1 ♀; same collection data as for preceding; 6 Oct. 2003; KT leg.; RCMK • 2 ♀♀; same collection data as for preceding; 7 Oct. 2003; KT leg.; RCMK • 1 ♀; NHML • 14 ♀♀; same collection data as for preceding; 24 Sep. 2009; KT leg.; RCMK • 1 ♀; NHML • 1 ♂; N Cape, Fynbos, 15 km NW of Nieuwoudtville, near farm Engelsepunt; 31°14'08" S, 18°58'23" E; 843 m a.s.l.; 13 Sep. 2003; KT leg.; RCMK • 2 ♂♂; N Cape, Nieuwoudtville, Glen Lyon, garden; 31°24'03" S, 19°08'34" E; 700 m a.s.l.; 27 Aug. 2003; MK leg.; RCMK • 1 ♂; Plateau Hantam Mts, near antenna, 9 km N of Calvinia; 31°22'29" S, 19°47'03" E; 1570 m a.s.l.; 7 Jun. 2013; MK leg.; RCMK • 2 ♂♂; same collection as for preceding; 30 Aug. 2011; MK leg.; RCMK (1 ♂ NHML) • 2 ♂♂; W Cape, Knersvlakte, Vanrhynsdorp, urban garden; 31°36'31" S, 18°44'02" E; 3 Aug. 2003; KT leg.; RCMK • 5 ♀♀; Farm Dassiefontein near Kamieskroon; 30°09' S, 17°59' E; 1100 m a.s.l.; 1 Oct. 1990; CE leg.; SANC • 1 ♀; Doringrivier, N Nieuwoudtville; 31°18' S, 19°07' E; 760 m a.s.l.; 28 Sep. 1990; CE leg.; SANC • 1 ♀; Clanwilliam Dist., Biedouw Valley; 32°08' S, 19°14' E; 330 m a.s.l.; 5–7 Sep. 1987; CE leg.; SANC • 1 ♀; W Cape, Villiersdorp; 33°58' S, 19°16' E; 1030 m a.s.l.; 29 Sep. 2001; CE leg.; SANC • 1 ♀; W Cape, Hermanus; 34°14' S, 18°26' E; 250 m a.s.l.; 29 Sep. 2001; CE leg.; SANC • 1 ♀, 4 ♂♂; 200 m S Farm Boskloof, 18 km S of Calvinia on R355; 31°38'36" S, 19°44'36" E; 1000 m a.s.l.; 22 Sep. 2022; MK leg.; RCMK • 3 ♂♂; Roggeveld Mts, 2 km S of Farm Perdekloof, river, dolerite; 31°47'35" S, 19°58'16" E; 1220 m a.s.l.; 28 Sep. 2022; MK leg.; RCMK • 4 ♀♀; same collection data as for preceding; 20 Sep. 2022; HE leg.; RCMK • 1 ♀; Farm Avontuur, Fynbos, 12 km NW of Nieuwoudtville; 31°16'18" S, 19°02'55" E; 770 m a.s.l.; 2 Sep. 2022; MK leg.; RCMK.

Description

Female

BODY LENGTH. 7.6–8.3 mm.

HEAD. Slightly wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with greyish hair, more densely around basis of antennae. Ocelli in line with posterior margin of compound eyes. Clypeus medially with shallow longitudinal depression; punctation fine and irregular ($i = 1-3$ d). Surface between punctures smooth and shiny (Fig. 36B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin distinctly emarginated and edges slightly extended.

MESOSOMA. Integument black, pronotal lobe black. Scutum coarsely and irregularly punctate ($i = 0.5-2$ d); surface between punctures smooth and shiny (Fig. 36C). Metanotum about half as long as scutellum. Propodeum anterior longitudinal broad and fine carinae and posterior finer transverse carinae (Fig. 36D). Scutum, scutellum, metanotum and mesepisternum sparsely covered with short, greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 36A).

LEGS. Integument black, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig. 36A).

METASOMA. Integument brownish to black, marginal zones light brownish. Hair field of short, greyish, erect hair basolaterally on T2 (Fig. 36F). Basally on T3–T4 hair bands, which cover about one fifth of T4, less on T3. T3 anterior of premarginal line with row of hairs (Fig. 36E). Prepygidial and pygidial

fimbriae dark brownish to black. Disc of T1 sparsely ($i = 3\text{--}5$ d), finely and shallowly punctate (Fig. 36F); discs of T2–T4 shallowly and irregularly ($i = 3\text{--}6$ d) punctate. Surface between punctures smooth and shiny. T3 anterior of premarginal line with row of points across complete width of tergum (Fig. 36E).

Male

BODY LENGTH. 7.8–8.4 mm.

HEAD. Slightly wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli in line with posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black; pronotal lobe black. Scutum relatively regularly, coarsely and densely ($i = 0.1\text{--}1.5$ d) punctate; surface between punctures smooth and shiny (Fig. 37B). Propodeum completely coarsely rugulose-areolate (Fig. 37C–D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 37A).

LEGS. Integument black, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 37A).

METASOMA. Integument black, marginal zone brownish. Disc of T1 sparsely haired (Fig. 37F), T2–T3 basally greyish, dense, short, erect hair band, covering about half of tergum; T4 with short hairs, getting longer towards posterior. T3–T4 anterior of premarginal line with row of short, erect, greyish hair (Fig. 37E). Punctuation on discs of T2–T4 dense ($i = 0.1$ d); narrow, impunctate, non-continuous stripe apicolaterally on all terga, getting broader towards posterior (Fig. 37E).

TERMINALIA. Genitalia (Fig. 38A), S7 (Fig. 38B–D) and terminal plate of S8 (Fig. 38C) as illustrated.

Distribution

Apparently widespread in western South Africa and recorded from Springbok down south at least to the wider Nieuwoudtville and Calvinia areas. As not all of the specimens listed under *S. nitidus* by Eardley (1996) could be studied the distribution of this species is not clear. However, it is almost certain that the record of a female *S. nitidus* from Kenya (Davies *et al.* 2005: 177) does not belong to this species because it is far outside the range of the species. Unfortunately, no reference specimen could be found in SANC so it is impossible to investigate the identity of the species.

Floral hosts

On *Senecio* sp., *Felicia* sp. (Asteraceae) and various unidentified yellow Asteraceae.

Seasonal activity

May–October.

Scapter obtusus sp. nov.

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Figs 39–41

Diagnosis

The female of *S. obtusus* sp. nov. can be separated from that of all other species of this group by the following character combination: surface of scutum with coarse and fine punctuation mixed (Fig. 39C),

discs of T1–T3 almost impunctate (Fig. 39E); facial fovea about 8 times as long as wide (Fig. 39B). The male is characterized by punctation on discs of T2–T4 fine and basally dense ($i = 0.5$ d), apically sparse ($i = 2–3$ d) (Fig. 40D), dense punctation on disc of T2 covers at most half of the tergum (Fig. 41A); less punctation medially of T2 (Fig. 41A).

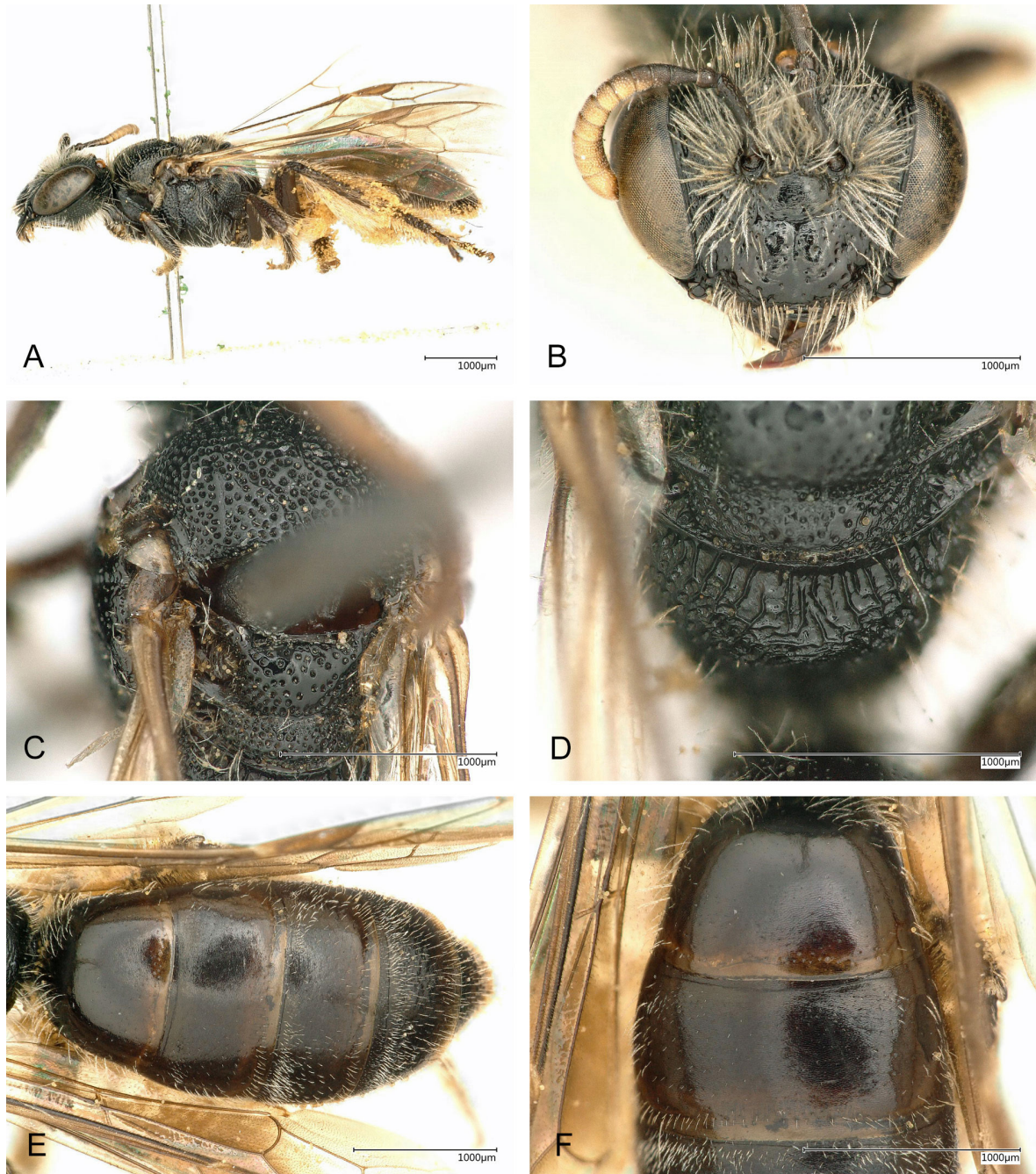


Fig. 39. *Scapter obtusus* sp. nov., paratype, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

Etymology

The name '*obtusus*' (Latin for 'matt') refers to the matt surface of meso- and metasoma in both males and females.

Type material (12 specimens)

Holotype

SOUTH AFRICA • ♂; Lion's Head, Cape Town; 33°58' S, 18°23' E; 5 m a.s.l.; 11–13 Jul. 1920; RT leg.; NHML.

Paratypes

SOUTH AFRICA • 2 ♂♂; same collection data as for holotype; Aug. 1920; RT leg.; RCMK • 1 ♂; same collection data as for preceding; Aug. 1920; RT leg.; NHML • 1 ♂; same collection data as for preceding; 21–31 Jul. 1920; RT leg.; NHML • 5 ♀♀; Mossel Bay; 34°10' S, 22°07' E; 60 m a.s.l.; Sep. 1933; RT leg.; NHML • 2 ♀♀; same collection data as for preceding; RCMK.

Description

Female

BODY LENGTH. 8.4–8.5 mm.

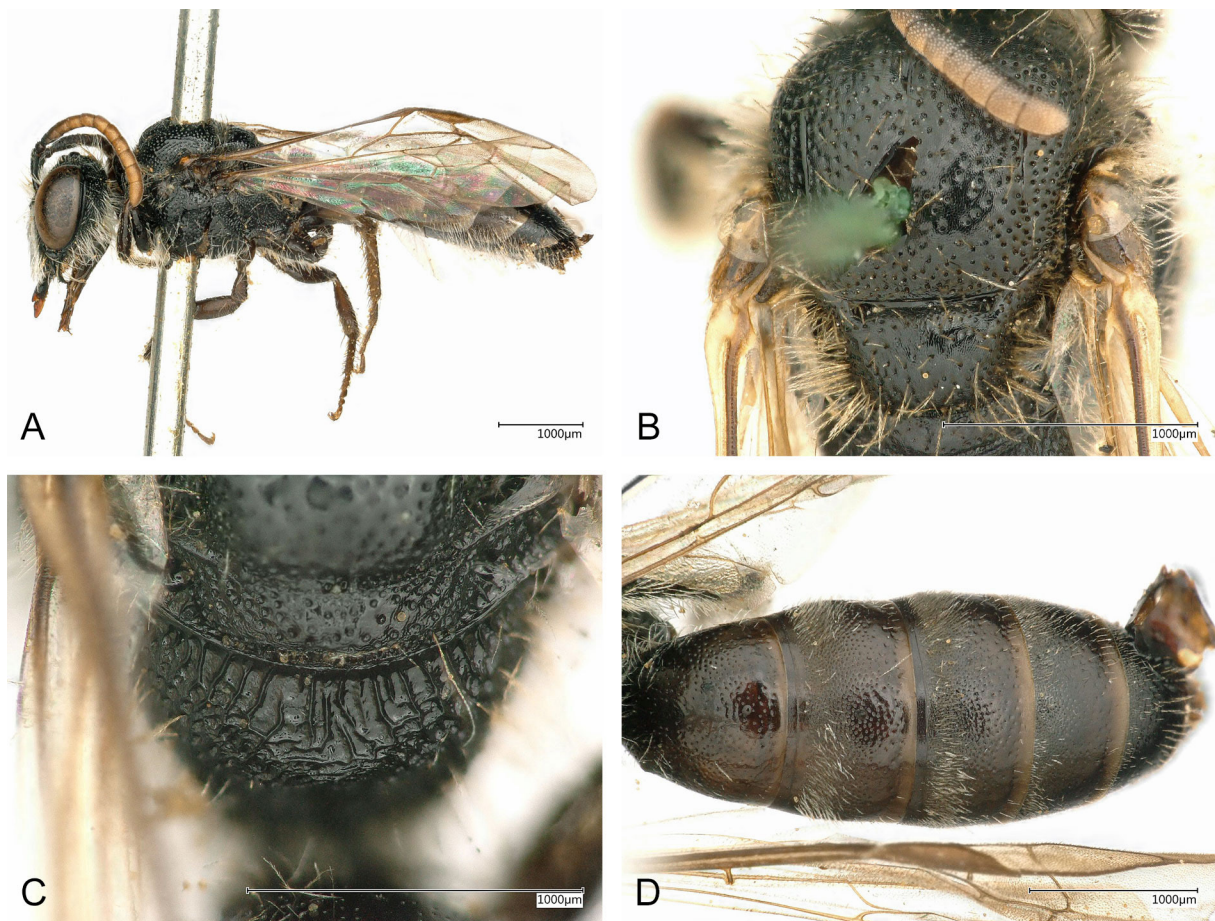


Fig. 40. *Scrapper obtusus* sp. nov., paratype, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli slightly in front of posterior margin of complex eyes. Clypeus medially with superficial longitudinal depression; punctation fine and sparse ($i = 1-2.5$ d); surface between punctures smooth and shiny (Fig. 39B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area elevated and sharply delimited.

MESOSOMA. Integument black, pronotal lobe dark brownish-black. Scutum, scutellum, metanotum and propodeum covered with fine punctation, surface shimmering. Scutum coarsely and regularly ($i \sim 1$ d) punctate (Fig. 39C). Metanotum about half as long as scutellum (Fig. 39C). Propodeum basally broadly carinate (Fig. 39D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 39A).

LEGS. Integument brownish, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig. 39A).

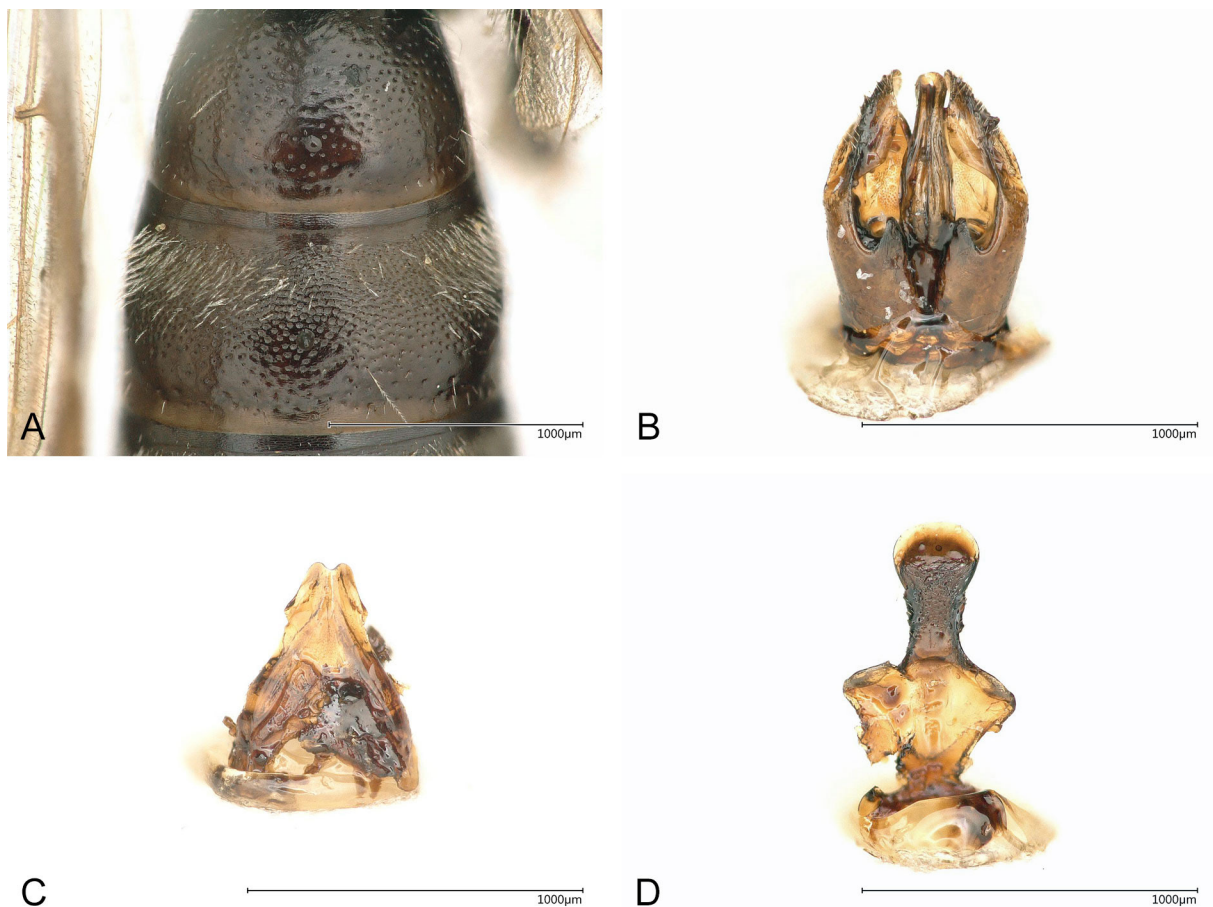


Fig. 41. *Scapter obtusus* sp. nov., paratype, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

METASOMA. Integument brownish, marginal zones yellowish-brown shimmering. Anterior on T2–T4 laterally hair fields of sparse, greyish-white, erect hair; on posterior margin of T3 at least laterally one single hair row; T4 completely haired, anteriorly denser than posteriorly; prepygidial and pygidial fimbriae greyish (Fig. 39 E–F). T1–T3 almost impunctate; surface matt (Fig. 39E–F).

Male

BODY LENGTH. 8.1–8.3 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli at level of posterior margin of complex eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument brownish-black. Scutum, scutellum, metanotum and propodeum covered with fine punctation, surface shimmering. Scutum coarsely and regularly ($i \sim 1$ d) punctate. Scutum densely ($i < 1$ d) punctate (Fig. 40B). Propodeum basally coarsely carinate, apically areolate (Fig. 40C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 40A).

LEGS. Integument brownish, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 40A).

METASOMA. Integument brownish, marginal zone yellowish-brown shimmering. Disc of T1 without hair (Fig. 41A), T2–T4 basally greyish, dense, short, erect hair band, covering a fourth of tergite. Posterior margins of T3–T4 at least laterally with single hair row of short, erect, greyish hair (Fig. 40D). Terga basally denser ($i < 1$ d) and finer punctate than posteriorly ($i = 1.5$ – 2 d); medially denser than laterally; posterior margins of T1–T4 with single point row; surface between punctation matt (Fig. 40D).

TERMINALIA. Genitalia (Fig. 41B), S7 (Fig. 41C) and terminal plate of S8 (Fig. 41D) as illustrated.

Distribution

Only known from a few sites at the south coast of South Africa from around Cape Town to Mossel Bay.

Floral hosts

Unknown.

Seasonal activity

July–September.

Scapter perpunctatulus sp. nov.

[urn:lsid:zoobank.org:act:8E40F342-7983-4032-BC22-964488A1119D](https://zoobank.org/act:8E40F342-7983-4032-BC22-964488A1119D)

Figs 42–43

Diagnosis

The male of *S. perpunctatulus* sp. nov. can be separated from that of all other species of the thus group by the following character combination: dense ($i = 0.2$ d) and irregular punctation basally on T2–T4 (Fig. 42D), dense punctation covers more than half of T2, less than 15 points medially of terga (Fig. 43A); basal hair bands on T3–T4 coarse and long (Fig. 44D). The female is unknown.

Etymology

The name refers to the morphological similarity to *S. perpunctatus*.

Type material (15 specimens)

Holotype

SOUTH AFRICA • ♂; N Cape, Fynbos, 15 km NW of Nieuwoudtville, near farm Engelsepunt; 31°14'08" S, 18°58'23" E; 843 m a.s.l.; 30 Aug. 2003; KT leg.: SAMC.

Paratypes

SOUTH AFRICA • 1 ♂; 12 km NW of Nieuwoudtville, Farm Avontuur, Fynbos; 31°18'18" S, 19°02'55" E; 770 m a.s.l.; 25 Aug. 2010; MK leg.; RCMK • 1 ♂; N Cape, Fynbos, 15 km NW Nieuwoudtville, Farm Engelsepunt; 31°14'31" S, 18°59'08" E; 830 m a.s.l.; 7 Aug. 2003; KT leg.; RCMK • 1 ♂; N Cape, Fynbos, 15 km NW of Nieuwoudtville, near farm Engelsepunt; 31°14'08" S, 18°58'23" E; 843 m a.s.l.; 30 Aug. 2003; KT leg.; RCMK • 1 ♂; same collection data as for preceding; 13 Sep. 2009; KT leg.; RCMK • 1 ♂; W Cape, Knersvlakte, Vanrhynsdorp, urban garden; 31°39'31" S, 18°44'02" E; 15 Aug. 2003; KT leg.; RCMK • 1 ♂; same collection data as for preceding; 3 Aug. 2003; KT leg.; RCMK • 1 ♂; Stellenbosch, Jonkershoek; 33°56' S, 18°51' E; 150 m a.s.l.; 22 Aug. 1986; DM leg.; SANC • 4 ♂♂; Camps Bay, Cape Peninsula; 33°57' S, 18°22' E; 5 m a.s.l.; Sep. 1920; RT leg.; NHML • 1 ♂;

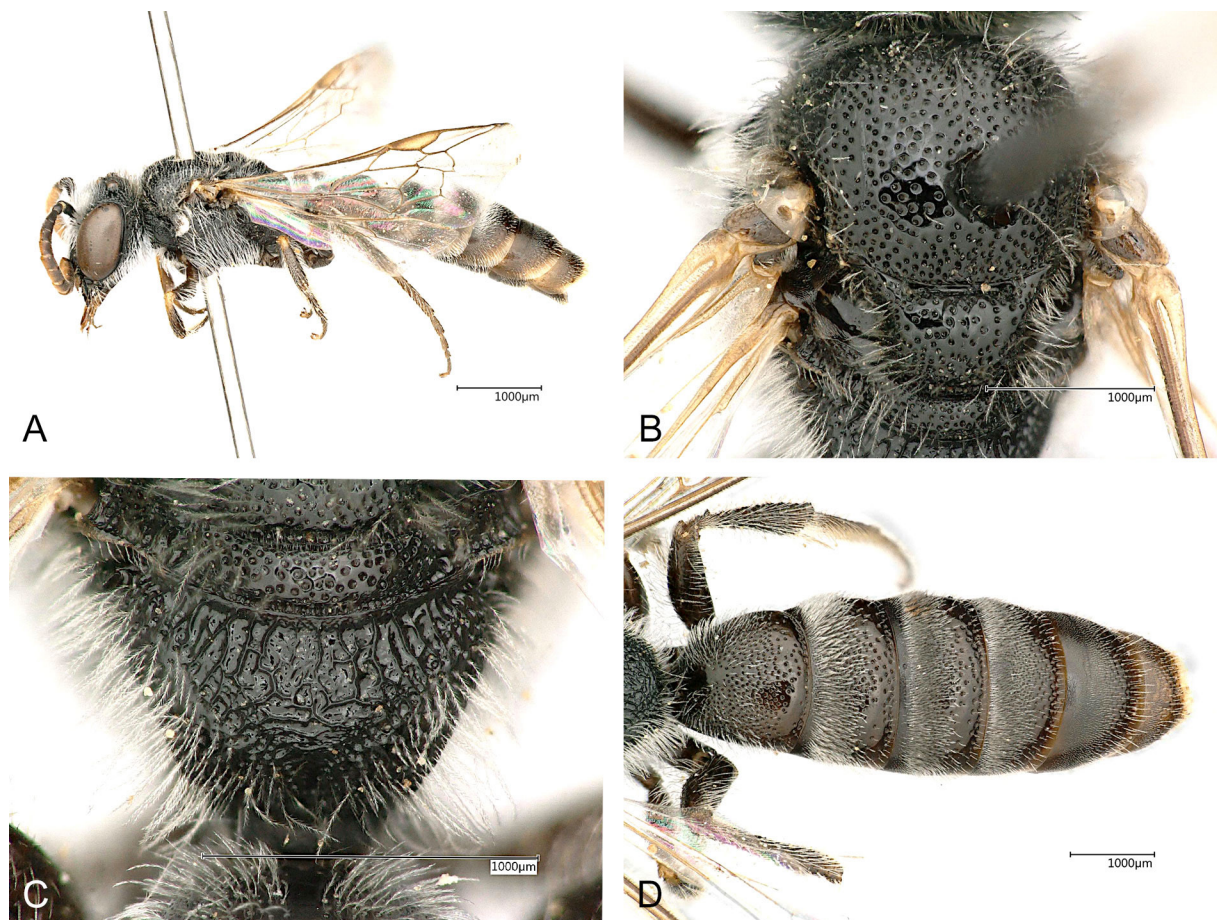


Fig. 42. *Scapter perpunctatulus* sp. nov., paratype, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

same collection data as for preceding; 1–20 Oct. 1920; RT leg.; NHML • 1 ♂; W Cape, Villiersdorp; 33°58' S, 19°16' E; 1130 m a.s.l.; 29 Sep. 2001; CE leg.; SANC • 1 ♂; Mossel Bay; 34°10' S, 22°07' E; 60 m a.s.l.; Sep. 1933; RT leg.; NHML.

Description

Male

BODY LENGTH. 7.2–9.6 mm.

HEAD. Slightly wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli in line with posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum relatively regularly and densely ($i = 0.5\text{--}1$ d) punctate; surface between punctures smooth and shiny (Fig. 42B). Propodeum completely areolate (Fig. 42C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 42A).

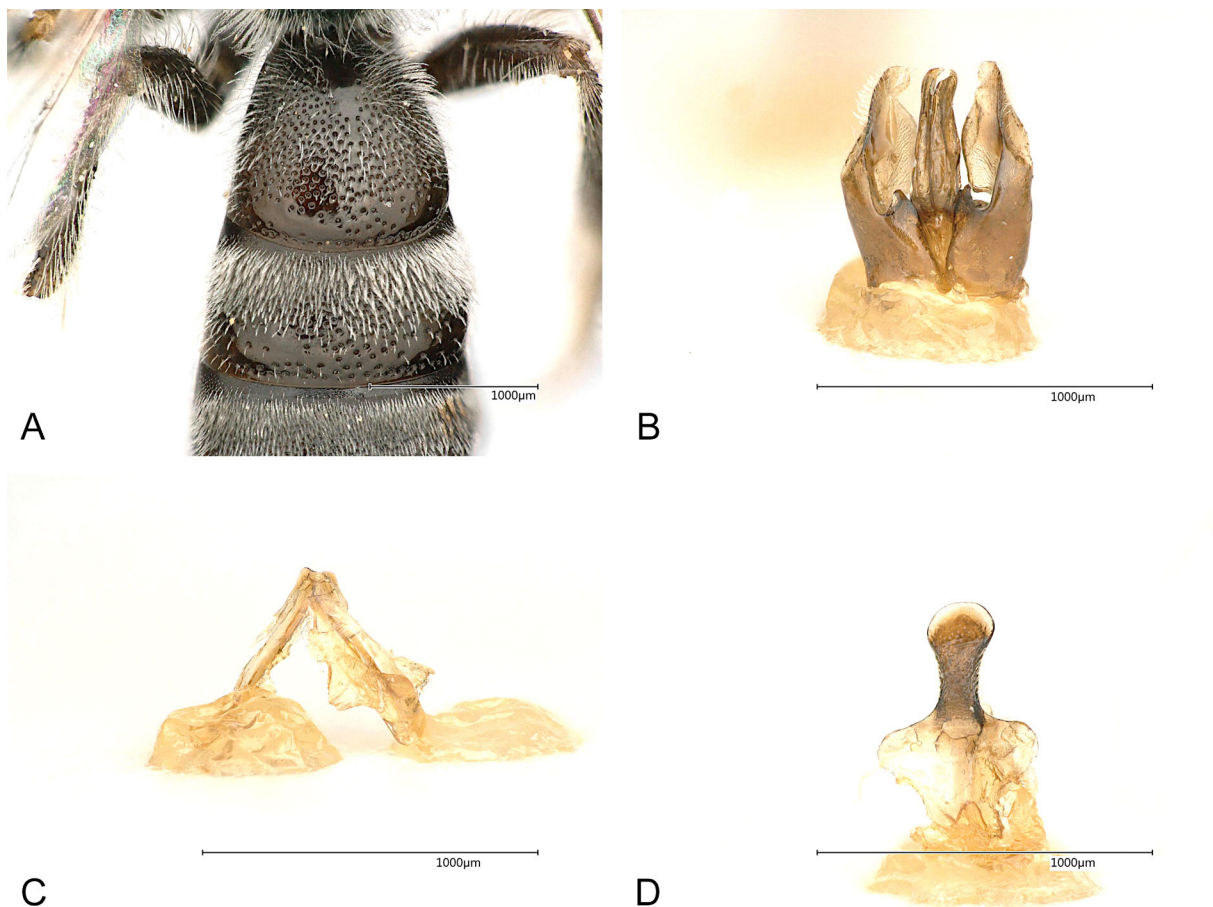


Fig. 43. *Scapter perpunctatulus* sp. nov., paratype, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

LEGS. Integument brownish, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 42A).

METASOMA. Integument brownish-black, marginal zone yellowish-brown. Disc of T1 without hair (Fig. 43A), T2–T4 basally greyish, dense, short, erect hair band, covering third to half of terga, which covers less of tergum the farther posterior it is. T3–T4 anterior of premarginal line laterally row of short, erect, greyish hair (Fig. 42D). T2–T4 basally more densely ($i = 0,2$ d) and much finer punctate than apically ($i = 1–4$ d) (Fig. 42D); dense punctation covers more than half of T2 (Fig. 43A); less than 15 points medially on T2; T2–T3 anterior of premarginal line with row of points; surface between punctures smooth and shiny (Fig. 42D).

TERMINALIA. Genitalia (Fig. 43B), S7 (Fig. 43C) and terminal plate of S8 (Fig. 43D) as illustrated.

Distribution

Found from the vicinities of the towns Nieuwoudtville and Vanrhynsdorp in the north down south to the wider Cape Town area with an isolated record further east from Mossel Bay.

Floral hosts

On *Senecio* sp., *Felicia* sp. (Asteraceae) and various unidentified yellow Asteraceae.

Seasonal activity

August–September.

Scapter perpunctatus Cockerell, 1933

Figs 44–47

Scapter perpunctata [sic!] Cockerell, 1933: 205–206, holotype ♀ (type locality: Knysna, South Africa) (NHML), examined.

Diagnosis

The male of *S. perpunctatus* is here described for the first time. The female of *S. perpunctatus* can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line with a row of points (Fig. 45C–D); fine and irregular punctation on discs of T1–T4, basomedial punctation often sparse (Fig. 45C–D); propodeum with carinae, often on the entire width, not smooth (Fig. 45A–B). The male is characterized by dense ($i = 0.2$ d) punctation on discs of T2–T4 (Fig. 46D); dense ($i = 0.2$ d) punctation on disc of T2 covers at most three quarters of the tergum (Fig. 47A); relatively small stripe on T3 parallel to posterior margin without dense punctation (Fig. 46D); punctation of scutum completely dense ($i < 0.5$ d) (Fig. 46B) and form of S7 (Fig. 47C).

Additional material examined (262 specimens)

SOUTH AFRICA • 4 ♀♀; 12 km NW of Nieuwoudtville, Farm Avontuur, Fynbos; 31°16'18" S, 19°02'55" E; 770 m a.s.l.; 19 Sep. 2009; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 1 Sep. 2009; MK leg.; RCMK • 2 ♀♀, 2 ♂♂; same collection data as for preceding; 9 Sep. 2018; MK leg.; RCMK • 1 ♀; 20 km S of Nieuwoudtville, Farm Papkuilsfontein, Fynbos; 31°33'16" S, 19°08'31" E; 680 m a.s.l.; 20 Sep. 2014; MK leg.; RCMK • 7 ♀♀; Gemsbokrivier-Pad, 4.5 km NE of Grootdrif, road side; 31°25'54" S, 18°55'16" E; 170 m a.s.l.; 4 Sep. 2012; MK leg. RCMK • 1 ♀; same collection data as for preceding; 4 Sep. 2016; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 28 Aug. 2018; MK leg.; RCMK • 5 ♀♀; Kamiesberg Mts, 5 km SE of Leliefontein, road side; 30°20'09" S, 18°06'24" E; 1400 m a.s.l.; 5 Oct. 2014; MK leg.; RCMK • 7 ♀♀; same collection data as for preceding; 10 Sep. 2017; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 11 Sep. 2016; MK leg.;

RCMK • 1 ♀; same collection data as for preceding; 7 Sep. 2016; MK leg.; RCMK • 2 ♀♀; Keiski Mts, 3 km E of Farm M'Vera, shale; 31°45'29" S, 19°54'13" E; 1190 m a.s.l.; 13 Sep. 2016; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 19 Aug. 2017; MK leg.; RCMK • 1 ♀; Keiski Mts, 5 km S of Farm Nooiensrivier, burnt area; 31°45'47" S, 19°50'17" E; 1275 m a.s.l.; 4 Sep. 2010; MK leg.; RCMK • 6 ♀♀; same collection data as for preceding; 29 Aug. 2010; MK leg.; RCMK • 4 ♀♀; Keiski Mts, 5 km S of Farm Nooiensrivier, dolerite hill; 31°45'54" S, 19°15'17" E; 1270 m a.s.l.; 29 Aug. 2010; MK leg.; RCMK • 3 ♀♀; same collection data as for preceding; 29 Aug. 2011; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 22 Sep. 2014; MK leg.; RCMK • 2 ♀♀; Keiskie Mts, near Farm Nooitgedag, road side; 31°43'11" S, 19°54'11" E; 1190 m a.s.l.; 11 Oct. 2014; MK leg.; RCMK • 1 ♀; Knersvlakte, 5 km N of Grootdrif; 31°26'40" S, 18°56'23" E; 195 m a.s.l.; 21 Sep. 2007; KT leg.; RCMK • 1 ♀; same collection data as for preceding; 21 Sep. 2007; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 14 Sep. 2007; KT leg.; RCMK • 2 ♀♀, 2 ♂♂; N Cape, Fynbos, 15 km NW of Nieuwoudtville, Farm Engelsepunt; 31°14'31" S, 18°59'08" E; 830 m a.s.l.; 28 Aug. 2003; KT leg.; RCMK • 6 ♀♀; N Cape, Fynbos, 15 km NW of Nieuwoudtville, near farm Engelsepunt; 31°14'08" S, 18°58'23" E; 843 m a.s.l.; 28 Aug. 2003; KT leg.; RCMK • 1 ♀; same collection data as for preceding; 13 Sep. 2003; KT leg.; RCMK • 3 ♀♀; Plateau Hantam Mts, near antenna, 9 km N Calvinia; 31°22'29" S, 19°47'03" E; 1570 m a.s.l.; 14 Oct. 2014; MK leg.; RCMK • 4 ♀♀; same collection data as for preceding; 7 Sep. 2010; MK leg.; RCMK • 2 ♀♀; Plateau Hantam Mts, weather stn, 12 km N of Calvinia; 31°21'13" S, 19°47'53" E; 1580 m a.s.l.; 11 Sep. 2010; MK leg.; RCMK • 1 ♀; W Cape, near Nieuwoudtville; [31°22' S], [19°07' E]; 21 Sep. 1999; MK leg.; RCMK • 3 ♀♀; 3 km NW of Farm

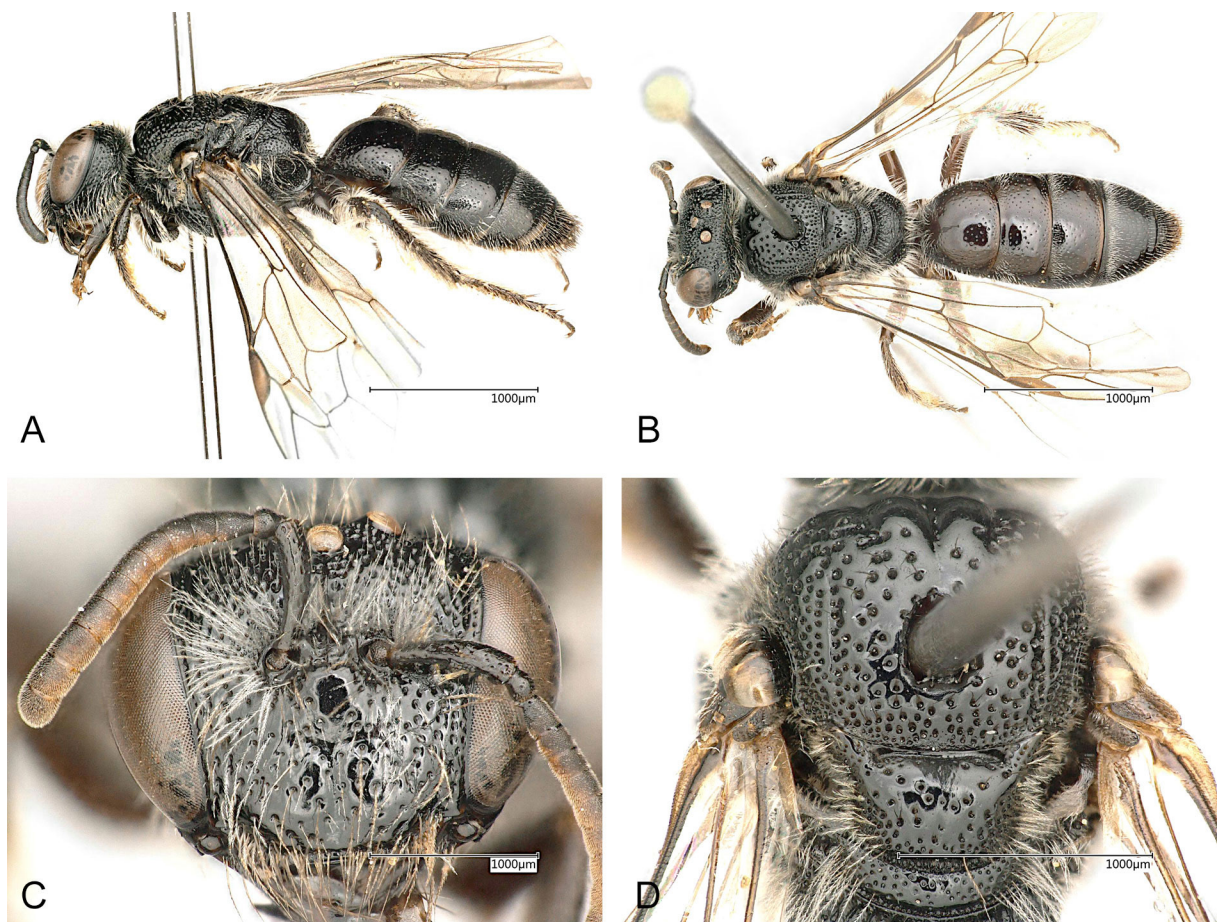


Fig. 44. *Scapter perpunctatus* Cockerell, 1933, ♀. **A.** Lateral view. **B.** Dorsal view. **C.** Head (lateral view). **D.** Scutum and scutellum (dorsal view).

Kanolfontein, 22 km W of Sutherland, road side; 32°23'17" S, 20°26'32" E; 1350 m a.s.l.; 18 Sep. 2017; MK leg.; RCMK • 5 ♀♀; Roggeveld Mts, 2 km S of Farm Perdekloof, river, dolerite; 31°47'35" S, 19°58'16" E; 1220 m a.s.l.; MK leg.; RCMK • 3 ♀♀; Roggeveld Mts, 2 km SE of Farm Allemansdam, burnt area; 31°49'32" S, 19°59'55" E; 1290 m a.s.l.; MK leg.; RCMK • 7 ♀♀; Farm Dassiefontein near Kamieskroon; 30°09' S, 17°59' E; 1100 m a.s.l.; 1 Oct. 1990; CE leg.; SANC • 1 ♀; Kamiesberg Pass; 30°12', 17°59'; 1210 m a.s.l.; 11 Sep. 1987; CE leg.; SANC • 2 ♀♀; N Cape Province, 33 km E of Garies; 30°20'12" S, 17°53'21" E; 750 m a.s.l.; 17 Sep. 2011; CE leg.; SANC • 1 ♀; N Cape Province, 25 km E Garies; 30°25'40" S, 18°08'36" E; 770 m a.s.l.; 16 Oct. 2008; CE leg.; SANC • 1 ♀; Niewoudtville, Botanic Gardens; 31°22' S, 19°07' E; 760 m a.s.l.; 9 Sep. 1987; CE leg.; SANC • 2 ♀♀; 10–20 km E Lamberts Bay; 32°08' S, 18°28' E; 180 m a.s.l.; 3 Oct. 1990; CE leg.; SANC • 2 ♀♀, 1 ♂; Clanwilliam Dist., Biedouw Valley; 32°08' S, 19°14' E; 330 m a.s.l.; 5–7 Sep. 1987; CE leg.; SANC • 1 ♀; SW Cape Province, 8 km W of Clan William; 32°09' S, 18°50' E; 300 m a.s.l.; 19 Oct. 2008; CE leg.; SANC • 2 ♀♀; Wuppertal; 32°17' S, 19°13' E; 540 m a.s.l.; 8 Sep. 1987; CE leg.; SANC • 5 ♀♀, 2 ♂♂; W Cape, Kunje Farm, 28 km SE of Citrusdal; 32°40' S, 19°10' E; 1100 m a.s.l.; 23 Sep. 2001; CE leg.; SANC • 5 ♀♀; Farm Liberty 50 km N Ceres; 32°54' S, 19°17' E; 980 m a.s.l.; 27 Sep. 1990; CE leg.; SANC • 6 ♀♀; 7 km E Wellington; 33°38' S, 19°05' E; 300 m a.s.l.; CE leg.; SANC • 13 ♀♀; Montagu; 33°47' S, 20°07' E; 220 m a.s.l.; 23–30 Sep. 1924; RT leg.; NHML • 1 ♀; same collection data as for preceding; 1–21 Oct.; RT leg.; NHML • 1 ♀; Bien Donn , near Franschhoek; 33°54' S, 19°06' E; 250 m a.s.l.; 17 Oct. 2003; CE leg.; SANC • 1 ♀; SW Cape Province, Franschhoek Pass; 33°55'05" S, 19°09'32" E; 240 m a.s.l.; 23 Oct. 2008; CE leg.; SANC • 3 ♀♀; SW Cape Province, Franschhoek;

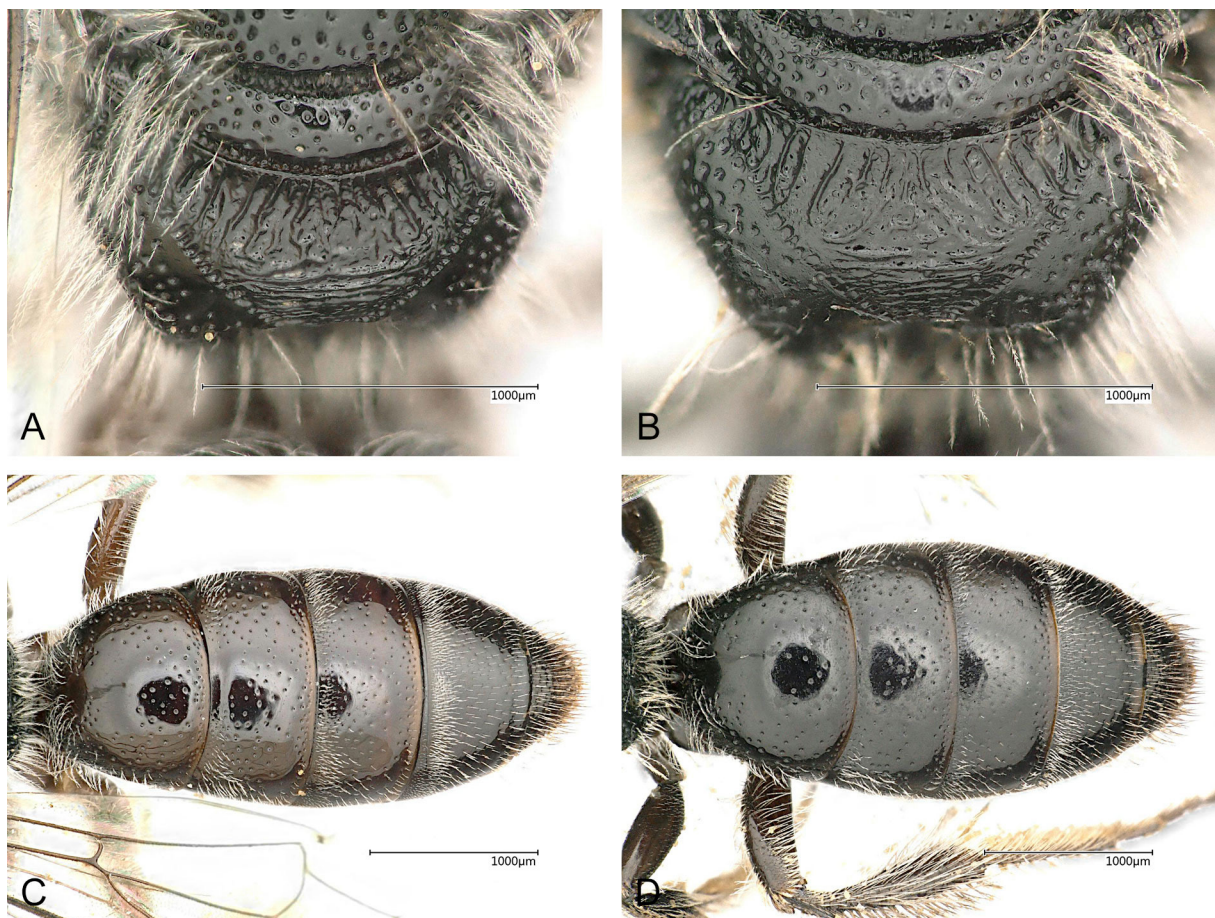


Fig. 45. *Scapter perpunctatus* Cockerell, 1933, ♀. **A.** Metanotum and propodeum (dorsal view). **B.** Metanotum and propodeum (dorsal view). **C.** Metasoma (dorsal view). **D.** Metasoma (dorsal view).

33°55'34" S, 19°05'41" E; 240 m a.s.l.; 23 Oct. 2008; CE leg.; SANC • 1 ♀; Stellenbosch; 33°56' S, 18°51' E; 150 m a.s.l.; 17 Sep. 1925; RN leg.; NHML • 3 ♀♀, 1 ♂; Rapenburg, Cape Flats; 33°57' S, 18°27' E; 5 m a.s.l.; 1–14 Oct. 1920; RT leg.; NHML • 3 ♀♀, 1 ♂; W Cape, Villiersdorp; 33°58' S, 19°16' E; 1030 m a.s.l.; 29 Sep. 2001; CE leg.; SANC • 3 ♀♀; 5 km S of Grabouw; 34°18' S, 19°01' E; 560 m a.s.l.; 29 Sep. 2001; CE leg.; SANC • 11 ♀♀; 200 m S Farm Boskloof, 18 km S of Calvinia on R355; 31°38'36" S, 19°44'36" E; 1000 m a.s.l.; 22 Sep. 2022; MK leg.; RCMK • 3 ♀♀; same collection data as for preceding; 17 Sep. 2022; HE leg.; RCMK • 6 ♀♀, 3 ♂♂; Farm Avontuur, Fynbos, 12 km NW Nieuwoudtville; 31°16'18" S, 19°02'55" E; 770 m a.s.l.; 2 Sep. 2022; HE leg., RCMK • 3 ♀♀, 1 ♂; same collection data as for preceding; 13 Sep. 2022; HE leg., RCMK • 6 ♀♀; Roggeveld Mts, 2 km SE of Farm Allemansdam, burnt area; 31°49'32" S, 19°59'55" E; 1290 m a.s.l.; 20 Sep. 2022; MK leg.; RCMK • 16 ♀♀, 1 ♂; Roggeveld Mts, 2 km S of Farm Perdekloof, river, dolerite; 31°47'35" S, 19°58'16" E; 1220 m a.s.l.; 20 Sep. 2022; MK leg.; RCMK • 4 ♀♀, 2 ♂♂; same collection data as for preceding; 28 Sep. 2022; MK leg.; RCMK • 9 ♂♂; 12 km NW Nieuwoudtville, Farm Avontuur, Fynbos; 31°16'18" S, 19°02'55" E; 770 m a.s.l.; 25 Aug. 2017; MK leg.; RCMK • 11 ♂♂; same collection data as for preceding; 16 Aug. 2011; MK leg.; RCMK • 1 ♂; same collection data as for preceding; 25 Aug. 2010; MK leg.; RCMK • 1 ♂; same collection data as for preceding; 4 Sep. 2011; HE leg.; RCMK • 7 ♂♂; 20 km S of Nieuwoudtville, Farm Papkuilsfontein, Fynbos; 31°33'16" S, 19°08'31" E; 680 m a.s.l.; 20 Aug. 2017; MK leg.; RCMK • 1 ♂; Cederberg Mts, road to Algeria, Olifants River bridge; 32°21'55" S, 18°57'06" E; 150 m a.s.l.; 8 Sep. 2017; MK leg.; RCMK • 1 ♂; Lamberts Bay, Strandveld,

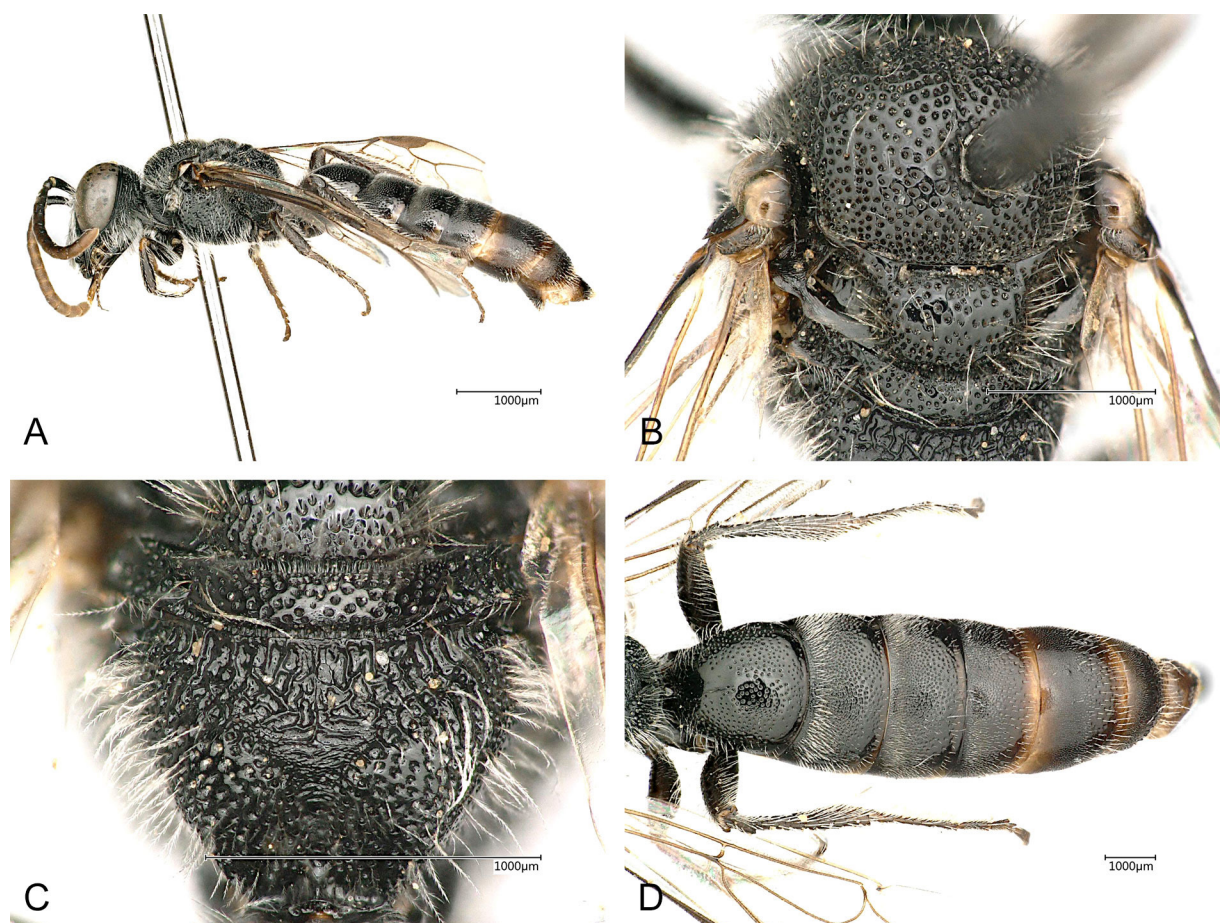


Fig. 46. *Scapter perpunctatus* Cockerell, 1933, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

sand; 32°06'19" S, 18°18'16" E; 5 m a.s.l.; 7 Sep. 2017; MK leg.; RCMK • 2 ♂♂; same collection data as for preceding; 6 Aug. 2003; KT leg.; RCMK • 5 ♂♂; same collection data as for preceding; 22 Jul. 2003; KT leg.; RCMK • 12 ♂♂; same collection data as for preceding; 27 Aug. 2003; KT leg.; RCMK • 1 ♂; same collection data as for preceding; 7–29 Aug. 2003; KT leg.; RCMK • 2 ♂♂; N Cape, Fynbos, 2 km W of Nieuwoudtville, near Grasberg; 31°21'05" S, 19°05'49" E; 742 m a.s.l.; 23 Aug. 2003; KT leg.; RCMK • 1 ♂; Roggeveld Mts, 2 km S of Farm Perdekloof, river, dolerite; 31°47'35" S, 19°58'16" E; 1220 m a.s.l.; 24 Aug. 2018; MK leg.; RCMK • 3 ♂♂; Roggeveld Mts, 2 km SE of Farm Allemansdam, burnt area; 31°49'32" S, 19°59'55" E; 1290 m a.s.l.; 24 Aug. 2018; MK leg.; RCMK • 8 ♂♂; same collection data as for preceding; 29 Aug. 2018; MK leg.; RCMK • 3 ♂♂; Bien Donné, near Franschhoek; 33°54' S, 19°06' E; 250 m a.s.l.; 7 Aug. 2003; GT leg.; SANC • 1 ♂; Mossel Bay; 34°10' S, 22°07' E; 60 m a.s.l.; 23–30 Sep. 1924; RT leg.; NHML • 1 ♂; 12 km NW of Nieuwoudtville, Farm Avontuur, Fynbos; 31°16'18" S, 19°02'55" E; 770 m a.s.l.; 6 Sep. 2009; MK leg.; RCMK.

Description

Female

BODY LENGTH. 7.6–8.8 mm.

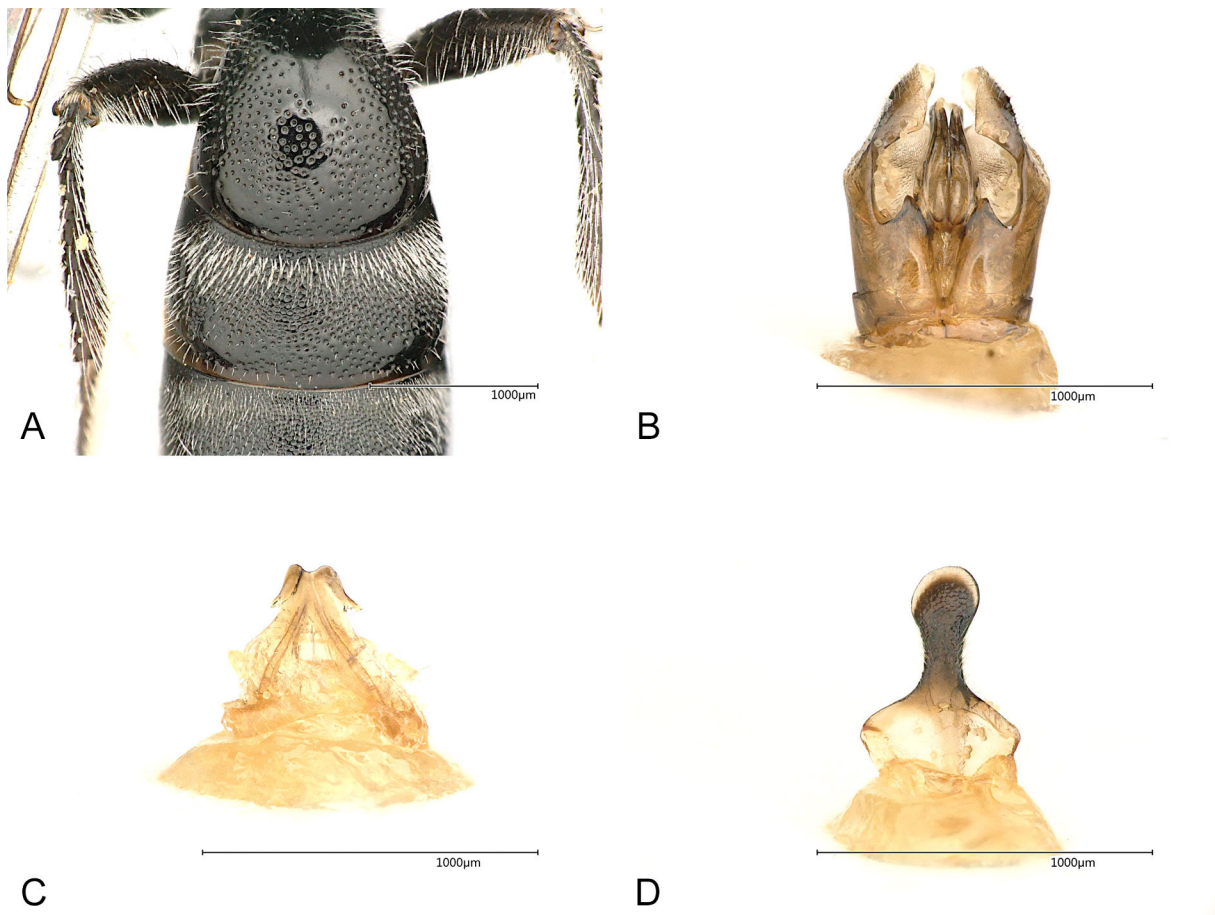


Fig. 47. *Scapter perpunctatus* Cockerell, 1933, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

HEAD. Slightly wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli in line with posterior margin of compound eyes. Clypeus medially with shallow longitudinal depression; punctation fine, irregular and sparse ($i = 2\text{--}4$ d); surface between punctures smooth and shiny (Fig. 44C). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin distinctly emarginated and edges slightly extended.

MESOSOMA. Integument black, pronotal lobe dark brown to black. Scutum coarsely and irregularly punctate, medially sparse ($i = 1\text{--}2$ d), laterally dense ($i = 0.3\text{--}1$ d); surface between punctures smooth and shiny (Fig. 44D). Propodeum anterior with broad and coarse longitudinal carinae, posterior with finer transverse carinae (Fig. 45A–B). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 44A–B).

LEGS. Integument brownish-black, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig. 44A–B).

METASOMA. Integument brownish; marginal zones yellowish-brown shimmering. Basolaterally on T2–T3 hair patches of middle long, greyish-white, erect hair; sparse, narrow hair band basally on T3 possible; T4 completely sparsely haired, basally more densely than apically; T3 anterior of premarginal line at least laterally row of hairs (Fig. 45C–D). Prepygidial and pygidial fimbriae dark brownish to black (Fig. 45C–D). Disc of T1 regularly, sparsely ($i = 2\text{--}3$ d) and finely punctate; on T2–T3 at least posterior margins finer and more densely ($i = 1$ d) punctate than disc ($i = 1\text{--}4$ d); surface between punctures relatively smooth and shiny (Fig. 45C–D).

Male

BODY LENGTH. 7.6–7.7 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli in line with posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum densely ($i < 0.5$ d) punctate; surface between punctures smooth and shiny (Fig. 46B). Propodeum completely rugulose-areolate (Fig. 46C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 46A).

LEGS. Integument black, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 46A).

METASOMA. Integument brownish-black, marginal zone brownish shimmering. Disc of T1 without hair (Fig. 47A), T2–T4 basally with greyish, dense, short, erect hair band, covering third of terga; T2–T4 anterior of premarginal line with row of short, erect, greyish hair (Fig. 46D). T2–T4 basally more densely ($i = 0.2$ d) and finer punctate than apically ($i = 1$ d); medially more densely than laterally; lateral dense punctation covers three quarters of tergum, small impunctate stripe on T3 parallel to posterior margin; T2–T3 anterior of premarginal line with row of points; surface between punctures smooth and shiny (Fig. 46D).

TERMINALIA. Genitalia (Fig. 47B), S7 (Fig. 47C) and terminal plate of S8 (Fig. 47D) as illustrated.

Distribution

Widespread in the Greater Cape Floristic Region and known from Knysna in the SE to the Kamiesberg Mts in Namaqualand, apparently with a preference for the Fynbos biome.

Floral hosts

On *Senecio* sp., *Felicia* sp. (Asteraceae) and various unidentified yellow Asteraceae.

Seasonal activity

August–September.

Remarks

Eardley (1996) synonymised this species with *S. nitidus*.

A couple of female specimens that are morphologically similar to but not identical with *S. perpunctatus* were collected later in the year (October–November). Their identity is not clear so they are preliminarily labelled as *S. cf. perpunctatus* until further material from that season is available. All records of this taxon are listed below:

SOUTH AFRICA • 1 ♀; Nieuwoudtville; 31°22' S, 19°08' E; 760 m a.s.l.; 18–22 Nov. 1931; RT leg.; NHML • 3 ♀♀; Ceres; 33°21' S, 19°18' E; 450 m a.s.l.; Nov. 1920; RT leg.; NHML • 1 ♀; same collection data as for preceding; RCMK • 3 ♀♀; same collection data as for preceding; 1–12 Nov. 1924; RT leg.; NHML • 1 ♀; same collection data as for preceding; 27 Oct.–1 Nov. 1920; RT leg.; NHML • 1 ♀; Stellenbosch; 33°56' S, 18°51' E; 150 m a.s.l.; 15 Oct. 1924; RN leg.; NHML • 1 ♀♀; Knysna; 34°02' S, 23°03' E; 3 m a.s.l.; 6 Nov. 1931; RT leg.; NHML • 1 ♀; same collection data as for preceding; RCMK.

Scapter semirufus Cockerell, 1932

Figs 48–50

Scapter semirufa [sic!] Cockerell, 1932a: 452, lectotype ♀ [designated by Eardley 1996] (type locality: Port Elizabeth, South Africa) (NHML), examined.

Diagnosis

The female of *S. semirufus* can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line impunctate (Fig. 48E); T1 anterior of premarginal line with a row of points (Fig. 48F); propodeum completely carinate, matt (Fig. 48D); supraclypeal area squarish (Fig. 48B). The male is characterized by discs of T1–T3 superficially punctate, dense ($i < 1$ d) punctuation covers at most basal three quarters of the tergum (Fig. 49D).

Additional material examined (63 specimens)

SOUTH AFRICA • 1 ♀; W Cape, 1 km N of Struisbaai; 34°47'20" S, 20°00'10" E; 27 Sep. 2001; RCMK • 1 ♀; W Cape, Agulhas; 34°49'92" S, 20°00'14" E; 27 Sep. 2011; RCMK • 1 ♀; Van Rhyn's Pass; 31°22' S, 19°01' E; 820 m a.s.l.; 11–21 Nov. 1931; AM leg.; NHML • 3 ♀♀; Camps Bay, Cape Peninsula; 33°57' S, 18°22' E; 5 m a.s.l.; Sep. 1920; RT leg.; NHML • 1 ♀; Lion's Head, Cape Town; 33°58' S, 18°23' E; 5 m a.s.l.; Aug. 1920; RT leg.; NHML • 1 ♀; same collection data as for preceding; 21–31 Jul. 1920; RT leg.; NHML • 5 ♀♀; Port Elizabeth; 33°58' S, 25°36' E; 80 m a.s.l.; 29 Oct. 1931; JO leg.; NHML • 1 ♀; same collection data as preceding; RCMK • 1 ♀; Mossel Bay; 34°10' S, 22°07' E; 60 m a.s.l.; 17 Sep. 1938; RT leg.; NHML • 1 ♀; same collection data as for preceding; 1–14 Nov 1921; RT leg.; NHML • 12 ♀♀, 2 ♂♂; same collection data as for preceding; Sep. 1921; RT leg.; NHML •

1 ♀; same collection data as preceding; RCMK • 5 ♀♀, 1 ♂; same collection data as for preceding; Oct. 1921; RT leg.; NHML • 5 ♀♀, 18 ♂♂; same collection data as for preceding; Aug. 1932; RT leg.; NHML • 1 ♀, 1 ♂; same collection data as for preceding; RCMK • 1 ♂; same collection data as for preceding; Sep. 1933; RT leg.; NHML.

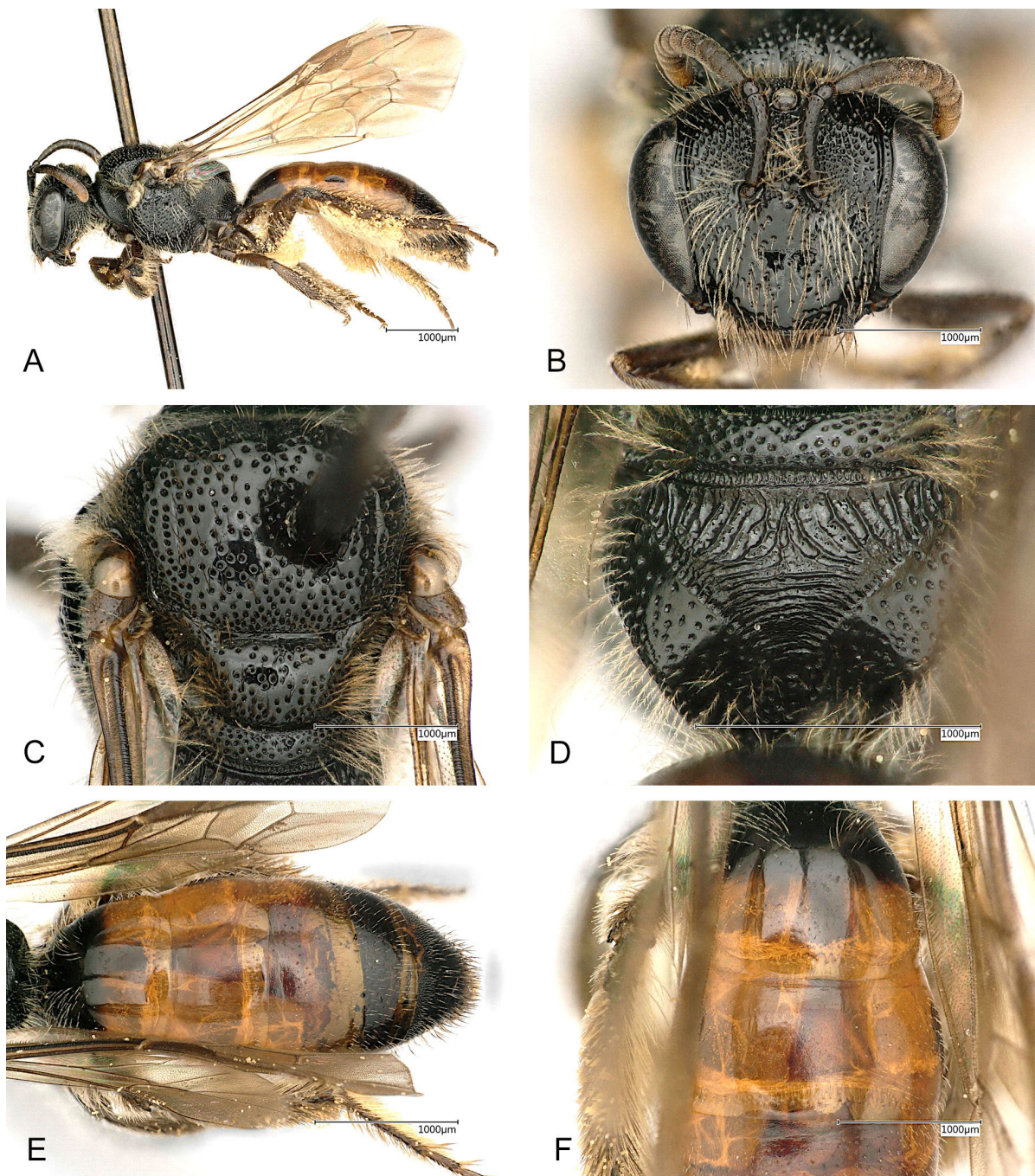


Fig. 48. *Scapter semirufus* Cockerell, 1932, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

Description

Female

BODY LENGTH. 8.2–8.4 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around the basis of the antennae. Ocelli in line with posterior margin of compound eyes. Clypeus medially with shallow longitudinal depression; punctation fine and regular ($i = 1.5\text{--}3\text{ d}$); surface between punctures smooth and shiny (Fig. 48B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin slightly emarginated and edges slightly extended.

MESOSOMA. Integument black, pronotal lobe dark black. Scutum coarsely and regularly punctate ($i = 0.5\text{--}1.5\text{ d}$); surface between punctures smooth and shiny (Fig. 48C). Metanotum about half as long as scutellum. Propodeum with anterior broad and coarse transitional carinae and posterior with fine transverse carinae (Fig. 48D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 48A).

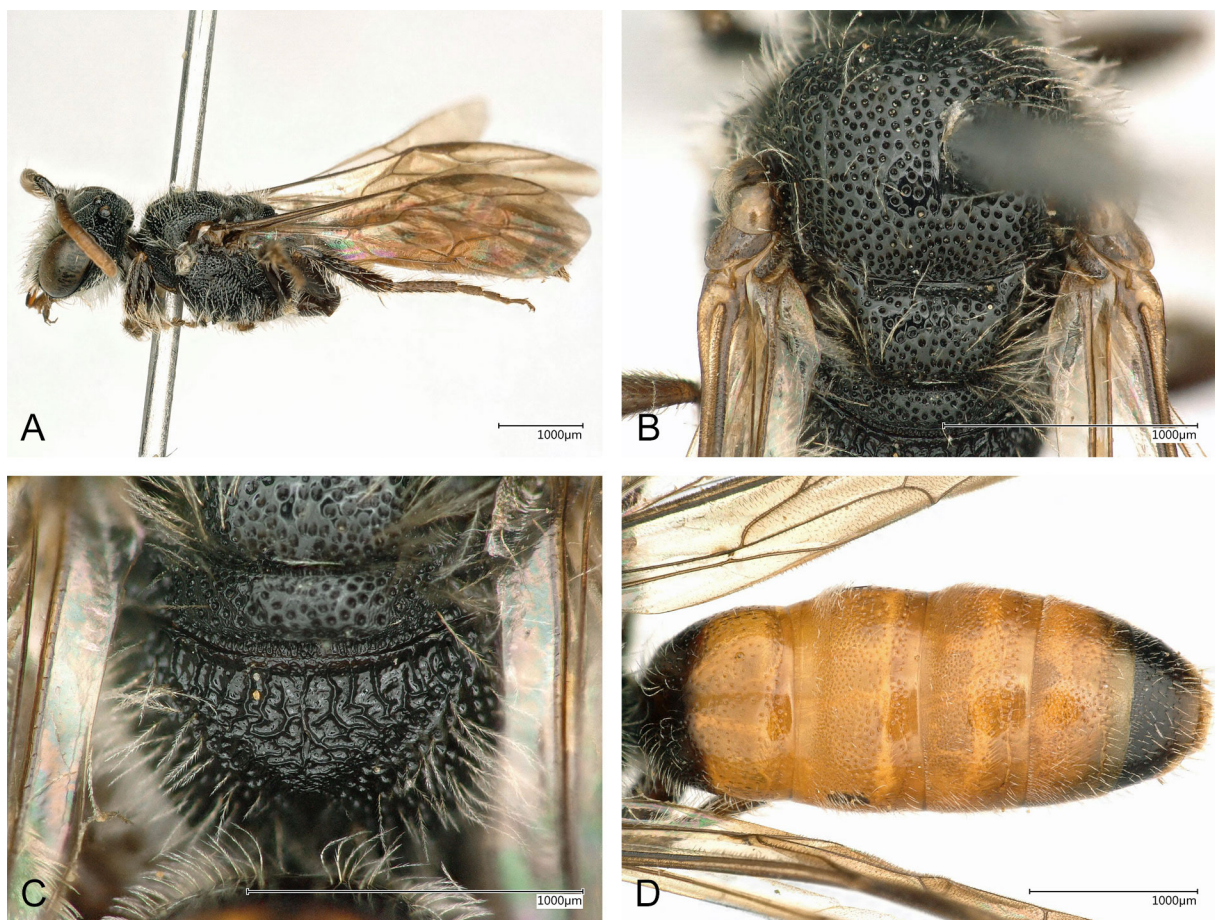


Fig. 49. *Scapter semirufus* Cockerell, 1932, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

LEGS. Integument brownish, fore tibia with yellow spot. Vestiture greyish-white, scopa brownish (Fig. 48A).

METASOMA. Integument black; T2–T3 and part of T1 yellowish-brown. T3 anterior of premarginal line at least laterally row of hairs; T4 completely haired, basally more densely and shorter than apically; prepygidial and pygidial fimbriae dark brownish to black (Fig. 48E). T1 impunctate (Fig. 48F); discs of T2–T3 almost impunctate, single shallow punctation at most; T3 anterior of premarginal line with row of points. Surface of metasoma matt (Fig. 48E).

Male

BODY LENGTH. 7.4–8.1 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli slightly behind posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black, pronotal lobe dark brownish to black. Scutum irregularly punctate, laterally denser ($i \sim 0.5 d$) than medially ($i \sim 1 d$); surface between punctures smooth and shiny (Fig. 49C).

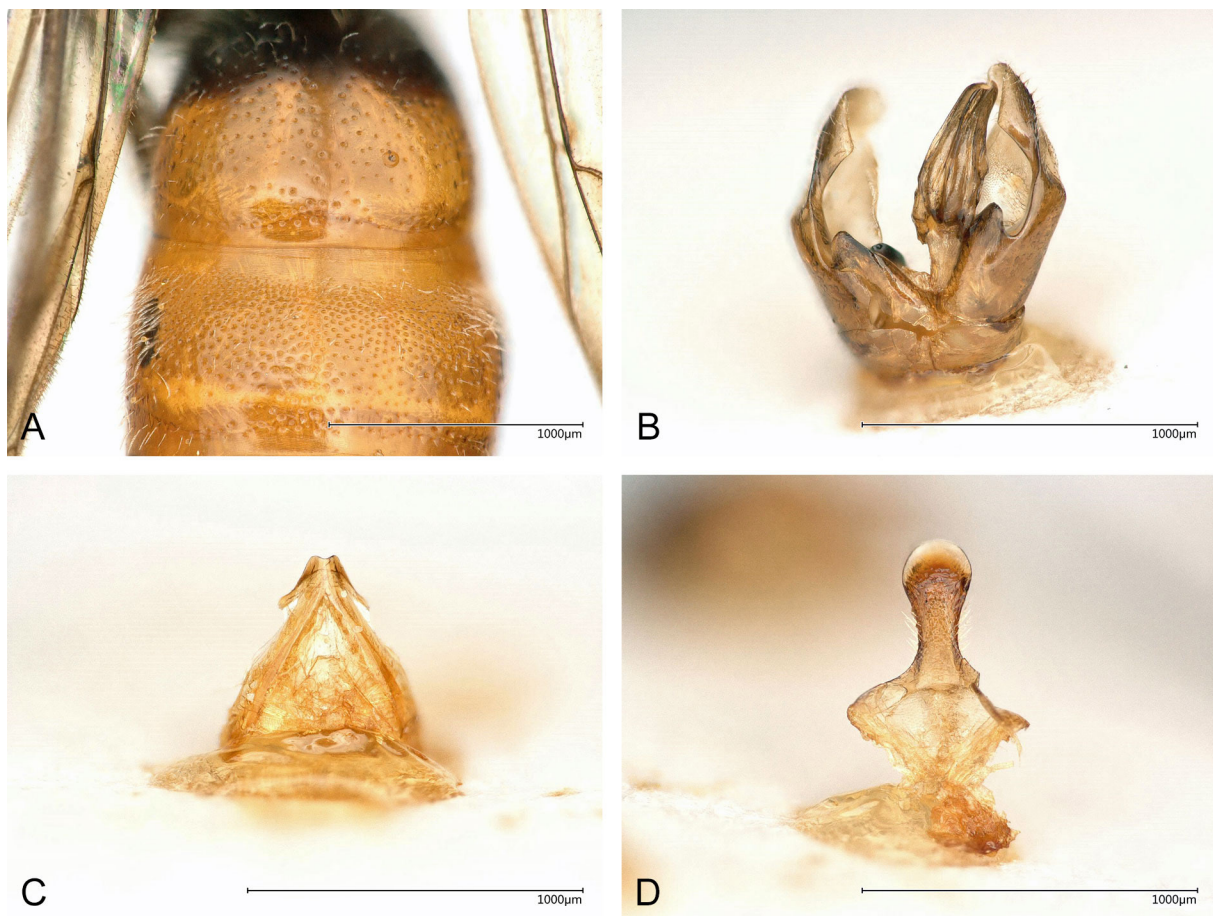


Fig. 50. *Scrapper semirufus* Cockerell, 1932, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

Propodeum basolaterally with coarse carinae, medially rugulose-areolate (Fig. 49D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 49A).

LEGS. Integument brownish, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 49A).

METASOMA. Integument brownish, marginal zone yellowish-brown shimmering. Disc of T1 without hair (Fig. 50A), T2–T4 basolaterally greyish, sparse, short, erect hair field; T2–T4 anterior of premarginal line with row of short, erect, greyish hair (Fig. 49D). T1 regularly ($i = 1-1.5$ d) punctate (Fig. 50A). T2–T4 basally more densely ($i = 0.5$ d) and finer punctate than apically ($i = 1-2$ d); medially more densely than laterally; dense punctation of T2 covers half of tergum; T2–T3 anterior of premarginal line with row of points; surface between punctures smooth and shiny (Fig. 49D).

TERMINALIA. Genitalia (Fig. 50B), S7 (Fig. 50C) and terminal plate of S8 (Fig. 50D) as illustrated.

Distribution

Coastal areas in the south of the Greater Cape Floristic Region.

Floral hosts

Unknown.

Seasonal activity

September.

Remarks

Eardley (1996) synonymised this species with *S. nitidus*.

Scapter sphecodoides (Friese, 1912)

Figs 51–53

Strandiella sphecodoides Friese, 1912: 183–184, fig. 3. lectotype ♀ [designated by Eardley 1996] (type locality: Kapstadt, South Africa) (SAMC), examined.

Diagnosis

The female of *S. sphecodoides* can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line impunctate (Fig. 51E); punctation on discs of T1–T4 shallow and sparse (Fig. 51E); transitional line between disc and apical depression of terga curved (Fig. 51E); propodeum basally with carinae, apically slightly areolate (Fig. 51D). The male is characterized by punctation on discs of T1–T4 anteriorly dense ($i = 0.3$ d), apically sparse ($i = 3$ d) (Fig. 52D); punctation on disc of T1 fine and sparse ($i = 2-3$ d) (Fig. 53A); basal hair bands on T2–T4 fine and short (Fig. 52D); propodeum basally with carinae, apically implied areolate (Fig. 52C) and form of S7 (Fig. 53C).

Material examined (102 specimens)

SOUTH AFRICA • 30 ♀♀, 8 ♂♂; 25 km S of Bredasdorp, coast; 34°45' S, 20°03' E; 23 Oct. 1999; MS/MH leg.; OÖLM • 5 ♀♀, 4 ♂♂; RCMK • 31 ♀♀; Kleinmond, coast; 34°20' S, 19°02' E; 6 Nov. 1999; MS/MH leg.; OÖLM • 5 ♀♀; RCMK • 1 ♀; Capland, Willowmore; 850 m a.s.l.; collection date unknown; HB leg.; SANC • 1 ♀; same collection data as for preceding; 7 Oct. 1923; HB leg.; SANC •

1 ♀; Algoa Bay, Capland; 33°40' S, 26°00' E; 180 m a.s.l.; 1 Nov. 1914; HB leg.; SANC • 1 ♂; Cape Province, Kenton-on-Sea; 33°41' S, 26°41' E; 30 m a.s.l.; 23–29 Oct. 1971; RJ leg.; SANC • 1 ♀; Cape Town; 33°57' S, 18°27' E; 5 m a.s.l.; 27 Mar. 1905; GP leg.; SANC • 1 ♂; W Cape, Villiersdorp; 33°58' S, 19°16' E; 1030 m a.s.l.; 29 Sep. 2001; CE leg.; SANC • 1 ♂; W Cape, Hermanus; 34°14' S, 18°26' E; 250 m a.s.l.; 7 Oct. 1978; VW leg.; SANC • 2 ♀♀, 1 ♂; Betty's Bay, Botanical Gardens; 34°21' S,

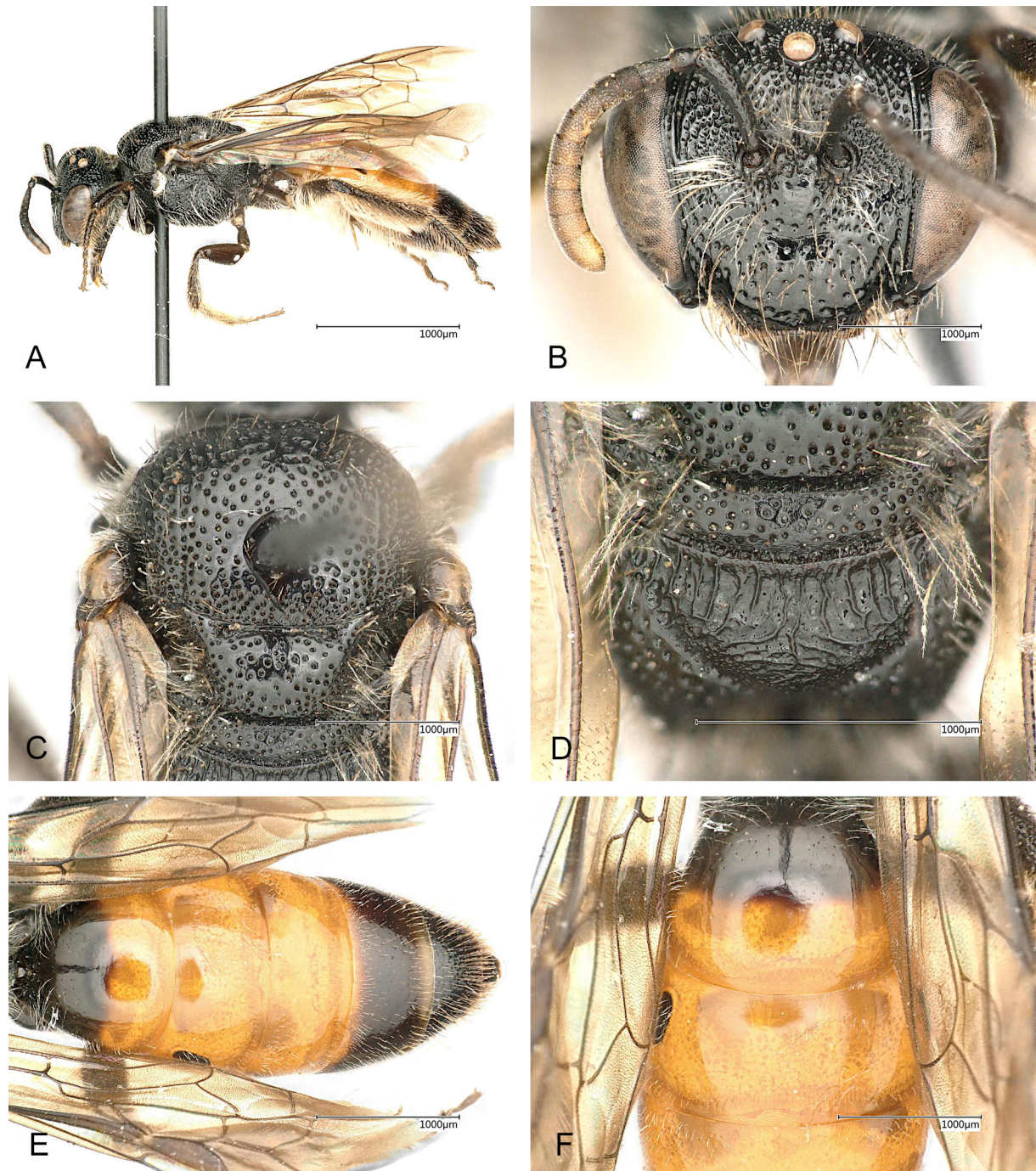


Fig. 51. *Scapter sphecodoides* (Fries, 1912), ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

18°55' E; 40 m a.s.l.; 27 Sep. 2001; CE leg.; SANC • 3 ♂♂; Vermont Dunes; 34°26' S, 19°10' E; 0 m a.s.l.; Sep. 1977; VW leg.; SANC • 1 ♀, 1 ♂; W Cape, between Struisbaai and Elim; 34°45' S, 20°00' E; 10 m a.s.l.; 27 Sep. 2001; CE leg.; SANC • 7 ♀♀, 4 ♂♂; W Cape, 1 km N of Struisbaai; 34°46' S, 20°01' E; 10 m a.s.l.; 27 Sep. 2001, CE leg.; SANC • 6 ♀♀, 1 ♂; Cape Agulhas; 34°50' S, 20°01' E; 10 m a.s.l.; 27 Sep. 2001; CE leg.; SANC.

Description

Female

BODY LENGTH. 8.1–10 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli slightly in front of posterior margin of compound eyes. Clypeus medially with shallow longitudinal depression; punctation fine and irregularly ($i = 1-3$ d); surface between punctures smooth and shiny (Fig. 51B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin distinctly emarginated and edges slightly extended.

MESOSOMA. Integument black, pronotal lobe dark brown to black. Scutum regularly and densely ($i = 1$ d) punctate; surface between punctures smooth and shiny (Fig. 51C). Metanotum less than half as



Fig. 52. *Scapter sphecodoides* (Frieze, 1912), ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

long as scutellum. Propodeum anterior with broad and coarse longitudinal carinae and posterior with fine transverse carinae, transitional line between anterior longitudinal and posterior transverse carinae slightly areolate (Fig. 51D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 51A).

LEGS. Integument black, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish (Fig. 51A).

METASOMA. Integument black, terga sometimes (partly) yellow, marginal zones yellowish-brown shimmering. T3 anterior of pre-marginal line at least laterally row of short, greyish, erect hair; T4 sparsely haired, basally more densely and shorter than apically; prepygidial and pygidial fimbriae dark brownish to black (Fig. 51E). Discs of T1–T4 almost impunctate (Fig. 51E). Surface smooth and shiny (Fig. 51E–F).

Male

BODY LENGTH. 7.3–8.3 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli slightly in front of posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

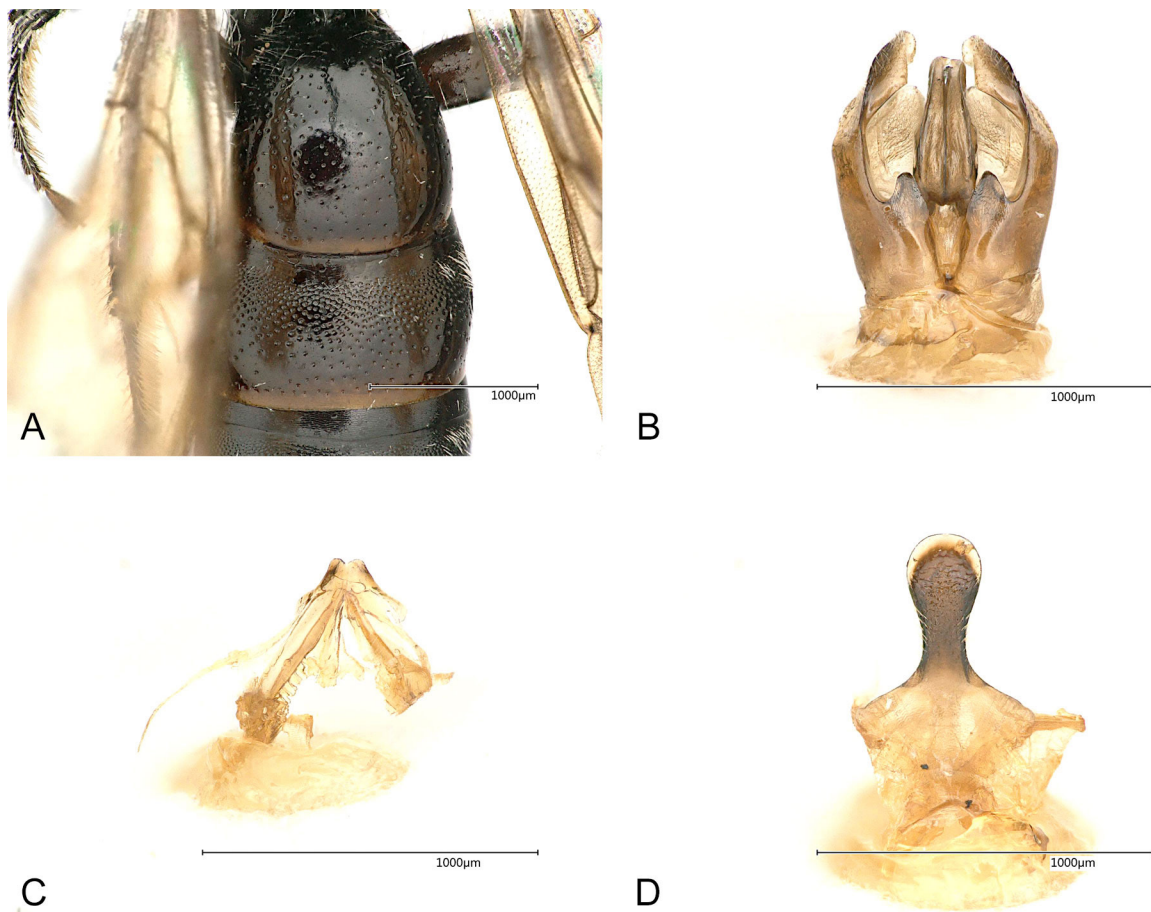


Fig. 53. *Scapter specodoides* (Friese, 1912), ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

MESOSOMA. Integument black, pronotal lobe black. Scutum densely ($i < 1$ d) punctate; surface between punctures smooth and shiny (Fig. 53B). Basal half of propodeum rugulose areolate, posterior half with carinae (Fig. 53C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 52A).

LEGS. Integument brownish, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 52A).

METASOMA. Integument brownish, terga sometimes (partly) yellow, marginal zone light brownish. Disc of T1 without hair (Fig. 53A), T2–T4 basally greyish, dense, short, narrow hair band and basolaterally on T2–T3 hair field; T2–T4 anterior of premarginal line laterally row of short, erect, greyish hair (Fig. 52D). Disc of T1 finely and sparsely punctate (Fig. 53A); discs of T2–T4 basally more densely ($i = 0.3$ d) and finer punctate than apically ($i = 3$ d); medially more densely than laterally; surface between punctures on posterior parts of terga matt (Fig. 52D).

TERMINALIA. Genitalia (Fig. 53B), S7 (Fig. 53C) and terminal plate of S8 (Fig. 53D) as illustrated.

Distribution

Found in the southern part of the Greater Cape Floristic Region from the wider Cape Town area eastward to Willowmore and Kenton-on-Sea.

Floral hosts

Unknown.

Seasonal activity

October–November.

Remarks

Eardley (1996) synonymised this species with *S. nitidus*.

***Scapter variabilis* sp. nov.**

[urn:lsid:zoobank.org:act:DCB91BC0-CC27-4362-A4AC-A659F47F4249](https://doi.org/10.21203/rs.3.rs-1234567/v1)

Figs 54–57

Diagnosis

The female of *S. variabilis* sp. nov. can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line with a row of points (Fig. 55C–D); punctuation of T1–T4 shallow, sparse (Fig. 55C–D); T1 anterior of premarginal line with row of points (Fig. 55C–D); propodeum with carinae, laterally often smooth (Fig. 55A–B). The male is characterized by punctuation on discs of T2–T4 coarse and basally dense ($i = 0.5$ d), apically sparse ($i = 2–3$ d) (Fig. 56E), dense punctuation on disc of T2 covers at most half of tergum (Fig. 56F); less punctuation medially of T2 (Fig. 56F); basal hair bands on T3–T4 (Fig. 56E); propodeum completely coarsely carinate (Fig. 56D).

Etymology

Named after the variable colour of the metasoma, which varies from completely dark blackish-brown to largely reddish.

Type material (72 specimens)

Holotype

SOUTH AFRICA • ♂; Gemsbokrivier-Pad, 4.5 km NE of Grootdrif, road side; 31°25'54" S, 18°55'16" E; 170 m a.s.l.; 20 Aug. 2011; MK leg.; SAMC.

Paratypes

SOUTH AFRICA • 1 ♂; 12 km NW of Nieuwoudtville, Farm Avontuur, Fynbos; 31°16'18" S, 19°02'55" E; 770 m a.s.l.; 25 Aug. 2010; MK leg.; RCMK • 1 ♂; same collection data as for preceding; 6 Sep. 2009; MK leg.; RCMK • 1 ♀; 3 km NW of Farm Kanolfontein, 22 km W of Sutherland, road side; 32°23'17" S, 20°26'32" E; 1350 m a.s.l.; 18 Sep. 2017; MK leg.; RCMK • 1 ♀; Gemsbokrivier-Pad, 4.5 km NE of Grootdrif, road side; 31°25'54" S, 18°55'16" E; 170 m a.s.l.; 10 Sep. 2010; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 19 Aug. 2010; MK leg.; RCMK • 1 ♀, 2 ♂♂; same collection data as for preceding; 15 Aug. 2011; MK leg.; RCMK • 3 ♀♀, 3 ♂♂; same collection data as for preceding; 20 Aug. 2011; MK leg.; RCMK • 3 ♀♀, 1 ♂; same collection data as for preceding; 28 Aug. 2018; MK leg.; RCMK • 1 ♀; NHML • 5 ♂♂; Knersvlakte, 5 km N of Grootdrif; 31°26'40" S, 18°56'23" E; 195 m a.s.l.; 21 Sep. 2007; KT leg.; RCMK • 2 ♂♂; same collection data as for preceding; 21 Sep. 2007; MK leg.; RCMK • 1 ♂; same collection data as for preceding; 14 Sep. 2007; KT leg.; RCMK • 1 ♀; Lamberts Bay, Strandveld, sand; 32°06'19" S, 18°18'16" E; 5 m a.s.l.; MK leg.; RCMK • 1 ♂; N Cape, Fynbos, 15 km NW of Nieuwoudtville, Farm Engelsepunt; 31°14'31" S, 18°59'08" E;

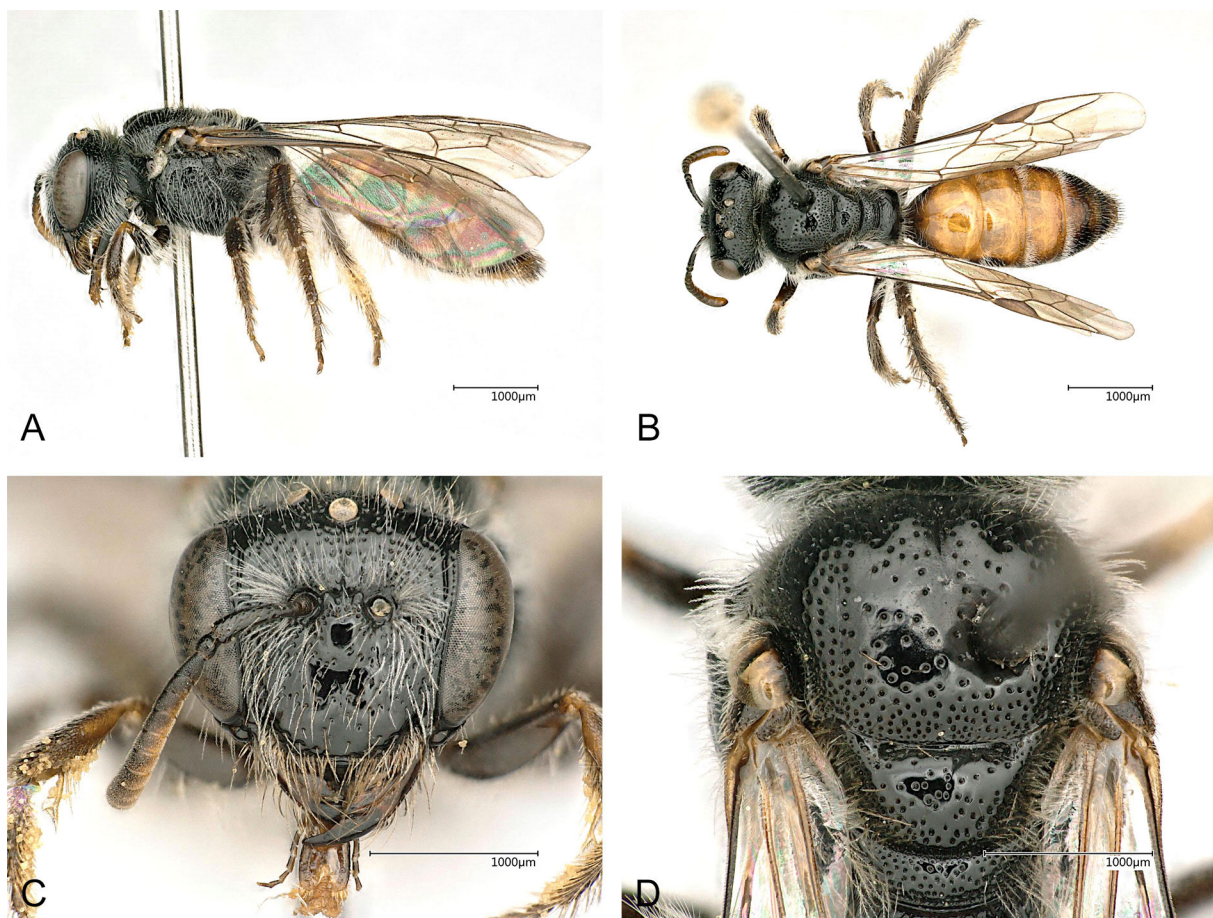


Fig. 54. *Scapter variabilis* sp. nov., paratype, ♀. **A.** Lateral view. **B.** Dorsal view. **C.** Head (dorsal view). **D.** Scutum and scutellum (dorsal view).

830 m a.s.l.; 28 Aug. 2003; KT leg.; RCMK • 1 ♂; N Cape, Fynbos, 15 km NW of Nieuwoudtville, near farm Engelsepunt; 31°14'08" S, 18°58'23" E; 843 m a.s.l.; 30 Aug. 2003; KT leg.; RCMK • 3 ♀♀, 4 ♂♂; Roggeveld Mts, 2 km S of Farm Perdekloof, river, dolerite; 31°47'35" S, 19°58'16" E; 1220 m a.s.l.; 1 Sep. 2017; MK leg.; RCMK • 6 ♀♀; same collection data as for preceding; 2 Sep. 2017; MK leg.; RCMK • 1 ♀; NHML • 9 ♂♂; same collection data as for preceding; 24 Aug. 2018; MK leg.; RCMK • 2 ♂♂; NHML • 1 ♀, 4 ♂♂; same collection data as for preceding; 10 Sep. 2018; MK leg.; RCMK • 1 ♀, 7 ♂♂; W. Cape, Knersvlakte, Vanrhynsdorp, urban garden; 31°36'31" S, 18°44'02" E; 3 Aug. 2003; KT leg.; RCMK • 2 ♀♀; Nieuwoudtville, Botanic Gardens; 31°22' S, 19°07' E; 760 m a.s.l.; Aug. 1923; HB leg.; SANC • 1 ♀; Clanwilliam Dist., Biedouw Valley; 32°08' S, 19°14' E; 330 m a.s.l.; 5–7 Sep. 1987; CE leg.; SANC • 2 ♂♂; W Cape, Kunje Farm, 28 km SE of Citrusdal; 32°40' S, 19°10' E; 1100 m a.s.l.; 23 Sep. 2001; CE leg.; SANC • 1 ♀; Farm Liberty 50 km N of Ceres; 32°54' S, 19°27' E; 980 m a.s.l.; 27 Sep. 1990; CE leg.; SANC • 1 ♀; Vermont Dunes; 34°26' S, 19°10' E; 0 m a.s.l.; Sep. 1977; VW leg.; SANC.

Description

Female

BODY LENGTH. 7–7.4 mm.

HEAD. Slightly wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish to greyish hair, more densely around basis of antennae. Ocelli in

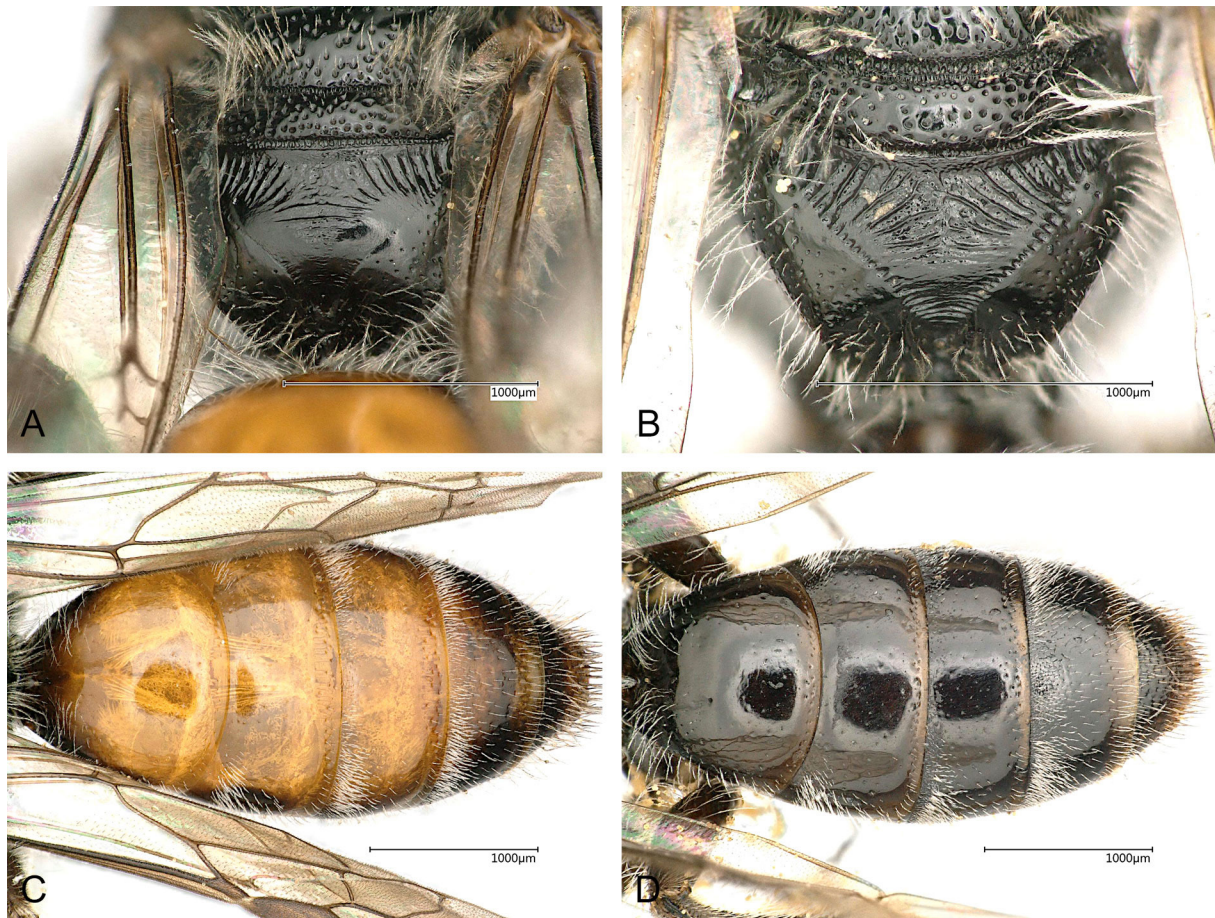


Fig. 55. *Scapter variabilis* sp. nov., paratype, ♀. **A.** Metanotum and propodeum (dorsal view). **B.** Metanotum and propodeum (dorsal view). **C.** Metasoma (dorsal view). **D.** Metasoma (dorsal view).

line with posterior margin of compound eyes. Clypeus medially with longitudinal depression; punctation fine and irregular ($i = 1-3 d$); surface between punctures smooth and shiny (Fig. 54C). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin distinctly emarginated and edges slightly extended.

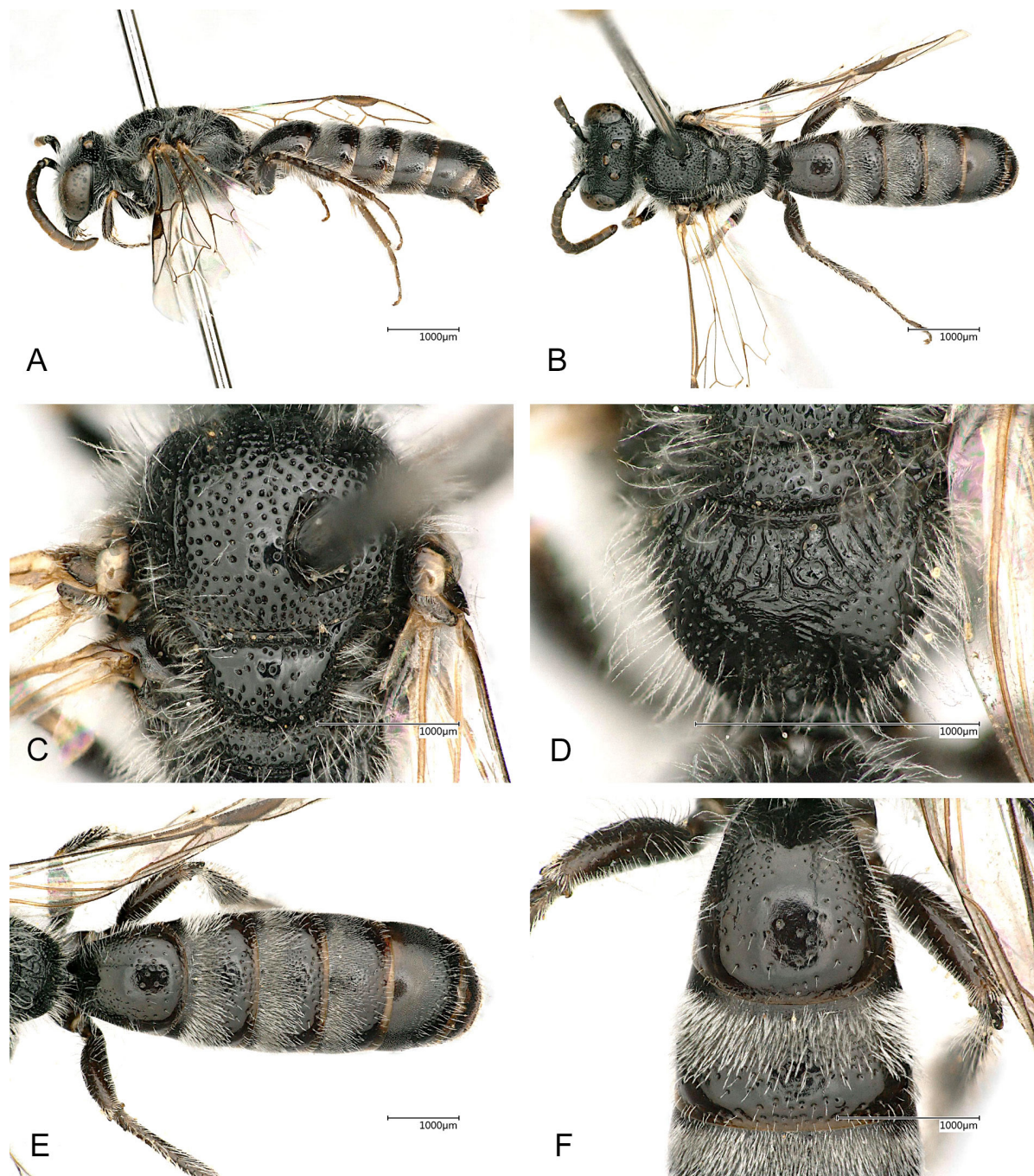


Fig. 56. *Scrapper variabilis* sp. nov., paratype, ♂. **A.** Lateral view. **B.** Dorsal view. **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

MESOSOMA. Integument black, pronotal lobe dark brown to black. Scutum coarsely and irregularly punctate, laterally dense (0.5 d), medially sparse ($i = 1-1.5$ d); surface between punctures smooth and shiny (Fig. 54D). Metanotum less than half as long as scutellum. Propodeum anterior with broad and coarse transitional carinae, posterior with fine transverse carinae, laterally often smooth (Fig. 55A–B). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 54A–B).

LEGS. Integument black, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig. 54A–B).

METASOMA. Integument brownish, terga sometimes (partly) reddish, marginal zones yellowish-brown shimmering. Basolaterally on T2–T3 hair patches of greyish, short, erect hair; basally on T3 and T4 narrow hair band; T4 completely haired, basally more densely and shorter than apically; T3 anterior of premarginal line laterally row of hairs; prepygidial and pygidial fimbriae brownish to black (Fig. 55C–D). Discs of T1–T4 finely puncticulate, T1–T4 anterior of premarginal line with row of points; surface between punctures smooth and shiny (Fig. 55C–D).

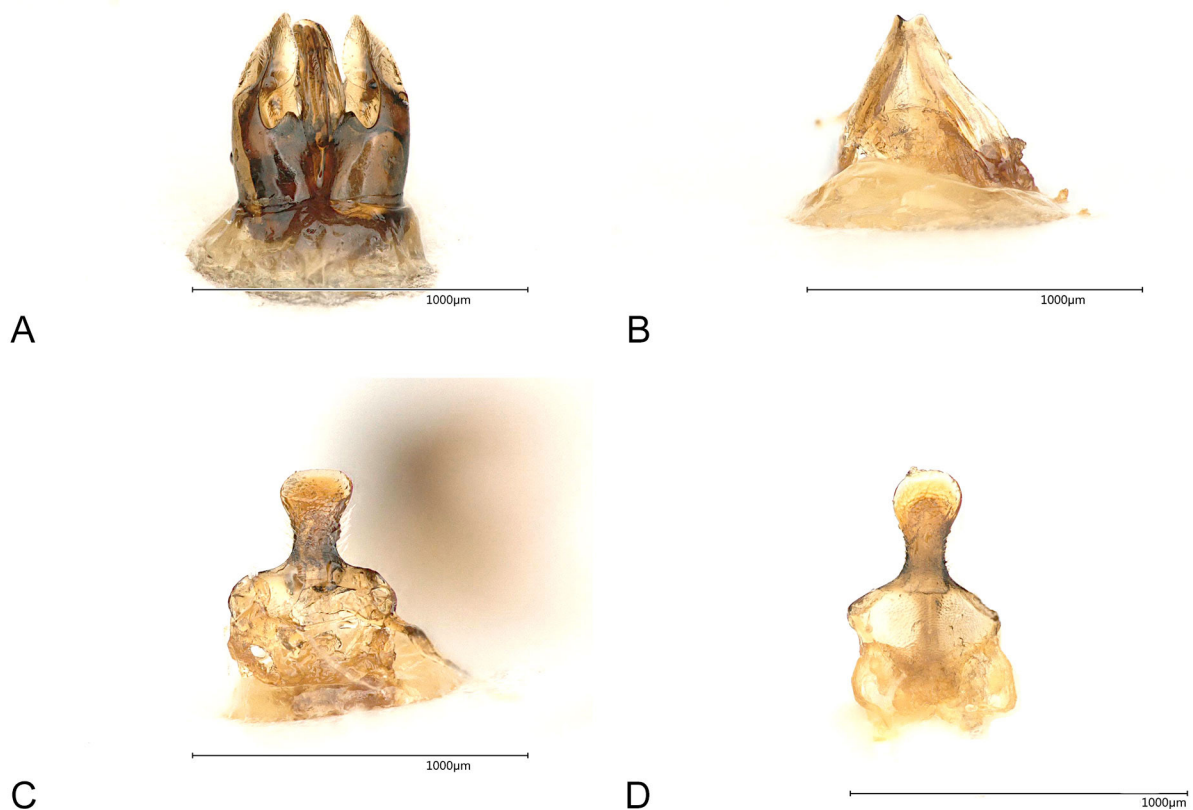


Fig. 57. *Scapter variabilis* sp. nov., paratype, ♂. **A.** Genitalia (dorsal view). **B.** Sternum 7. **C.** Sternum 8. **D.** Sternum 8.

Male

BODY LENGTH. 6.9–7.5 mm.

HEAD. Slightly wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli in line with posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black, pronotal lobe dark brownish to black. Scutum irregularly punctate, laterally dense ($i = 0.3$ d), medially sparse ($i = 1–1.5$ d); surface between punctures smooth and shiny (Fig. 56C). Propodeum basolaterally with carinae, medially rugulose-areolate (Fig. 56D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 56A–B).

LEGS. Integument brownish, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 56A–B).

METASOMA. Integument brownish, marginal zone yellowish-brown shimmering. Disc of T1 without hair (Fig. 56F), T2–T4 basally greyish, dense, short, erect hair band, covering third of terga; T2–T4 anterior of premarginal line with row of short, erect, greyish hair (Fig. 56E). T1 basolaterally finer and more densely ($i = 1$ d) punctate than disc ($i = 1–2$ d) (Fig. 56F). T2–T4 basally more densely ($i = 0.5$ d) and finer punctate than apically ($i = 2–3$ d); medially more densely than laterally; dense punctation of T2 covers at most half of tergum; T2–T3 anterior of premarginal line with row of points; surface between punctures smooth and shiny (Fig. 56E).

TERMINALIA. Genitalia (Fig. 57A), S7 (Fig. 57B) and terminal plate of S8 (Fig. 57C–D) as illustrated.

Distribution

Only known from southern Namaqualand from Lamberts Bay in the west to the northern extension of the Roggeveld Mts south of Calvinia in the east.

Floral hosts

On *Senecio* sp., *Felicia* sp. (Asteraceae) and various unidentified yellow Asteraceae.

Seasonal activity

August–September.

Remarks

A single male was found that morphologically corresponds to that of *S. variabilis*, but the punctation of terga is denser and surface of terga matt. Its identity is currently unclear so it is here provisionally labelled as *S. sp. variabilis*. The site data is recorded below:

SOUTH AFRICA • 1 ♂; Farm Avontuur, Fynbos, 12 km NW of Nieuwoudtville; 31°16'18" S, 19°02'55" E; 770 m a.s.l.; 13 Sep. 2022; HE leg.; RCMK.

Scapter divergens subgroup

In both sexes, species in this subgroup have a very fine and regular punctation on T2–T3. Males: distal margin of S7 with broad emargination. Females: posterior ocelli in line with posterior margin of complex eyes. The subgroup comprises three species (Table 1).

Scapter divergens (Friese, 1925)

Figs 58–60

Polyglossa (Strandiella) divergens Friese, 1925: 515, holotype ♀ (Willowmore, South Africa) (ZMHB), examined.

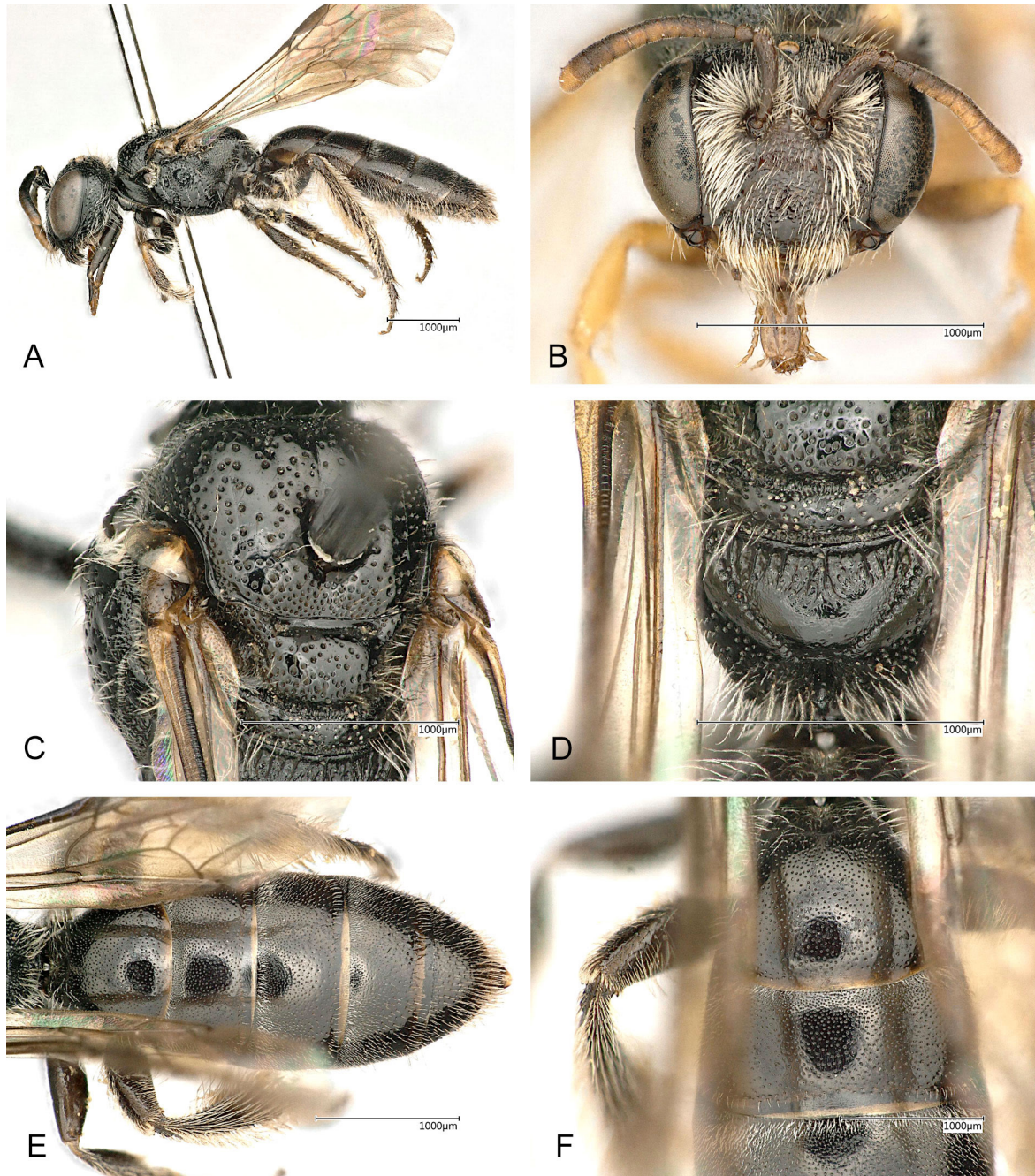


Fig. 58. *Scapter divergens* (Friese, 1925), ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

Diagnosis

The female of *S. divergens* can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line impunctate (Fig. 58E); discs of T1–T4 regularly ($i = 1.5$ d) and coarsely punctate (Fig. 58E); propodeum basally carinate, apically smooth, matt (Fig. 58D). The male is described for the first time. It is characterized by a regular ($i = 1–1.5$ d) and fine punctation on discs of T1–T4 (Fig. 59D); propodeum rugulose-areolate (Fig. 59C) and form of S7 (Fig. 60C).

Material examined (4 specimens)

SOUTH AFRICA • 1 ♀; 15 km NW of Vioolsdrif, Orange River valley; 28°42'02" S, 17°30'22" E; 310 m a.s.l.; 9 Sep. 2016; MK leg.; RCMK • 1 ♂; same collection data as for preceding; 9 Sep. 2016; 310 m a.s.l.; EA leg., RCMK • 1 ♀; W of Bothaville, Vaal riv.; 27°23' S, 26°37' E; 28 Oct. 2008; MS leg.; RCMK • 1 ♂; Tussen Die Riviere Res. nr Bethulie; 30°30' S, 26°12' E; 1280 m a.s.l.; 30 Mar.–3 Apr. 1987; CE leg.; SANC.

Description

Female

BODY LENGTH. 7.2 mm.

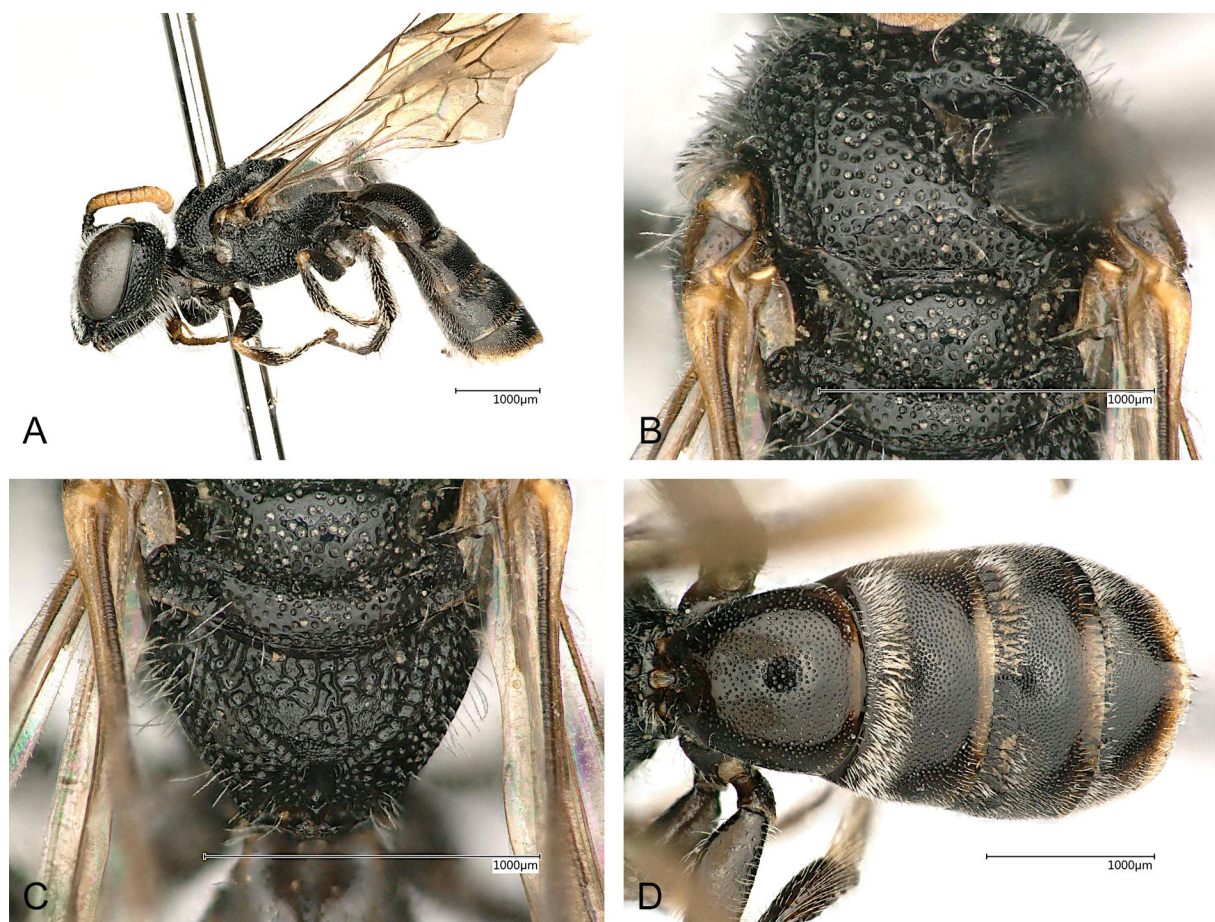


Fig. 59. *Scapter divergens* (Frieze, 1925), ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

HEAD. Slightly wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli in line with posterior margin of compound eyes. Clypeus medially with shallow longitudinal depression and fine punctation, apically sparse ($i = 2-4$ d), laterally dense ($i = 0.5-1$ d). Surface between punctures smooth and shiny (Fig. 58B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin slightly emarginated and edges slightly extended.

MESOSOMA. Integument black, pronotal lobe dark brownish-black. Scutum coarsely and irregularly ($i = 0.5-3$ d) punctate; surface between punctures smooth and shiny (Fig. 58C). Metanotum less than half as long as scutellum. Propodeum basally broadly carinate, apically fine coriaceous and shiny (Fig. 58D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with middle long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 58A).

LEGS. Integument black, fore tibia with yellow spot. Vestiture greyish-brown, scopa greyish to brownish (Fig. 58A).

METASOMA. Integument dark brownish, marginal zones yellowish-brown. T2–T4 anterior of premarginal line at least laterally short hairs in row; disc of T4 with very short, sparse hair; basal hair bands on T2–T4

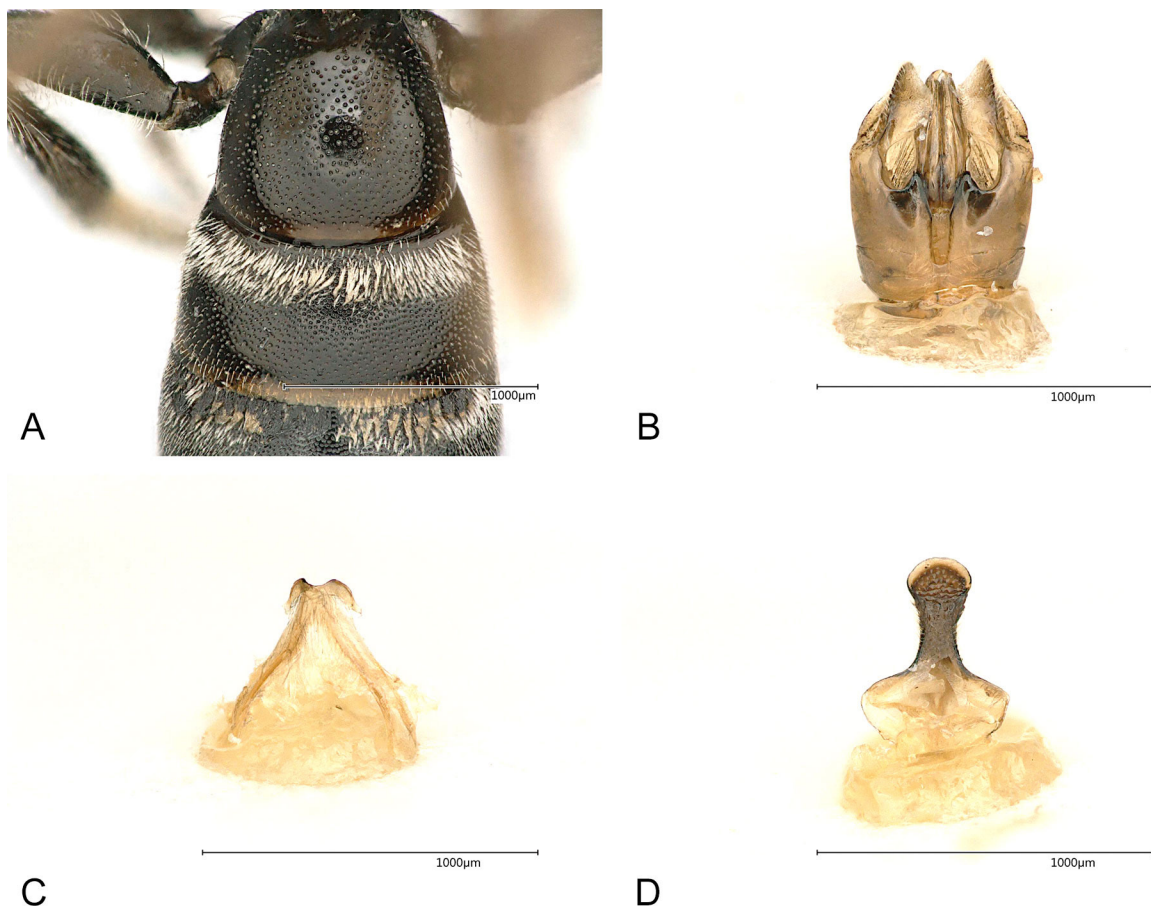


Fig. 60. *Scapter divergens* (Fries, 1925), ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

of greyish, short, erect hair, broader towards posterior possible. Prepygidial and pygidial fimbriae brownish (Fig. 58E). Disc of T1 densely ($i = 1-2$ d), regularly and finely punctate (Fig. 58F); T2–T4 basally more densely ($i = 0.5$ d) punctate than disc ($i = 1-1.5$ d). Surface between punctures smooth and shiny (Fig. 58E).

Male

BODY LENGTH. 6 mm.

HEAD. Wider than long. Integument black, mandibles reddish to brownish. Face densely covered with long, white, erect hair. Ocelli in line with posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum regularly and densely ($i = 0.5-1$ d) punctate; surface between punctures smooth and shiny (Fig. 59B). Propodeum completely rugulose-areolate, matt (Fig. 59C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 59A).

LEGS. Integument black, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 59A).

METASOMA. Integument black, marginal zone yellowish-brown. Disc of T1 without hair (Fig. 60A), T2–T4 basally with greyish, dense, short, erect hair band, covering third of T2, getting narrower towards posterior (Fig. 59D). T3–T4 anterior of premarginal line with row of short, erect, greyish hair (Fig. 59D). Discs of T1–T4 completely densely ($i = 1-1.5$ d), regularly and finely punctate. Surface between punctures smooth and shiny (Fig. 59D).

TERMINALIA. Genitalia (Fig. 60B), S7 (Fig. 60C) and terminal plate of S8 (Fig. 60D) as illustrated.

Distribution

Few records but widely distributed in South Africa and known from different biomes.

Floral hosts

On yellow *Senecio* sp. (Asteraceae).

Seasonal activity

September–October.

Remarks

Eardley (1996) synonymised this species with *S. ruficornis*.

Scapter montanus sp. nov.

[urn:lsid:zoobank.org:act:12A7BEA6-6EF4-480C-B9F6-EE0B2F861BCA](https://zoobank.org/act:12A7BEA6-6EF4-480C-B9F6-EE0B2F861BCA)

Figs 61–63

Diagnosis

The female of *S. montanus* sp. nov. can be separated from that of all other species of this group by the following character combination: on posterior margin of T3 no row of points (Fig. 61E); scutum finely and densely ($i = 0.5-2$ d) punctate (Fig. 61C); discs of T1–T4 deeply and regularly punctate (Fig. 61E);

propodeum matt on posterior half (Fig. 61D). The male is characterized by disc of T1 and T2 finely and regularly ($i = 1-1.5 d$) punctate (Fig. 63D); legs at most dark (Fig. 63A).

Etymology

The species is named for its apparent preference for mountainous regions in South Africa.



Fig. 61. *Scapter montanus* sp. nov., paratype, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1-2 (dorsal view).

Type material (5 specimens)

Holotype

SOUTH AFRICA • ♂; Oranje Free State, Kroonstad; 27°39' S, 27°14' E; 1380 m a.s.l.; 3 Oct. 1965; unknown leg.; SANC.

Paratypes

SOUTH AFRICA • 1 ♀, 1 ♂; same collection data as for holotype; 2 Oct. 1965; unknown leg.; SANC • 1 ♂; Caledon Riv btw Bethulie and Aliwal; 30°35' S, 26°20' E; 1300 m a.s.l.; Oct. 1935; unknown leg.; RCMK • 1 ♀; Capland, Willowmore; 33°18' S, 23°30' E; 850 m a.s.l.; Oct. 1912; HB leg.; RCMK.

Description

Female

BODY LENGTH. 7.8 mm.

HEAD. Wider than long. Integument brownish, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli at level of posterior margin of complex eyes. Clypeus medially with superficial longitudinal depression; punctuation fine

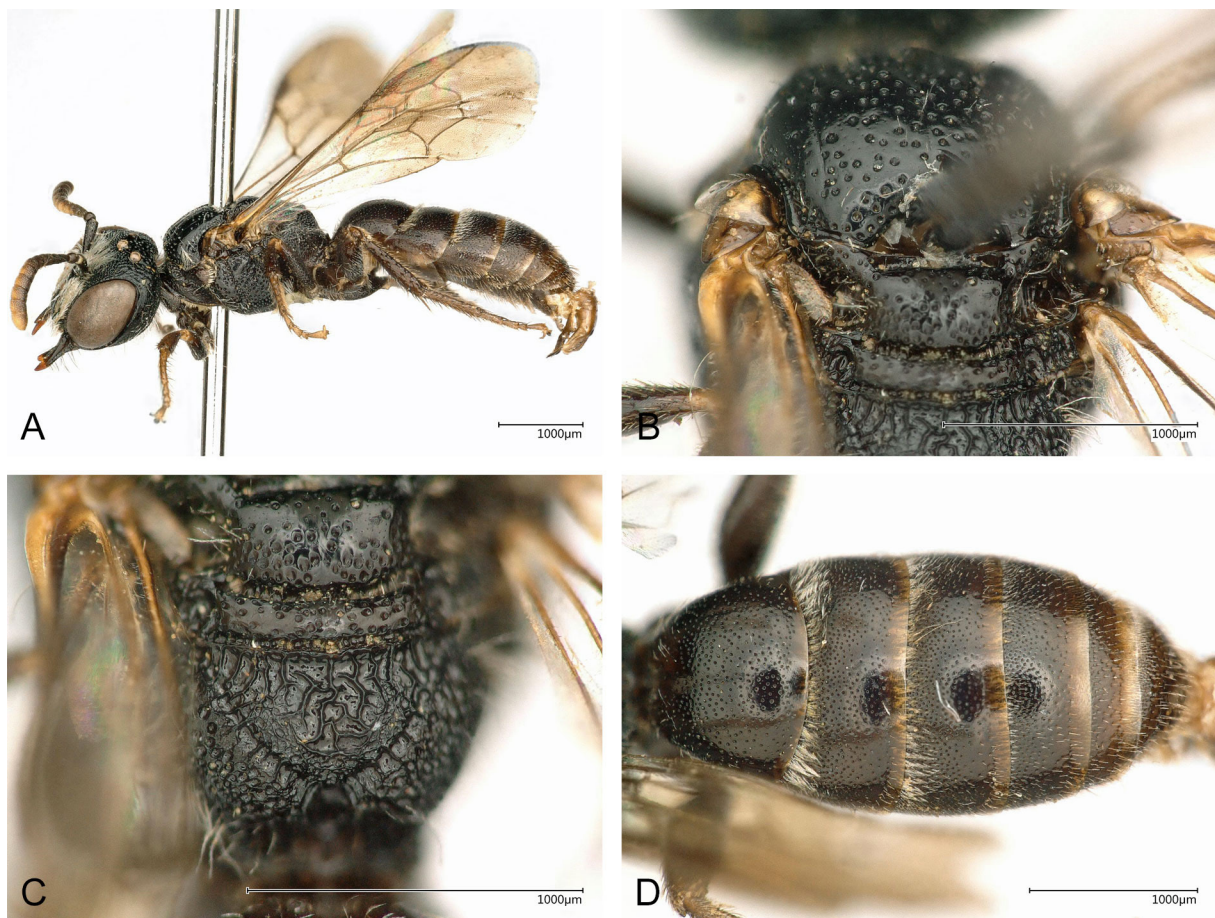


Fig. 62. *Scapter montanus* sp. nov., paratype, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

and sparse ($i = 2-3$ d); surface between punctures smooth and shiny (Fig. 61B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area elevated and sharply delimited.

MESOSOMA. Integument dark brownish, pronotal lobe dark brownish. Scutum coarsely and irregularly punctate ($i = 0.5-2$ d); surface between punctation smooth and shiny. Metanotum about half as long as scutellum. Propodeum basally carinate; surface matt. Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 61A)

LEGS. Integument yellowish-brown, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig. 61A).

METASOMA. Integument brownish, marginal zones yellowish-brown shimmering. Anterior on T2–T3 hair bands of sparse, greyish-white, erect hair; anterior margin of T3 with hair band; on posterior margin of T3 at least laterally one single hair row; T4 completely haired, anteriorly denser than posteriorly; prepygidial and pygidial fimbriae dark brownish to black (Fig. 61E). Discs of T1–T3 finely and regularly ($i = 2-4$ d); disc of T3 anteriorly slightly denser punctate than posteriorly; punctate; surface between punctures smooth and shiny (Fig. 61E–F).

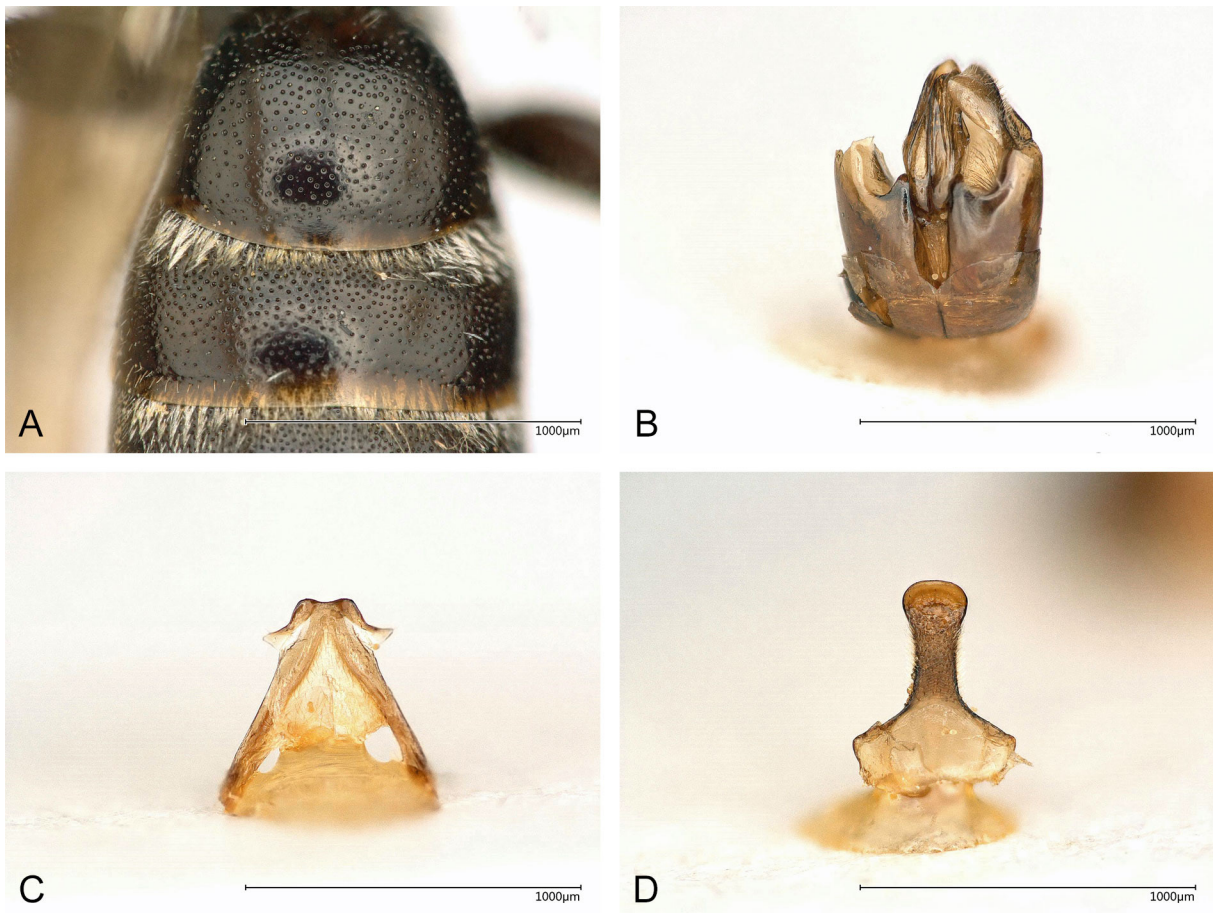


Fig. 63. *Scapter montanus* sp. nov., paratype, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

Male

BODY LENGTH. 6.5–6.9 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli slightly in front of posterior margin of complex eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument brownish-black. Scutum irregularly ($i = 0.5\text{--}1.5$ d) punctate; surface between punctation smooth and shiny (Fig. 62B). Propodeum completely rugulose-areolate (Fig. 62C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 62A).

LEGS. Integument brownish, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 62A).

METASOMA. Integument brownish, marginal zone yellowish-brown. Disc of T1 without hair (Fig. 63A), T2–T4 basally greyish, dense, short, erect hair band, covering fifth of tergite. Posterior margins of T3–T4 at least laterally with single hair row of short, erect, greyish hair (Fig. 62D). T1–T3 finely and regularly ($i = 1\text{--}1.5$ d); surface between punctation smooth and shiny (Fig. 62A).

TERMINALIA. Genitalia (Fig. 63B), S7 (Fig. 63C) and terminal plate of S8 (Fig. 63D) as illustrated.

Distribution

Only known from few sites in the eastern central part of South Africa from Willowmore in the south to Kroonstad in the north.

Floral hosts

Unknown.

Seasonal activity

October.

Scapter pallidicinctus Cockerell, 1933

Figs 64–66

Scapter pallidicincta [sic!] Cockerell, 1933: 206–208, holotype ♂ (type locality: Oudtshoorn, South Africa) (NHML), examined.

Diagnosis

The female of *S. pallidicinctus* can be separated from that of all other species of this group by the following character combination: scutum is coarsely and sparsely ($i = 1\text{--}4$ d) punctate (Fig. 64C); discs of T1–T4 deeply and regularly punctate (Fig. 64E); propodeum smooth and shiny on posterior half (Fig. 64D). The male is characterized by punctation on discs of T1–T4 basally dense ($i = 1$ d), apically sparse ($i = 2\text{--}3$ d) (Fig. 65D); propodeum completely areolate (Fig. 65C) and form of S7 (Fig. 66C).

Material examined (1 specimen)

SOUTH AFRICA • 1 ♀; Oudtshoorn; 33°39' S, 22°13' E; 380 m a.s.l.; 1 Nov ?; unknown leg.; NHML.

Description

Female

BODY LENGTH. 7.3 mm.

HEAD. Wider than long. Integument brownish, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli in line with

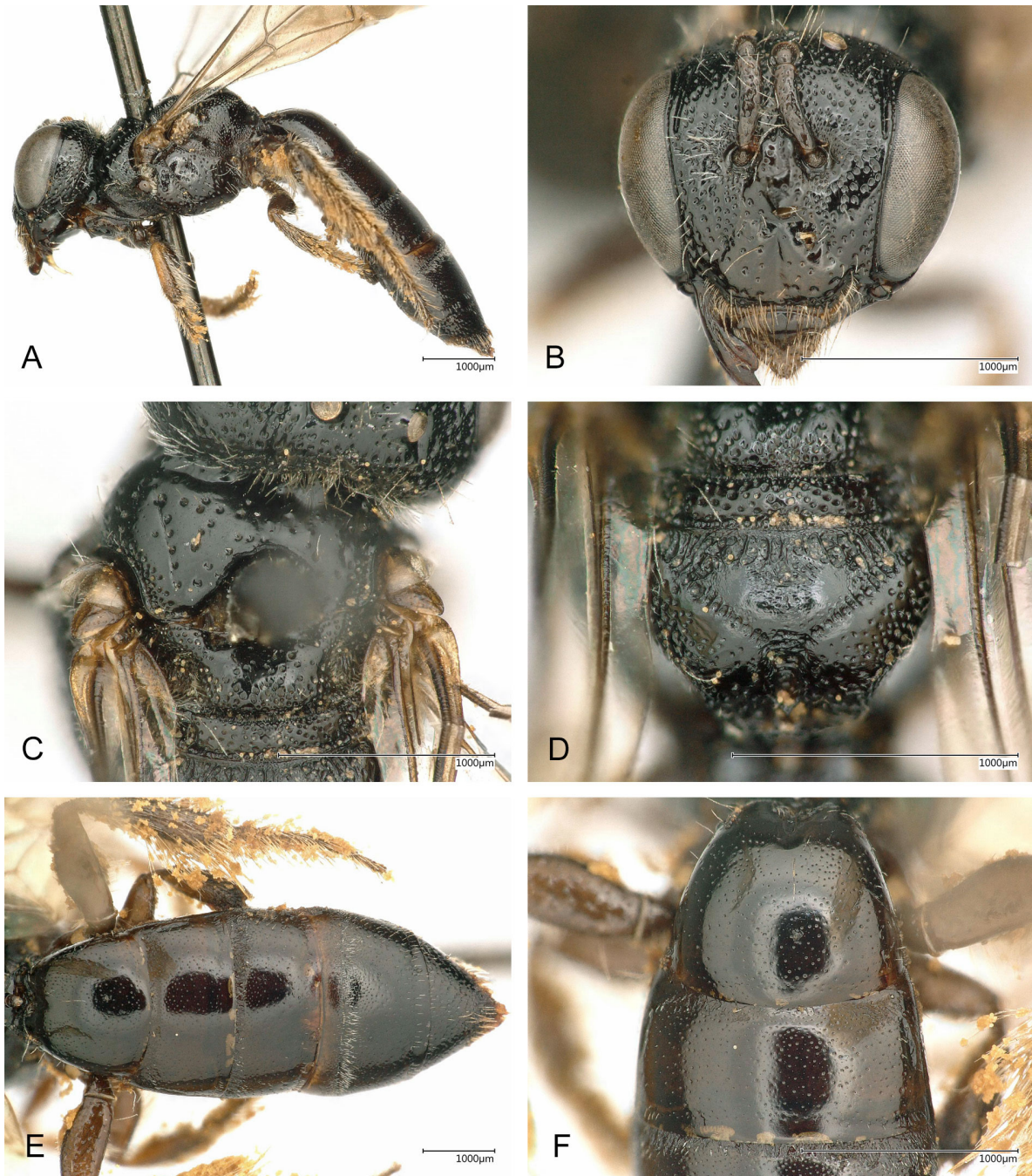


Fig. 64. *Scapter pallidicinctus* Cockerell, 1933, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

posterior margin of compound eyes. Facial fovea narrow, at least 5 times as long as wide. Clypeus medially with shallow longitudinal depression; laterally punctate ($i = 1-2$ d), in middle sparsely punctate ($i > 3$ d). Surface between punctures smooth and shiny (Fig. 64B). Malar area medially narrow, slightly curved. Supraclypeal area triangularly elevated.

MESOSOMA. Integument dark brownish to black, pronotal lobe brownish. Scutum coarsely and irregularly punctate ($i = 1-4$ d), surface between punctures smooth and shiny (Fig. 64C). Metanotum about half as long as scutellum. Propodeum basally broadly, finely carinate, posteriorly smooth (Fig. 64D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 64A).

LEGS. Integument dark brownish to black. Vestiture and scopa greyish-white (Fig. 64A)

METASOMA. Integument dark brownish, marginal zones yellowish-brown shimmering. T3 anterior of premarginal line with row of hairs across whole width of tergum (Fig. 64E). T4 sparsely haired with short, greyish-yellow, erect hair. Prepygidial and pygidial fimbriae yellowish-grey (Fig. 64E). Discs of T1–T3 finely punctate ($i \sim 2$ d); surface between punctures smooth and shiny (Fig. 64E–F).

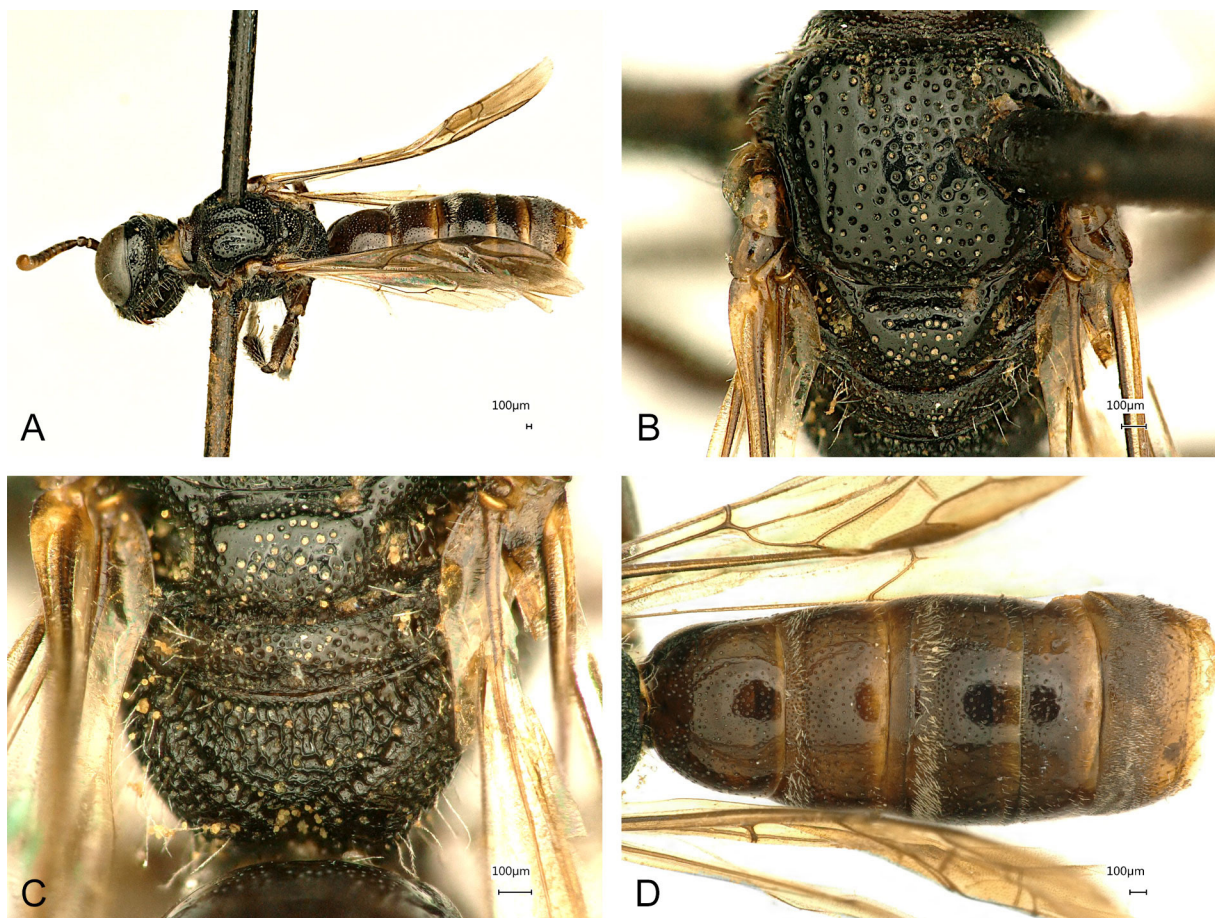


Fig. 65. *Scapter pallidincinctus* Cockerell, 1933, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

Male

BODY LENGTH. 9 mm.

HEAD. Slightly wider than long. Integument black, mandibles dark brownish. Face densely covered with long, white, erect hair. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum irregularly and densely ($i = 0.5\text{--}2$ d) punctate; surface between punctures smooth and shiny (Fig. 65B). Propodeum completely areolate, matt (Fig. 65C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 65A).

LEGS. Integument dark brownish, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 65A).

METASOMA. Integument dark brownish, marginal zone light brownish. Disc of T1 without hair (Fig. 66A), T2–T4 basally greyish, dense, short, erect hair band, covering fifth of terga. T3–T4 anterior of premarginal line with row of short, erect, greyish hair (Fig. 65D). Disc of T1 regularly and densely ($i=1\text{--}2$ d) punctate (Fig. 66A). T2–T4 basally more densely ($i = 1$ d) and more finely punctate than apically ($i = 2\text{--}4$ d). T2–T3 anterior of premarginal line with row of points (Fig. 65D).

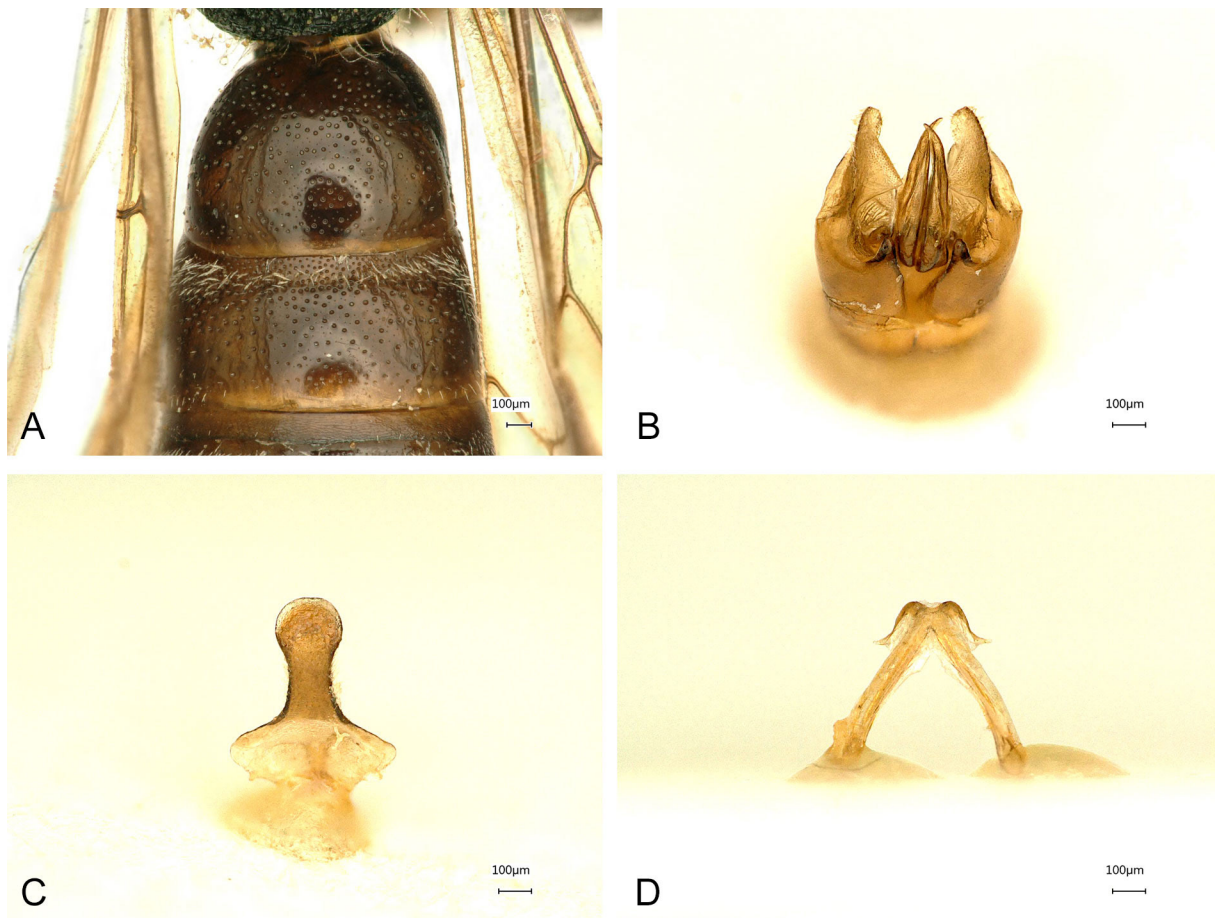


Fig. 66. *Scapter pallidicinctus* Cockerell, 1933, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 8. **D.** Sternum 7.

TERMINALIA. Genitalia (Fig. 66B), S7 (Fig. 66C) and terminal plate of S8 (Fig. 66D) as illustrated.

Distribution

Only known from the type locality Oudtshoorn.

Floral hosts

Unknown.

Seasonal activity

November.

Remarks

Eardley (1996) synonymised this species with *S. opacus* (Friese).

Scapter ruficornis subgroup

In this subgroup both sexes have a brownish pronotal lobe and metasomal integument. Males: S7 with apicolateral hairs and/or disc of T2–T3 sparsely punctate; the fine and dense punctation at the base of T2 covers at most about a quarter of the tergal length. Females: mesosoma often partly orange and propodeum mostly areolate. This subgroup comprises three species (Table 1).

Scapter felicis sp. nov.

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Figs 67–69

Diagnosis

The female of *S. felicis* sp. nov. can be separated from that of all other species of this group by the following character combination: T3 anterior of premarginal line with a row of points (Fig. 67E); disc of T2 basally finely and densely ($i = 1$ d) punctate, apically coarser, and sparse ($i = 2–3$ d) (Fig. 67F); propodeum partly rugulose-areolate (Fig. 67D); ocelli slightly in front of posterior margin of the compound eyes. The male is characterized by discs of T1–T4 basally more densely ($i = 0.5$ d) punctate than apically ($i = 2$ d) (Fig. 68D); propodeum rugulose-areolate (Fig. 68C); hairs and form of S7 (Fig. 69C).

Etymology

This species is named after its preferred host plant genus *Felicia* (Asteraceae).

Type material (93 specimens)

Holotype

SOUTH AFRICA • 1 ♀; W Cape, S of Skurfkop; 32°03'26" S, 18°40'27" E; 400 m a.s.l.; 24 Sep. 2011; CE leg.; SANC.

Paratypes

SOUTH AFRICA • 1 ♀; 12 km NW of Nieuwoudtville, Farm Avontuur, Fynbos; 31°16'18" S, 19°02'55" E; 770 m a.s.l.; 5 Sep. 2012; HE leg.; RCMK • 1 ♀; same collection data as for preceding; 24 Aug. 2012; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 18 Aug. 2012; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 4 Sep. 2011; HE leg.; RCMK • 1 ♀, 1 ♂; same collection data as for preceding; 16 Aug. 2011; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 3 Sep. 2009; MK leg.; RCMK • 1 ♀; 20 km N of Nieuwoudtville, Vlei near Hellse Pad,

Fynbos; 31°10'34" S, 19°01'09" E; 810 m a.s.l.; 28 Sep. 2014; MK leg.; RCMK • 1 ♀; 20 km S of Nieuwoudtville, Farm Papkuilsfontein, Fynbos; 31°33'16" S, 19°08'31" E; 680 m a.s.l.; 27 Aug. 2012; MK leg.; RCMK • 1 ♂; same collection data as for preceding; 15 Aug. 2010; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 7 Sep. 2007; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 9 Sep. 2007; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 11 Aug. 2011; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 9 Sep. 2007; KT leg.; RCMK • 1 ♀;

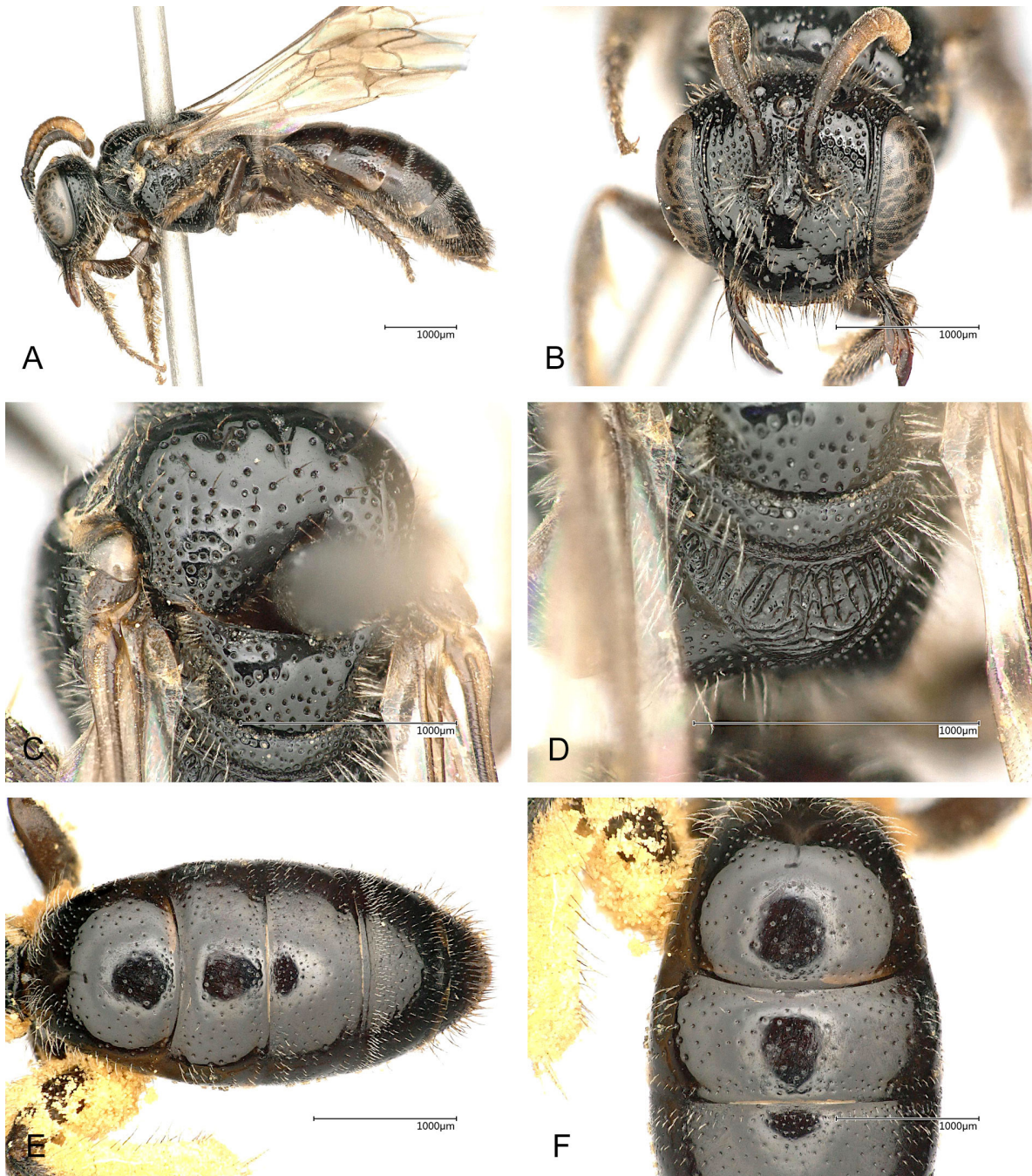


Fig. 67. *Scapter felicis* sp. nov., paratype, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

Knervslakte, path along Gemsbokrivier; 31°26'40" S, 18°56'26" E; 195 m a.s.l.; 14 Sep. 2007; KT leg.; RCMK • 3 ♀♀; N. Cape, 15 km NW of Nieuwoudtville, Farm Engelsepunt, Fynbos; 31°14'30" S; 18°59'13" E; 830 m a.s.l.; 10 Oct. 2006; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 29 Sep. 2006; MK leg.; RCMK • 1 ♀; same collection data as for preceding; 14 Oct. 2006; MK leg.; RCMK • 2 ♀♀; N. Cape, Fynbos, 15 km NW of Nieuwoudtville, Farm Engelsepunt; 31°14'31" S, 18°59'08" E; 830 m a.s.l.; 27 Aug. 2003; KT leg.; RCMK • 1 ♀; same collection data as for preceding; 7 Aug. 2003; KT leg.; RCMK • 1 ♀; same collection data as for preceding; 5 Aug. 2003; KT leg.; RCMK • 1 ♀; same collection data as for preceding; 7–29 Aug. 2003; KT leg.; RCMK • 10 ♀♀; same collection data as for preceding; 24 Sep. 2003; KT leg.; RCMK • 1 ♀; same collection data as for preceding; 6–7 Oct. 2003; KT leg.; RCMK • 7 ♀♀; same collection data as for preceding; 6 Oct. 2003; KT leg.; RCMK • 2 ♀♀; same collection data as for preceding; 28 Aug. 2003; KT leg.; RCMK • 6 ♀♀; same collection data as for preceding; 7 Oct. 2003; KT leg.; RCMK • 2 ♀♀; same collection data as for preceding; 13 Sep. 2003; KT leg.; RCMK • 2 ♀♀; same collection data as for preceding; 30 Aug. 2003; KT leg.; RCMK • 1 ♀; N. Cape, Nieuwoudtville, Glen Lyon, garden; 31°24'03" S, 19°08'34" E; 700 m a.s.l.; 23 Aug. 2003; MK leg.; RCMK • 1 ♀; Ouberg Pass, 27 km SE of Vanrhynsdorp, Fynbos; 31°48'07" S, 18°55'00" E; 380 m a.s.l.; 24 Sep. 2014; MK leg.; RCMK • 2 ♀♀; W Cape, Rietvlei; 32°14'61" S, 18°77'25" E; 282 m a.s.l.; 22 Sep. 2011; LP leg.; RCMK • 1 ♀; N Cape Province, 24 km N of Eksteenfontein; 28°43'03" S, 17°06'33" E; 380 m a.s.l.; 9 Oct. 2008; CE leg.; SANC • 1 ♀; W Cape, S



Fig. 68. *Scapter felicis* sp. nov., paratype, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

Skurfkop; 32°03'26" S, 18°40'27" E; 400 m a.s.l.; 24 Sep. 2011; CE leg.; SANC • 1 ♀; W Cape, Rietvlei; 32°08'46" S, 18°46'21" E; 300 m a.s.l.; 22 Sep. 2011; CE leg.; SANC • 1 ♀; SW Cape Province, 11 km N of Clan William; 32°09' S, 18°50' E; 300 m a.s.l.; 21 Sep. 2011; CE leg.; SANC • 3 ♀♀; W Cape, Kunje Farm, 28 km SE of Citrusdal; 32°40' S, 19°10' E; 1100 m a.s.l.; 23 Sep. 2001; CE leg.; SANC • 1 ♀; Farm Liberty 50 km N of Ceres; 32°54' S, 19°27' E; 980 m a.s.l.; 27 Sep. 1990; CE leg.; SANC • 1 ♂; Matjesfontein; 33°14' S, 20°35' E; 900 m a.s.l.; 16–21 Oct. 1928; RT leg.; NHML • 1 ♀; Ceres; 33°21' S, 19°18' E; 450 m a.s.l.; 27 Oct.–1 Nov. 1920; RT leg.; NHML • 2 ♀♀; same collection data as for preceding; Nov. 1920; RT leg.; NHML • 3 ♀♀; same collection data as for preceding; 1–12 Nov. 1924; RT leg.; NHML • 3 ♀♀; Montagu; 33°47' S, 20°07' E; 220 m a.s.l.; 23–30 Sep 1924; RT leg.; NHML • 5 ♀♀; same collection data as for preceding; 1–21 Oct. 1924; RT leg.; SANC • 1 ♀; W Cape Province, Franschhoek; 33°55'34" S, 19°05'41" E; 240 m a.s.l.; 23 Oct. 2008; CE leg. SANC • 10 ♀♀; 5 km S of Grabouw; 34°18' S, 19°01' E; 560 m a.s.l.; 29 Sep. 2001; CE leg.; SANC • 1 ♀; Mossel Bay; 34°10' S, 22°07' E; Aug. 1932; RT leg.; NHML.

Description

Female

BODY LENGTH. 6.7–7 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli slightly in front of

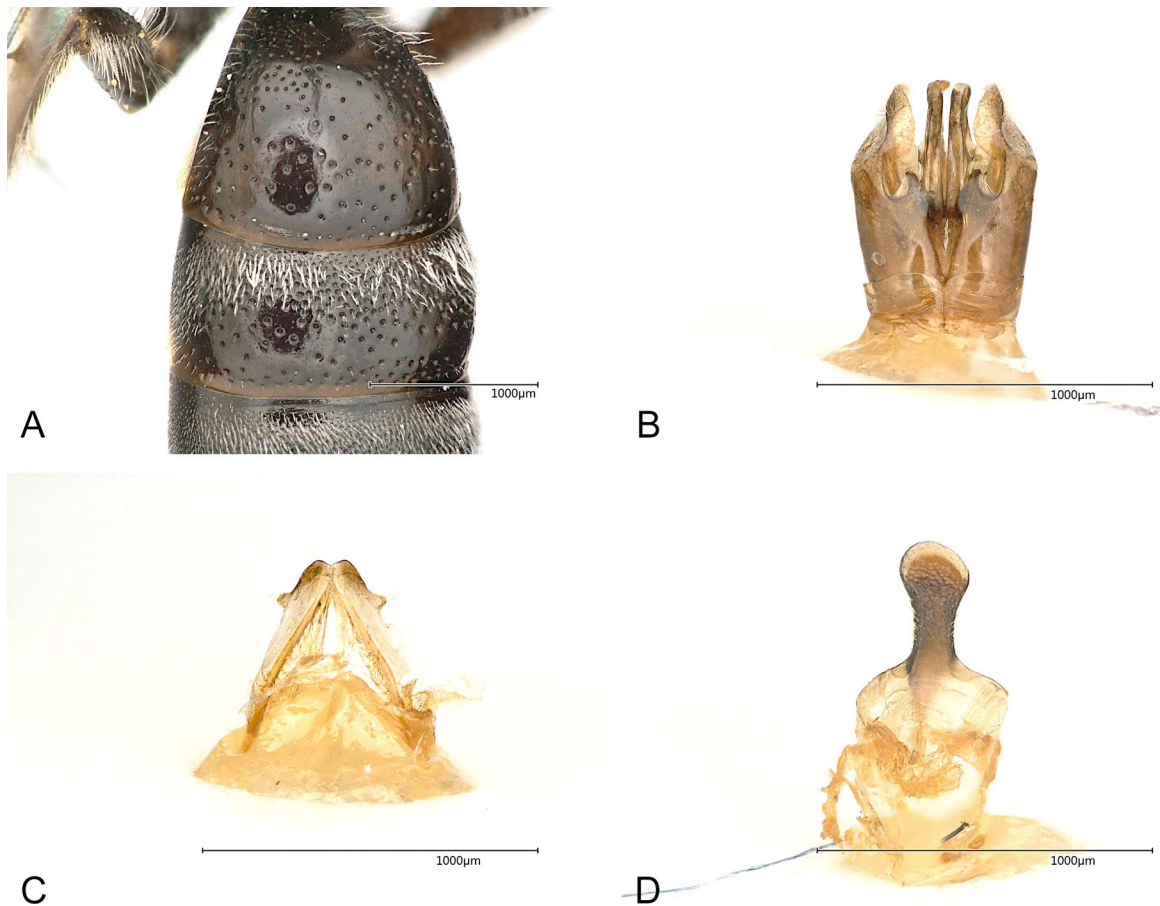


Fig. 69. *Scapter felicis* sp. nov., paratype, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

posterior margin of compound eyes. Clypeus medially with shallow longitudinal depression; punctation fine and sparse ($i = 1\text{--}2.5$ d); surface between punctures smooth and shiny (Fig. 67B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area at upper margin distinctly emarginated and edges slightly extended.

MESOSOMA. Integument black, pronotal lobe dark brownish-black. Scutum coarsely and irregularly punctate, medially sparse ($i = 1\text{--}2$ d), laterally dense ($i = 0.3$ d); surface between punctures smooth and shiny (Fig. 67C). Metanotum about half as long as scutellum. Propodeum basolaterally broadly, coarsely carinate, apically and medially areolate (Fig. 67D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 67A).

LEGS. Integument brownish, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig. 67A).

METASOMA. Integument brownish, marginal zones yellowish-brown shimmering. Basolaterally on T2–T4 hair patches of sparse, greyish-white, erect hair; T3 basally with hair band; T3 anterior of premarginal line at least laterally row of hairs; T4 completely haired, anteriorly more densely than apically; prepygidial and pygidial fimbriae dark brownish to black (Fig. 67E). Disc of T1 irregularly ($i = 1\text{--}4$ d) and finely punctate, posterior margin more densely ($i = 1$ d); on T2–T3 basal and apical margins more densely ($i = 1$ d) punctate than disc ($i = 2\text{--}3$ d); surface between punctures smooth and shiny (Fig. 67E–F).

Male

BODY LENGTH. 7.3 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli in line with posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument brownish-black. Scutum densely ($I < 1$ d) punctate; surface between punctures smooth and shiny (Fig. 68B). Propodeum completely rugulose-areolate (Fig. 68C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 68A).

LEGS. Integument brownish, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 68A).

METASOMA. Integument brownish, marginal zone yellowish-brown. Disc of T1 without hair (Fig. 69A), T2–T4 basally greyish, dense, short, erect hair band, covering third of tergum T3–T4; anterior of premarginal line at laterally with row of short, erect, greyish hair (Fig. 68D). Discs of T1–T4 basally more densely ($i = 0.5$ d) and finely punctate than apically ($i = 2\text{--}3$ d); medially more densely than laterally; T1–T4 anterior of premarginal line with row of points; surface between punctures smooth and shiny (Figs 68D, 69A).

TERMINALIA. Genitalia (Fig. 69B), S7 (Fig. 69C) and terminal plate of S8 (Fig. 69D) as illustrated.

Distribution

With one exception (Knervlakte, Succulent Karoo) only known from the Fynbos biome between Rietvlei in the south and the wider Nieuwoudtville area (Bokkeveld Plateau) in the north.

Floral hosts

Found on *Felicia* sp. and *Senecio* sp. (Asteraceae).

Seasonal activity

August–October.

Scapter flavipunctatus sp. nov.

[urn:lsid:zoobank.org:act:BC193FB2-43CE-4612-B4DE-FA99A5AB1C3C](https://doi.org/10.3896/BC193FB2-43CE-4612-B4DE-FA99A5AB1C3C)

Figs 70–72

Diagnosis

The female of *S. flavipunctatus* sp. nov. can be separated from that of all other species of this group by the following character combination: metanotum partly yellowish; T3 anterior of premarginal line impunctate (Fig. 70E); coarse punctation on metasoma (Fig. 70E); no basal hair bands on T3–T4 (Fig. 70E); supraclypeal area delimited by sharp edges (Fig. 70B). The male is characterized by hairs on the apicolateral lobes and form of S7 (Fig. 70C), narrow basal part of T2 haired and finely, dense ($l > 1d$) punctate (Fig. 72A), major part of front femur and tibia yellowish (Fig. 71A).

Etymology

Named after the unique yellow spot on the metanotum of the female.

Type material (14 specimens)

Holotype

SOUTH AFRICA • ♂; N Cape, SW of Springbok; [29°40' S], [17°52' E]; 4 Nov. 1999; MH leg.; SAMC.

Paratypes

SOUTH AFRICA • 2 ♀♀; SW of Springbok; 29°14' S, 17°52' E; 4 Nov. 1999; MH leg.; RCMK • 1 ♂; same collection data as for holotype; 4 Nov. 1999; MH leg.; RCMK • 4 ♂♂; W Cape, Nuwerus; [31°09' S], [18°22' E]; 31 Oct. 1999; MH leg.; RCMK • 1 ♂; N Cape, 25 km E Hondeklipbay wadi; [30°19' S], [17°16' E]; 17 Oct. 1999; MH leg.; RCMK • 1 ♂; N Cape, E of Kamieskroon; [30°12' S], [17°56' E]; 2 Nov. 1999; MH leg.; RCMK • 1 ♂; N Cape, 40 km SW of Garies wadi Groen; [32°20' S], [18°40' E]; 16 Nov. 1999; MH leg.; RCMK • 1 ♀; W Cape, 40 km S of Lamberts Bay, Coast; 29 Oct. 1999; MH leg.; OÖLM. • 1 ♀; W Cape, Nuwerus; 31 Oct. 1999; MH leg.; OÖLM.

Description

Female

BODY LENGTH. 6.9–7.1 mm.

HEAD. Wider than long. Integument brownish, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli slightly in front of posterior margin of compound eyes. Clypeus medially with shallow longitudinal depression; punctation fine and sparse ($i = 2–4d$); surface between punctures smooth and shiny (Fig. 70B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area delimited by sharp edges and with dispersed punctation.

MESOSOMA. Integument black, scutum, scutellum and part of metanotum yellowish-brown, pronotal lobe lighter than integument (Fig. 70C). Scutum coarsely and irregularly punctate ($i = 1–3d$); surface between punctures smooth and shiny (Fig. 70C). Metanotum less than half as long as scutellum.

Propodeum completely coarsely areolate (Fig. 70D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 70A).

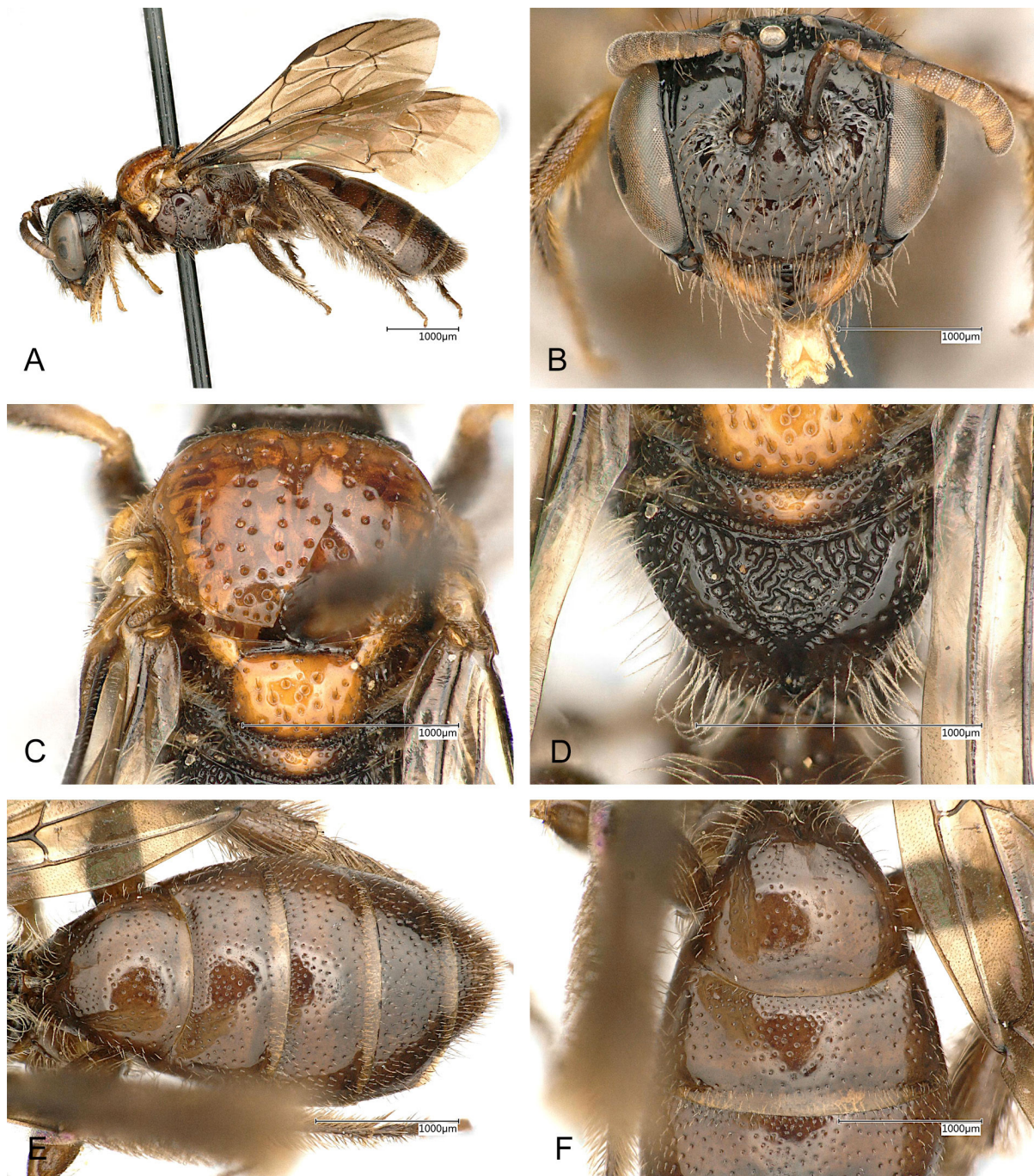


Fig. 70. *Scapter flavipunctatus* sp. nov., paratype, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

LEGS. Integument brownish, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig. 70A).

METASOMA. Integument brownish, marginal zones yellowish-brown shimmering. T2–T3 laterally with sparse, short, brownish-grey, erect hair; T4 completely sparsely haired; T3–T4 anterior of premarginal line with row of hairs; prepygidial and pygidial fimbriae greyish-brown (Fig. 70E). Disc of T1 sparsely ($i = 1-3$ d) and finely punctate; basally on T2 more densely ($i = 1$ d) punctate than disc ($i = 1-3$ d); disc of T3 completely sparse punctate ($i = 1-3$ d); surface between punctures smooth and shiny (Fig. 70F).

Male

BODY LENGTH. 7.3–7.6 mm.

HEAD. Wider than long. Integument brownish-black to black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli in front of posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

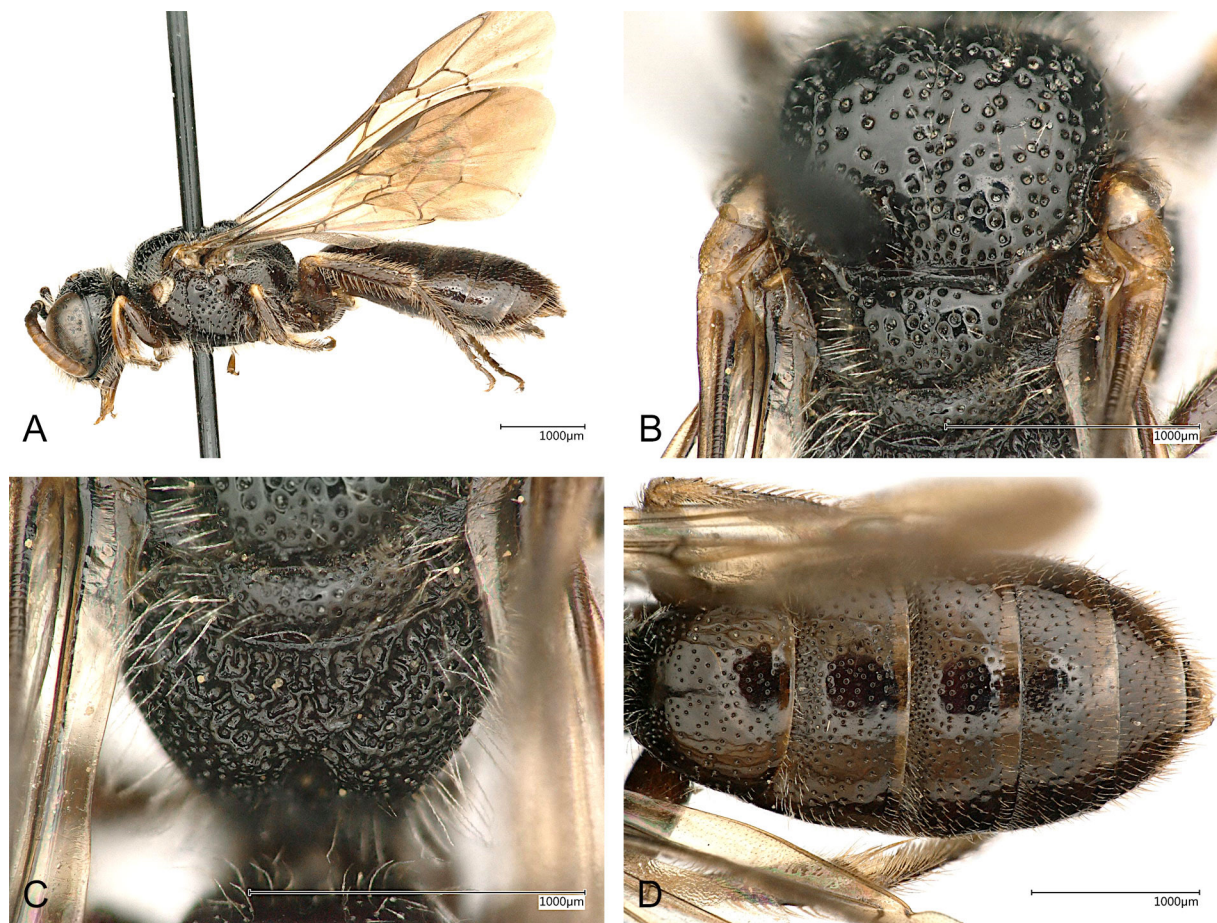


Fig. 71. *Scapter flavipunctatus* sp. nov., paratype, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

MESOSOMA. Integument black, pronotal lobe brownish. Scutum irregularly and sparsely ($I < 1$ d) punctate; surface between punctures matt (Fig. 71B). Propodeum completely coarsely rugulose-areolate (Fig. 71C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 71A).

LEGS. Integument brownish, fore and mid tibia with yellow spot of different sizes; fore legs often generally lighter than other legs. Vestiture greyish-brown (Fig. 71A).

METASOMA. Integument brownish, marginal zones yellowish-brown. Disc of T1 without hair (Fig. 72A), T2–T4 basally narrow, greyish-brown, dense, middle-long, erect hair band. T2–T4 laterally sparsely, but long haired. T3–T4 anterior of premarginal line at least laterally row of short, erect, greyish hair (Fig. 71D). Disc of T1 finely and relatively sparsely ($i = 2-4$ d) punctate (Fig. 72A); discs of T2–T4 basally more densely ($i = 1$ d) and finer punctate than apically ($i = 2-3$ d); surface between punctures matt (Fig. 71D).

TERMINALIA. Genitalia (Fig. 72B), S7 (Fig. 72C) and terminal plate of S8 (Fig. 72D) as illustrated.

Distribution

Only known from Namaqualand between Nuwerus in the south and Springbog in the north.

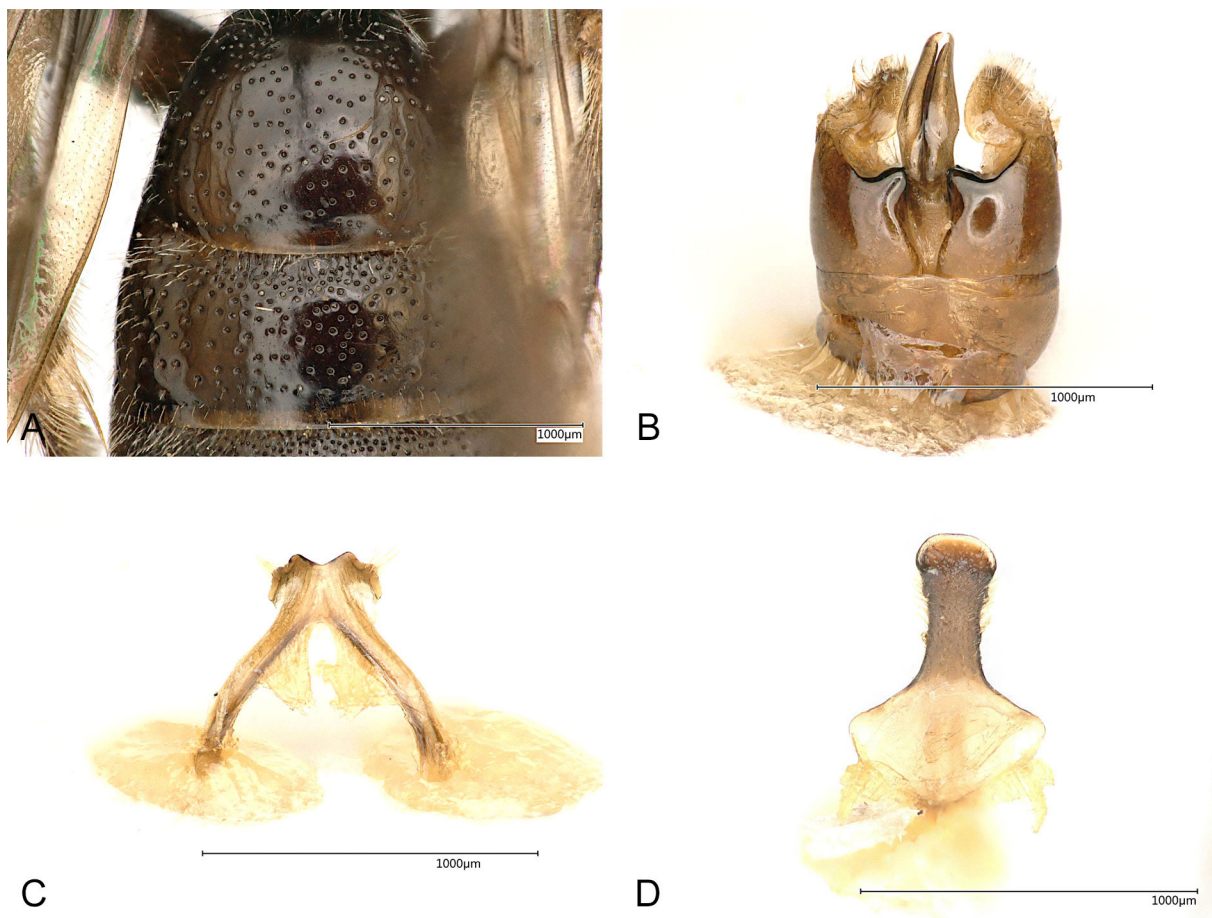


Fig. 72. *Scapter flavipunctatus* sp. nov., paratype, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

Floral hosts

Unknown.

Seasonal activity

October–November.

Scapter ruficornis (Cockerell, 1916)

Figs 73–75

Strandiella ruficornis Cockerell, 1916: 430, holotype ♂ (type locality: Willowmore, South Africa) (NHML), examined.

Polyglossa (Strandiella) caffra Friese, 1925: 515, holotype ♀ (Willowmore, South Africa) (ZMHB), examined (synonymized by Eardley 1996).

Diagnosis

The female of *S. ruficornis* can be separated from that of all other species of this group by the following character combination: pronotal lobe dark (Fig. 73A); T3 anterior of pre-marginal line impunctate (Fig. 73E); propodeum completely carinate (Fig. 73D); basal hair bands on T3–T4 and fine punctation on discs of T1–T4 (Fig. 73E); supraclypeal area delimited by sharp edges (Fig. 73B). The male is characterized by sparse punctation on discs of T1–T4 (Fig. 74D), basally on each tergum except T1 more densely ($i = 1$ d), apically sparse ($i = 2–3$ d); punctation on disc of T1 regular ($i = 3–4$ d) and fine (Fig. 75A); propodeum coarsely areolate (Fig. 74D) and form of S7 (Fig. 75C).

Additional material examined (40 specimens)

SOUTH AFRICA • 1 ♀; Ceres, Cape Province; [33°21' S], [19°18' E]; 450 m a.s.l.; Nov. 1920; RT leg.; RCMK • 1 ♂; same collection data as for preceding; Dec. 1920; RT leg.; RCMK • 1 ♀; N Cape, 24 km N of Eksteenfontein; 28°43'03" S, 17°06'33" E; 380 m a.s.l.; 9 Oct. 2008; CE leg.; SANC • 2 ♂♂; Colesberg; 30°43' S, 25°06' E; 1360 m a.s.l.; Nov. 1930; unknown leg.; SANC • 1 ♂; W Cape, Kunje Farm, 28 km SE of Citrusdal; 32°40' S, 19°10' E; 1100 m a.s.l.; 23 Sep. 2001; CE leg.; SANC • 1 ♂; Matjesfontein; 33°14' S, 20°35' E; 900 m a.s.l.; 1–6 Nov. 1928; RT leg.; SANC • 2 ♂♂; same collection as for preceding; 1–6 Nov. 1928; RT leg.; NHML • 2 ♀♀; Capland, Willowmore; 33°18' S, 23°30' E; 850 m a.s.l.; 1 Dec. 1899; HB leg.; SANC • 1 ♂; same collection data as for preceding; 20 Nov. 1905; HB leg.; SANC • 11 ♀♀, 5 ♂♂; Ceres; 33°21' S, 19°18' E; 450 m a.s.l.; Nov. 1920; RT leg.; NHML • 2 ♀♀, 5 ♂♂; same collection data as for preceding; Dec. 1920; RT leg.; NHML • 1 ♀; Little Karoo, 38 km E of Ceres; 33°21' S, 19°43' E; 1130 m a.s.l.; 17–25 Nov. 1924; RT leg.; NHML • 3 ♂♂; Buffels River, Ladismith Div.; 33°30' S, 21°05' E; 270 m a.s.l.; Oct. 1937; unknown leg.; SANC • 1 ♀; Cape Province; Nov. 1920; RT leg.; NHML.

Description

Female

BODY LENGTH. 8.2 mm.

HEAD. Wider than long. Integument reddish-brown, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli slightly in front of posterior margin of compound eyes. Clypeus medially with shallow longitudinal depression, punctation fine and sparse ($i = 3–4$ d). Surface between punctures smooth and shiny (Fig. 73B). Malar area medially narrowly, slightly curved. Antennal flagella ventrally yellowish, dorsally dark brownish. Supraclypeal area delimited by sharp edges and definite.

MESOSOMA. Integument dark brownish, pronotal lobe dark brownish, scutum and scutellum possibly yellowish-brown. Scutum coarsely and irregularly punctate ($i = 1-4$ d); surface between punctures matt (Fig. 73C). Metanotum about half as long as scutellum. Propodeum areolate, medially fine, laterally coarse (Fig. 73D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 73A).

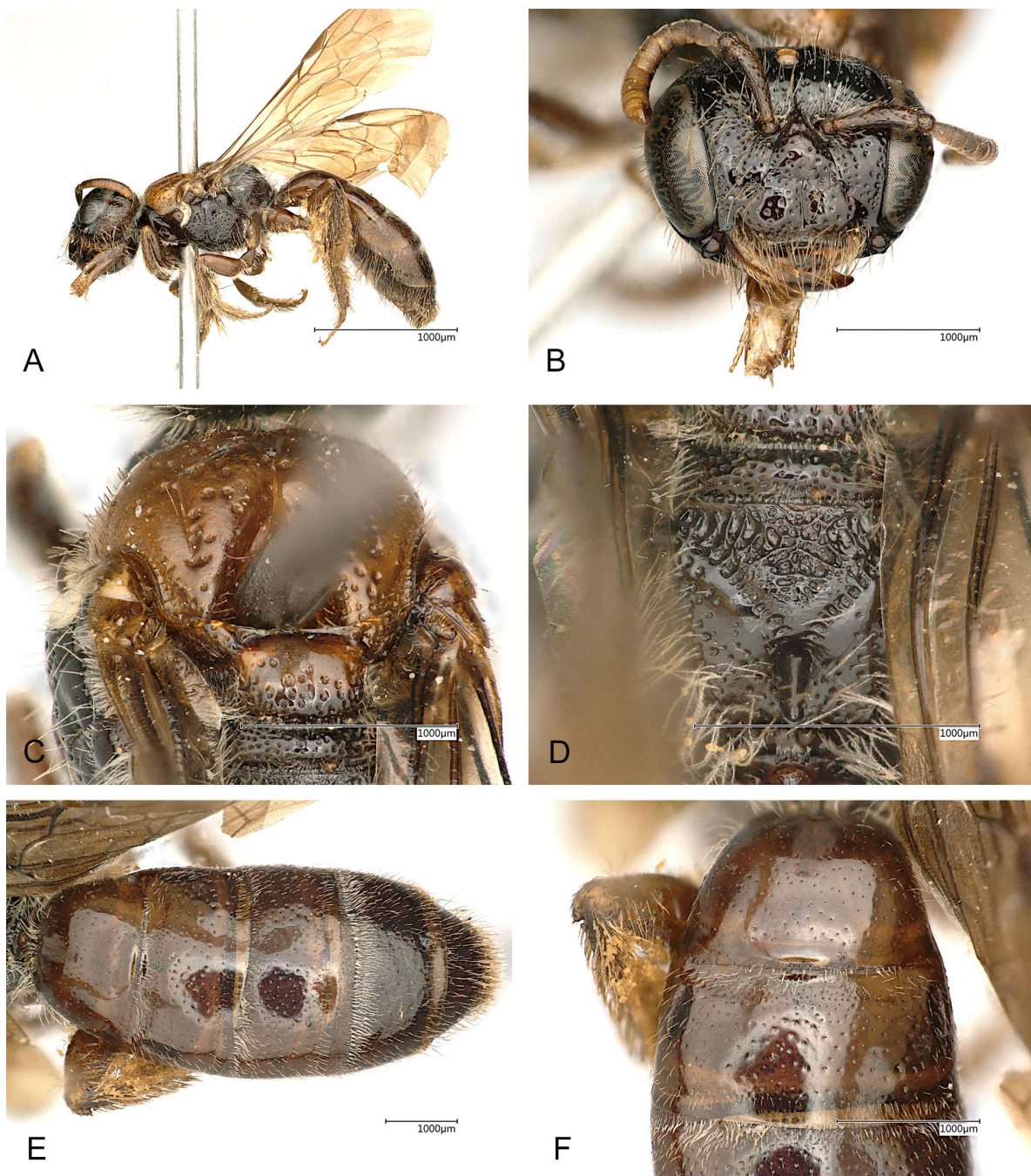


Fig. 73. *Scapter ruficornis* (Cockerell, 1916), ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

LEGS. Integument brownish, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish (Fig. 73A).

METASOMA. Integument brownish. Basal hair bands on T2–T4, on T2 narrow and sparse (Fig. 73F), broadening towards posterior (Fig. 73E). Prepygidial and pygidial fimbriae dark brownish. Disc of T1 finely and shallowly punctate (Fig. 73F); T2–T4 basally a bit more densely ($i = 2-3$ d) punctate than disc ($i = 4-5$ d) and fine. Surface between punctures smooth and shiny. Marginal zone with single hairs in row across complete width (Fig. 73E).

Male

BODY LENGTH. 8.6 mm.

HEAD. Wider than long. Integument brownish, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli in line with posterior margin of compound eyes. Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black.

MESOSOMA. Integument black. Scutum regularly and densely ($i = 1-1.5$ d) punctate; surface between punctures smooth and shiny (Fig. 74B). Propodeum completely coarsely areolate (Fig. 74C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

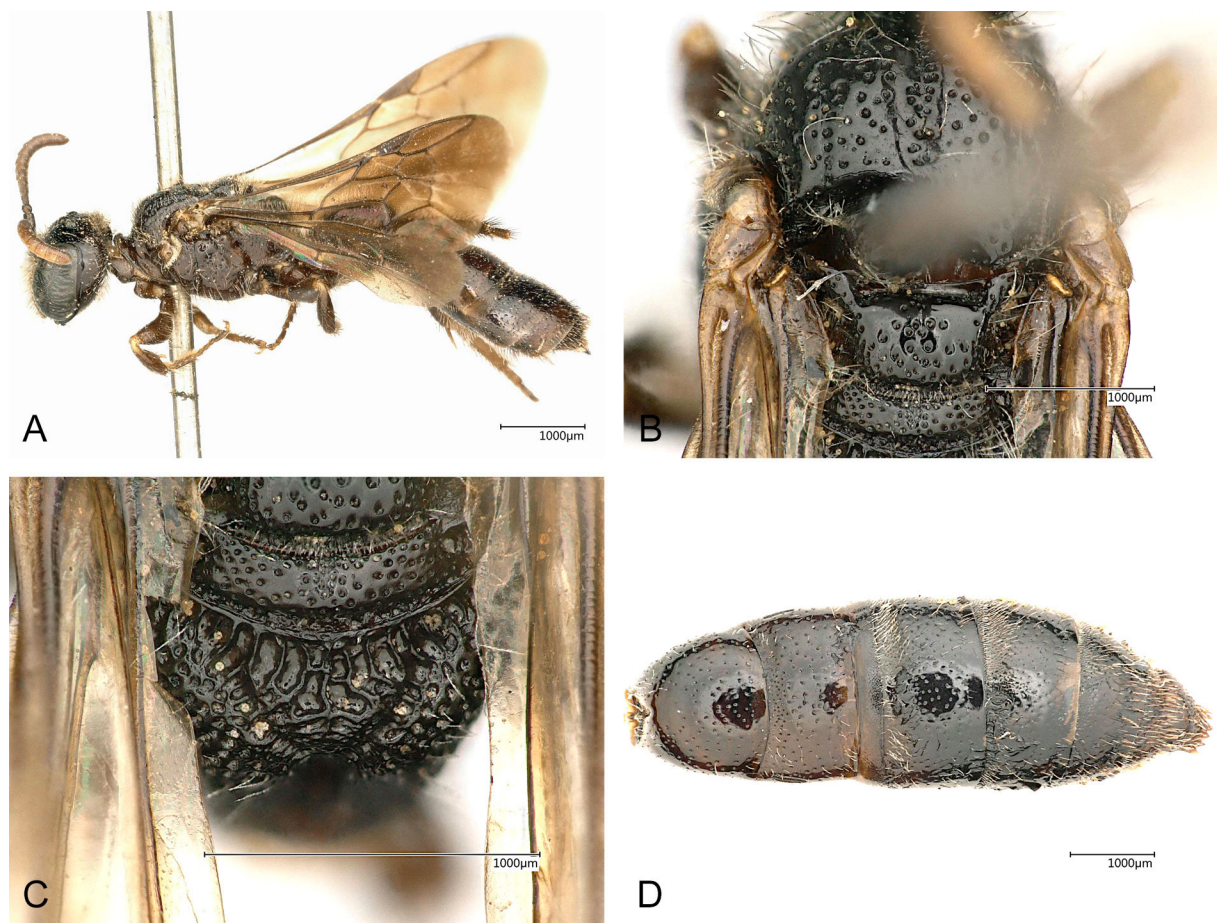


Fig. 74. *Scapter ruficornis* (Cockerell, 1916), ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 74A).

LEGS. Integument black, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 74A).

METASOMA. Integument brownish, marginal zones yellowish-brown shimmering. Disc of T1 without hair (Fig. 75A), T3–T4 basally greyish, dense, middle long, erect hair band, covering sixth of terga. T3–T4 anterior of pre-marginal line with row of short, erect, greyish-brown hair (Fig. 74D). Disc of T1 finely and regularly ($i = 2-3$ d) punctate (Fig. 75A); discs of T2–T3 basally more densely ($i = 1-1.5$ d) and finer punctate than apically ($i = 2-3$ d). Surface between punctures smooth and shiny (Fig. 74D).

TERMINALIA. Genitalia (Fig. 75B), S7 (Fig. 75C) and terminal plate of S8 (Fig. 75D) as illustrated.

Distribution

Eardley (1996) synonymized several taxa with *S. ruficornis* that turned out to be separate species. Because only a few of those specimens were available for study, details of the distribution of this species are unclear but apparently *S. ruficornis* is widespread in the Greater Cape Floristic Region known from Willowmore in the SE to Ceres in the W.

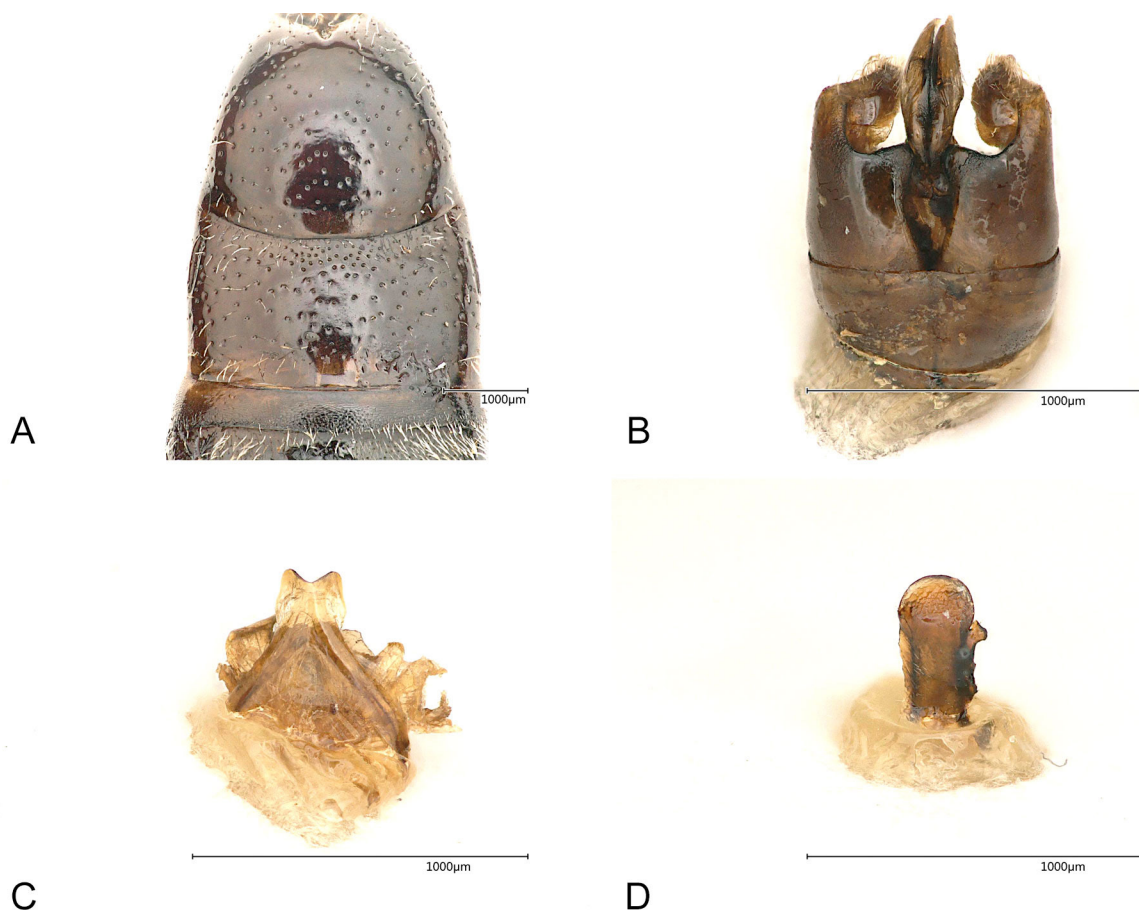


Fig. 75. *Scapter ruficornis* (Cockerell, 1916), ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

Floral hosts

Due to the taxonomic confusion floral hosts are not clear but Eardley (1996) only mentions Asteraceae like in all other species of this group for which flower visitation records are available.

Seasonal activity

November–December.

Scapter confusus subgroup

In both sexes the *S. confusus* subgroup is defined by the following character combination: mesosoma and terga covered by a mix of coarse and very fine punctation, facial fovea very broad, about four times as long as wide.

The only species of this subgroup (Table 1), *S. confusus* sp. nov., is quite different from all other species of the *S. nitidus* group but clearly does not belong to the apparently closely related taxa around *S. aureiferus* and *S. calx* that form a species group of their own. Species of the latter group are distinctly smaller with finer punctation.

Scapter confusus sp. nov.

[urn:lsid:zoobank.org:act:0A4193F6-5694-4931-8DDD-F5E0126683BF](https://doi.org/10.3896/abris.2019.49318-1)

Figs 76–78

Diagnosis

The female of *S. confusus* sp. nov. can be separated from that of all other species of this group by the following character combination: surface of scutum between coarse punctation with fine punctation (Fig. 76C); discs of T1–T3 finely and densely punctate ($i = 1–2$ d) (Fig. 76E); facial fovea about 4 times as long as wide (Fig. 76B). The male is characterized by surface of scutum between coarse punctation with fine punctation (Fig. 77B); facial fovea about 3 times as long as wide; flagella of antennae shorter than the compound eye (Fig. 77A).

Etymology

The unusual appearance of this species and the confusion caused by this with respect to its systematic placement within the genus *Scapter* is reflected in its name.

Type material (18 specimens)

Holotype

SOUTH AFRICA • ♀; Namaqualand, Hester Malan N.R.; 29°38' S, 17°58' E; 1050 m a.s.l.; 4 Sep. 1985; MS leg.; SAMC.

Paratypes

SOUTH AFRICA • 1 ♀; same collection data as for holotype; 4 Sep. 1985; MS leg.; SAMC. • 3 ♂♂; 32 km N of Calvinia, near Farm Van Zyls Rust; 31°10'32" S, 19°52'42" E; 870 m a.s.l.; 1 Sep. 2007; KT leg.; RCMK • 1 ♂; Hantam Mts, river bank, 32 km N of Calvinia, S Klipwerf Farm; 31°12'09" S, 19°50'04" E; 870 m a.s.l.; 30 Aug. 2010; MK leg.; RCMK • 1 ♂; 7 km NE of Steinkopf, road side N7; 29°12'40" S, 17°47'11" E; 970 m a.s.l.; 12 Sep. 2017; MK leg.; RCMK • 1 ♀; Leliefontein, slope, white trap; 30°13'58" S, 18°09'52" E; 1150 m a.s.l.; 15 Sep. 2003; CM leg.; RCMK • 1 ♂; Leliefontein, slope, yellow trap; 30°14'02" S, 18°09'53" E; 1150 m a.s.l.; 5 Sep. 2003; CM leg.; RCMK • 1 ♂; Leliefontein, slope, yellow trap; 30°13'54" S, 18°09'45" E; 1150 m a.s.l.; 5 Sep. 2003; CM leg.; RCMK • 1 ♂;

Leliefontein, slope, white trap; 30°13'54" S, 18°09'45" E; 1150 m a.s.l.; 7 Sep. 2003; CM leg.; RCMK • 2 ♂♂; W. Cape, Knersvlakte, Sukkulent Karoo, 30 km N of Vanrhynsdorp; 31°22'23" S, 18°42'37" E; 146 m a.s.l.; 6 Sep. 2003; KT leg.; RCMK • 1 ♀; 11 km N of Concordia; 29°25'54" S, 17°57'16" E; 1100 m a.s.l.; 13 Sep. 2007; TG leg.; USDA • 1 ♀; W. Cape, Knersvlakte, Sukkulent Karoo, 30 km N of Vanrhynsdorp; 31°22'23" S, 18°42'37" E; 146 m a.s.l.; 22 Aug. 2003; KT leg.; RCMK • 1 ♀;

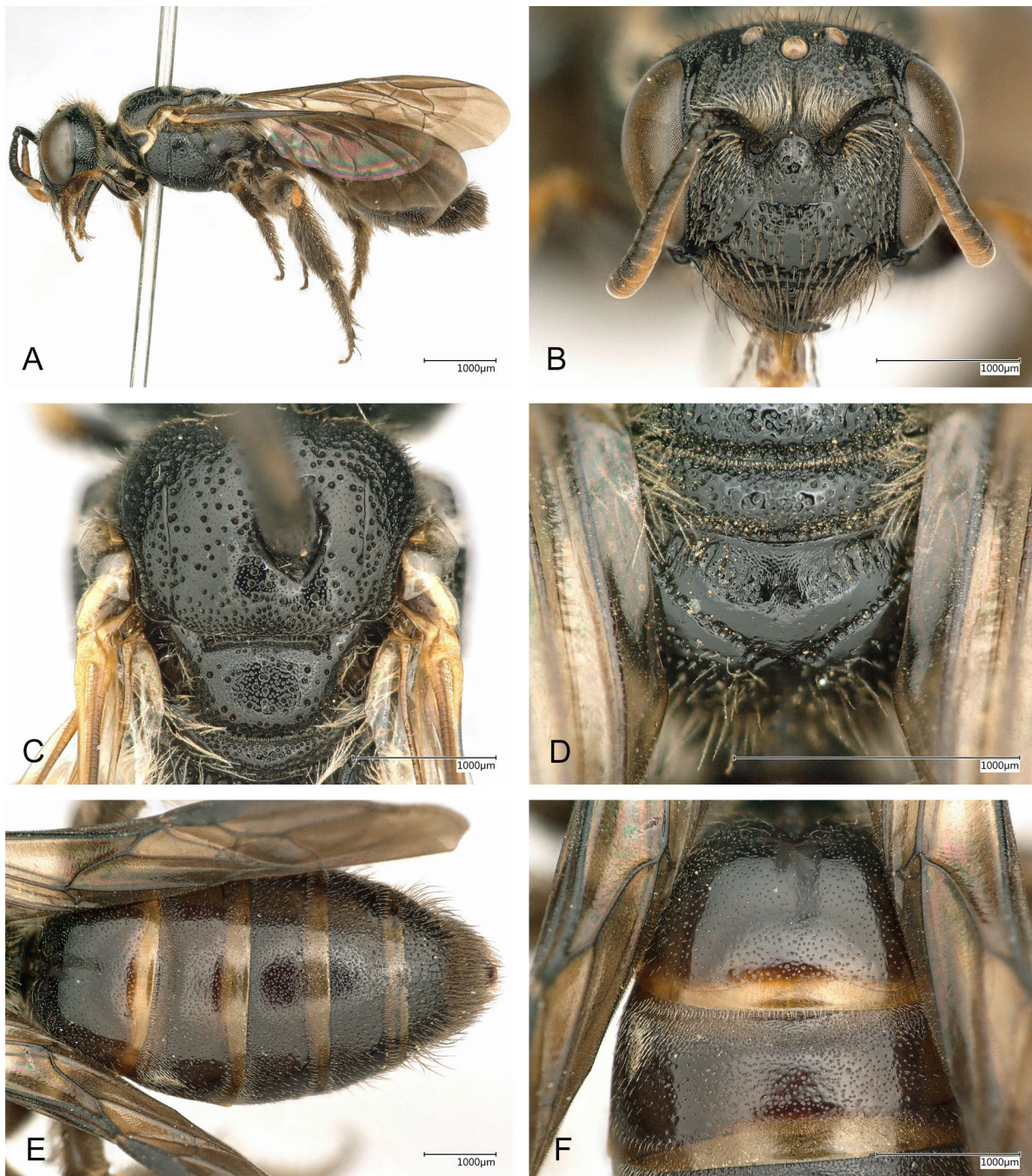


Fig. 76. *Scapter confusus* sp. nov., paratype, ♀. **A.** Lateral view. **B.** Head (dorsal view). **C.** Scutum and scutellum (dorsal view). **D.** Metanotum and propodeum (dorsal view). **E.** Metasoma (dorsal view). **F.** Terga 1–2 (dorsal view).

Gemsbokrivier-Pad, 4.5 km NE Grootdrif, road side; 31°25'54" S, 18°55'16" E; 170 m a.s.l.; 20 Aug. 2010; MK leg.; RCMK • 1 ♀; 60 km S of Loriesfontein, Kliprand; 31°24' S, 19°35' S; 970 m a.s.l.; 31 Oct. 1999; MH leg.; RCMK • 1 ♂; 22–33 km ESE of Port Nolloth; 29°19' S, 17°06' E; 150 m a.s.l.; 15 Sep. 1984; CE leg.; SANC.

Description

Female

BODY LENGTH. 9.1–9.8 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face irregularly and sparsely covered with brownish hair, more densely around basis of antennae. Ocelli slightly in front of posterior margin of complex eyes. Clypeus medially with superficial longitudinal depression; punctation fine and densely ($i = 1-1.5$ d); surface between punctures smooth and shiny (Fig. 76B). Malar area medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black. Supraclypeal area medial next to each antenna elevated. Facial fovea about 4 times as long as wide (Fig. 76A).

MESOSOMA. Integument black, pronotal lobe dark brownish-black. Scutum coarsely and regularly ($i = 1.5-2.5$ d) punctate, surface between coarse punctation covered with fine punctation (Fig. 76C). Metanotum about half as long as scutellum (Fig. 76C). Propodeum basolaterally finely carinate, posteriorly and

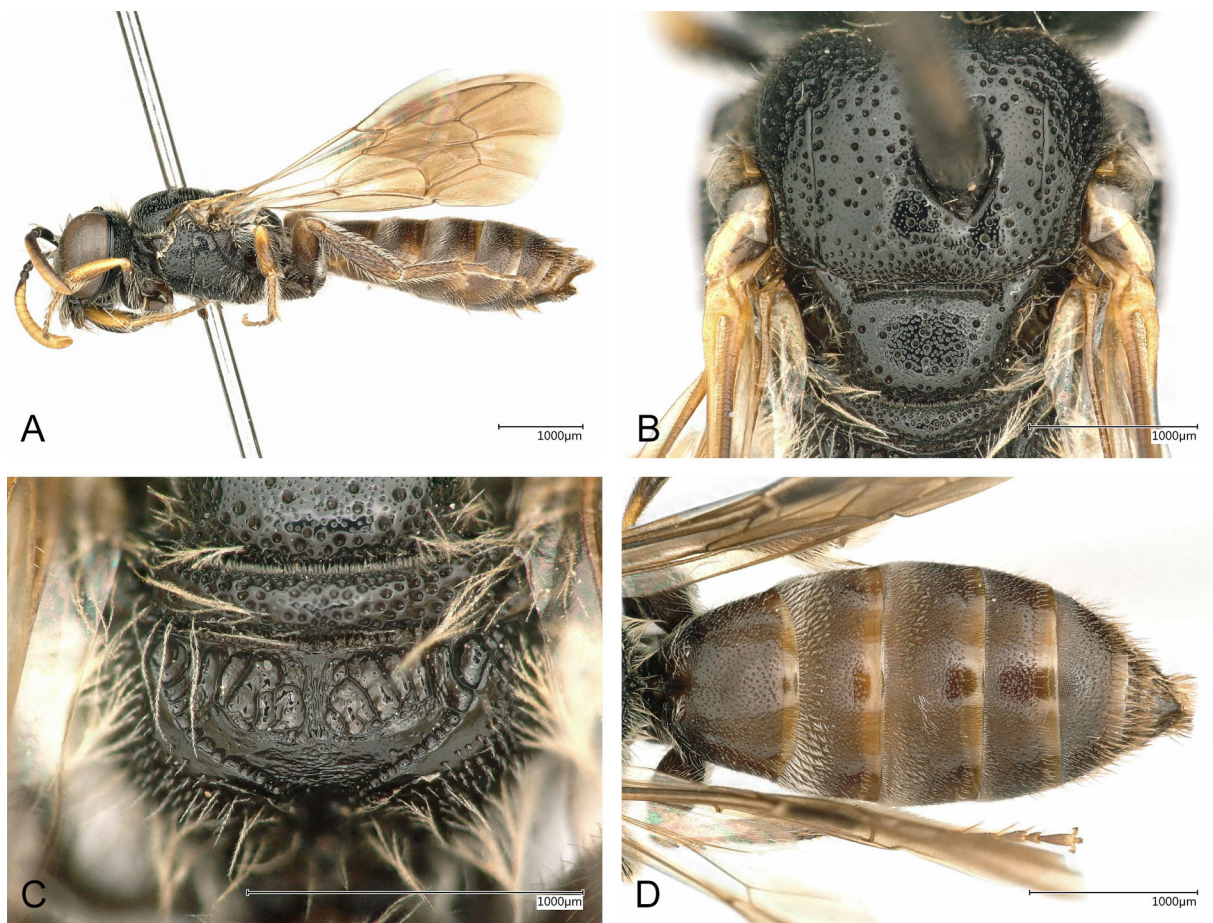


Fig. 77. *Scapter confusus* sp. nov., paratype, ♂. **A.** Lateral view. **B.** Scutum and scutellum (dorsal view). **C.** Metanotum and propodeum (dorsal view). **D.** Metasoma (dorsal view).

medially smooth and shiny (Fig. 76D). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with short, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 76A).

LEGS. Integument brownish, fore tibia with yellow spot. Vestiture greyish-white, scopa greyish to brownish, partly black (Fig. 76A).

METASOMA. Integument brownish, marginal zones yellowish shimmering. Anterior on T2 laterally hair fields of sparse, greyish-white, erect hair (Fig. 76F); T3 laterally with very sparse short, greyish-white, erect hair; apicolaterally on T3 with one single row of hair; T4 completely haired, anteriorly denser than posteriorly; prepygidial and pygidial fimbriae dark brownish to black (Fig. 76E). T1 regularly ($i = 2-3$ d) and finely punctate (Fig. 76F); on T2–T3 anterior and posterior margins denser ($i = 1$ d) punctate than disc ($i = 2-3$ d); surface between punctures smooth and shiny (Fig. 76E).

Male

BODY LENGTH. 9.1–9.5 mm.

HEAD. Wider than long. Integument black, mandibles dark brownish to reddish. Face densely covered with long, white, erect hair. Ocelli slightly in front of posterior margin of complex eyes. Malar area

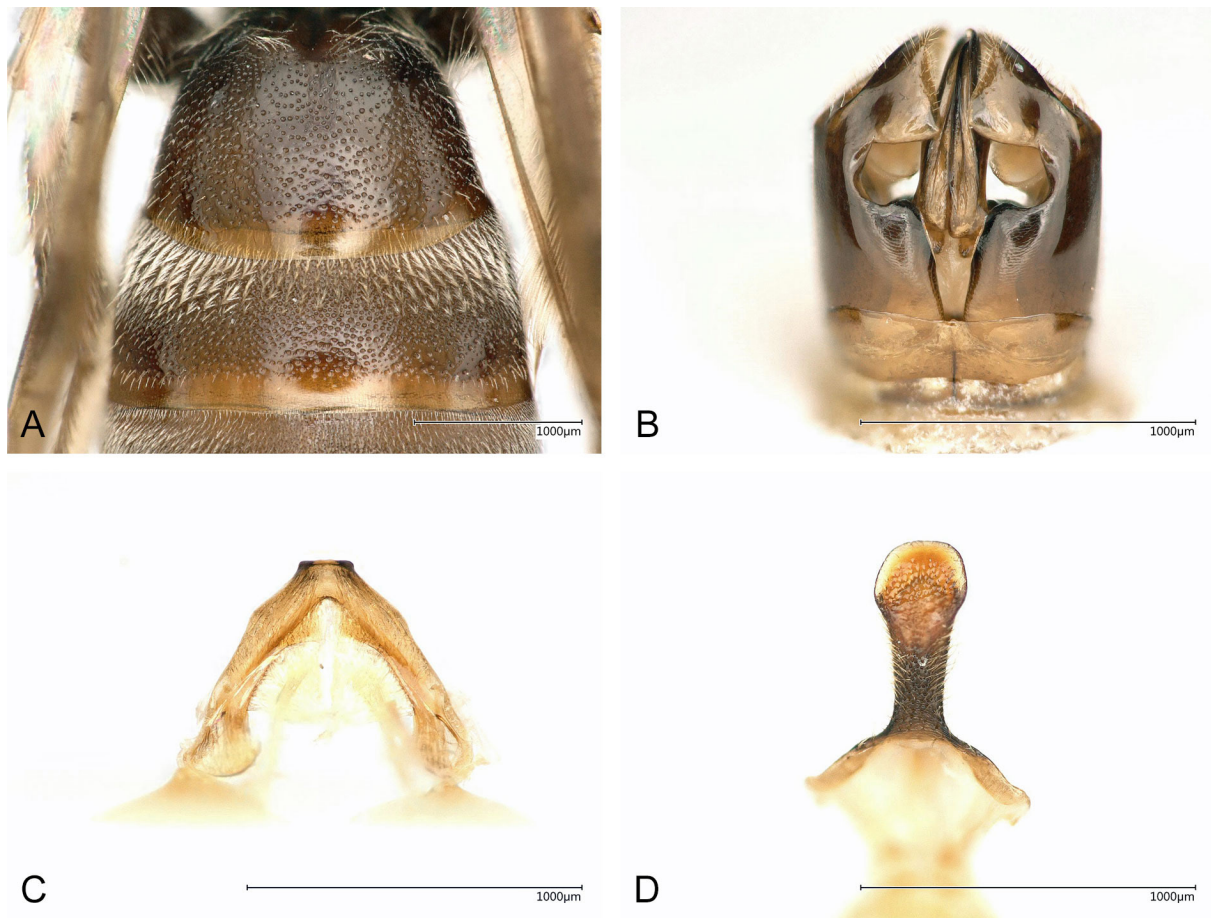


Fig. 78. *Scapter confusus* sp. nov., paratype, ♂. **A.** Terga 1–2 (dorsal view). **B.** Genitalia (dorsal view). **C.** Sternum 7. **D.** Sternum 8.

medially narrow, slightly curved. Antennal flagella ventrally yellow, dorsally black, shorter than compound eye (Fig. 77A).

MESOSOMA. Integument brownish-black. Scutum sparsely ($i = 1\text{--}2$ d) punctate; surface between punctation covered with fine punctation (Fig. 77B). Propodeum completely rugulose-areolate (Fig. 77C). Scutum, scutellum, metanotum, mesepisternum and propodeum sparsely covered with long, brownish to greyish, erect hair.

WINGS. Yellowish-brown, stigma and wing venation brownish (Fig. 77A).

LEGS. Integument brownish, fore and mid tibia with yellow spot. Vestiture greyish-white (Fig. 77A).

METASOMA. Integument brownish, marginal zone yellowish-brown. Disc of T1 without hair (Fig. 78A), T2–T4 basally greyish, dense, short, erect hair band, covering third of tergite (Fig. 77D). Posterior margins of T3–T4 at least laterally with single hair row of short, erect, greyish hair (Fig. 77D). T1 finely and densely punctate ($i < 1$ d) (Fig. 78A); T2–T4 basally denser ($i = 0.1$ d) and finer punctate than posteriorly ($i = 0.5$ d); medially denser than laterally; posterior margins of T1–T4 with single point row; surface between punctation smooth and shiny (Fig. 77D).

TERMINALIA. Genitalia (Fig. 78B), S7 (Fig. 78C) and terminal plate of S8 (Fig. 78D) as illustrated.

Distribution

This species is apparently restricted to the Succulent Karoo Biome of Namaqualand and the Kamiesberg Mts in the NW of South Africa.

Floral hosts

Unknown.

Seasonal activity

August–October.

Remarks

Eardley (1996) erroneously described the female of this species as the female of *S. armatipes* (Fries).

Species of unknown identity assigned to the S. nitidus species group

Nomina dubia

***Scapter rufescens* (Fries, 1912)**

Strandiella rufescens Fries, 1912: 184–185; holotype ♂ (type locality: Kapstadt, South Africa) (type depository unknown), not examined (lost?)

According to Kuhlmann (2021), *S. rufescens* belongs to the *S. nitidus* species group but has to be treated as a nomen dubium because type material could not be located and the description is not detailed enough for an identification. Potentially, this species represents the male of *S. sphecodoides*.

Nomina nuda

Eardley (1996) and Eardley & Urban (2010) mentioned several species names that are nomina nuda and treated them as synonyms of what was then *S. nitidus* and *S. ruficornis*, respectively.

Nomina nuda assigned to *S. nitidus* (sensu Eardley 1996)

Strandiella carinata Brauns nomen nudum: anonymous (1958): 31.

Polyglossa (*Strandiella*) *carinulata* Brauns, nomen nudum: Friese (1925): 514. According to Eardley (1996), *S. carinulata* is a typo, and *S. carinata* is meant instead. The species is interpreted as a synonym of *S. fuscipennis* (Friese, 1912).

Polyglossa colonialis Brauns, nomen nudum: anonymous (1958): 31.

Nomina nuda assigned to *S. ruficornis* (sensu Eardley 1996)

Polyglossa (*Strandiella*) *sanguinicollis* Brauns, nomen nudum: Friese (1925): 514.

Scapter sanguinicollis (Brauns), nomen nudum: Cockerell (1932b): 12.

Strandiella ruficornis var. *sanguinicollis* Cockerell, nomen nudum: anonymous (1958): 33.

Key for the identification of species in the *Scapter nitidus* species group

Females

Females of *S. convexoides* sp. nov., *S. perpunctatulus* sp. nov. and *S. glaberrimus* are unknown.

1. Pronotal lobe yellowish to white (Figs 2A, 3A); if pronotal lobe brownish, scutellum and metanotum at least partly orange (Figs 70C, 73C)..... 2
– Pronotal lobe brownish to black (Figs 24A, 36A, 57A); scutellum and metanotum dark brown to black..... 6
2. Scutum, scutellum and metanotum partly orange; propodeum completely rugulose-areolate; supraclypeal area delimited by sharp edges (Figs 70C, 73C)..... 3
– Scutum, scutellum and metanotum brownish or black; propodeum often partly carinate or coriaceous (Figs 8C–D, 58C–D, 64C–D); supraclypeal area elevated but not sharply delimited..... 4
3. Metanotum with an orange spot medially (Fig. 70C)..... *S. flavipunctatus* sp. nov.
– Metanotum completely brown (Fig. 73C) *S. ruficornis* (Cockerell, 1916)
4. Facial fovea narrow, at least 5 times as long as wide, convergent at vertex (Fig. 8B); posterior ocelli in line with posterior margin of compound eyes; discs of T2–T3 deeply punctate (Fig. 8E–F)
..... *S. flavostictus* Cockerell, 1934
– Facial fovea wide, about 3.5 times as long as wide (Fig. 3B), parallel at vertex; posterior ocelli in front of posterior margin of compound eyes; discs of T1–T3 shallowly punctate (Figs 2E–F, 21E–F)..... 5
5. Scutum sparsely punctate ($i = 1–2.5$ d) (Fig. 2C)..... *S. basutorum* (Cockerell, 1915)
– Scutum densely punctate ($i = 0.1$ d) (Fig. 5C)..... *S. flavipes* (Friese, 1925)
6. Surface of scutum between coarse punctation with fine punctation (Figs 39C, 78C)..... 7
– Scutum only with coarse punctation (Figs 27C, 54D, 61C)..... 8
7. Discs of T1–T3 with very fine and coarse punctation ($i = 1–2$ d) (Fig. 76E); facial fovea about 4 times as long as wide (Fig. 76B) *S. confusus* sp. nov.
– Discs of T1–T3 almost impunctate (Fig. 39E); facial fovea about 8 times as long as wide (Fig. 39B)..... *S. obtusus* sp. nov.

8. T3 anterior of premarginal line without row of punctures (Figs 21E, 33E); if T3 is completely punctate, punctation is regular and deep, single points are separated (Fig. 58E)..... 9
 – T3 anterior of premarginal line with a row of punctures (Figs 45D, 55C–D); if T3 is completely punctate, punctation is irregular, single points merge into each other..... 18
9. Supraclypeal area at upper margin straight to slightly convex (Figs 27B, 58B, 61B); propodeum shallowly carinate, at least partly smooth or coriaceous (Figs 27D, 58D, 61D) (It is assumed that *S. flavitarsis* belongs to this group based on the characteristics of similar species and *S. cf. flavitarsis*) 10
 – Supraclypeal area at upper margin distinctly emarginated and edges slightly extended (Figs 24B, 48B, 51B); propodeum usually more deeply carinate or areolate, sometimes with smooth parts laterally (Figs 24D, 48D, 51D)..... 16
10. Propodeum coriaceous on posterior half (Fig. 21D); scutum densely ($i = 0.5$ d) punctate (Fig. 21C); T2–T3 superficially and regularly ($i \sim 2$ d) punctate; scopa greyish to brownish, without black hair (Fig. 21A); supraclypeal area distinctly elevated, formed like pyramid (Fig. 21B).....
 *S. flavitarsis* Cockerell, 1936
 – Propodeum smooth and shiny on posterior half (Figs 27D, 48D, 58D); scutum sparsely punctate ($i > 0.5$ d) (Figs 27C, 48C, 58C); T2–T3 either less punctate or more deeply; scopa often partly black (Fig. 48A); supraclypeal area usually flat to slightly elevated (Figs 27B, 48B, 58B)..... 11
11. Discs of T1–T4 deeply and regularly punctate (Figs 58E, 61E, 64E); posterior ocelli in line with posterior margin of compound eyes..... 12
 – Discs of T1–T4 shallowly punctate (Figs 33E, 48E); posterior ocelli in front of posterior margin of compound eyes (Fig. 11D)..... 14
12. Disc of T2 basally denser ($i = 0.5$ – 1 d) punctate than apically ($i = 2$ – 3 d) (Fig. 58E). Scutum densely punctate, laterally denser ($i = 0.5$ d) than medially ($i = 1$ – 1.5 d) (Fig. 58C); propodeum smooth and shiny (Fig. 58D); supraclypeal area elevated, but not sharply delimited (Fig. 58B).....
 *S. divergens* (Friese, 1925)
 – Disc of T2 basally denser ($i = 1$ – 2 d) punctate than apically ($i = 3$ – 5 d) (Figs 61F, 64F); scutum completely irregularly ($i = 0.5$ – 2 d or 2 – 4 d) punctate (Figs 61C, 64F); propodeum matt (Figs 61D, 64F); supraclypeal area elevated and sharply delimited (Figs 61B, 64F) 13
13. Scutum finely and densely ($i = 0.5$ – 2 d) punctate (Fig. 61C)..... *S. montanus* sp. nov.
 – Scutum coarsely and sparsely ($i = 2$ – 4 d) punctate (Fig. 64C)..... *S. pallidicinctus* Cockerell, 1933
14. Prepygidial and pygidial fimbria and scopa partly black (Fig. 27A); propodeum basally with fine, v-shaped carinae, apically smooth and shiny (Fig. 27D); mesosoma shallowly punctate (Fig. 27E–F).....
 *S. imparilis* sp. nov.
 – Prepygidial and pygidial fimbria at most dark brown (Figs 12A, 33A); propodeum different (Figs 12B, 33D); metasoma almost impunctate (Figs 12C–D, 33E–F)..... 15
15. Propodeum basally with carinae (Fig. 33D); metasoma smooth but without oily-bluish shine; mesepisternum with coarse punctation mixed with fine punctation; surface between punctures matt (Fig. 33C, E–F).....
 *S. mpumalangensis* sp. nov.
 – Propodeum basally coriaceous (Fig. 12B); metasoma with oily-bluish shine; mesepisternum only with coarse punctation, surface between punctures smooth and shiny (Fig. 12C–D).....
 *S. caeruleus* sp. nov.

16. T1 anterior of premarginal line with a row of punctures, disc of T1 without punctuation, surface distinctly matt (Fig. 48F); propodeum deeply carinate (Fig. 48D) *S. semirufus* Cockerell, 1932
 – T1 with very fine and dispersed punctures ($i > 5$ d) (Figs 24F, 51F), surface slightly matt; propodeum shallowly carinate (Figs 24E, 51D) 17
17. Transitional line from disc to apical depression of T1–T4 curved (Fig. 51E–F); discs of T1–T4 shallowly punctate, punctures almost invisible (Fig. 51E–F) *S. sphecodoides* (Friese, 1912)
 – Transitional line from disc to apical depression of T1–T4 straight (Fig. 24F); disc of T1 shallowly punctate, discs of T2–T3 deeply punctate (Fig. 24F) *S. fuscipennis* (Friese, 1912)
- Females of the following species are very similar. Their identification can be difficult without reference specimen.
18. Discs of T1–T2 almost impunctate, sometimes punctuation hardly visible, T1 anterior of premarginal line without row of punctures (Fig. 30E–F); disc of T3 deeply punctate; metasoma matt (Fig. 30E); scutum regularly and densely ($i = 1–2$ d) punctate (Fig. 30 C); transitional line between anterior longitudinal carinae and posterior transverse carinae of propodeum curved (Fig. 30D) *S. littoralis* sp. nov.
 – Discs of T1–T3 with distinct punctuation, if punctuation shallowly, then anterior of premarginal line of T1 with row of punctures; transitional line between anterior longitudinal and posterior transverse carinae usually straight; other combination of characters (Figs 15C–F, 36C–F, 67C–F) 19
19. Discs of T1–T2 shallowly and dispersed punctate ($i > 4$ d), T1 anterior of premarginal line with row of punctures (Fig. 55C–D); propodeum finely carinate, laterally often smooth and shiny (Fig. 55A–B); scutum medially more densely punctate than laterally (Fig. 54D) *S. variabilis* sp. nov.
 – Discs of T1–T2 more deeply punctate; other combination of characters (Figs 15C–F, 36C–F, 67C–F) 20
20. Discs of T1–T3 finely and shallowly punctate; propodeum finely carinate (Fig. 36D) *S. nitidus* (Friese, 1909)
 – Discs of T1–T3 coarsely and deeply punctate; propodeum different (Figs 15C–F, 18C–F, 67C–F) ..
 21
21. Scutum and mesosoma regularly and densely ($i = 1–2$ d) punctate (Fig. 18C); disc of T3 basally often more densely ($i < 1$ d) punctate than apically ($i = 1–2$ d) (Fig. 18E–F); propodeum laterally often smooth and shiny, posterior carinae shallow (Fig. 18D) *S. crassipunctatus* sp. nov.
 – Scutum and mesosoma more irregular and/or sparser punctate; disc of T3 usually regularly punctate; propodeum different. If basal third of disc of T3 more densely punctate than posterior third, propodeum coarsely carinate; (Figs 15C–F, 44D, 45A–D, 67C–F) 22
22. Propodeum laterally carinate, medially (rugulose-)areolate (Fig. 67D); mesepisternum irregularly ($i = 0.5–3$ d) punctate; discs of T1–T4 regularly punctate ($i = 3–4$ d); T3 sometimes more densely ($i = 2–3$ d) punctate than T2 ($i = 3–4$ d) (Fig. 67E–F) *S. felicis* sp. nov.
 – Propodeum and punctuation of mesosoma different (Figs 15C–F, 44D, 45A–D) 23
23. Discs of T2–T3 regularly ($i = 2–3$ d) punctate (Fig. 15E–F); propodeum medially coarsely and irregularly areolate to longitudinally carinate, laterally carinate, posterior third transversely carinate (Fig. 15D); posterior ocelli little behind posterior margin of compound eyes ... *S. convexus* sp. nov.
 – Discs of T2–T3 irregularly (Fig. 45C–D) punctate; propodeum coarsely carinate (Fig. 45A–B); posterior ocelli in line with posterior margin of compound eyes *S. perpunctatus* Cockerell, 1933

Males

Males of *S. caeruleus* sp. nov., *S. fuscipennis* and *S. littoralis* sp. nov. are unknown.

1. Pronotal lobe yellow to white (Figs 3A, 7A, 10A)..... 2
 – Pronotal lobe brown to black (Figs 34A, 62A, 77A)..... 4
2. Facial fovea wide, about 3.5 times as long as wide; mesosoma covered with long hair (Fig. 3D); hind femur partly yellow (Fig. 3A)..... *S. basutorum* (Cockerell, 1915)
 – Facial fovea narrow, at least 5 times as long as wide; mesosoma covered with short hair (Figs 7D, 10D); hind femur completely dark brown to black (Figs 7A, 10A)..... 3
3. T3 anterior of premarginal line with narrow band of pilosity of long, whitish, erect hair (Fig. 6D); scutum very densely ($i = 0.1$ d) and finely punctate (Fig. 6B); apical plate of S8 round in shape, shaft distinctly shorter (Fig. 7D) *S. flavipes* (Friese, 1925)
 – T3 anterior of premarginal line with hair patches laterally of short, whitish, erect hair (Fig. 9D); scutum densely ($i = 0.5$ d) and coarsely punctate (Fig. 9B); apical plate of S8 truncate in shape, shaft distinctly longer (Fig. 10D) *S. flavostictus* Cockerell, 1934
4. Surface of scutum between coarse punctation with fine punctation (Fig. 77B); facial fovea about 3 times as long as wide; flagella of antennae shorter than the compound eye (Fig. 77A) *S. confusus* sp. nov.
 – Scutum only with coarse punctation (Figs 14B, 19B, 59B); facial fovea at least 6 times as long as wide; flagella of antennae longer than compound eye (Figs 14A, 19A, 59A) 5
5. Discs of T1–T3 sparsely punctate ($i > 1$ d), on T2–T4 sometimes more densely punctate on basal third than on posterior third (Figs 22D, 34D, 75D)..... 6
 – At least basal third of discs of T1–T3 densely ($i < 0.5$ d) punctate (Figs 37D, 49D, 56D)..... 10
6. Discs of T1–T3 shallowly and finely punctate (Figs 22D, 34D); legs and/or tarsi yellow (Figs 22A, 34A) 7
 – Discs of T1–T3 deeply punctate (Figs 61D, 65D, 74D); legs completely brown to black (Figs 61A, 65A, 74A) 8
7. Scutum finely and sparsely punctate ($i = 2-3$ d) (Fig. 34B); distal margin of S7 with deeper emargination (Fig. 35C); posterior ocelli behind posterior margin of compound eyes..... *S. mpumalangensis* sp. nov.
 – Scutum coarsely and densely ($i = 1-2$ d) punctate (Fig. 22B); distal margin of S7 with shallower emargination (Fig. 23C); posterior ocelli in line with the posterior margin of compound eyes..... *S. flavitarsis* Cockerell, 1936
8. Disc of T1 sparsely and regularly ($i = 3-4$ d) punctate (Fig. 75A); propodeum coarsely areolate (Fig. 74C); apicolateral parts of S7 slightly curved (Fig. 75C)*S. ruficornis* (Cockerell, 1916)
 – Disc of T1 densely punctate ($i = 1-2$ d) (Figs 62A, 66A); propodeum different (Figs 61C, 65C); apicolateral parts of S7 distinctly curved (Figs 62C, 66C)..... 9
9. Disc of T1 coarsely and densely punctate ($i = 1-2$ d), mixed fine punctures (Fig. 66A); T2 basally denser ($i \sim 1$ d) punctate than apically ($i \sim 2$ d) (Fig. 66A); propodeum finely areolate (Fig. 65C) ... *S. pallidicinctus* Cockerell, 1933
 – Discs of T1 and T2 finely and regularly ($i = 1-1.5$ d) punctate (Fig. 62A); propodeum coarsely areolate (Fig. 61C)..... *S. montanus* sp. nov.

10. Discs of T1–T3 evenly densely (at most $i = 0.5$ –1 d) punctate, T2–T3 anterior of premarginal line narrowly impunctate, width at most quarter of tergum (Figs 32D, 37D). If discs of T1–T4 without impunctate stripe (Fig. 59D), scutum also completely densely ($i = 0.1$ d) punctate (Fig. 59B).....11
 – Discs of T1–T3 unevenly punctate, basally more densely ($i < 1$ d) punctate than apically ($i > 1$ d), T1–T3 anterior of premarginal line impunctate, width at least quarter of tergum (Figs 31D, 47D, 56D) 13
11. Scutum completely densely ($i = 0.1$ d) punctate (Fig. 32B) (Fig. 19B); discs of T1–T3 completely punctate (Fig. 19D)..... *S. crassipunctatus* sp. nov.
 – Scutum coarsely and sparsely ($i = 0.5$ –1 d) punctate (Figs 37C, 60C); T1–T3 anterior of premarginal line sometimes narrowly impunctate (Figs 37D, 60D)..... 12
12. Discs of T1–T4 regularly and more sparsely ($i = 0.5$ –1 d) punctate (Fig. 59D); distal margin of S7 with broad emargination (Fig. 60C)*S. divergens* (Friese, 1925)
 – Discs of T1–T4 irregularly and more densely ($i < 0.3$ d) punctate (Fig. 37E); distal margin of S7 with almost no emargination (Fig. 38B, D)..... *S. nitidus* (Friese, 1909)
13. S7 apicolaterally with hairs (Figs 69C, 72C)..... 14
 – S7 apicolaterally without hairs (Figs 14C, 29C, 50C)..... 15
14. T2 on basal third of disc finely and densely punctate ($i = 0.5$ d) (Fig. 69A); scutum regularly ($i = 1$ –1.5 d) punctate (68B); fore femur and tibia mostly brownish (Fig. 68A)*S. felicis* sp. nov.
 – T2 on basal fifth of disc finely and more sparsely punctate ($i > 1$ d) (Fig. 72A); scutum irregularly ($i = 0.5$ –2.5 d) punctate (Fig. 71B); fore femur and tibia mostly yellowish (Fig. 68A).....
*S. flavipunctatus* sp. nov.
15. Terga distinctly convex in lateral view (Figs 14A, 16A)..... 16
 – Terga (particularly T1) slightly convex in lateral view or usually even (Figs 28A, 52A, 56A)..... 17
16. Discs of T1–T3 with dense ($i = 0.2$ d) punctuation that covers basal third of tergum (Fig. 16D); distal margin of S7 almost without emargination (Fig. 17C).....*S. convexus* sp. nov.
 – Discs of T1–T3 with dense ($i = 0.2$ d) punctuation that covers at least basal half of tergum (Fig. 13D); distal margin of S7 with emargination (Fig. 14C).....*S. convexoides* sp. nov.
17. Discs of T1–T3 superficially punctate (Figs 49D, 52D); disc of T1 finely punctate (Figs 50A, 53A); basomedially on T2–T3 hair bands of short and fine hair (Figs 49D, 52D)..... 18
 – Discs of T1–T3 deeply punctate (Figs 25D, 27D, 31D); disc of T1 coarsely punctate (Figs 26A, 28A, 32A); basomedially on T1–T3 hair bands of long, coarse, and dense hair (Figs 25D, 27D, 31D)..... 19
18. Disc of T2 basally densely ($i = 0.2$ d) punctate, punctuation covers at most basal half of tergum (Fig. 53A); propodeum apically carinate (Fig. 52C).....*S. sphecodoides* (Friese, 1912)
 – Disc of T2 basally densely ($i = 0.2$ d) punctate, punctuation covers at most basal three quarters of tergum (Fig. 50A); propodeum completely areolate (Fig. 49C).....*S. semirufus* Cockerell, 1932
19. Gonocoxites medial angular-shaped (Figs 27B, 32B, 47B); scutum completely densely ($i < 1$ d) and regularly punctate (Figs 26B, 31B, 46B); disc of T2 apicomediaally with at least 20 punctures (Figs 28A, 32A, 47A) 20
 – Gonocoxites medially curved (Figs 41B, 43B, 57B); scutum not completely densely ($i < 1$ d) punctate, punctuation irregular (Figs 40B, 42B, 56B); disc of T2 apicomediaally at most with 15 punctures (Figs 41A, 45A, 57A)..... 22
20. Flagella of antennae about twice as long as compound eye (Fig. 31A)*S. longicornis* sp. nov.

- Flagella of antennae about 1.4 × as long as compound eye (Figs 28A, 46A) 21
- 21. Disc of T2 basally densely ($i = 0.2 d$) punctate, punctation covers at most basal three quarters of tergum, getting sparser apically (Fig. 47A); posterior ocelli little behind posterior margin of compound eyes; distal margin of S7 with wide and deep emargination (Fig. 47C).....
..... *S. perpunctatus* Cockerell, 1933
- Disc of T2 basally densely ($i = 0.2 d$) punctate, punctation covers at most basal half of tergum (Fig. 28F); posterior ocelli much behind posterior margin of compound eyes (Fig. 28B); S7 with slight emargination (Fig. 29C)..... *S. imparilis* sp. nov.
- 22. T2 basally with dense punctation that covers more than basal half of tergum (Fig. 43A); discs of T2–T4 medially with irregular coarse punctures (Fig. 42D); propodeum completely and coarsely areolate (Fig. 42C).....*S. perpunctatulus* sp. nov.
- T2 basally with dense punctation that covers basal third to half of tergum (Figs 26A, 41A, 57A); discs of T2–T4 medially with regular coarse punctures (Figs 25D, 40D, 56D); propodeum not completely areolate or with other type of sculpture (Figs 25C, 40C, 56C)..... 23
- 23. Discs of T1–T3 finely punctate (Fig. 40C)..... *S. obtusus* sp. nov.
- Discs of T1–T3 coarsely punctate (Figs 25D, 56D)..... 24
- 24. Propodeum laterally carinate, medially rugulose-areolate (Fig. 56C).....*S. variabilis* sp. nov.
- Basal third of propodeum coarsely areolate, apical part finely areolate or coriaceous (Fig. 25C).....
.....*S. glaberrimus* (Friese, 1912)

Discussion

The original definition of the *Scapter nitidus* species group introduced by Eardley (1996) was modified and extended in the present study to provide a consistent systematic framework to accommodate and unite all morphologically similar and apparently closely related species in a single group. However, a phylogenetic study, which is currently underway, is required to rigorously test this assumption. Here, 15 new species of the bee genus *Scapter*, more specifically of the *S. nitidus* group, are described bringing the number of taxa in this group to 28 (for *Scapter* in total now 92 species). In addition, the previously unknown males of three species (*S. divergens*, *S. perpunctatus*, *S. semirufus*) are described for the first time. To facilitate their identification, that is often based on subtle but constant characters, all species of the taxonomically challenging *S. nitidus* group are redescribed in a standardized way accompanied by comprehensive illustrations and a key for identification.

However, some taxonomic problems are still pending. Because of its biogeographic significance (vast range extension), the most prominent case is the alleged record of a single female “*S. nitidus*” from Kenya (Davies *et al.* 2005). Based on the present study, it is highly unlikely that the specimen belongs to this species because the record is far outside the known range of *S. nitidus* that is endemic to western South Africa. Unfortunately, no reference specimen could be found at SANC, so the identity of the specimen remains unclear.

At various sites small numbers of female specimens of the *S. nitidus* group were collected late in early summer (October/November) that slightly differ from earlier active species. Their taxonomic status remains unclear as males are unknown and they might represent undescribed species. Records of these bees are summarized under “Remarks” with their supposed closest relatives to make their data available for future studies.

Seven species are only known from a single sex, three from females (*S. caeruleus* sp. nov., *S. fuscipennis*, *S. littoralis* sp. nov.) and four from males (*S. convexoides* sp. nov., *S. glaberrimus*, *S. longicornis* sp. nov., *S. perpunctatulus* sp. nov.) highlighting the importance of conducting further field research.

Although some species in the *S. nitidus* group can be locally abundant, very little is known about their biology. Due to taxonomic confusion, flower visitation records for the *S. nitidus* group provided by Eardley (1996) cannot be assigned to a certain species. However, only Asteraceae have been mentioned so far as potential host plants which was also confirmed by Kuhlmann & Eardley (2012) and by fieldwork since the late 1990s (documented in this study). Hence, it is likely that most if not all species of the *S. nitidus* group are specialised (oligolectic) flower visitors of Asteraceae but more fieldwork is required and in particular analyses of female scopal pollen loads to prove this.

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