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RESEARCH ARTICLE

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Five new species of *Pseudomezium* Pic (Coleoptera: Ptinidae: Ptininae), a genus endemic to South Africa

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Five new species of the South African endemic spider beetle genus *Pseudomezium* Pic are described from the Western Cape province. They are *Pseudomezium altimontanum, Pseudomezium glabrum, Pseudomezium periculum, Pseudomezium stenochasma* and *Pseudomezium swartbergense*. Illustrations of the external morphology and male genitalia of each species are provided, as well as a distribution map. An updated key to all described *Pseudomezium* species is provided. Four previously established species names in the genus *Pseudomezium* are corrected because of their Code-incompliance. These names after mandatory nomenclatural correction are *Pseudomezium brunneaurantiacum* Smiley & Philips for "*Pseudomezium brunneaurant*"; *Pseudomezium diteinum* Smiley & Philips for "*Pseudomezium diteinus*"; *Pseudomezium dolichotrichinum* Smiley & Philips for "*Pseudomezium dolichothrixus*"; and *Pseudomezium polyomorphum* Smiley & Philips for "*Pseudomezium polyomorphus*." The diversity of spider beetles in South Africa is also summarised.

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ZOOBANK
Pseudomezium altimontanum: urn:lsid:zoobank.org:act:6A77F8D8-B862-481E-A3EC-A58E6586598F
Pseudomezium glabrum: urn:lsid:zoobank.org:act:1D79680F-CA91-4160-B40E-ABA08E6A042E
Pseudomezium periculum: urn:lsid:zoobank.org:act:C6861956-4F0D-4571-A2BE-D25E4199F9BC
Pseudomezium stenochasma: urn:lsid:zoobank.org:act:99647BB4-9A80-4E4A-BEC5-2CDA0B99C2C0
Pseudomezium swartbergense: urn:lsid:zoobank.org:act:0B51DA1C-47A4-456A-9526-EABEF03D4790
Article: urn:lsid:zoobank.org:pub:5CA33E13-DF41-41DC-BD4E-ED03C33C6543

INTRODUCTION

The spider beetles, currently part of the family Ptinidae as the Ptininae, are small, mainly xerophilic beetles that are widely distributed globally and appear to be particularly diverse in sub-Saharan Africa. Worldwide, spider beetles constitute about 70 genera and more than 600 species. The southern part of Africa is one of the major biodiversity hotspots for spider beetles globally, possibly due to the area's geographic uniqueness and great environmental variability (Werger 1978), among other factors. South Africa alone has 22 described genera, 11 of which are endemic, and with still several more known but undescribed (Philips, unpubl.). The paucity of knowledge on this fauna may be due to a combination of factors such as their small size, cryptic form, and small populations with limited distributions for some species (e.g. Gearner et al. 2019), as well as too few taxonomists.

Eight new spider beetle genera have been described from South Africa since 2004. They are *Cryptopeniculus* Philips (in Philips & Foster 2004, presently monotypic, but two undescribed species known, Philips, unpubl.); *Hiekeptinus* Borowski (Borowski 2006a, monotypic); *Scaleptinus* Borowski (Borowski 2006b, four species); *Pocapharaptinus* Philips & Akotsen-Mensah, (in Akotsen-Mensah & Philips 2009, eight species); *Dignomorphus* Borowski (Borowski 2009a, monotypic); *Eutaphroptinus* Borowski (Borowski 2009b, monotypic after synonymy by Gearner et al. 2019b); *Carinomezium* Wood & Philips (Wood & Philips 2013, monotypic); and *Notaferrum* Gearner & Philips (Gearner & Philips 2021, monotypic).

The genus *Pseudomezium* was erected by Pic (1897) for his new species *Pseudomezium sulcithorax*, a synonym of *Ptinus coquerelii* Fairmaire, 1876 (Bellés 1985). Pic (1908) described a second *Pseudomezium* species, namely *Pseudomezium schultzei*. More than a century later, Smiley & Philips (2011) added another nine species to this genus, showing that species of *Pseudomezium* are widely distributed through the Western Cape province of South Africa. Towards the end of their study, Smiley & Philips (2011) discovered five additional undescribed *Pseudomezium* species, but these were left in abyeance. Herein, we describe and illustrate those new species and their distributions and update the identification key initially published by Smiley & Philips (2011). We also publish mandatory corrections to the spellings of four *Pseudomezium* specific epithets which Smiley & Philips (2011) created in conflict with the requirements of the *International Code of Zoological Nomenclature* (ICZN 1999).

MATERIALS and METHODS

This study was based upon the 34 specimens from the Ditsong National Museum of Natural History in Pretoria, South Africa. Photographs were taken with a JVC KYF75U camera mounted on either a Leica® MZ16 dissecting scope or an Olympus® BH-2 compound microscope, using the Syncroscopy® automontage system. Genitalia dissections were made after softening specimens in hot water, separating the abdomen from the rest of the body, soaking the abdomen in lactic acid to soften tissues, removing the genitalia and placing them in glycerin. They were then studied and imaged on a microscope slide and later for permanent storage placed in a genitalia vial that is on the same pin as the dissected specimen.

The geographic coordinates on Ditsong National museum of Natural History (TMSA) specimen labels before ca. 2020 are not decimal degrees, but a notation of degrees and minutes that very much looks like a decimal degrees format (R. Stals, pers. comm.). Recorded labels may contain alternative abbreviations and spellings for the same locality. Endrödy-Younga erroneously used the term "groundtrap" instead of pitfall trap; he often left these traps in the field for long

periods of time (R. Stals, pers. comm.). Body lengths were measured from the pronotal apex to the elytral apex, with the specimen held horizontally. Body size ranges were calculated by measuring all intact specimens to report the smallest and largest measurements. The length of the pronotum was measured from its anterior margin to the transverse cleft at its base.

All holotypes and most paratypes are deposited in the Ditsong National Museum of Natural History (TMSA), Pretoria, South Africa. Selected paratypes are deposited in the collection of the second author (TKPC), Western Kentucky University, Kentucky, USA. Holotypes and paratypes are respectively labelled with red and yellow type labels.

TAXONOMY

Genus *Pseudomezium* Pic, 1897: 102

Type species, by monotypy: *Pseudomezium sulcithorax* Pic, 1897: 102 (= *Ptinus coquerelii* Fairmaire, 1876: CCXXVI, synonymy by Bellés 1985: 69)

SPECIES DESCRIPTIONS

Pseudomezium altimontanum Apostolopoulos & Philips sp. n.

Figures 1, 6A, 7

Diagnosis

This species can be distinguished from other *Pseudomezium* species by the following combination of characters: long red-brown pronotal setae slightly lighter-coloured than the surrounding cuticle; pronounced white ovoid setal patches on the apical quarters of the elytra; and long, erect, orange-brown elytral interpuncture setae, the same length as the width of two intervals.

Size range: 1.9–2.3 mm

Description

Head. Cuticle dark red-brown; setae predominately orange-brown and occasionally silver on vertex and genae, some with bifid apices; frons medially with smooth patch, a few scattered setae located centrally, other surfaces rugose and densely covered with medium-sized punctures; interantennal ridge as wide as diameter of 2 ommatidia, with few orange-brown, recumbent setae; eye subcircular, maximum diameter approximately ¾ the length of scape; antennomeres 3–10 subequal in size, penultimate antennomere at widest point approximately equal to half its length, ultimate antennomere 1.5 times as long as penultimate, covered with silvery setae.

Pronotum. Cuticle dark red-brown; erect or suberect setae red-brown, slightly lighter-coloured than cuticle, fine, long; median lobes large, moderately expanding dorsally, median cleft in dorsal view approximately one half total length of pronotum, inner sides approximately 4–5 elytral punctures wide at narrowest point, parallel at middle, converging very slightly posteriorly, diverging very slightly anteriorly, posteriorly expanding out laterally obliquely to small lateral cleft; lateral spines present; three dorsally projecting basal spines sparsely covered with a thin layer of tan setae, setae absent from spaces between spines.

Elytra. Cuticle dark reddish brown to reddish black; interpuncture setae orange-brown, some with bifid apices, in length mostly subequal to width of two elytral intervals and longer than first metatarsomere; surface texture smooth; at second and third puncture rows at middle, punctures separated by a distance 3 times their length, separation of rows approximately equal to width of 5–6 punctures; basal maculation consisting of dense, interrupted bands of coarse, white, recumbent setae; maculation at apical quarter consisting of mostly An ovoid, sometimes slightly transverse, patch of coarse, dense, white, recumbent setae; narrow transverse band of similar setae near apex; elytral margin at apex slightly notched inwards.

Male genitalia. Very elongate, parameres very narrow, median lobe elongate and narrow (Figure 6A).

Etymology

The name is derived from the Latin adjectives "*altus*" [high] and "*montanus*" [mountainous], referring to the large elevations at which this species occurs. The specific epithet is an adjective.

Type material examined

South Africa, Western Cape.

Holotype. South Africa, Western Cape. "S. Afr. Cape, Cederb[er]g., Jeep track, 1550m, 32.23S-19.08E [32°23′S, 19°08′E] / 1.9.1981 [1981-09-01]; E-Y:1884, groundtraps, 63 days, leg. Endrödy-Younga /groundtrap with banana bait" (TMSA).

Paratypes (13). Same data as holotype (3 TMSA, 3 TKPC); same data as holotype except 1380 m, 32.24 S-19.10 E (1, TMSA); same data as holotype except 870 m, 32.29 S-19.16 E (1, TMSA); S. Afr., Cape, Cederbg., Jeep track, 870m, 32.29 S-19.16 E [32°29′S, 19°16′E] / 1.9.1981; E-Y:1884, groundtraps, 63 days, leg. Endrödy-Younga groundtrap with meat bait (2 TMSA, 2 TKPC); S. Afr. Cape, Cederbg., Jeep track, 1130m, 32.28S-19.14E / 7.11.1983, E-Y:2055, sifted, marsh shore, leg. Endrödy-Younga (1, TMSA); S. Afr. Cape, Cederbg., Jeep track, 1380m, 32.24S-19.10E / 1.9.1981; E-Y:1878, groundtraps, 63 days, leg. Endrödy-Younga (1 TMSA).

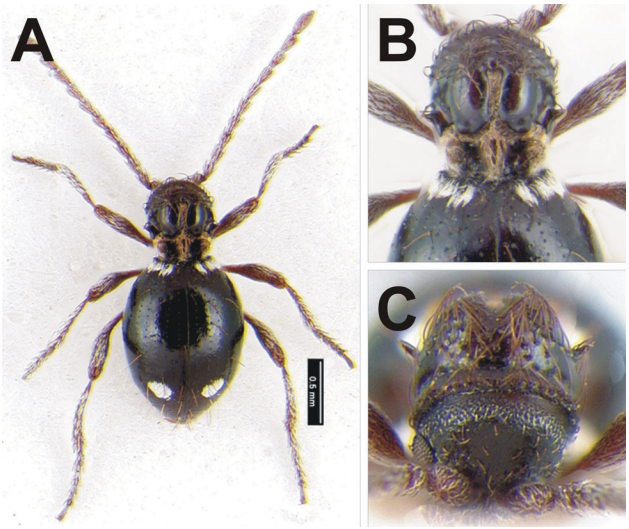

Figure 1. *Pseudomezium altimontanum*. **A**) Habitus, dorsal view (scale bar = 0.5 mm); **B**) Pronotum and elytral bases, dorsal view; **C**) Head and pronotum, frontal view

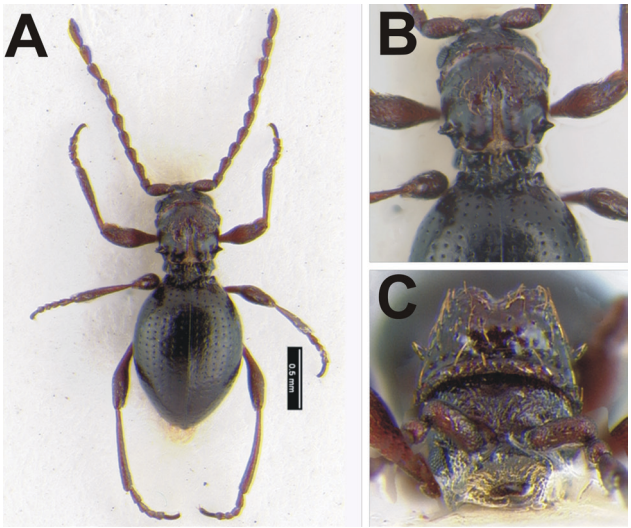

Figure 2. *Pseudomezium glabrum*. **A**) Habitus, dorsal view (scale bar = 0.5 mm); **B**) Pronotum and elytral bases, dorsal view; **C**) Head and pronotum, frontal view

Pseudomezium glabrum Apostolopoulos & Philips **sp. n.**

Figures 2, 6B, 7

Diagnosis

This species is easily distinguished from all other known *Pseudomezium* species known by the elytra lacking basal maculation and the apical maculation being barely visible; and the lack of elytral interpuncture setae. The three dorsally projecting spines on the pronotum are also notably asetose.

Size range. 2.3–2.4 mm

Description

Head. Dark reddish-brown; setae predominately orange-brown and occasionally silver laterally on vertex and genae, recumbent, some with bifid apices, vertex surface dorsally and laterally densely rugose, glabrous; interantennal ridge as wide as diameter of 3 ommatidia, setae largely absent; eyes subcircular, at maximum diameter approximately half the length of scape; antennomeres 3–10 subequal in size, penultimate antennomere at widest point approximately equal to half its length, ultimate antennomere 1.5 times as long as penultimate, covered with fine silver setae.

Pronotum. Dark red-brown to red-brown; setae orange-brown, fine, long; large median lobes projecting dorsally, median cleft in dorsal view approximately half the length of pronotum measured from anterior margin to transverse cleft at base, inner sides approximately 2.5 elytral punctures wide at narrowest point, inner sides approximately parallel for most of length except near anterior end, posteriorly expanding out laterally obliquely to small lateral cleft, visible from frontal view; lateral spines present; three dorsally projecting basal cleft spines, setae largely absent from lateral spines, and space between spines, much more dense on central spine.

Elytra. Dark reddish-brown approaching black; interpuncture setae absent; surface texture smooth to slightly rugose; at second and third puncture rows at middle, punctures separated by a distance approximately equal to 3 times their own length, separation of rows approximately equal to width of 4 punctures; maculation absent from elytral base, minimal on apical quarter, consisting of very few white, recumbent, coarse setae, nearly absent by lateral edges near apex, lacking notch at apex.

Male genitalia. Short in length, parameres moderate in width, median lobe moderately narrow to short (Figure 6B).

Etymology

This name is derived from the Latin adjective "*glaber*" meaning "bald," referring to the lack of interpuncture setae on the elytra. It is the only known *Pseudomezium* species lacking interpuncture setae and largely without white setal maculations on the elytra.

Type material examined

Holotype. South Africa, Western Cape. "S. Afr., S. W. Cape, Gansbaai, 10km NE, 34.31S-19.25E [34°31′S, 19°25′E] / 27.8.1983 [1983-08-27]; E-Y:1983, groundtraps, 63 days, leg. Endrödy-Younga/ groundtrap with faeces bait" (TMSA).

Paratypes (2). same data as holotype (2 TMSA, 1 TKPC); "S. Afr., S. W. Cape, Pearly Beach, 5km NE, 34.38S-19.33E [34°38′S, 19°33′E] / 27.8.1983 [1983-08-27]; E-Y:1984, groundtraps, 63 days, leg. Endrödy-Younga / groundtrap with faeces bait" (3 TMSA, 3 TKPC).

Pseudomezium periculum Apostolopoulos & Philips **sp. n.**

Figures 3, 6C, 7

Diagnosis

This species is the only known *Pseudomezium* to occur the vicinity of Danger Point in the Western Cape. It can be distinguished by the following combination of characteristics: a dense band of white setal maculation on the apical quarter of each elytron and short (approximately the length of the width of 1–1.5 intervals), suberect silver interpuncture setae. The median pronotal cleft shape is nearly identical to that of *P. noacanthus* Smiley & Philips, 2011, but the latter species lacks lateral pronotal spines.

Size range. 1.7–2.2 mm

Description

Head. Dark brown to reddish-black; setae predominately silvery and occasionally orange, some with cleft tips, recumbent; head surface above antennae on frons largely covered with small shallow impressions, with glabrous patch; interantennal ridge as wide as diameter of 1–2 ommatidia, with few silvery setae; eyes subcircular, at maximum diameter approximately half the length of scape; antennomeres 3–10 subequal in size, penultimate antennomere at widest point approximately equal to half its length, ultimate antennomere 1.25 times length of penultimate, covered with silvery setae.

Pronotum. Dark red-brown; setae light brown, fine, long, few with cleft tips; large median lobes slightly expanding dorsad; median cleft in dorsal view approximately half the total length

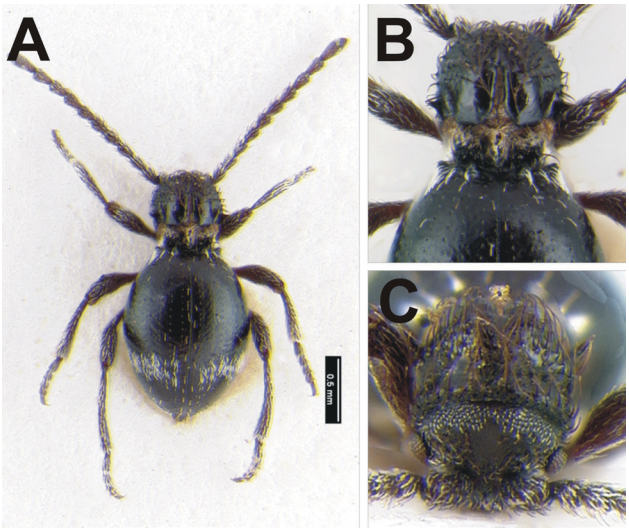

Figure 3. *Pseudomezium periculum*. **A**) Habitus, dorsal view (scale bar = 0.5 mm); **B**) Pronotum and elytral bases, dorsal view; **C**) Head and pronotum, frontal view.

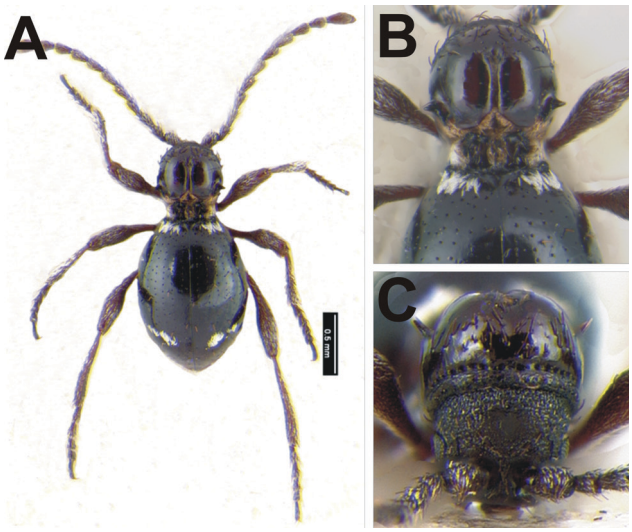

Figure 4. *Pseudomezium stenochasma*. **A**) Habitus, dorsal view (scale bar = 0.5 mm); **B**) Pronotum and elytral bases, dorsal view; **C**) Head and pronotum, frontal view

of pronotum measured from anterior margin to transverse cleft at base, inner sides approximately 1.5 elytral punctures wide at narrowest point, inner sides approximately parallel for two thirds length, slightly diverging posteriad for entire length, slightly expanding out laterally obliquely to small lateral cleft; lateral spines reduced but present; three dorsally projecting basal cleft spines; space between covered with a thin layer of either tan or whitish-yellow setae.

Elytra. Black to dark red-brown; interpuncture setae silver-yellow to tan, some with cleft tips, most approximately one interval long and most shorter than first metatarsomere; surface texture very slightly shagreened; at second and third puncture rows at middle, punctures separated by a distance approximately equal to 3 times their length, separation of rows approximately equal to width of 5–6 punctures; basal maculation consisting of dense relatively sparse patches of white, recumbent, coarse setae; maculation at apical quarter consisting of a thick transverse band with white, recumbent, coarse setae; margin slightly shallowly notched inwards at apex.

Male genitalia. Elongate, parameres narrow, median lobe moderately narrow and short (Figure 6C).

Etymology

The species name is the Latin noun "*periculum*" [danger], referring to Danger Point, a place with offshore rocks treacherous to shipping and close to the known distribution of this species. The specific epithet is a noun in apposition.

Type material examined

Holotype. South Africa, Western Cape. S. Afr., S.W. Cape, Gansbaai, 10 km NE, 34.31S-19.25E/ 27.8.1983; E-Y:1983, groundtraps, 63 days, leg. Endrödy-Younga/ groundtrap with faeces bait (deposited in the TMSA).

Paratypes (9). Same data as holotype (3); S. Afr., S.W. Cape, Pearly Beach, 5 km NE, 34.38S-19.33E/ 27.8.1983; E-Y:1984, groundtraps, 63 days, leg. Endrödy-Younga/ groundtrap with faeces bait (6).

Pseudomezium stenochasma Apostolopoulos & Philips **sp. n.**

Figures 4, 6D, 7

Diagnosis

This species can be distinguished from its sympatric congeners with the following combination of characteristics: a narrow median pronotal cleft that is no more than 3 elytral punctures wide; pronotum in anterior view notably rounded, with little dorsal cleft visible; interpuncture setae brown, short, the same length as the width of one interval; and interrupted transverse maculation on apical quarter of each elytron.

Size range: 1.9–2.3 mm

Description

Head. Dark red-brown; setae predominately orange-brown and occasionally silvery, some with cleft tips; relatively smooth glabrous patch centrally located on vertex, rest of surface rugose and densely covered with moderately sized punctures; interantennal ridge as wide as diameter of about 1.5 ommatidia, with a few brown, recumbent setae; eyes subcircular, at maximum diameter approximately two-thirds the length of scape; antennomeres 3–10 equal in size, penultimate antennomere at widest point approximately equal to half its length, ultimate antennomere 1.5 times as long as penultimate, covered with silvery setae.

Pronotum. Dark red-brown; setae brown, fine, long; large median lobes slightly expanding dorsad; median cleft long, shallow, in dorsal view approximately two thirds total length of pronotum measured from anterior margin to transverse cleft at base, inner sides narrowly separated, approximately 2 elytral punctures wide at narrowest point, parallel at middle to posterior end, very slightly diverging anteriad, expanding out laterally obliquely to small lateral cleft; lateral spines present; three dorsally projecting basal cleft spines sparsely covered with a sparse layer of brownish-yellow setae, setae largely absent from space between spines.

Elytra. Dark red-brown approaching black; interpuncture setae orange-brown or tan, lacking cleft tips, most approximately one interval in length, some approaching 2 intervals in length, and typically shorter than first metatarsomere; surface texture smooth; at second and third puncture rows at middle, punctures separated by a distance approximately equal to 3–4 times their length, separation of rows approximately equal to width of 5 punctures; basal maculation consisting of dense, elongate patches of coarse, white recumbent setae; maculation at apical quarter consisting of a thin, obliquely transverse patch of coarse white, recumbent setae, some with cleft tips; narrow transverse band of coarse, white, recumbent setae near apex; margin obscurely notched at apex.

Male genitalia. Moderate in length, parameres moderate in width, median lobe moderately broad and short (Figure 6D).

Etymology

The name is derived from the Greek words "*stenos*" [narrow] and "*chasma*" [abyss, chasm], referring to the narrow median pronotal cleft of this species. The specific epithet is a noun in apposition.

Type material examined

Holotype. South Africa, Western Cape. Z. A. 99, Sedar Berg [Cederberg], 500-1100m, Clanwilliam distr[ict]. C. P. [Cape Province] / Humus under bushes and large stones, IV.1962, N. Leleup (TMSA).

Paratype (1). same data as holotype (TKPC).

Pseudomezium swartbergense Apostolopoulos & Philips **sp. n.**

Figures 5, 6E, 7

Diagnosis

This species is only known to occur on the northern face of the Swartberg mountains in the Western Cape. It can be distinguished by the following combination of characteristics: dark brown to black cuticle; median lobes dorsally pronounced; interpuncture elytral setae length about the width of two to three intervals, orange-brown and the maculation at apical quarter of the elytra composed of a sparse, transversely oblique band of white setae.

Size range: 2.2–2.7 mm

Description

Head. Dark brown; setae predominately orange-brown and silvery, recumbent, long, some with cleft tips; small glabrous patch on vertex not visible on type specimens due to head position, rest of surface densely rugose; interantennal ridge as wide as diameter of 2–3 ommatidia, with few orange-brown setae present; eyes subcircular, at maximum diameter approximately equal to one half the length of scape; antennomeres 3–10 equal in size, penultimate antennomere at widest point approximately equal to half its length, ultimate antennomere 1.5 times as long as penultimate, covered with silvery setae.

Pronotum. Black; setae orange-brown, fine, long; median lobes large, pronounced, expanding dorsad, median cleft in dorsal view approximately half length of pronotum measured from anterior margin to transverse cleft at base, inner sides approximately parallel for half length, as wide as 4–5 punctures at the narrowest point, slightly diverging posteriad, slightly diverging anteriad near anterior end, expanding laterally obliquely to small lateral

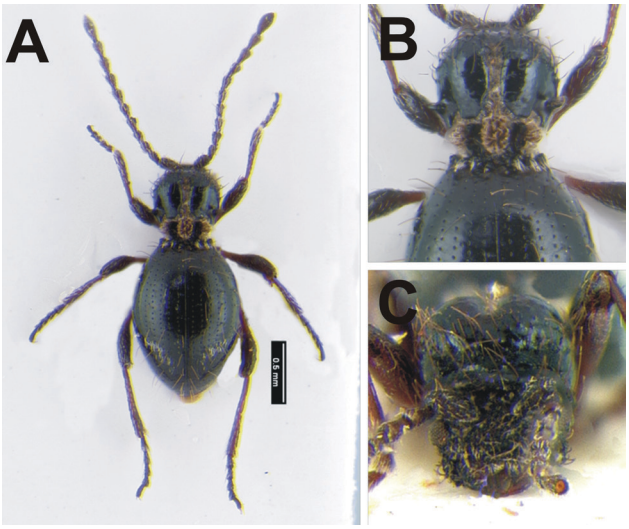

Figure 5. *Pseudomezium swartbergense.* **A**) Habitus, dorsal view (scale bar = 0.5 mm); **B**) Pronotum and elytral bases, dorsal view; **C**) Head and pronotum, frontal view

cleft; lateral spines present; three dorsally projecting basal cleft spines covered with a thick layer of yellow-brown setae, setae absent from spaces between spines.

Elytra. Black; interpuncture setae orange-brown, long, most approximately 2–3 intervals in length and longer than first metatarsomere; surface texture smooth; at second and third puncture rows at middle, punctures separated by a distance approximately twice their length, separation of rows approximately equal to width of 5–6 punctures; basal maculation consisting of dense patches of short, coarse, white, recumbent setae; maculation at apical quarter consisting of a transversely oblique band of sparse, coarse, white, recumbent setae; margin slightly notched at apex.

Male genitalia. Elongate, parameres narrow, median lobe narrow and short (Figure 6E).

Etymology

This species is named after the Swartberg mountain range, where it is known to occur. The specific epithet is an adjective.

Type material examined

Holotype. South Africa, Western Cape. "S. Afr., Cape Karroo [sic, Karoo]. Zwartskraal farm, 33.10S-22.32E [33°10′S, 22°32′E] / 5.9.1979 [1979-09-05]; E-Y:1639, groundtraps, 50 days, leg. R. Oosthuizen / groundtrap with banana bait" (TMSA).

Paratypes (4). same data as holotype (2 TMSA, 2 TKPC).

NOMENCLATURAL CORRECTIONS

Six of the nine specific epithets of *Pseudomezium* species proposed by Smiley & Philips (2011) are not in accordance with the appropriate latinisation recommended by the *International Code of Zoological Nomenclature* (the *Code*, ICZN 1999). Apart from gender agreement, the inappropriately formed linguistic structures cannot be corrected. Since these errors are not inadvertent, they are not incorrect original spellings in the sense of Articles 32.4 and 32.5 of the *Code*, and they stand as they are. On the other hand, adjectival species names that do not agree in gender with the genus name (Article 31.2) requires mandatory correction (Article 34.2).

Among the six problematic *Pseudomezium* species names, half are both inappropriately formed and gender-noncongruent. The inappropriate latinisations may not be corrected, but below we correct the gender endings of those names.

Smiley & Philips (2011) did not indicate whether their new species names are to be regarded as nouns or adjectives. To

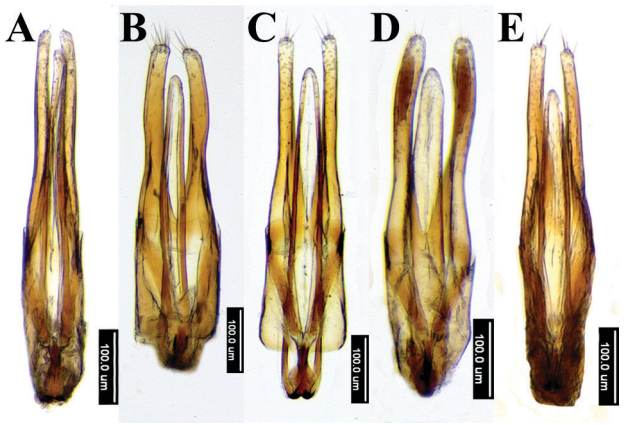

Figure 6. Male genitalia. **A**) *Pseudomezium altimontanum*; **B**) *Pseudomezium glabrum*; **C**) *Pseudomezium periculum*; **D**) *Pseudomezium stenochasma*; **E**) *Pseudomezium swartbergense*

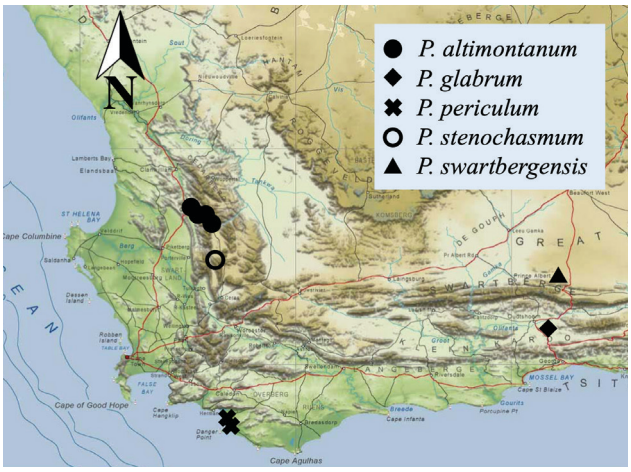

Figure 7. Distribution map of the five new *Pseudomezium* species described from the Western Cape province of South Africa. *Pseudomezium stenochasma* is indicated by an open circle since the exact location of capture is unknown

establish which *Pseudomezium* names are gender-noncongruent, a necessary step was to distinguish between adjectival or participial species names and those that act as nouns, a decision which was in a number of cases not clear cut. The etymologies provided by the species authors were hence employed as contingent evidence.

Article 31.2.3 (ICZN 1999) rules that if a species name's final component word (throughout applicable here) is not a Latin or latinised word, it is to be treated as indeclinable, hence remaining unchanged. This would be a preferred option vis-à-vis nomenclatural stability, but could not be applied to all of these specific epithets since the authors throughout either stated that their stem words are Latin, or implied that the components of their compound names are latinised "from the Greek" [sic]. Even if Smiley & Philips's (2011) species names were irregularly formed, they still allow the application of the *Code*'s Article 26, which mandates the assumption of Greek or Latin in scientific names.

The grammatical gender of the genus name *Pseudomezium* is neuter. In our view, the specific epithets in the following four combinations act as adjectives, but were not originally proposed with corresponding neuter gender. In accordance with Article 34.2 (ICZN 1999), these four names are here corrected as follows:

- *Pseudomezium brunneaurant*. Original etymology: "from the Latin words *'brunne'* meaning brown, and *'auranti'* meaning orange." Note that the latter component is interpreted as a colour, not as a fruit. Corrected name: *Pseudomezium brunneaurantiacum*.

- *Pseudomezium diteinus*. Original etymology: "from the Greek words *'di'* meaning two, and *'tein'* meaning extended or stretched." Corrected name: *Pseudomezium diteinum*.
- *Pseudomezium dolichothrixus*. Original etymology: "from the Greek words *'dolich'* meaning long, and *'thrix'* meaning hair." Corrected name: *Pseudomezium dolichotrichinum*.
- *Pseudomezium polyomorphus*. Original etymology: "from the Greek words *'poly'* meaning many, and *'morph'* meaning form." Corrected name: *Pseudomezium polyomorphum*.

The corrected names retain their original authorship, date, and page numbers (Article 19.2 of the *Code*, among others).

Smiley & Philips's (2011) species names *P. aspricorpus* and *P. noacanthus* should not be changed, since we consider the specific epithets in these combinations to be nouns in apposition to the genus name (Articles 31.2.1 and 34.2.1, ICZN 1999). Selection of this option was encouraged by our wish to maximise nomenclatural stability. The remaining three species names coined by Smiley & Philips (2011), *P. brucei*, *P. darae* and *P. effieae*, all three patronyms, pose no grammatical or Code-compliance problems.

KEY TO THE DESCRIBED SPECIES OF *PSEUDOMEZIUM*

When identifying species of *Pseudomezium*, one should be aware of broken or abraded setae that may hamper identification. The lengths of the erect elytral setae between the puncture rows are generally somewhat variable, but most will be within the range given in the key and descriptions. Male genitalia and the collecting locality will assist identifications.

1. Mediolateral protonal spine at middle present, projecting outwards on each side 2
1′. Mediolateral protonal spines absent ..... *P. noacanthus* Smiley & Philips

2. Interpuncture setae and elytral setal maculations present at elytral base and near elytral apex..... 3
2′. Interpuncture setae and elytral setal maculation absent at elytral base and sparse near elytral apex ..... *P. glabrum* sp. n.

3. Elytral setal maculations present, composed of white recumbent setae near elytral apex; cuticle black to brown; median pronotal cleft parallel-sided to moderately expanded (~60°) near pronotal midlength; South Africa 4
3′. Elytral setal maculations absent; cuticle brown; median pronotal cleft greatly expanded (~90°) near pronotal midlength; Namibia .....*P. brunneaurant* Smiley & Philips

4. Maculations near elytral apex consisting of two relatively small, approximately rounded or slightly ovoid patches of recumbent white setae (e.g. Figure 1); erect elytral setae variable in length 5
4′. Maculations near elytral apex typically consisting of two broadly transverse or slightly oblique bands of white recumbent setae, although bands sometimes interrupted in one or more places (e.g. Figures 3, 5); erect elytral setae generally longer than length of first metatarsomere..... 7

5. Patches of white recumbent setae near elytral apex typically rounded; elytral setae relatively long, up to twice as long as first metatarsomere..... 6
5′. Patches of white recumbent setae near elytral apex typically elongate and obliquely oriented; elytral setae relatively short, typically no longer than length of first metatarsomere ..... *P. diteinum* Smiley & Philips

6. Median pronotal cleft distinctly expanded anteriad, anteriorly approximately twice as wide as its narrowest part; body anteriorly often distinctly reddish; male genitalia overall relatively broad, parameres parallel towards apex (see Figure 23 in Smiley & Philips 2011). Known only from the Northern Cape province..... *P. schultzei* Pic
6′. Median pronotal cleft slightly expanded anteriad, but anteriorly only slightly wider than its narrowest part; body black to reddish black; male genitalia overall relatively narrow, parameres slightly expanded towards apex (Figure 6A). Known only from the Cederberg mountains, Western Cape province ..... *P. altimontanum* sp. n.

7. Pronotal lobes in profile distinctly pronounced dorsally, their peaks extending to or even slightly surpassing the plane of the highest point of the elytra with the ventral surface held horizontally. 8
7′ Pronotal lobes in profile not pronounced dorsally, their peaks usually slightly to well below the plane of the highest point of the elytra with the ventral surface held horizontally..... 10

8. Band of white recumbent setae near elytral apex usually positioned transversely or nearly transversely to the longitudinal body axis; parameres broad and apically spatulate..... *P. coquerelii* (Fairmaire)
8′. Band of white recumbent setae near elytral apex positioned obliquely to the longitudinal axis of body; parameres narrow and parallel-sided, except slightly expanded apically..... 9

9. Male genitalia with median lobe short relative to paramere length, overall moderately elongate (length-width ratio 7.5:2) (Figure 33, Smiley & Philips 2011). North and west of the Cederberg mountains, Western Cape province..... *P. polyomorphum* Smiley & Philips
9′. Male genitalia with median lobe long relative to paramere length, overall more greatly elongate (length-width ratio 9:2) (Figure 6). Known from only one locality north of the Swartberg mountains, Western Cape province. ..... *P. swartbergense* sp. n.

10. Pronotal median cleft gradually narrowing from its posterior end anteriad. Southern Cape coast 11
10′. Pronotal median cleft expanding from about its middle anteriad. Western part of South Africa from Northern Cape province to Cape Peninsula..... 12

11. Elytra black, surface smooth and shiny. Known from west of Cape Agulhas, Western Cape province..... *P. effieae* Smiley & Philips
11′. Elytra reddish black, surface micro-alutaceous, not smooth or shiny. Known from Gansbaai area, Western Cape province..... *P. periculum* sp. n.

12. Erect elytral setae short, typically about as long as the width between two puncture rows at midlength of elytra 13
12′. Erect elytral setae long, typically longer than the width between two puncture rows at midlength of elytra 15

13. Surfaces of head rugose throughout; anterior part of pronotum with a similarly rough or an irregular surface around setose tubercles; elytral surfaces between punctures often finely rugose .....*P. aspricorpus* Smiley & Philips
13′. Head vertex at middle distinctly smoother than surrounding surface; anterior part of pronotum smooth around setose tubercles; elytral surfaces between punctures typically very smooth.....14

14. Maculation near elytral apex consisting of a narrow, transverse band of scattered, recumbent white setae, sometimes discontinuous; elytra dark brown to black. St. Helena Bay area, Western Cape province ..... *P. brucei* Smiley & Philips

14′. Maculation near elytral apex consisting of interrupted patches of dense, recumbent white setae; elytra reddish brown, Cederberg area, Western Cape province..... ..... *P. stenochasma* sp. n.

15. Vertex of head usually distinctly smoother medially than laterally; pronotal setae dark brown. Western Cape province..... *P. dolichotrichinum* Smiley & Philips

15′. Vertex of head rugose and similar in texture throughout; pronotal setae reddish brown. Richtersveld, Northern Cape province..... *P. darae* Smiley & Philips

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