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# A new *Meligethes* of the *M. pubescens* species-group from South Africa (Coleoptera, Nitidulidae, Meligethinae)

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**Abstract.** A new South African species (from Western Cape Province) of the recently revised *Meligethes pubescens* species-group is described as *M. colonnellii* n. sp., an updated key to the identification of the known species of the group is provided, and new data are added on the geographic distribution of the recently described *M. hermanniae* Audisio, Kirk-Spriggs & Kirejtshuk.

**Keywords.** Coleoptera, Nitidulidae, *Meligethes*, new species, South Africa, *Hermannia*, Sterculiaceae.

## 1. INTRODUCTION

Recent years have seen the description of a number of new taxa within the *Meligethes pubescens* species-group from Southern Africa (SPORNRAFT & AUDISIO 1995; KIREJTSHUK 1996; AUDISIO et al. 1998), and a revision of the group was recently published (AUDISIO et al. 1998).

This paper mainly deals with the description of a new South African species more closely related to *Meligethes confertus* Reitter, 1872, and to *M. aurivestis* Audisio, Kirk-Spriggs & Kirejtshuk, 1998, and includes an updated key to the identification of the known species of the group; both form part of a coming revision of the Southern African species of the subfamily Meligethinae as a whole (P. AUDISIO, in preparation).

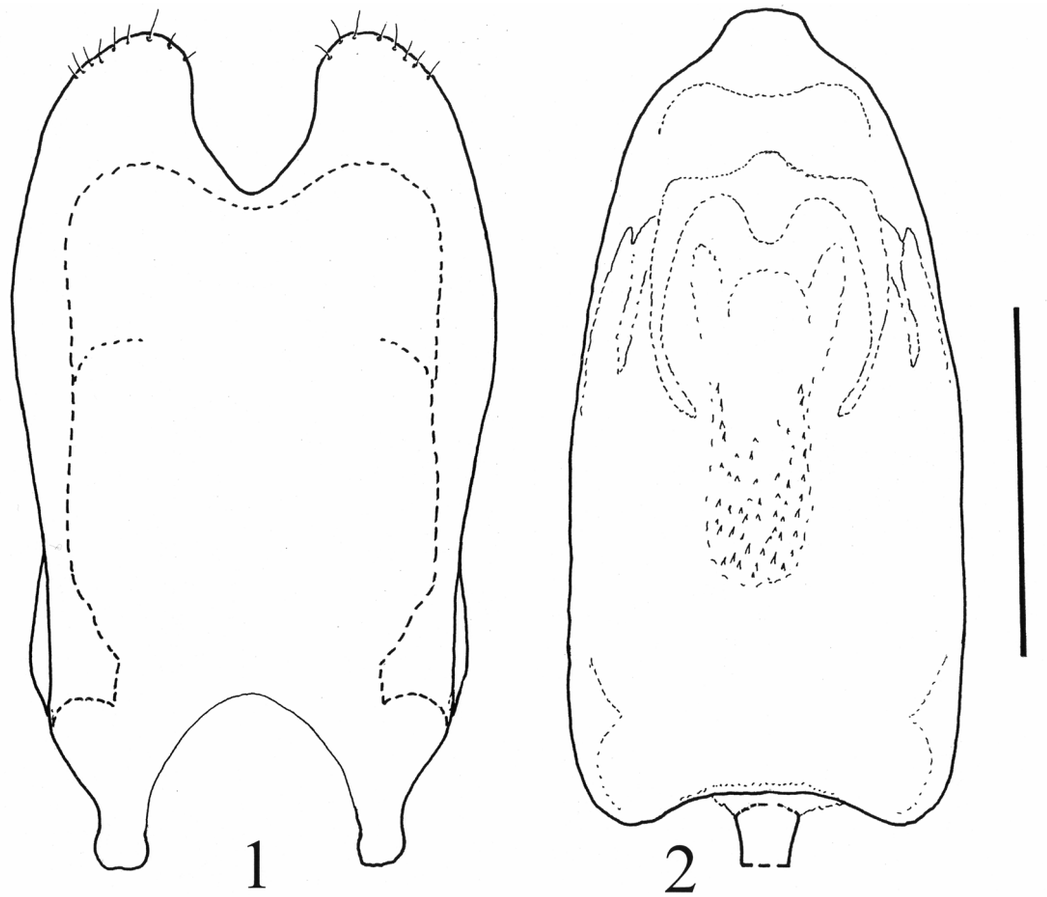
## 2. MATERIALS

The new species described herein was collected during two recent fieldtrips to South Africa (April–May, and October, 2005) organised by the Dept. of Animal and Human Biology of the Rome University "La Sapienza"; the studied material is mostly preserved in P.Audisio's collection, Rome (CAR), in the Albany Museum, Grahamstown (AMG) and in the Transvaal Museum, Pretoria (TMSA). Other comparative material has been borrowed for study from several South African and Namibian institutions, including the National Collection of Insects, Plant Protection Institute, Pretoria (SANC), the South African Museum, Cape Town (SAMC), the National Museum, Bloemfontein (NMBS), the Department of Entomology and Nematology, University of Stellenbosch (USSA), and the National Museum of Namibia, Windhoek (NMNW); much other (mostly unnamed) material, and the type material of all previously described species have kindly been made available for study by various European institutions, such as the Natural History Museum, London (BMNH), the Muséum National d'Histoire Naturelle, Paris (MHNP), the Zoological Museum of the University, Lund (MZLU), the Museum für Naturkunde, Humboldt University, Berlin (ZMHB), the Museum Alexander Koenig, Bonn (MAKB), the Zoological Museum of the Russian Academy of Sciences, St. Petersburg (ZMAS), the Zoologischen Staatsammlung München (ZSSM) and the Museo Civico di Zoologia, Rome (MCZR).

## 3. DESCRIPTION OF THE NEW SPECIES

***Meligethes colonnellii* n. sp**. (Figs 1–3)

**Diagnosis**. Medium-sized (length 2.8–2.9 mm), black species with orange brown legs and antennae (outer edges of all tibiae, and antennal scapes and clubs, slightly darker), with tarsal claws strongly toothed. In general appearance (Fig. 3) similar to *M. aurivestis* Audisio, Kirk-Spriggs & Kirejtshuk, 1998 (AUDISIO et al. 1998), but slightly narrower and less convex, without distinct metallic coppery reflections on pronotum and elytra, with finer and shorter silvery-golden dorsal pubescence, and with amply distinct male genitalia. *M. confertus* Reitter, 1872, recently re-described by Spornraft & Kirejtshuk (1993 ) and by AUDISIO et al. (1998), shows less developed elytral transverse strigosity, wider and more convex body shape, and again amply distinct male genitalia. *M. translatus* Grouvelle, 1913 (REITTER 1872; GROUVELLE 1913), recently redescribed by SPORNRAFT & KIREJTSHUK (1993 ) and by AUDISIO et al. (1998), shows less developed elytral trans-




**Figs 1–2.** Tegmen and aedeagus (dorsal aspect) of *Meligethes colonnellii* n.sp. (male holotype from Western Cape Province, 20 km S Oudtshoorn). Scale bar = 0.20 mm.

verse strigosity, longer golden pubescence, and again amply distinct male genitalia. *M. pubescens* Reitter, 1872 eventually shows strongly modified posterior tibiae in males, much less developed elytral transverse strigosity, and different male genitalia.

**Description**. Male. Length 2.76 mm; breadth (at widest point of elytra) 1.30 mm. Moderately elongate, oval, convex (Fig. 3); black, with moderately developed silver-golden pubescence. Legs orange brown, except for dorsal outer edges of tibiae, which are slightly darker, nut-brown. Antennae orange brown, with scape and club slightly darker.

Head with dorsal punctures as large as eye facets, rather strongly impressed, separated by less than one diameter, surface between them smooth; front margin of clypeus completely and very distinctly bordered, widely and shallowly emarginate with obtusely rounded side angles. Fronto-geneal grooves very distinct and complete. Antennae of normal size (Fig. 3), third antennal segment slender, as long as second one; antennal club medium-sized.

Pronotum 1.54 times as wide as long (Fig. 3), broadest at posterior third, narrower anteriorly; sides very narrowly bordered, not explanate; posterior angles obtuse but distinct. Posterior base not sinuate on either side of scutellum; punctures as on head, surface between them smooth and shining.

Scutellum medium-sized, finely and sparsely punctate in posterior half; surface showing a faint trace of microscopic reticulation. Elytra 1.08 times as long as wide, broadest at basal second fifth, scarcely wider than pronotum (1.07 times); shoulders feebly raised, humeral striae almost absent; elytral punctures as on head and pronotum, but slightly longer and closer, each joined to its lateral neighbours by rather strongly raised aciculation, so giving rise to a markedly distinct transrugosity, surface between them smooth.

Ventral surface black, with fine short pubescence. Prosternal antennal furrows strongly marked. Prosternal process rather long and narrow in the middle (here scarcely as wide as antennal club), with much wider and flatly rounded

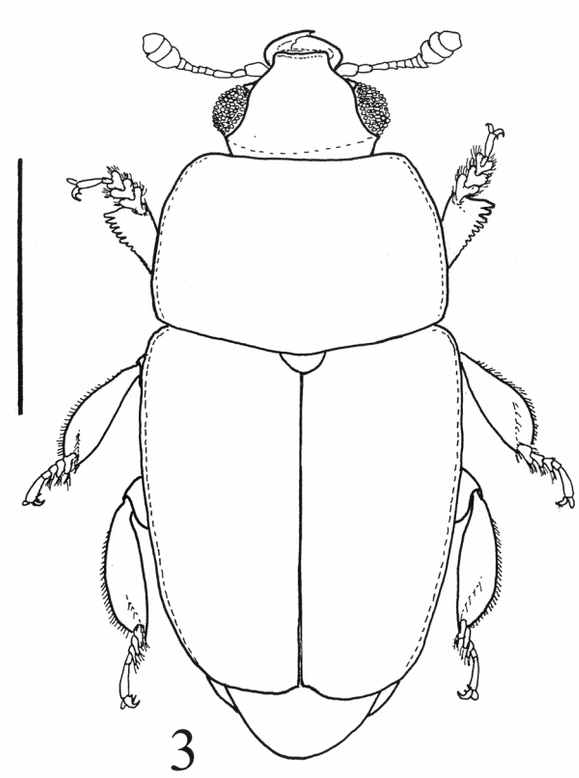



**Fig. 3.** Habitus (dorsal aspect) of *Meligethes colonnellii* n.sp. (male holotype from Western Cape Province, 20 km S Oudtshoorn). Scale bar = 1 mm.

apex, 1.4 times as wide as antennal club; punctures nearly as on head; surface smooth and shining. Mesosternum with hind edge straight. Metasternum rather flat (punctures and the spaces between as on head and pronotum), with a couple of small and barely distinct tubercles at its anterior two-fifths, and with a shallow longitudinal impression on its posterior two-thirds, slightly widened posteriorly. The caudal marginal line of the hind coxal cavity follows closely its posterior edge, turning back just before its outer end. Last visible abdominal sternite with its hind edge slightly and widely curving forward medially, here with a flattened, scarcely raised, but markedly shining tubercle.

Anterior tibiae (Fig. 3) shaped nearly as in *M. translatus* (Fig. 10 in AUDISIO et al. 1998), with their outer edges finely crenulate from basal third, then with a subapical group of 4–5 progressively larger and slightly sharper teeth, separated by one smaller tooth from the narrow subtarsal plate, but the distal teeth are of reduced size and less sharp, if compared with those of *M. translatus*, *M. aurivestis*, and *M. confertus*; anterior tarsi as wide as antennal club; intermediate and posterior tibiae with their inner edges narrowly bordered; posterior tibiae relatively narrow, their inner edges not sinuate (Fig. 3); all tarsal claws strongly toothed.

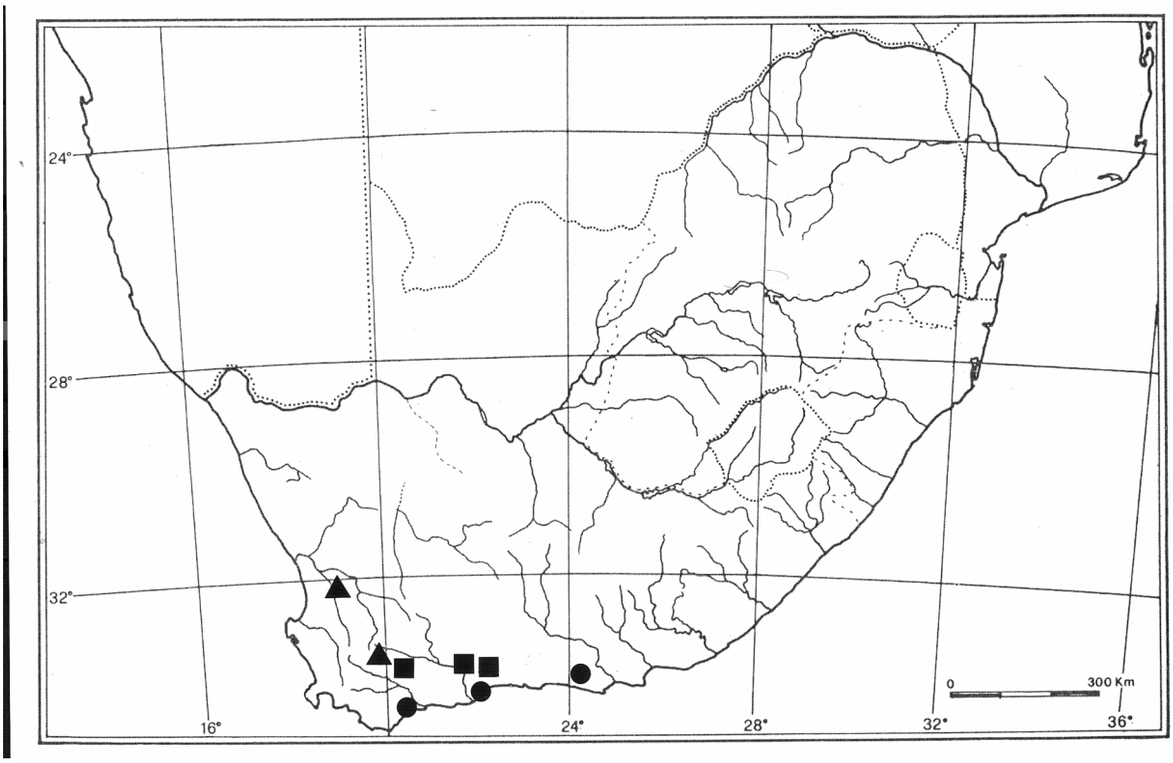
Genitalia. Tegmen (Fig. 1) with apex of paramera obtusely rounded, scarcely pubescent, and with median excision relatively small, U-shaped; aedeagus elongate (Fig. 2), strongly narrowed from distal sixth, with narrowly truncate apex.

**Female**. Metasternum rather flat (punctures as in male holotype), without tubercles at its anterior two-fifths, and without longitudinal impression on its posterior two-thirds. Ovipositor shaped as in *M. confertus* Reitter and *M. translatus* Grouvelle (Fig 46 in Audisio *et al.*, 1998), moderately sclerotized.

**Type material:**- Holotype, ♂, Republic of South Africa: Western Cape Province, Little Karoo, 20 Km S Oudtshoorn (R328), road between Oudtshoorn and the Robinson Pass, 400 m, 33°.49'.55"S, 22°.07'.13"E, 6.v.2005, P. Audisio leg., on *Asparagus* sp. (Liliaceae) (AMG). Paratypes, 1 ♂, 1 female; South Africa: Western Cape, Swartberg Mts, Seweweekspoort, NW Calitzdorp, 700 m, 33°.25'.16"S, 21°.23'.50"E, 14.x.2005, P. Audisio, M. Biondi & A. De Biase leg., by sweeping on riverine vegetation, 1 ♂ (CAR); Western Cape Province, Langeberg Mts, road between Ashton and Montagu, Kogmanskloof, 180 m, 33°.49'.26"S, 20°.05'.25"E, 9.x.2005, P. Audisio, M. Biondi & A. De Biase leg., by sweeping on riverine vegetation, 1 female (CAR).

**Comparative notes**. *M. colonnellii* n. sp. is rather closely related to *M. aurivestis* Audisio, Kirk-Spriggs & Kirejtshuk, *M. confertus* Reitter and *M. translatus* Grouvelle, from which it differs by the characters given in the diagnosis and in the following keys. Easily recognizable also from other related members of the genus, such as *M. pubescens* Reitter and *M. hermanniae* Audisio, Kirk-Spriggs & Kirejtshuk, by the not sinuate inner edges of the posterior tibiae, and the strongly differing male genitalia.

**Biological notes**. The type specimen of the new species was collected in late Autumn (May) by sweeping in disturbed fynbos from flowers of an unidentified *Asparagus* sp. (Liliaceae) with white flowers, which is clearly not its true larval host-plant. The above listed paratypes have been both collected by sweeping on riverine herbaceous vegetation. Larvae very likely develop in late Summer/Autumn on certain hygrophilous species of the genus *Hermannia* (Sterculiaceae; VERDOORN 1980; ARNOLD & DE WET 1993), given that all its closely related species are associated with members of this botanical genus (AUDISIO et al. 1998). The holotype and the two paratypes were collected in company of several specimens of the common and widespread *Meligethes pubescens* Reitter.




**Figs 4.** Known geographic distribution of *Meligethes colonnellii* n.sp. (squares), *M. hermanniae* Audisio, Kirk-Spriggs & Kirejtshuk (circles), and of *M. aurivestis* Audisio, Kirk-Spriggs & Kirejtshuk (triangles).

**Geographic distribution**. So far only known from the above mentioned localities in the Western Cape Province (Fig. 4); this species is probably more widely distributed throughout the mountain areas bordering the Little Karoo and the south eastern edge of the Great Karoo.

**Etymology**. This species is so named from our colleague and friend Enzo Colonnelli (Rome), renowned specialist in Curculionidae Ceutorhynchinae, in whose company the first known specimen of the new species was collected by the senior author.

## 4. ADDITIONAL NOTES

***Meligethes hermanniae*** Audisio, Kirk-Spriggs & Kirejtshuk, 1998

**Examined material**: South Africa, Eastern Cape Province, 10 km W Kareedouw, 600 m, 33°.55'.41"S, 24°.14'.32"E, 5.v.2005, E. Colonnelli leg., on flowering bush of *Protea* sp. (Proteaceae), 1 ♂ (CAR).

This species, at larval stage associated with *Hermannia salviifolia* L. fil. (Sterculiaceae), was known so far only from two coastal localities of the eastern areas of the Western Cape Province (AUDISIO et al. 1998; fig. 4). The above reported new locality significatively extends eastwards and inwards the geographic range of this species. The mentioned male specimen from Kareedouw area is peculiarly large, reaching 3.0 mm in length.

## 5. UPDATED KEY TO THE SPECIES OF THE *MELIGETHES PUBESCENS* SPECIES-GROUP

Refer to Figs 1–71 of the AUDISIO et al. (1998) revision (indicated in *italic*) and to Figs 1–5 of the present paper (indicated in **bold**).

1 (2) Fronto-geneal and periocular grooves on head absent (*as in fig. 53*) . . . . . .3

2 (1) Fronto-geneal and periocular grooves on head distinct (*as in fig. 54*) . . . . . .9

3 (4) Tarsal claws with a well-formed, large and sharp tooth at base (*as in Fig. 55*). Male genitalia with aedeagus peculiarly long and narrow (*Figs 30–32*); ovipositor peculiarly small and unsclerotized (*Fig. 51*). Anterior tibiae with minute and irregular teeth on their distal outer edges (*Fig. 16*). Eastern Cape Province, Natal, southern Mpumalanga (= Eastern Transvaal) (*Fig. 63*) . . . . . .**15. *marshalli*** Grouvelle

4 (3) Tarsal claws with a virtually undeveloped tooth at base (*as in fig. 57*), or with a blunt tooth at base (*as in fig. 56*). Male genitalia with aedeagus considerably less elongate (*Figs 43–44, 68–71*); ovipositor larger (*Fig. 50*), or at least more sclerotized (*Fig. 52*) . . . . . .5

5 (8) Tarsal claws with a blunt tooth at base (*as in fig. 56*). Anterior tibiae with a series of 5/10 sharp teeth placed in their distal half or two-thirds, an intermediate one and the penultimate usually being the largest (*as in fig. 1*3). Body usually brown to blackish, with yellowish to orange legs and antennae, sparse and more or less conspicuous silvery, or golden pubescence, and elytra paler, or with a large reddish discal spot . . . . . ..6

6 (7) Dorsal and ventral pubescence usually silvery, more conspicuous, each hair being moderately long, but of unusually large diameter. Male genitalia smaller, shaped as in *figs 70–71*. Ovipositor as in the following species (*Fig. 50*). Northern and eastern Namibia, Botswana, northern parts of South Africa (*Fig. 64*) . . . . . .**12. *rufofuscus*** Audisio, Kirk-Spriggs & Kirejtshuk

7 (6) Dorsal and ventral pubescence golden, less conspicuous, each hair being moderately long and fine. Male genitalia larger, shaped as in *figs 68–69*. Ovipositor as in *fig. 50*. Central and southern Namibia, Namaqualand (*Fig. 64*) . . . . . .**13. *eremita*** Audisio, Kirk-Spriggs & Kirejtshuk

8 (5) Tarsal claws lacking a distinct tooth at base (*as in fig. 57*). Anterior tibiae with a series of small, irregular and usually blunt teeth on their distal outer edges (*Fig. 17*). Body unicolorous blackish-brown, with legs and antennae brown to blackish. Male genitalia as in *figs 43–44*. Ovipositor as in *fig. 52*. NE Eastern Cape Province, southern Kwa Zulu-Natal (*Fig. 61*) . . . . . .**14. *argentarius*** Audisio, Kirk-Spriggs & Kirejtshuk

9 (10) Tarsal claws simple, lacking a distinct tooth at base (*as in Fig. 57*) . . . . . .11

10 (9) Tarsal claws with a well-formed, large and sharp tooth at base (*as in Fig. 55*) . . . . . .19

11 (12) Last segment of the antennal club peculiarly large (*Fig. 21*). Body peculiarly large, short and convex (*Fig. 65*). Anterior tibiae as in *fig. 18*. Male genitalia as in *figs 66–67*. Northern Transvaal (*Fig. 62*). .....**11. *massivus*** Audisio, Kirk-Spriggs & Kirejtshuk

12 (11) Last segment of the antennal club much smaller, and normally shaped (*Figs 1–5*) . . . . . .13

13 (14) Dorsal pubescence golden or silvery, scarcely long and dense, never obscuring upper surface. Outer edges of anterior tibiae with a series of 7/12 sharp and usually irregular teeth, never regularly increasing in size from the first to the penultimate (*Figs 14–15*). (The *M. fuerschi*-complex) . . . . . .15

14 (13) Dorsal pubescence golden or silvery, peculiarly long and dense, partially obscuring upper surface (in unrubbed specimens). Outer edges of anterior tibiae with a series of 7/10 more or less sharp teeth placed in their distal three-fifths, usually slightly and regularly increasing in size from the first to the penultimate, which as a rule, is the largest (*Figs 11–12*). (The *M. plumbeus*-complex) . . . . . .17

15 (16) Elytra strongly transversely strigose. Male genitalia with a very small and shallow distal excision on tegmen (*Fig. 26*) and moderately pointed aedeagus (*Fig. 27*). Ovipositor slightly more pointed (*Fig. 49*). Southern parts of the Western Cape Province, eastern Free State (*Fig. 62*) . . . .**10. *pecten*** Audisio, Kirk-Spriggs & Kirejtshuk

16 (15) Elytra less strongly transversely strigose. Male genitalia with much deeper and narrow distal excision on tegmen (*Fig. 28*), and subtruncate aedeagal apex (*Fig. 29*). Ovipositor slightly less pointed (*Fig. 48*). Eastern parts of

the Eastern Cape Province and of the Free State, Kwa Zulu-Natal, and Mpumalanga (*Fig. 62*). . . . . .**9. *fuerschi*** Spornraft & Audisio

17 (18) Metasternum flat, not impressed in both sexes. Male genitalia much shorter (*Figs 35–36*). Ovipositor as in *fig. 47*. Western parts of the Western Cape Province (*Fig. 59*) . . . . . .**8. *plumbeus*** Reitter

18 (17) Metasternum shallowly impressed in males. Male genitalia much longer and differently shaped (*Figs 33–34*). Ovipositor as in *M. plumbeus* (*fig. 47*). Western parts of the Western Cape Province, southern Namibia (*Fig. 61*) . . . . . .**7. *namakwaensis*** Audisio, Kirk-Spriggs & Kirejtshuk

19 (20) Inner edges of posterior tibiae markedly sinuate at distal third in both sexes (*as in fig. 19*). (The *M. pubescens*-complex) . . . . . .21

20 (19) Inner edges of posterior tibiae not sinuate at distal third in both sexes (*as in fig. 20* **and in fig. 3**). (The *M. confertus*-complex) . . . . . .23

21 (22) Male genitalia much longer and larger, with median distal excision of tegmen more rounded basally (*Figs 24–25*). Body on average larger (length: 2.3–3.0 mm). Eastern coastal and subcoastal areas of the Western Cape Province and of the western portion of the Eastern Cape Province (**Fig. 4**) . . . . . .**2. *hermanniae*** Audisio, Kirk-Spriggs & Kirejtshuk

22 (21) Male genitalia much shorter and smaller, with median distal excision of tegmen V-shaped basally (*Figs 22–23*). Body on average smaller (length: 2.2–2.8 mm). Southern parts of the Western Cape Province and SW parts of the Eastern Cape Province (*Fig. 59*) . . . . . .**1. *pubescens*** Reitter

23 (24) Pronotum more distinctly narrower than elytra (*Fig. 4*); pronotum and elytra partially covered by usually golden pubescence. Elytra without, or with only a faint trace of transverse strigosity. Male genitalia with distal apex of tegmen with deep and wide V-shaped excision (*Figs 37–38*). Subdesertic inner parts of the Western Cape Province and extreme West of the Northern Cape Province (*Fig. 60*) . . . . . .**3. *translatus*** Grouvelle

24 (23) Pronotum nearly as wide as elytra (*as in fig. 3* **and 3**); pronotum and elytra partially covered by usually silvery, silvery-golden, or olivaceous pubescence. Elytra with distinct traces of, or with strong, transverse strigosity. Male genitalia differently shaped (*Figs 39–42;* **Figs 1–2**) . . . . . .25

25 (26) Usually only with trace of elytral transverse strigosity. Male genitalia differently shaped, with distally widely truncate median lobe of aedeagus, but without distally subtruncate tegmen (*Figs 39–40*). Body lacking a faint coppery reflection. Southern parts of the Western Cape Province and SW parts of the Eastern Cape Province (*Fig. 60*) . . . . . .**4. *confertus*** Reitter

26 (25) Elytra with strong transverse strigosity. Male genitalia with very peculiarly shaped and distally truncate tegmen (*Fig. 41*), or with median lobe of the aedeagus much more narrowly pointed at the apex (**Fig. 2**) . . . . . .27

27 (28) Body with a faint coppery reflection, especially dorsally. Dorsal pubescence silvery-olivaceous, longer and more developed. Male genitalia with much more widely truncate apex of the median lobe of aedeagus, combined with a subtruncate apex of tegmen, with short U-shaped median excision of the latter (*Figs 41–42*). Montane areas of the SW Western Cape Province (**Fig. 4**) . . . . . .**5. *aurivestis*** Audisio, Kirk-Spriggs & Kirejtshuk

28 (27) Body without coppery reflection. Dorsal pubescence silvery-golden, finer and less developed. Male genitalia with much more narrowly truncate apex of the median lobe of aedeagus, combined with roundly obtuse apex of paramera, with short U-shaped median excision of tegmen (**Figs 1–2**). Montane areas of the SE Western Cape Province (**Fig. 4**) . . . . . .**6. *colonnellii* n.sp.**

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## REFERENCES

ARNOLD, J. H. & DE WET, B. C. (1993): Plants of southern Africa: names and distribution. Memoirs of the Botanical Survey of South Africa **62**. National Botanical Institute, Pretoria, 825 pp.

AUDISIO, P., KIRK-SPRIGGS, A. & KIREJTSHUK, A. G. (1998): The *Meligethes* of the *M. pubescens* species-group from Southern Africa (Coleoptera: Nitidulidae, Meligethinae). Entomologica scandinavica **29**: 169–198.

GROUVELLE, A. (1913): Famille des Nitidulidae. Notes synonymiques et rectifications à la nomenclature. Annales de la Société Entomologique de France **81** (1912): 387–400.

KIREJTSHUK, A. G. (1996): Some results of Study on the Nitidulidae from Namibia and Adjacent Territories. Part 1 (Coleoptera, Cucujoidea, Nitidulidae). Mitteilungen aus dem Zoologischen Museum in Berlin **72** (1): 21–52.

REITTER, E. (1872): Die südafrikanischen Arten der Nitidulinen-Gattung *Meligethes* nach dem Materiale der Herren Chevrolat, Dr. Fritsch und Anderer. Berliner Entomologische Zeitschrift **16**: 241–264.

SPORNRAFT , K. & AUDISIO, P. (1995): Ein weiterer neuer *Meligethes* aus Südafrika (Coleoptera, Nitidulidae). Nachrichtenblatt der Bayerischen Entomologen **44** (3–4): 69–73.

SPORNRAFT , K. & KIREÏJTSHUK, A. G. (1993): Über alte und neue südafrikanische *Meligethes*-Arten (Coleoptera, Nitidulidae). Mitteilungen der Münchener Entomologischen Gesellschaft **83**: 47–75.

VERDOORN, I. C. (1980): Revision of *Hermannia* subgenus *Hermannia* in southern Africa. Bothalia **13** (1–2): 1–63.

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(2005): Band 2: Insektenfresser (Insectivora), Hasentiere (Lagomorpha), Nagetiere (Rodentia), Raubtiere (Carnivora), Paarhufer (Artiodactyla). 704 S., 193 Farbphotos, 2 SW-Photos, 172 Diagramme & Zeichnungen, 47 Verbreitungskarten, 138 Tabellen. 49,90 €. Eugen Ulmer Verlag, Stuttgart.

Mit dem Erscheinen des 2. Bandes so relativ kurz nach dem des 1. liegt dieses eindrucksvolle Werk mit zusammen weit mehr als 1000 Seiten nun komplett vor. Grundlage seiner Veröffentlichung ist das langjährige und aus öffentlichen Mitteln geförderte Forschungsprojekt „Wild lebende Säugetiere in Baden-Württemberg“. Außer von den beiden Herausgebern enthalten die beiden Bände Textbeiträge von jeweils 20 weiteren Autoren. Entscheidend für das Projekt und die Fülle der darin präsentierten Daten war sicherlich auch die ehrenamtliche Mitarbeit von über 1000 weiteren Personen, die Beobachtungsdaten und Hinweise zum Vorkommen von Säugetieren in Baden-Württemberg beigetragen haben.

Den ersten Teil des 1. Bandes mit nahezu 300 Seiten bildet der Allgemeine Teil mit u.a. den folgenden Kapiteln: Säugetiere (Kennzeichen, Verbreitung und Vielfalt); Zur Geschichte der Erforschung der Säugetierfauna (allgemein und regional in Württemberg und Baden); Naturräume in Baden-Württemberg [im folgenden: B-W]; Methoden der Datenerhebung und Datenverarbeitung; Gewölleanalyse; Die Säugetiere im Quartär von B-W; Einwanderung, Einbürgerung und (Wieder-) Ansiedlung von Säugetieren; Jagd; Domestizierte Säugetiere in B-W; Zoonosen wildlebender Säugetiere in B-W; Gefährdungsursachen; Schutzmöglichkeiten; Rote Liste der gefährdeten Säugetiere in B-W. Er spannt damit einen wirklich weiten thematischen Bogen. Den anschließenden Speziellen Teil von nahezu 400 Seiten Umfang leitet ein allgemeines Kapitel über Säugetiere zu „Klassifikation, taxonomische Merkmale, Maße, Fachbezeichnungen u.a.“ ein, gefolgt von einer Einführung in die Ordnung Chiroptera, einem Überblick über die heimischen Fledermäuse und einem Bestimmungsschlüssel der mitteleuropäischen Arten nach äußeren Kennzeichen und Zahnmerkmalen. Ausführliche monographische Abhandlungen zu 22 in B-W vorkommenden Fledermausarten schließen sich an. Die Artkapitel sind jeweils nach einem weitgehend einheitlichen Schema gegliedert und behandeln folgende Themen: Namensgebung (Taxonomie und Geschichte des deutschen Trivialnamens); Beschreibung (äußere Merkmale, Maße und Gewicht, Schädel und Gebiss [bei einander ähnlichen Arten wird ausführlich auf Unterscheidungsmerkmale eingegangen]); Verbreitung (Artareal insgesamt, in Deutschland und speziell in B-W); Lebensraum; Lebensweise (Sommerquartiere, Nahrungsökologie, Echoortung, Fortpflanzung, Wanderungen, Winterquartiere und Winterschlaf, Populationsdynamik); Artenschutz. Am Beginn des 2. Bandes wird das Projekt, das Grundlage der vorliegenden Veröffentlichung war, noch einmal kurz vorgestellt, gefolgt von einer erneuten kleinen Einführung in Datenerhebung und Datendarstellung sowie zu den für Säugetieren spezifischen Maßangaben. Daran schließt sich auf mehr als 600 Seiten die Darstellung der übrigen in B-W vorkommenden Säugetierarten aus den Ordnungen der Insectivora (11 Arten) (der aktuelle Erkenntnisstand, wonach die Zusammenfassung der Igel mit Spitzmäusen und Maulwürfen in einer gemeinsamen Ordnung keine natürliche Verwandtschaftsgruppe darstellt, wurde hier noch nicht berücksichtigt), Lagomorpha (3 Arten), Rodentia (21 Arten), Carnivora (14 Arten) und Artiodactyla (7 Arten) an. Auch in diesem Band gibt es zu allen Ordnungen jeweils kürzere allgemeine Einführungskapitel (bei den Artiodactyla auch zu den Unterordnungen der Nichtwiederkäuer und der Wiederkäuer), ebenso zu den jeweiligen Familien (bei den Rodentia auch zu Unterfamilien). Der Aufbau der einzelnen Artkapitel folgt einem ähnlichen Schema wie in Band 1, es fehlen aber durchgehend die Ausführungen zur Namensgeschichte. Besonders eingehend wird die Lebensweise der einzelnen Arten mit Ausführungen zu Verhalten, Aktivität, Fortbewegung, Aktionsraum, Sinnen, Kommunikation, Lautäußerungen, Ernährung, Fortpflanzung, Jugendentwicklung, Populationsdynamik, natürlichen Feinden, Parasiten und Krankheiten sowie – wo relevant – auch zur Bejagung und deren Auswirkungen dargestellt.

Alle Beiträge sind in ihrer Darstellung allgemeiner Zusammenhänge und der zu den einzelnen Arten präsentierten Fakten fachlich fundiert und bereiten für den betroffenen geographischen Raum eine große Fülle interessanter Einzeldaten auf; diese wiederum werden dann in sinnvoller Weise in einen größeren Zusammenhang gestellt. Auch in ihrer Ausstattung, ihrem Druck und der Zahl und Qualität der Abbildungen werden diese beiden Bände hohen Ansprüchen gerecht. Bei einem so umfangreichen Werk, an dem viele Autoren mitgewirkt haben, ist es fast unvermeidlich, dass sich hier und da Uneinheitlichkeiten der Darstellung oder auch kleinere redaktionelle Fehler einschleichen. Um nur ein Beispiel zu nennen: In Band 2 sind in Tabelle 60 (S. 357) für die Felidae rezent 11 Gattungen und 36 Arten aufgeführt, der anschließende Text auf S. 358 nennt aber 18 Gattungen und 35 Arten. Als wenig nutzerfreundlich empfindet es der Rezensent, dass das vollständige Literaturverzeichnis am Ende des 2. Bandes nach den einzelnen darin behandelten Säugerordnungen unterteilt ist. So sucht man erst einmal nach der Seite, auf der die Literaturzitate für die jeweiligen Ordnungen beginnen und kann erst dann gezielt alphabetisch nach dem speziellen Zitat suchen, an dem man interessiert ist. Im 1. Band ist dies besser gelöst; dort folgen dem Allgemeinen Teil und dem Speziellen Teil die jeweiligen Literaturverzeichnisse.

Von solchen wirklich geringfügigen Kritikpunkten abgesehen gebührt den Förderern des Projekts, aus dem diese Veröffentlichung hervorgegangen ist, Dank und allen anderen daran beteiligten Personen, besonders natürlich den beiden Herausgebern, ausdrückliche Anerkennung für diese Leistung. Diese beiden Bände gehören ohne Einschränkung in jede größere öffentliche Bibliothek, die von ernsthaft an unseren heimischen Säugetieren interessierten Personen genutzt wird. Wer beruflich mit diesen Tieren arbeitet, sollte sich dieses Werk auf jeden Fall anschaffen. Wenn man einmal vom viel umfangreicheren „Handbuch der Säugetiere Europas“ absieht (das primär für einen anderen Nutzerkreis gedacht ist), gibt es aktuell auf dem deutschsprachigen Buchmarkt keine auch nur annähernd in Qualität und Informationsfülle vergleichbare Veröffentlichung zur Biologie (im weitesten Sinne) der heimischen Säuger – und es besteht wohl auch wenig Aussicht, dass auf absehbare Zeit eine solche erscheinen wird. Angesichts der bedauernswerten Entwicklung, dass die organismische Biologie im Unterricht an weiterführenden Schulen und im Grundstudium der Biologie immer weiter zurückgedrängt wird, kann man nur hoffen, dass diese beiden Bände in diesen Schulen und in den betreffenden Universitätsinstituten angeschafft werden und eine möglichst intensive Nutzung erfahren.

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