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A contribution to knowledge of the subfamily Panagaeinae Hope, 1838 from Africa. Part 6/I. Revision of the genera *Adischissus* Fedorenko, 2015, *Microschemus* Andrewes, 1940, *Epigraphus* Chaudoir, 1869 and *Paregraphus* Basilewsky, 1967 (Coleoptera: Carabidae)

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Abstract. Species belonging to four Afrotropical genera of the tribe Panagaeini (Coleoptera, Carabidae) are revised. The status of the genera *Adischissus* Fedorenko, 2015, *Microcosmodes* Strand, 1936 (= *Microschemus* Andrewes 1940 respectively), *Epigraphus* Chaudoir, 1869 and *Paregraphus* Basilewsky, 1967 is reassessed to subgenera of the genus *Craspedophorus* Hope, 1838. Five new species are described, *Craspedophorus* (*Adischissus*) *chaudoirianus* sp. nov. from West and Central Africa, *Craspedophorus* (*A.*) *behoka* sp. nov. from Zambia and South Africa, *Craspedophorus* (*A.*) *kasanka* sp. nov. from Zambia, *Craspedophorus* (*Microschemus*) *bulirschi* sp. nov. from Botswana and South Africa and *Craspedophorus* (*Microschemus*) *uigensis* sp. nov. from Angola. *Microcosmodes barkeri* Fedorenko, 2015 is reassigned to the genus *Craspedophorus*, subgenus *Adischissus*. *Microcosmus aurantiacus* Chaudoir, 1879 is resurrected as a bona species with a new combination in the genus *Craspedophorus* (*Microschemus*). *Microschemus vadoni* Jeannel, 1949 is synonymized with *Craspedophorus* (*Adischissus*) *obscuricornis* (LaFerté-Sénectere, 1850), *Dischissus pradieri* Chaudoir, 1879 is synonymized with *C.* (*A.*) *angularis* (Schaum, 1863), *Microcosmodes arabicus* Häckel & Azadbakhsh, 2016 is synonymized with *C.* (*Microschemus*) *cruciatus* (Dejean, 1831), *Microcosmodes luebberti* (Kuntzen, 1919) is synonymized with *C.* (*Microschemus*) *aurantiacus* (Chaudoir, 1879), *Microcosmodes perrieri* (Jeannel, 1949) is synonymized with *C.* (*Microschemus*) *laetiusculus* (Chaudoir, 1879), *Microcosmus natalensis* Péringuey, 1896 is synonymized with *C.* (*M.*) *vicinus* Murray, 1857.

INTRODUCTION

In his latest two revisions of the Oriental Panagaeini, Fedorenko (2015) established a new genus *Adischissus* Fedorenko, 2015 and made a number of taxonomic changes in the paleotropical genera *Dischissus* Bates, 1873, *Microcosmodes* Strand, 1936, and *Craspedophorus* Hope, 1838 (Fedorenko 2015). The work substantially corrects the previous revision by Häckel and Kirschenhofer (2014a, b). In this work, I attempt to take into account Fedorenko‘s conclusions and apply them to the taxonomy of Afrotropical Panagaeini. In my last work on the Oriental Panagaeini, I opened the possibility of resolving the supraspecific taxonomy in the tribe Panagaeini pending the results of DNA analysis. It is a unification of the overview of the historically understood genera *Craspedophorus*

Hope, 1838, *Adischissus* Fedorenko, 2015, *Microschemus* Andrewes, 1940 (previously *Microcosmodes* Strand, 1936), *Epigraphus* Chaudoir, 1869, and *Paregraphus* Basilewsky, 1967. In my opinion, this significantly simplifies the classification of taxa described so far, as well as newly described ones. In this section, I focus on the first two taxa, *Adischissus* and *Microcosmodes* (= *Microschemus*), named above.

MATERIAL AND METHODS

The classification of the group is based primarily on external morphological characters of the adult. The aedeagus was mounted on a card and photographed in the glued position (lateral view). Habitus photographs were taken using a Canon EOS 6D digital camera equipped with a Canon MP-E 65 mm macro lens; image stacking was performed with Helicon Focus 7 software.

The acronyms of the entomological collections in which the examined material is deposited are as follows:

BMNH The Natural History Museum, London, United Kingdom (M. Barclay);
KSMA King Saud Museum of Arthropods, Saudi Arabia (M.S. Abdel-Dayem);
MNHN Muséum national d'Histoire naturelle, Paris, France (Th. Deuve);
NME Naturkundemuseum Erfurt, Germany (M. Hartmann);
MRAC Musée Royal de l' Afrique Centrale, Tervuren, Belgium (S. Hanot);
NMP National Museum, Praha, Czech Republic (L. Sekerka);
NMWC Naturhistorisches Museum Wien, Austria (H. Schilhammer);
SAMC Iziko Museums of South Africa, Cape Town, Republic South Africa (A. Mayekiso);
cDW Collection of David Wrase, Berlin, Germany (deposited in Naturkunde Museum Stuttgart);
cEO Private Collection of Eylon Orbach, Kiryat Tiv'on, Israel;
cMH Private Collection of Martin Häckel, Praha, Czech Republic (will be deposited in NMP);
cPB Private Collection of Petr Bulirsch, Praha, Czech Republic;
cSF Private Collection of Rudolf Kmeco, Litovel, Czech Republic;
cSF Private Collection of Sergio Facchini, Piacenza, Italy.

Other abbreviations:

AR = antennal ratio (antennomere length A1/A3 : A2/A3 : A4/A3)
BL = body length
EL = elytral length
EW = elytral width
HL = head length
HW = head width
PL = pronotal length
PW = pronotal width
DR Congo =Democratic Republic of the Congo;
RSA =Republic of South Africa;
/ marks the end of the line on the original label;
// marks the end of one specific original label.

Genus *Craspedophorus* Hope, 1838

Comments. The genus has been repeatedly described and redefined (Hope 1838: 165; Chaudoir 1878: 90; Andrewes 1919: 125; Basilewsky 1953a: 168; Häckel & Kirschenhofer 2014b; Fedorenko 2016). Gradually, a number of criteria distinguishing Chaudoir's concept of different genera (Chaudoir 1878: 85) were reclassified as species-specific characters only, and a number of other taxa (previously considered related genera) were thus included in the genus *Craspedophorus* Hope, 1838. Basilewsky (1953a: 170) synonymized the taxa *Eudema* Laporte de Castelnau, 1840, *Isotarsus* LaFerté-Sénectere, 1851, and *Epicosmus* Chaudoir, 1846 due to taxonomic ambiguities, but also because Basilewsky no longer shared Chaudoir's view on the importance of differences in the shape of the metepisterna or terminal palpomeres. However, he and other authors after him respected other external characters chosen by Chaudoir as generic criteria, especially the shape of the protarsomere and its chaetotaxy. This opinion was somewhat disturbed by Lorenz (1998), who, based on the relativization of the importance of tarsal characters, synonymized Chaudoir's genus *Brachyonychus* (1879) with the genus *Craspedophorus*. This decision was adopted by other authors (Baehr 2003; Häckel & Kirschenhofer 2014b; Fedorenko 2016). The latter author (Fedorenko 2016: 2) even on this occasion demonstrates the interspecific variability of such characters on the tarsus as its shape or chaetotaxy within the single genus *Craspedophorus*. Fedorenko himself relativizes the meaning of similar external characters and considers them species- (not genus-) specific. The aforementioned variability is discussed by the same author in his previous work, where he establishes a new genus and completely reclassifies the existing concept of the genus *Dischissus* Bates, 1873. Although Fedorenko separated some species from the genus *Dischissus* (keeping it monotypic) and created a new genus (*Adischissus*) for the smaller Oriental species, he notes in his commentary (2015: 276): "The shape of tarsomere 4 is not a good character for separating taxa of the genera in Panagaeini, with *Adischissus* gen. n. may be a subgenus of *Microcosmodes* rather than a separate genus…". In my opinion, it also follows from the author's other conclusions that the chaetotaxy of tarsomeres, the shape of the terminal palpomere, the ratio of antennal length, or the shape of the metepisterna should continue to be considered significant only for differentiation into groups of species (or different subgenera). Thus, the basic aspect for generic characteristics within the tribe would remain only the morphology of the oral apparatus, especially the shape of the ligula, paraglossae, and mentum. After examining a number of types of Afrotropical species of the genus, one can agree with the author, but it is necessary to apply this view evenly across the entire tribe and not only to a selected group in the Oriental region. The named characters (length of the ligula, paraglossae, and mentum) are similar in the Afrotropical species divided into five different genera. In addition to the genus *Craspedophorus*, these include the genera *Epigraphus* Chaudoir, 1879, *Microschemus* Andrewes, 1940 (previously *Microcosmodes* Strand, 1935), *Paregraphus* Basilewsky, 1967, and currently also *Adischissus* Fedorenko, 2015. As I presented in my earlier work (Häckel 2024), the other Afrotropical species of this genus-group will be treated within the genus *Craspedophorus* with five subgenera.

Subgenus *Craspedophorus* s. str.

The Afrotropical species so far classified in the genus *Craspedophorus* (a total of 73 known species and 31 subspecies) have been divided by the author into eight species groups based on the criteria of Chaudoir, Andrewes, and Basilewsky (Häckel 2016, 2017a, b, 2020, 2022). This group is considered here as the subgenus *Craspedophorus* s. str. and will not be further taxonomically treated here; for details, I refer to my five works published on this topic. Only the new subgenera will be briefly characterized (see below), and the species included in them will be exhaustively listed, or exhaustive changes to the new classification of already described species will be commented on.

Subgenus *Adischissus* Fedorenko, 2015 stat. nov.

Type species: *Carabus notulatus* Fabricius, 1801.

Characters. Small species within the tribe Panagaeini (6.7-9.5 mm), pubescent, macropterous. Coloration black, except lateral margins of pronotum lightened with rust yellow, with two large maculae (sometimes merged into one large patch) on each elytron (all species known so far), and femora or entire legs reddish-yellow. Back shiny, microsculpture distinct on labrum and elytra, absent on head and pronotum; ventral side with metepisterna elongate (trapezoidal), movable ventral sterna with a dense series of coarse pits along bases (see also Fedorenko 2015, p. 273). Species of the subgenus *Adischissus* differ from the closely related subgenus *Microschemus* Andrewes, 1940 (= *Microcosmodes* Strand, 1936) in the length of the antennae (especially the 1st antennomere) and the legs. In *Adischissus*, the legs and antennae are longer in proportion to body length; antennomere 1 (scape) three to four times longer than the eye tuber and slightly longer (in Asian species) or equal (in Afrotropical species) to antennomere 3, AR (A1/A3 = 0.83-1). As stated by Fedorenko (2015: 278), the species classified in this subgenus have variously expressed bilobation, mainly of the fourth protarsomere. In some species, the protarsomere is distinctly bilobed in both sexes, in others only in males, and in some species it is only notched in both sexes. In older descriptions, often based on a single specimen, the newly described species were therefore assigned to different genera based only on the tarsal character of the described specimen. This is another reason for the relativization of the tarsal cleft as a generic character, and the reason why some species are reassigned to a different (sub)genus than the one in which the author of the description placed them. For those species for which I have new comparative material available, photographs of protarsomere IV in both sexes are provided.

Craspedophorus (*Adischissus*) *obscuricornis* (LaFerté-Sénectere, 1850) comb. nov.
(Figs. 13 a, b, 64, 65)

LaFerté-Sénectere, 1850: 393 (*Panagaeus*; type loc.: “Guinea Lusit.”); LaFerté-Sénectere, 1851: 224 (*Isotarsus*); Chaudoir 1861: 348 (*Epicosmus*), Chaudoir 1879: 154 (*Dischissus*); Kolbe 1887: 183; Lorenz 2005: 322; Häckel et Farkač 2012: 85; Fedorenko 2015: 275 (*Adischissus*); Anichtchenko 2024 (www. carabidae.com) (*Craspedophorus*). *Microschemus vadoni* Jeannel, 1949: 852 (type loc.: “Maroansetra (east Madagascar, Analanjirofo region)”);

Lorenz 2005: 322 (*Microschemus);* Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com), **syn. nov.**

Type material. Lectotype (established by Chaudoir and pinned by him in the row in Bates-Oberthür Collection, (unsexed but probably male) and labelled: "*obscuricornis*" (According to Chaudoir (1879: 155) the type is coming from „Sénégambie portuguaise" today Guinea-Bissau) (Tab. V: Fig. 64, MNHN).
Type (♀) of *Microschemus vadoni* Jeannel, 1949: "TYPE (printed in black on red label) // Madagascar (handwritten in black) / Mananara / XII. 37. Vadon ! (handwritten in black) // *Vadonii* / sp. nov. (handwritten in black)" (Tab. V, Fig. 65, MNHN).

Other material examined: Mali, 1 ♀: "w Africa, s-Mali, Koulikoro Prov., Kati Co. Kenieroba env.", (cMH); Zambia, 1 ♀: "c Africa, c-Zambia, Central Province, Kasanka National Park, Pontoon Camp 3, 12.57379°S 30.23526°E, 1191m" (Tab. II, Fig. 13 a, b, cMH).

Distribution: Guinea-Bissau, Madagascar, Mali, Zambia.

Comments. The author's description of the species is completely sufficient (LaFerté-Sénectere 1850: 393) and perfectly matches Chaudoir's description of his lectotype (1879: 154), i.e. a specimen that is not labeled with a locality (it is only placed in the row reserved for this taxon in the MNHN, as are other specimens of the Oberthür-Bates collection). It is also clear that Chaudoir's description refers to this specimen, which is labeled only with the taxon name "*obscuricornis*". The situation is complicated by Basilewsky, who (as with other species) created a comparative type using a specimen from Cameroon (Joko, Tab. V: Fig. 61). However, the Cameroonian "comparative type" does not correspond to either of the above descriptions, and it is evident that it represents a different species than Chaudoir's lectotype (see below). Therefore, I transfer both of Basilewsky's reports of "*Dischissus obscuricornis*" (1954: 247; 1963: 383) to another species. On the contrary, the description of *C. obscuricornis* and the lectotype in the MNHN morphologically fully correspond to Jeannel's type of *Microschemus vadoni* (a single female collected in Madagascar, deposited in the MNHN; Tab. V: Fig. 65). According to my measurements of a recent female specimen of *M. obscuricornis*, the fourth protarsomere of the female is not bilobed, only strongly notched (Tab. II, Fig. 13 b). The taxon vadoni was based on a single female; this species has a distinctly bilobed protarsomere only in males, therefore the female was placed in the genus *Microcosmus* sensu Chaudoir, but according to Fedorenko's criteria it belongs to the (sub)genus *Adischissus*; therefore, I synonymize the taxa. A new description is not needed; I add only the antennal ratio (AR: 1.0 : 0.5 : 0.81), pronotal transversity (PW/PL) 1.38, and elytral ratio (EL/EW) 1.58 for the measured female (BL 6.86 mm). According to my results, *C. obscuricornis* is a rare species but with a wide pan-African distribution.

Craspedophorus (*Adischissus*) *angularis* Schaum, 1863 comb. nov.
(Figs. 7-10, 58-61)

Schaum, 1863: 84 (type loc.: "Guinea (Gaboon)"); Kolbe 1887: 212; 1935: 185 (*Dischissus*); Lorenz 2005: 322 (*Dischissus*); Häckel et Farkač 2012: 85 (*Dischissus*); Fedorenko 2015: 275 (*Adischissus*); Anichtchenko 2024 (www.carabidae.com) (*Craspedophorus*).
Dischissus obscuricornis Basilewsky (non Laferté!) 1954: 247, 1963: 383, 1968: 94.
Dischissus pradieri Chaudoir, 1879: 154 (type loc.: "Gabon"); Kolbe 1887: 212; Burgeon 1930: 162 (as ?*pradieri*),

1935: 184 (as *pradieri*); Basilewsky 1948: 37, 1952: 244, 1953a: 178, 1956: 470 (as *pradieri*); Lorenz 2005: 322; Häckel et Farkač 2012: 85. Anichtchenko 2024 (www.carabidae.com) (*Craspedophorus*), **syn. nov.**

Type material. Comparative type (established by Basilewsky) (♀): "COLL. MUS. CONGO (printed in black) / Fernando Poo / Sta. Isabel / VIII - 1919 - ESCALERA (printed in black) // *angularis* Schaum / C.C.ex. det par Chaud. (handwritten in black) / P. Basilewsky det., 19 (printed in black on white label)" (Tab. V: Fig. 58, MRAC). Lectotype (established by Chaudoir and pinned by him in the row in Bates-Oberthür Collection, labelled "*Pradieri* (handwritten in black on white label) // ♀ (handwritten in black on white label)" (According to Chaudoir (1879: 154) the type is coming from Gabon) (Tab. V: Fig. 61, MNHN). Comparative type (established by Basilewsky) "COMP. TYP. BASILEWSKY" (printed in black on red circumscribed label) // Coll. Mus. Congo (printed in black)/ Joko (handwritten in black) VII.12./ Kamerun // Musée du Congo // Don. Moser (printed on white label) // *obscuricornis* Laf. / CCT (handwritten in black) / P. Basilewsky det., 19 (printed in black on white label)" (Tab. V: Fig. 61, MRAC).

Comparative type (established by Basilewsky): (♀): "COMP. TYP. BASILEWSKY" (printed in black on red circumscribed label) // Muséé / du Congo belge / Kisantu / P. Goosens (printed in black) // *Pradieri* Chd. / CCT (handwritten in black) / P. Basilewsky det., 19 (printed in black on white label)" (Tab. V: Fig. 60, MRAC).

Other material examined: Cameroon, 1 ♂: "Wc Africa c-Cameroon, Central Province, Ebogo env.", (cMH); Central African Republic, 1 ♂: "Centr. Afr. R. (w-Centrafrique) Mambéré-Kadeï Prov., 40 km n Berberati, near Bafio", (cMH); Gabon, 1 ♀: C Africa, nw-Gabon, Estuaire Prov., cca 120 km nw Lambaréné, 00°01'N 010°13'E" (Tab. I: Fig. 10 a, b, cMH), 1 ♂, 1 ♀: "Ngounyé Prov., Tsamba Magotsi Dept., Ikobey", (cEO); Guinea, 1 ♀: "W Africa, s-Guinea, Mt. Nimba Strict. Nature Reserve, Ziela Station, 545m" (Tab. I: Fig. 9 a, b, cMH); Guinea Equatorial 13 ♂♂, 10 ♀♀: "(Nyefang) Mossumu" (Tab. I: Figs. 7 a-c, 8 a-c, cMH, cSF).

Distribution: Cameroon, Central African Republic, DR Congo (Ituri, Katanga, Lualaba), Gabon, Guinea, Guinea Equatorial, Ivory Coast.

Comments. The species was briefly described by Schaum, and a more detailed redescription was added by Chaudoir (1879: 154). Chaudoir based his lectotype series of Schaum's taxon on three specimens from Gabon (1879: 154), one of which was photographed in the MNHN (Tab. V: Fig. 59), from which he distinguished his newly described species *Dischissus pradieri* (see below), but it is not clear whether he saw Schaum's original type. Indeed, Chaudoir's redescription of "*angularis*" does not completely agree with Schaum's description. The differences in both descriptions are at least in the coloration of the appendages (according to my observations, both sexes of species of the subgenus *Adischissus* maintain a constant appendage color across their range). Schaum lists the antennae and palps of his type specimen as black, Chaudoir as rusty, and Chaudoir also does not mention the completely darkened (up to black) tibiae of the original type emphasized by Schaum. According to a photograph (Tab. V: Fig. 62) of a specimen deposited at the MNHN in a row with Chaudoir's lectotypes of the taxon *Dischissus angularis* (from the Mnizsech collection), it appears to be a specimen with pale adnexae and tibiae, which differs from Chaudoir's lectotype of *D. pradieri* deposited in the MNHN (Tab. V: Fig. 59) in some body proportions, as Chaudoir states, but it is not clear whether these differences also apply to distinguishing this specimen from Schaum's type of *C. angularis*. Chaudoir's distinction of his taxon (*pradieri*) and Schaum's taxon (*angularis*) is also based only on the description of a single specimen, without the author commenting on details such as the proportions of the antennal segments or the shape of the protarsomere. Basilewsky created his comparative

types for both taxa, which in his opinion corresponded as closely as possible to Chaudoir's descriptions. For the taxon "*angularis*" he chose a specimen from Equatorial Guinea (Bioko) with a relatively more transverse pronotum and a shorter body (Tab. V: Fig. 58). For the taxon "*pradieri*" he chose a specimen from Kisantu (DR Congo; Tab. V: Fig. 60), which was provisionally assigned to the taxon by Burgeon (1930: 162) and marked with a question mark, and which belongs to a population with a more elongated body; however, in both specimens of Basilewsky's comparative types the adnexae correspond in color to Schaum's description of *angularis* and Chaudoir's description of *pradieri* (not to Chaudoir's "*angularis*"). In addition, Basilewsky created a comparative type for LaFerté's taxon "*Dischissus obscuricornis*" (see above) based on a specimen from Cameroon, which does not correspond in any way to the author's (or Chaudoir's) original description (Tab. V: Fig. 61). This specimen corresponds very well to Schaum's original description of *C. angularis* (a shorter and broader form with darker adnexae) and was also designated as *Dischissus angularis* (!) by the referring author (Burgeon 1935: 184). According to my observations, this individual ("comparative type") also belongs to the species *C. angularis* Schaum, 1863. Basilewsky's records of "*Dischissus obscuricornis*" from Bingerville and Divo (Ivory Coast) and from Mount Nimba in Guinea belong to the same species; therefore, I include the mentioned records (Cameroon, Guinea, and Ivory Coast). In addition, I have a recently collected specimen at my disposal from the localities from which Basilewsky's "comparative type" originates (Guinea), and this specimen clearly belongs to *C. angularis* (Tab. I: Fig. 9). Records of this species are reported by other authors from DR Congo (Burgeon 1930: 162, 1935: 184; Basilewsky 1948: 37, 1952: 244, 1953a: 178, 1956: 470), mostly as uncertain determinations marked by a question mark or as determinations based on comparative types of uncertain taxonomic validity, and often from localities distant from the type locality. Although I do not have Schaum's type available, specimens with black tibiae and a slightly narrower pronotum collected in West Africa from Guinea to Gabon and mostly designated as "*Dischissus pradieri*" match his description exactly. In my opinion, Chaudoir's lectotype of *C. pradieri* and Basilewsky's comparative type for "*Dischissus angularis*" (Tab. V: Fig. 58) from the island of Fernando Póo (today Bioko Island, Equatorial Guinea) belong among them, as well as his comparative type for "*Dischissus obscuricornis*" from Cameroon (see above). As for Basilewsky's comparative type for "*Dischissus pradieri*", collected outside the area described above, in the westernmost part of the DR Congo (Tab. V: Fig. 60), which also corresponds to Schaum's taxon in coloration but has a slightly more elongated body, two interpretations are possible. Only further collections will decide whether it represents a marginal population of *C. angularis* or another similar species. A new description is not needed; I add only the antennal ratio (AR: 0.93 : 0.46 : 0.70), pronotal transversity (PW/PL) 1.32, and elytral ratio (EL/EW) 1.575 in the measured male (BL 8.8 mm) and (EL/EW 1.56) in the measured female (BL also 8.8 mm). The aedeagus (Tab. I: Fig. 7c) and protarsomere 4 in the male (Tab. I: Figs. 7b, 9b) and female are also photographed (Tab. I: Figs. 8b, 10b). Other specimens were collected in practically the same area that correspond to Chaudoir's lectotype "*Dischissus angularis*" and differ from it in the proportions of the pronotum and body and in the coloration of the adnexae (ferruginous) as described by Chaudoir (difference between his "*angularis*" and *pradieri*). Here I complete the (re)description and give the taxon a new name (see below).

Craspedophorus (*Adischissus*) *chaudoirianus* sp. nov.
(Figs. 1-4, 62)

Dischissus angularis Chaudoir (non Schaum!) 1879: 154; type loc.: "Gabon". Burgeon 1930: 164, 1935: 185 (as *angularis*).

Type material. Holotype (♂): "Taraba State, Gashaka Gumti National Park, 560m, 07°20'N 11°35'E Kwano forest, V-2011 lgt. V. Kremitovský", (Tab. I: Fig. 1 a-c, cMH). Paratypes: (3 ♂♂, 2 ♀♀): same data as holotype; lectotype of Chaudoir's *Dischissus angularis* (established by Chaudoir and pinned by him in the row in Bates-Oberthür Collection, unsexed and labelled: "Ex Musaeo Mnizsech" (According to Chaudoir (1879: 155) the type is coming from "Gabon") (Tab. V: Fig. 62, MNHN); (13 ♂, 10 ♀♀): "Guinea Equatorial (Nyefang) Mossumu, X-2015 lgt. A. Susini", (cSF, cMH); (2 ♂♂, 2 ♀♀): "wc Africa c. Cameroon, Central Province, Ebogo env., XII-2018 lgt. J. Synek", (Tab. I: Fig. 3 a-c, cMH), (2 ♀♀): "c Africa w-Centrafrique, Mambéré-Kadeï Prov., 40 km n Berberati, near Bafio, VI-2009 lgt. A. Kudrna jr.", (2 ♀♀): "Sw-Centrafrique, Ombella-M'Poko Prov., 75 km nne Bangui, IV-2010 lgt. A. Kudrna jr."; (1 ♀): "Nana-Grébizi Prov., 25 km nne Mbrés, VI-2011 lgt. A. Kudrna jr.", (1 ♂): "Sangha-Mbaéré Prov., 20 km s Nola, 600m, XII-2008 lgt. A. Kudrna jr.", (Tab. I: Fig. 4 a, b, cMH); (1 ♀): "n Benin, Pendjari NP, Boudjagou forest, 6-8.vi.2005, light trap, lgt. Juhel, Josso, Montfort", (cPB).

Comments. A brief description was made by Chaudoir (1878: 154) for his misdetermined taxon "*Dischissus angularis*".

Description of holotype. BL 8.75 mm, EW 3.5 mm. Proportions. Head and pronotum (PW/PL 1.38, PW/HW 1.64), elytra (EW/PW 1.26, EL/EW 1.59).

Coloration. Body black, pronotum with lateral margins lightened yellow; each elytron with two yellow maculae, humeral macula semilunar, extending from interval III to the elytral margin (also extending onto the epipleura), broadly covering outer intervals; apical macula subquadrate, covering intervals III-VIII; lateral margin remaining black subapically. Palpi and antennomere 1 ferruginous; antennomeres 2-6 darkened with a yellowish terminal margin; femora, genua, tibiae, and tarsi ferruginous .

Head broad, short (length-to-width ratio 0.87), densely punctate; clypeus smooth and glabrous; neck wrinkled laterally and punctured medially. Antennae long, extending to midlength of elytra; scape slightly shorter than antennomere 3 (AR = 0.83 : 0.50 : 0.75) and twice as long as the eye tubercle. Labrum with apical margin almost truncate, median setae shorter and inserted near midline, lateral setae longer. Terminal palpomeres pubescent and securiform (in females); maxillary palpomere with outer angle acute and inner angle very obtuse, labial palpomere with apex less oblique and outer (terminal) angle more rounded than in the maxillary palpomere. Penultimate labial palpomere nearly cylindrical, with two setae inserted near the inner margin.

Pronotum semilunar, slightly transverse, 1.38 times wider than long, convex on disc, coarsely and irregularly pitted over the entire surface, without distinct microsculpture; maximum width beyond midlength; anterior margin parallel with the base; anterior angles rounded; lateral margins narrowing posteriorly, corrugated and slightly sinuate before basal angles, which project laterally; lateral rims flattened, tapering anteriorly and absent near the anterior margin; median longitudinal line fine but distinct.

Elytra suboval (EL/EW 1.59), widening slightly behind the middle, almost parallel; humeri weakly distinct, rounded; subapical sinuation indistinct; scutellar striae moderately

long, ending at one quarter of elytral length. Striae deep, coarsely and regularly pitted; intervals convex, each with three rows of finer pits; microsculpture weakly distinct, isodiametric; interval three without a distinct setigerous puncture. Lateral margin flattened, with a series of coarse pits.

Ventral side black, smooth, glabrous; ventrites with a dense row of large punctures along bases; ventrite VII with two setigerous pores on each side subapically. Metepisterna posteriorly elongated, trapezoidal (macropterous species).

Legs long and slender, brown-red, with darkened femora; tarsi pale brown; protarsomere 4 bilobed in the male (Tab. I: Figs. 1 b, 3 b), sharply incised in the female (Tab. I: Figs. 2 b, 4 b), with lobes subequal in the protarsus, the outer lobe somewhat shorter in the mesotarsus and clearly shorter and narrower than the inner lobe in the metatarsus.

Aedeagus. Median lobe and apex without any corrugation (Tab. I: Figs. 1 c, 3 c).

Derivatio nominis. The species was named after the author of the first description.

Differential diagnosis. *Craspedophorus* (*A.*) *chaudoirianus* sp. nov. differs from similar sympatric species mainly in body proportions, the shape of the pronotum, and the coloration of the tibiae. It also differs from *C. barkeri* Fedorenko, 2015 in the shape of the male protarsomere 4 .

Distribution: Benin, Cameroon, Central African Republic, ?DR Congo (Maniema), Guinea Equatorial, Nigeria.

Craspedophorus (*Adischissus*) *amoenulus* (Péringuey, 1899) comb. nov.
(Figs. 17, 18, 66)

Péringuey 1899: 485 (*Dischissus*; type loc.: "Mozambique (Rikatla)"); Lorenz 2005: 322; Häckel et Farkač 2012: 85; Fedorenko 2015: 275 (*Adischissus*); Anichtchenko 2024 (www.carabidae.com) (*Craspedophorus*).

Type material. Lectotype (♂): "Rikatla / Delagoa (handwritten in black) // *Dischissus* / *amoenulus* / Typ. Pér (handwritten in black) // *Type* (printed in black on red label) // Type / SAM/Ent (printed in black) / 003836 (handwritten in black on light red label)" (Tab. V: Fig. 66, SAMC).

Other material examined: Zambia, 2 ♂♂, 2 ♀♀: "S Africa c-Zambia, Central Province, Kasanka National Park, Pontoon Camp 3, 12.57379 S 30.23526 E, 1191m, I-2024 lgt. M.Häckel", (Tab. II: Figs. 17 a, b, 18 a, b, cMH).

Distribution: Mozambique, Zambia.

Comments. This taxon was established based on several specimens from Mozambique; Péringuey's description was not accompanied by an illustration. I received a photograph of the lectotype from the SAMC, which is of sufficient quality to determine the sex (male) and to take the necessary measurements. I collected conspecific specimens of both sexes in Zambia. A new description is not needed; I add only the antennal ratio (0.87 : 0.48 : 0.78) and pronotal ratio (PW/PL 1.30). This taxon also meets the criteria for treatment as a species of the subgenus *Adischissus*.

Craspedophorus (*Adischissus*) *repertus* (Basilewsky, 1947) comb. nov.
(Figs. 16, 67, 68)

Basilewsky 1947: 107 (type loc.: "Zanzibar"); Lorenz 2005: 322; Häckel et Farkač 2012: 85; Fedorenko 2015: 275 (*Adischissus*); Anichtchenko 2024 (www.carabidae.com) (*Craspedophorus*).
Dischissus obscuricornis Chaudoir (non Laferté!) 1879: 155.

Type material. Holotype (unsexed): "COLL. MUS. CONGO (printed in black) / Zanzibar (handwritten in black) / Col. P. Basilewsky // HOLOTYPUS (printed in black on red circumscribed label) /// (DataMatrix) RMCA ENT / 000020062 (printed on white label) // *Dischissus* / *repertus* sp. nov. (handwritten in black) / P. Basilewsky det., 19 (printed in black on white label)" (Tab. V: Fig. 68, MRAC). Paratype 1 ♂: "Zanzibar (printed in black) / Raffray (printed in black on white label) // ♂ (handwritten in black on white label) // *Dischissus* / *repertus* / Basilw. (handwritten in black) / P. Basilewsky det., 19 (printed in black on white label)" (Tab. V: Fig. 67, MNHN)

Other material examined: Tanzania (Zanzibar), 1 ♂: "Zanzibar, Jozani, 06°16'14»S, 39°25'12»E, alt. 10m", (Tab. II: Fig. 16 a, b, cMH).

Distribution: Zanzibar Islands (Tanzania).

Comments. This taxon was based on a single (non-genitalized) specimen from Zanzibar (holotype), distinguished primarily by differences in elytral coloration only (with one exception, see below). Basilewsky's taxon agrees well with Chaudoir's description of the "variable" specimen from Pemba Island (Chaudoir 1879: 155). Other specimens of the genus have been collected on the islands, one of which I examined very recently. The same very specific elytral colour pattern can be observed in all of them; therefore, I believe (following Basilewsky) that it represents a valid species, restricted to the Zanzibar Archipelago. This opinion is additionally supported by Chaudoir's remark in the redescription of *Dischissus obscuricornis* (1879: 154): "the epistome is pitted in the typical form, while it is smooth in the variety" (later described as *M. repertus*). The antennal ratio of *C.* (*A.*) *repertus* is 0.83 : 0.44 : 0.70 and the pronotal ratio is 1.37.

Craspedophorus (*Adischissus*) *barkeri* (Fedorenko, 2015) comb. nov.
(Figs. 5, 6, 63)

Fedorenko 2015: 278, nomen novum for *Microcosmodes* (=*Microcosmus*) *elegans* Barker, 1922 (junior homonym of Dejean, 1831); Anichtchenko 2024 (www.carabidae.com) (*Microcosmodes*).
Microcosmus elegans Barker, 1922: 35 (type loc.: "Natal: Durban and Isispingo"); Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*).

Type material. Paratype (♂): "PARATYPUS (printed in black on red circumscribed label) // Durban / cl: lights / I/99 (handwritten in black) // COLL. MUS. CONGO (printed in black) / ex Durban Mus. (handwritten in black) / Col. P. Basilewsky (printed in back) // *Microcosmus* / *elegans* sp. nov. / det. C.N. Barker (handwritten in black)" (Tab. V: Fig. 63, MRAC).

Other material examined: South Africa (Eastern Cape), 1 ♂, 1 ♀: "Kologha State Forest border, 32°32.3'S, 39°25.12' E, alt. 10m", (Tab. I: Figs. 5 a-c, 6 a, b, cMH).

Distribution: Republic of South Africa (Eastern Cape, KwaZulu-Natal).

Comments. This taxon was described by Barker (1922: 35) as *Microcosmus elegans* and placed in the genus *Microcosmus* (here subgenus *Microschemus*). The author did so because he stated (1922: 36): "In its more elongate shape, long slender antennae, palpi, legs, and tarsi this insect agrees well with Bates's definition of *Dischissus*, but this genus is described as having the anterior and intermediate tarsi bilobate, which is certainly not the case with elegans, in which they are the same as in *Microcosmus*, a little emarginate or incised. In the shape of prothorax elegans approximates to *M. aurantiacus* Chd., but the constriction to base is much more pronounced, and the elytra are also comparatively shorter." However, Fedorenko defines the genus *Adischissus* (to which he transferred the Afrotropical species of the genus *Dischissus*) differently (see above), and the shape of the protarsomere is considered only a species-specific character. After examining the paratype, it became clear that the taxon *C. elegans* Barker must not only receive a new species name (which Fedorenko already provided), but must also be reassigned to a different genus, i.e., in this work, to a different subgenus. A new description is not needed; I add only the antennal ratio (AR: 0.89 : 0.56 : 0.82) and pronotal ratio (PW/PL 1.44). *Craspedophorus barkeri* differs from the very similar newly described species *C. chaudoirianus* in body proportions, especially in overall body shape, width and sculpture of the neck, shape of the hind pronotal angles, antennal ratio, shape and coloration of the palpomeres, and the extent of the subapical elytral maculae .

Craspedophorus (*Adischissus*) *behoka* sp. nov.

(Figs. 11-12)

Type locality. "Namibia (Caprivi Region), Zambia (Central Province)".

Type material. Holotype (♂): "South Africa, Namibia, Caprivi Region, Zambezi River, 8km e of Katima Mulilo, XII-2011, lgt. R. Kmeco" (Tab. II Fig. 11 a-c, cMH). Paratypes: (1 ♀): "S Africa, c-Zambia, Central Province, Kasanka National Park, Pontoon Camp 3, 12.57379 S 30.23526 E, 1191m, I-2024 lgt. M.Häckel", (Tab. II Fig. 12 a, b, cMH); (1 ♀): "S Africa, n-Zambia, Northern Province, Lumange Falls Lodge, XII-2024 lgt. I. Martinů & D. Svoboda", (cMH).

Description of holotype. BL 7.87 mm, EW, 3.04 mm. Proportions. Head and pronotum (PW/ PL 1.26, PW/HW 1.4), elytra (EW/PW 1.45, EL/EW 1.67). Ratios in measured female (EW/PW 1.5, EL/EW 1.61).

Coloration. Body black; pronotum with lateral margins lightened yellow; each elytron with two yellow maculae. Humeral macula extensive, covering most of the anterior half of the elytron, its base and shoulders; extending from the elytral margin medially to interval II; individual spots on intervals II-IV about one quarter of elytral length; on interval VI significantly extended to the base; on intervals VII and VIII also markedly extended posteriorly, reaching about half of elytral length; at the base turning back on interval V; on the elytral margin connecting with the apical macula, which reaches from the elytral margin to interval II and, owing to mutual displacement of spots on neighbouring intervals, has distinctly jagged margins. Palpi, antennae, and legs ferruginous.

Head broad, short, length-to-width ratio 0.81 (0.85 in measured female), densely punctate; clypeus smooth and glabrous; neck slightly wrinkled laterally and strongly punctured

medially. Antennae long, extending close to midlength of elytra; scape approximately as long as antennomere 3 (AR = 1.0 : 0.6 : 0.9) and three times longer than eye tubercle. Labrum with apical margin almost truncate, median setae shorter and inserted near midline, lateral setae longer. Terminal palpomeres pubescent and securiform (in females); maxillary palpomeres with outer angle acute and inner angle very obtuse; labial palpomeres with apex less oblique and outer (terminal) angle more rounded than in maxillary palpomeres. Penultimate labial palpomere nearly cylindrical, with two setae inserted near the inner margin.

Pronotum not strongly transverse, almost hexagonal, 1.26 times wider than long, convex on disc, coarsely and irregularly pitted over the entire surface, without distinct microsculpture; maximum width beyond the posterior third of length; anterior margin slightly arcuate; anterior angles strongly rounded, indistinct; lateral margins narrowing posteriorly, straight to base; hind angles sharply protruding laterally; median longitudinal line slightly distinct or indistinct.

Elytra almost parallel (EL/EW 1.67), widening slightly behind the middle; humeri rounded but distinct; subapical sinuation indistinct; scutellar striae moderately long, ending at one quarter of elytral length. Striae deep, coarsely and regularly pitted; intervals convex, each with three rows of finer pits; microsculpture weakly distinct, isodiametric; interval three without a distinct setigerous puncture. Lateral margin flattened, with a series of coarse pits.

Ventral side black, smooth, glabrous; ventrites with a dense row of large punctures along bases; ventrite VII with two setigerous pores on each side subapically.

Metepisterna posteriorly elongated, trapezoidal (macropterous species).

Legs long and slender, brown-red; tarsi pale brown; protarsomere 4 moderately incised in the male and more weakly in the female (Tab. II: Figs. 11 b, 12 b).

Aedeagus. Median lobe and apex weakly corrugated (Tab. II: Fig. 11 c).

Derivatio nominis. The name of the species was chosen as an acronym for three members of the expedition, Vladimír Beneš, Ladislav Hovorka and Karel Křivánek.

Differential diagnosis. *Craspedophorus* (*A*). *behoka* sp. nov. differs from similar species mainly in elytral coloration (see the key below).

***Craspedophorus* (*Adischissus*) *kasanka* sp. nov.**

(Figs. 14-15)

Type locality. "Zambia: Kasanka National Park".

Type material. Holotype (♂): "S Africa, c-Zambia, Central Province, Kasanka National Park, Pontoon Camp 3, 12.57379 S 30.23526 E, 1191 m, I-2024 lgt. M.Häckel", (Tab. II: Fig. 14 a-c, cMH). Paratypes: (5 ♂♂, 7 ♀♀): same data as holotype, (Tab. II: Fig. 15 a, b, cMH).

Description of holotype. BL 7.92 (7.9-8.3 mm in measured specimens), EW 3.0 mm. (3.0-3.17 mm in measured specimens). Proportions. Head and pronotum (PW/PL 1.34, PW/HW 1.54), elytra (EW/PW 1.38, EL/EW 1.68).

Coloration. Body black; pronotum with lateral margins lightened yellow; each elytron with two yellow maculae. Humeral macula not too extensive, extending from interval III to the yellow elytral margin, broadly covering outer intervals. Macula spread over nine intervals; medially (on interval III) very short, appearing as a small dot; spots on intervals IV and V twice as long but still half as long as those on the outer intervals; spot on interval VI longer than those on the medial intervals but shorter than those on the external intervals. Edges of the macula thus quite irregular. Apical macula hook-shaped, extending from interval IV to interval VIII; elytral margin remains black apically. Legs, palpi, and antennae ferruginous; antennomeres 4-11 slightly darkened, with a yellowish terminal margin.

Head broad, short (length-to-width ratio 0.86), densely punctate; clypeus smooth and glabrous; neck glabrous, very rarely punctured medially. Antennae long, extending to one third of elytral length; scape slightly longer than antennomere 3 (AR = 1.0 : 0.6 : 0.8) and three times longer than the eye tubercle. Labrum with apical margin almost truncate, median setae shorter and inserted near midline, lateral setae longer. Terminal palpomeres pubescent and securiform (in females); maxillary palpomere with outer angle acute and inner angle very obtuse; labial palpomere with apex less oblique and outer (terminal) angle more rounded than in the maxillary palpomere. Penultimate labial palpomere nearly cylindrical, with two setae inserted near the inner margin.

Pronotum semilunar, slightly transverse (1.37-1.42 times wider than long), convex on disc, coarsely and irregularly pitted over the entire surface, without distinct microsculpture; maximum width beyond midlength; anterior margin rounded, passing into lateral margins, anterior angles indistinct; lateral margins narrowing posteriorly, corrugated and slightly sinuate before basal angles, which protrude laterally; lateral rims flattened, tapering anteriorly and absent anteriorly; median longitudinal line fine, indistinct posteriorly.

Elytra moderately elongate (EL/EW 1.67), subparallel, widening slightly behind the middle; humeri weakly distinct, rounded; subapical sinuation weak; scutellar striae moderately long, ending at one fifth of elytral length. Striae deep, coarsely and regularly pitted; intervals convex, each with two rows of finer pits; microsculpture weakly distinct, isodiametric; interval three without a distinct setigerous puncture. Lateral margin posteriorly broadly flattened, with a series of coarse pits.

Ventral side black, smooth, glabrous; ventrites with a dense row of large punctures along bases; ventrite VII with two setigerous pores on each side subapically. Metepisterna posteriorly elongated, trapezoidal (macropterous species).

Legs long and slender, brown-red; tarsi pale brown; protarsomere 4 moderately incised.

Aedeagus. Median lobe and apex sharp and weakly corrugated (Tab. II: Fig. 14 c).

Derivatio nominis. Named after Kasanka National Park in Zambia, where the species was collected.

Differential diagnosis. *Craspedophorus* (*A.*) *kasanka* sp. nov. differs from similar species mainly in body proportions and elytral coloration (see below).

Key to the determination of the Afrotropical species of the subgenus *Adischissus* Fedorenko, 2015

1. Pronotum more transverse (PW/PL)>1.35 2
- pronotum less tranverse (PW/PL)≤1.35 5
2. Scape longer than antennomere 3 (AR: A1/A3>1), pronotum with lateral margins sinusoidally narrowed anteriorly, anterior margin parallel to base, anterior angles rounded but clearly distinct. Legs, antennae and palpi ferruginous. Angola. ..... *C.* (*A.*) *angolensis* (Chaudoir, 1879)
- scape shorter than antennomere 3 (AR: A1/A3<1), pronotum with lateral margins arched anteriorly, anterior angles indistinct. At least antennomere 3-6 darkened, brown to black. 3
3. Terminal labial and maxillary palpomeres in male sharply triangular to axe-shaped without arcuate termination (Fig. 7 a). Neck smooth, at most with a few sparsely scattered fine pits. The first two antennomeres and palps all rusty yellow, elytral coloration is dominated by yellow, which covers the entire anterior half of elytra except for the interval I, the base and the shoulder (which stay black), and on interstices II and III it is stretched backwards, where it merges with the apical spot (Fig. 7 a). Zanzibar Island..... ..... *C.* (*A.*) *repertus* Basilewsky, 1947
- terminal labial and maxillary palpomeres in male dilated terminally ending with an arched border (Figs. 1-6, 8-11). Neck coarsely pitted at least in the middle or completely wrinkled. First two antennomeres more darkened, at least one of them brown. There are 2 separate spots, humeral and apical, which are distinctly separated in elytral coloration, all intervals stay black in the middle of elytra..... 4
4. Neck coarsely pitted and wrinkled all over, pronotum slightly narrower than elytra (EW/PW<1.3), which are more flat and parallel. Pronotum with lateral margins narrowing posteriorly in a wave-like manner with distinct denticulation in front of the hind angles, so that hind angle extends laterally like a sharp tooth. Protarsomere 4 distinctly bilobed in male, sharply incised in female (Figs. 1 b, 2 b, 3 b, 4 b), with lobes subequal, the outer lobe being slightly shorter in protarsus. Both terminal palpomeres more darkened ad the base, elytral coloration with humeral macula regularly bordered, semilunar in shape, as the yellow spot on interval VI reaches posteriorly as far as that on interval V. West, Central Africa ..... *C.* (*A.*) *chaudoirianus* sp. nov.
- neck glabrous laterally, with a few rough pits in the middle, pronotum distinctly narrower than elytra (EW/PW>1.4), which are more ovoid and convex. Pronotum with lateral margins narrowing posteriorly almost straight with only a small cut in front of the hind angles, which are obtuse or rectangular. Protarsomere 4 distinctly incised in male, less incised in female but never bilobed (Figs. 5 b, 6 b). Both terminal palpomeres slightly darkened ad the base, elytral coloration with humeral macula less regularly bordered, hooked in shape, as the yellow spot on interval VI is shortened backwards by 1/4 than that on the interval V. Republic of South Africa (Eastern Cape, Natal). ..... *C.* (*A.*) *barkeri* (Fedorenko, 2015)
5. Scape longer or similarly long as antennomere 3 (AR: A1/A3≥1), whole legs yellow, if tarsi darkened, tibiae always ferruginous 6
- scape shorter than antennomere 3 (AR: A1/A3<1), neck smooth except for a very fine wrinkling in the middle, pronotum with maximum width at midlength and lateral margins narrowing straight to posterior angles, which sharply protrude posterolaterally. Palpi, tarsi blackened, antennae and tibiae black (Figs 8-11). West and Central Africa. ..... *C.* (*A.*) *angularis* (Schaum, 1863)
6. Scape moderately longer than antennomere 3 (AR: A1/A3>1.2), pronotum allways slightly transverse, wider than long (PW/PL≥1.29) 7
- scape approximately as long as antennomere 3 (AR: A1/A3≤1.2) 9
7. Body more elongated (EL/EW>1.6), protarsomere IV bilobed in males, sharply incised in females. Terminal palpomeres black, terminally lightened, antennae black. Body black, elytra with two yellow maculae humeral and apical well separated in the elytral midlength, elytral margin and outer half of interval IX black. Zambia, Mozambique. ..... *C.* (*A.*) *amoenulus* (Péringuey, 1899)
- body less elongated (EL/EW>1.6), protarsomere IV incised in males and females, but never bilobed. The whole body including head and pronotum ferruginous, remains of black coloring in the form of the black posteriormost part of the apex (about 1/5 of the elytra) and two posthumeral maculae behind elytral midlength, elytral base, shoulders, the external margin and 4/5 of the length of interval I and II ferruginous. Mozambique .... *C.* (*A.*) *diversopictus* (Basilewsky, 1949)
9. Pronotum slightly transverse, but distinctly wider than long (PW/PL≥1.29) 10
- pronotum approximately hexagonal, almost as long as wide (PW/PL<1.29), body black but elytra with large

elytral yellow maculae, elytral margin yellow almost all the way up to the posterior second third of the length, palpi, antennae and legs yellow. Namibia, Zambia ..... *C.* (*A.*) *behoka* sp. nov.

10. Smaller species, body shorter and wider (EL/EW<1.6), terminal palps strongly widened and arched at the end, protarsomere IV bilobed in males, sharply incised in females. Antennomere 1 and 2 yellow, antennomere 3 to last black, palps basally dark, terminally brightened, elytra, each with two large yellow maculae (humeral and apical) approaching to almost confluent on interval IV, elytral margin yellow to nearly apex. Guinea-Bissau, Madagascar, Zambia. ..... *C.* (*A.*) *obscuricornis* (LaFerté-Sénectere, 1850)

- a little larger species, body more prolonged (EL/EW>1.6), terminal palps moderately widened and truncatiform, pronotum weakly transverse, semilunar (PW/PL: 1.37-1.42), protarsomere IV moderately incised in males in both sexes. Elytral maculae more reduced, the humeral is distant from the apical, triangular-shaped with serrated margins, and the apical is small and hook-shaped. Zambia. ..... *C.* (*A.*) *kasanka* sp. nov.

Subgenus *Microschemus* Andrewes, 1940 stat. nov.

Type species: *Panagaeus cruciatus* Dejean, 1831.

Andrewes, 1940: 536, nom. novum for *Microcosmus* Chaudoir
= *Microcosmus* Chaudoir, 1879 (junior homonym, preocc. by Fee and Heller)
= *Microcosmodes* Strand, 1936: 169 (unavailable name)*

Characters. Small species, so far including the smallest body size within the entire genus and perhaps even the tribe (5-13.7 mm). Similar to *Adischissus* Fedorenko, 2015 (macropterous, with two yellow spots on each elytron; see above), but differing from it in having shorter legs and antennae (usually extending beyond the pronotal base by about three and a half segments), with the scape and antennomere 3 shorter, though still significantly longer than antennomere 4. Similarly to the subgenus *Adischissus*, species of the subgenus *Microschemus* differ from most species of the subgenus *Craspedophorus* (s. str.) by slightly wider paraglossae (Chaudoir 1879: 140), usually a much smaller body, and a pronounced protarsomeral cleft which, however, is not very deep even in males (Fedorenko 2015: 278).
*According to the Code, I follow Lorenz (2005: 322), who considers Strand's generic name *Microcosmodes* unavailable; therefore, the next valid name is Andrewes's *Microschemus.*

Craspedophorus (*Microschemus*) *angolensis* species group

In a number of morphological characters, this group includes species resembling those classified here in the subgenus Adischissus, especially in pronotal shape and ratio and relatively longer legs. In contrast, due to their short and convex body and the length of the first antennomere, I consider it better to classify them as transitional forms, but still belonging to the subgenus *Microschemus*.

Craspedophorus (*Microschemus*) *angolensis* (Chaudoir, 1879) comb. nov.
(Figs. 19, 70)

Chaudoir 1879: 141 (*Microcosmus*; type loc.: "Angola"); Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com).

Type material. Holotype (♂) established by Chaudoir and pinned by him in the row in Bates-Oberthür Collection, labelled: "Angola (handwritten in black on white label) // *Microcosmus* / *angolensis* / Chaud. (handwritten in black on white label) // "Ex Musaeo / Bates / 1892 (printed in black on white circumscribed label)" (Tab. VI: Fig. 70, MNHN).

Other material examined: Angola, 1 ♂: "Bengo Prov., Quiçama National Park, 9°18'36.435»S 13°13'33.766»E, 390m", (cMH); Guinea Equatorial: 1 ♂: "(Nyefang) Mossumu", (Tab. II Fig. 19 a-c, cMH).

Distribution: Angola, Guinea Equatorial.

Comments. This taxon was established by Chaudoir based on a single specimen from Angola. The photographed type in the MNHN (Tab. VI: Fig. 70), showing a species of small body size (6 mm), is unsexed; even Chaudoir does not mention the sex of the specimen. However, the protruding apex of the aedeagus is clearly visible in the holotype, so it should be a male (but without any cleft on protarsomere 4, i.e. described in the genus *Microcosmus* sensu Chaudoir). Its pronotum is quite differently shaped than in other similar species, being narrow, constricted anteriorly (closer to the anterior margin), and rather rapidly expanded posteriorly. This peculiarity in the shape of the anterior part of the pronotum may not be species-specific, as it can also be observed in other species of the tribe (e.g. *C. strangulatus mesothorax* Häckel, 2022: 396). Chaudoir does not mention this peculiarity in the original description; therefore, I determined the otherwise identical-looking specimen from Equatorial Guinea (Tab. II: Fig. 19) as conspecific. In contrast, I describe similar South African specimens with different elytral coloration and a different shape of the aedeagus as a new species (see below). A new description of *C. angolensis* is not needed; I add only the antennal ratio (AR: 1.32 : 0.72 : 0.92) and pronotal transversity (PW/PL) 1.44 for the measured holotype. I also have a recently collected specimen, a male from Equatorial Guinea, which is conspecific with Chaudoir's type from Angola; I attach photographs of its habitus (Tab. II: Fig. 19 a), protarsomere 4 (Fig. 19 b), and aedeagus (Fig. 19 c). While drafting the article, I received another specimen, a male, also from Angola.

***Craspedophorus* (*Microschemus*) *bulirschi* sp. nov.**
(Figs. 20-23)

Microcosmus laetiusculus Péringuey (non Chaudoir!) 1926: 583 (partim).

Type locality. "Ithala Game Reserve, KwaZulu-Natal, Republic of South Africa"

Type material. Holotype (♂): "South Africa, KwaZulu-Natal, Ithala Game Reserve Mhlaba + trib. river banks 27°31.8'S 31°18.35'E, 800m, 8.xi. 2023 lgt. P. Bulirsch", (Tab. III: Fig. 20, cMH). Paratypes: (1 ♀): "South Africa w-Botswana Kalahari desert, II - 2017 lgt. V. Beneš", (Tab. III: Fig. 21, cMH); (1 ♂): "South Africa, Western Cape, Malgas, Breerivier banks 34°18.1'S 20°35.4'E, 25.xi. 2022, P. Bulirsch lgt.", (Tab. III: Fig. 22, cPB); (1 ♀): "RSA, Limpopo, Olifants river banks, 24°22.8'S 30°39.9'E, 480m, 26.xi. 2023, P. Bulirsch lgt.", (Tab. III: Fig. 23, cPB).

Comments. This taxon was probably cited by Péringuey (1926: 583) in comments to synonymization of the taxa *M. aurantiacus* with *M. laetiusculus*: "The size of this species is very variable; I have seen two very small examples (5 mm.) from Newcastle (Natal)." I am

convinced that such variability in size is not usual for the species of this genus and that both specimens mentioned by Péringuey belong to the newly described species. Moreover, the place of origin of those small specimens given by the author is not far from the type locality of the new species.

Description of holotype. BL 6.25 mm, EW 2.25 mm. Proportions. Head and pronotum (PW/PL 1.52, PW/HW 1.65), elytra (EW/PW 1.34, EL/EW 1.55).

Coloration. Body black, pronotum with lateral margins lightened yellow, each elytron with two yellow maculae. Humeral macula irregular, extending from interval IV to the elytral margin (and also extending onto the epipleura), broadly covering the outer three intervals, irregular, covering the shoulders and on interval VI reaching to the base of the elytra. Apical macula subquadrate, covering intervals VI-VIII; lateral margin remains black subapically. Palpi and antennomeres ferruginous; femora, genua, tibiae, and tarsi ferruginous.

Head subquadrate (length-to-width ratio 1.10), densely punctate; clypeus smooth and glabrous; neck punctured medially. Antennae shorter within the genus, extending to the first third of elytral length; scape slightly shorter than antennomere 3 (AR = 0.92 : 0.66 : 0.75) and twice as long as the eye tubercle. Labrum with apical margin slightly incised and with four setae, inserted at midlength and on the margins and edges of the inner third of the width of the labrum. Terminal palpomeres dilated (in females); maxillary palpomere with outer angle acute and inner angle very obtuse; labial palpomere with apex less oblique and outer (terminal) angle more rounded than in the maxillary palpomere. Penultimate labial palpomere nearly cylindrical, with two setae inserted near the inner margin.

Pronotum semilunar, clearly transverse, 1.5 times wider than long, convex on disc, coarsely and irregularly pitted over the entire surface, without distinct microsculpture; maximum width beyond midlength; anterior margin slightly curved forward; anterior angles rounded; lateral margins narrowing posteriorly, almost straight, tapering to basal angles, which project laterally; lateral rims flattened, tapering anteriorly and absent near the anterior margin; median longitudinal line not very distinct.

Elytra suboval (EL/EW 1.55), widening slightly behind the middle, almost parallel; humeri rounded but distinct; subapical sinuation indistinct; scutellar striae moderately long, ending after one quarter of elytral length. Striae deep, coarsely and regularly pitted; intervals convex, each with three rows of finer pits; microsculpture weakly distinct, isodiametric; interval three without a distinct setigerous puncture. Lateral margin flattened, with a series of coarse pits.

Ventral side black, smooth, glabrous; ventrites with a dense row of large punctures along bases; ventrite VII with two setigerous pores on each side subapically.
metepisterna posteriorly elongated, trapezoidal (macropterous species).

Legs long (but relatively shorter within the genus), slender; tarsi light brown; protarsomere 4 without a distinct slit, only slightly incised in both sexes.

Aedeagus. Median lobe and apex with distinct corrugation (Tab. III: Fig. 20b).

Derivatio nominis. The species was named after the collector, a specialist in Scaritinae and my friend Petr Bulirsch.

Differential diagnosis. *Craspedophorus* (*M.*) *bulirschi* sp. nov. differs from similar sympatric species mainly in body proportions, thickness of antennae, shape of the pronotum, and elytral coloration.

Distribution: Botswana, Republic of South Africa: KwaZulu-Natal.

Craspedophorus (*Microschemus*) *diversopictus* (Basilewsky, 1949) comb. nov.
(Fig. 69)

Basilewsky, 1949: 143 (*Microcosmodes*; type loc.: "Afrique orientale portugaise (=Mozambique, Cabo Delgado Prov.): Xinavane"); Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com).

Type material. Paratype (unsexed): "Xinavane / Nov. 21st (handwritten in black) P.E.A. / C.B. Hardenberg (printed in black) // PARATYPUS (printed in black on red circumscribed label) // COLL. MUS. CONGO / Col. P. Basilewsky (printed in black) // *Microcosmodes / diversopictus,* sp. nov. (handwritten in black) / P. Basilewsky det., 19(printed in black) 49 (handwritten in black on white label" (Tab. V: Fig. 69, MRAC).

Distribution: Mozambique.

Comments. This taxon was established by Basilewsky (1949: 143) based on a series of nine specimens with a relatively large body (7.0-7.5 mm) and a unique elytral coloration, which, as Basilewsky states, differs not only from all species of the genus *Microcosmodes* but from all other African Panagaeini. However, the examined paratype in the MRAC matches the dimensions of the species *C.* (*A.*) *repertus* (Basilewsky, 1947) (see above). Basilewsky does not mention the shape of the tarsi in his description, and it is evident that the protarsomere in *C. diversopictus* is not bilobed even in males, which is why the author classified the species in the genus *Microcosmodes*. The species is therefore not identical with *C. repertus*, but it is very close to it. According to the criteria adopted here, it belongs to the subgenus *Microschemus*. A new description is not needed; I add only the approximately measured antennal ratio (AR: 1.25 : 0.37 : 1.0) and the pronotal ratio (PW/PL 1.29).

Craspedophorus (*Microschemus*) *chaudoiri* (Raffray, 1886) comb. nov.
(Fig. 38)

Eudema laetum? Chaudoir 1876: 356 (non Dejean!).
Raffray, 1886: 312 (*Eudema*; type loc.: "Plateaux du Hamacen, du Lasta et du Damotkonene" (=Ethiopia)); Csiki 1929: 361 (*Microcosmus*); Alluaud 1937: 281; Basilewsky 1968b: 7; (*Microcosmodes*); Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com); Yashitla et al. 2023: 91 (*Microschemus*).

Material examined: Republic of Central Africa, 3 ♀♀: "Ombella-M'poko Dept., 75 km nne Bangui", (Tab. III: Fig. 38, cMH).

Distribution: Central African Republic, Eritrea, Ethiopia, Somalia.

Comments. This taxon was reported as *Eudema laetum*? by Chaudoir (1876: 356), based on the observation of a single specimen collected by Raffray in Abyssinia. Already in this report, Chaudoir noted differences between the observed specimen and Dejean's type of *C.* (*M.*) *laetus* from West Africa, but did not describe a new species. Raffray (1886: 312), after having the opportunity to collect additional specimens on the Ethiopian highlands, found that Chaudoir's differences from *C. laetus* were constant in all these populations and described the species in Chaudoir's honour. I did not find the type specimen in the MNHN, but I consider the part of Chaudoir's description (1876: 356) concerning the humeral macula to be relevant: "mais, comme dans le *laetus*, les taches externes qui la forment sont plus longues et s'avancent davantage vers la base que les internes…". It is thus the third species with a "*laetus*-type" coloration, with laterally expanding humeral maculae, and therefore differs from other species of the group inhabiting the same East African region. Alluaud, who processed material from an expedition to Ethiopia (1937: 281), also reported this species. I attach photographs of specimens from the Central African Republic (Tab. III: Fig. 38), which correspond exactly to the description but could not be compared directly with the type .

Craspedophorus (*Microschemus*) *cruciatus* species group

This group includes the remaining species of the subgenus *Microschemus* with a typical shape of the pronotum and shorter legs; the antennae are also shorter than in species of the subgenus *Adischissus*.

Craspedophorus (*Microschemus*) *tenuipunctatus* (LaFerté-Sénectere, 1851) comb. nov.

(Figs. 40-42, 75)

Panagaeus notulatus Dejean 1826: 291 (non Fabricius!) (type loc.: "Cap de Bonne Espérance").
Isotarsus tenuipunctatus LaFerté-Sénectere, 1851: 224 (type loc.: "India bor." probably in error sensu Chaudoir, 1879: 142); Chaudoir 1861: 347 (*Epicosmus*); Gemminger et Harold 1868: 210 (*Eudema*); Chaudoir 1879: 142 (*Microcosmus*); Péringuey, 1896: 482, 1926: 582; Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com)
Isotarsus marginicollis Schaum 1853: 432 nomen novum for *Panagaeus notulatus* Dejean.

Material examined: Eswatini, 1 ♂: "(Swaziland) Mlilwane Wildlife Sanctuary 26°29.22'S 31°11'E, 800m", (cMH); Republic of South Africa, 1 ♂: "Limpopo (Transvaal), Modimole (cMH); 1♀: "Free State, w of Bothaville, Vaal River", (cMH); 1 ♀: "Mpumalanga, 10 km n Volksrust, 27°18'S 29°55'S, 1800m", (Tab. IV: Fig. 42, cMH); 1 ♀: "Mpumalanga Prov., Graskop env., Manausta Lodge", (cMH); 1 ♂, 3 ♀♀: KwaZulu-Natal, Chelmsford NR, dam banks, 27°57.95'S 29°55.2'E at light, 1250m", (Tab. IV: Figs. 40 a, b, 41, cMH, cPB).

Distribution: Eswatini, Republic of South Africa (Free State, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape).

Comments. This species was first described by Dejean (1826: 291) based on specimens from South Africa (Cape of Good Hope), but under the name of Fabricius's taxon *Panagaeus notulatus* (a species described from the Oriental region). Dejean himself did not provide a new name for the species; this was done by LaFerté-Sénectere, who, however, gave an incorrect locality (still as an Oriental species). Schaum (1853: 432) also proposed a new

name for the taxon, but did not redescribe the species and based his decision solely on the different origin of the two taxa (South African vs. Oriental). The currently valid name of the species was established by Chaudoir, according to priority (LaFerté-Sénectere), together with the indication of the correct locality and a redescription of the species (1861: 347). Another redescription was provided by Péringuey (1896: 482), together with a key for differentiating four larger, closely related South African species of the genus (here subgenus *Microschemus*). No further description is needed. I did not find the type specimen in the MNHN. I attach photographs of South African specimens determined using Péringuey's key and corresponding to Chaudoir's description (Tab. IV: Figs. 40-42) and add the pronotal ratio (PW/PL 1.50) and antennal ratio (AR: 0.90 : 0.55 : 0.81).

Craspedophorus (*Microschemus*) *cruciatus* (Dejean, 1831) comb. nov.

Dejean, 1831: 602 (*Panagaeus*; type loc.: "Sénégal"); LaFerté-Sénectere 1850: 397; LaFerté-Sénectere 1851: 222 (*Isotarsus*); Schaum 1853: 28; Chaudoir 1861: 348 (*Epicosmus*); Gemminger et Harold 1868: 208 (*Eudema*); Chaudoir 1879: 145 (*Microcosmus*); Basilewsky 1968a: 94 (*Microcosmodes*); Baehr 2003: 413; Lorenz 2005: 322 (*Microschemus);* Häckel et Farkač 2012: 88 (*Microcosmodes*); Häckel & Azadbakhsh, 2016: 554; Anichtchenko 2024 (www.carabidae.com).
Microcosmodes arabicus Häckel & Azadbakhsh, 2016: 554; Anichtchenko 2024 (www.carabidae.com), **syn. nov**.

Type material. Lectotype ♀ (established by Chaudoir and pinned by him in the row in Bates-Oberthür Collection, labelled "*cruciatus* / in Sénégal (handwritten in black on blue label) // *cruciatus* (handwritten in black on white label)" (According to Chaudoir (1879: 146) the type is coming from Sénégal) (Häckel & Azadbakhsh 2016: 558: Fig. 5, MNHN).
Holotype (♂) of *Microcosmodes arabicus*: "SW Asia, Oman, Dhofar Province Jabal al Qamar w Al MughsaylWádí, N 16.84497°, E 53.68615° 20.-31. 8. 2012 lgt. P. Kučera" (Häckel & Azadbakhsh2016: 558: Fig. 4, NMPC). Paratypes of *M. arabicus*: 2 ♂♂: (same data as holotype) (MNBL, cMH); 1 ♂: "Sw Asia Oman Dhofar prov Wadi Mughsayl IX-2007 lgt. J. Horák", (cSA); 1 ♀: "Sultanate Oman, 250m, Wadi Nashib, Nashib env. 25-26. 9. 2003 lgt. S. Jákl", (cSJ); 1 ♀: "SW Asia, Oman, Dhofar Prov. Jabal al Qamar, 5 km n Dhalqut, 22. 11. 2011, N 16.72291°, E 53.27424°, 300m lgt. W. Grosser", (cMH); 1 ♀: same data except "22. 9. 2011, lgt. P. Kučera", (cDW); 1 ♂: "Sultanate Oman, Dzhophar prov. 0-50m Takwa env., 8. 1999 lgt. S. Jákl", (cMH); 1 ♂: "Sw Asia, w Yemen, Hammam Ali (NW Dhawran) 14°41'N 44°07'E, ca 1570m, lgt. D. Král", (cMH); 5 ♂♂, 5 ♀♀: "Baha Province, Al Makhwa, Shada Al Ala (Nature Preserve), 825-392m", (KSMA).

Other material examined: Ethiopia, 1 ♀: "Oromiya region, Guji Zone (Sidamo) 60 km e Negele" (cMH); Senegal, 1 ♂: "Dakar. Laf" (probably Senegal) (NMWC); Yemen, 1 ♂: "Sw Asia w Yemen, NEE of Hawf 16°39'N, 53°03'E" (cMH); 1 ♂, 1 ♀: "SW Asia S- Oman, Dhofar Prov. Mountain Chain" (cMH).

Distribution: Ethiopia, Gambia, Ivory Coast, Oman, Saudi Arabia, Senegal, Tchad, Yemen.

Comments. After examination and measurement of numerous specimens deposited in various museums (NMWC, MNHN, MRAC) and identified by Chaudoir, Bates, or Basilewsky as *C.* (*M.*) *cruciatus*, I found no morphological differences when compared with the type material of the recently described species *Microcosmodes arabicus* Häckel & Azadbakhsh, 2016, including the holotype and several paratypes. Although the aedeagus of both taxa cannot be compared directly with the original type of *C. cruciatus*, the differences noted in the description of *M. arabicus* (Häckel & Azadbakhsh 2016: 554) can be readily explained by intraspecific variability. This is particularly evident given that the description

of *M. arabicus* was based on comparison with a single specimen, the lectotype in the MNHN (Häckel & Azadbakhsh 2016: 558, Fig. 5). Additional material also provides a clearer picture of the species' distribution, which is remarkably wide, extending from Senegal across the entire Sahel region of Africa to much of the Arabian Peninsula.

Craspedophorus (*Microschemus*) *amabilis* (Dejean, 1831) comb. nov.
(Figs. 24, 25)

Dejean, 1831: 604 (*Panagaeus*; type loc.: "Sénégal"); LaFerté-Sénectere 1850: 397; LaFerté-Sénectere 1851: 222 (*Isotarsus*); Schaum 1853: 28; Chaudoir 1861: 348 (*Epicosmus*); Gemminger et Harold 1868: 208 (*Eudema*) Chaudoir 1879: 145 (*Microcosmus*); Basilewsky 1953a: 175 (*Microcosmodes*), 1954: 247, 1956: 470, 1963: 383, 1968a: 94; Serrano 2005: 68; Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com).

Material examined: Central African Republic, 1 ♀: "Nw-Centrafrique, Ouham Prov., (50 km e) Bossangoa-Bouca road", (Tab. III: Fig. 24, cMH); Ivory Coast, 1 ♀: "Dimbroko" (NMP); Ghana, 1 ♀: "Sc-Ghana (Kumasi Metropolitan District), Tafo", (Tab. III: Fig. 25, cMH).

Distribution: Central African Republic, Democratic Republic of the Congo (Haut-Katanga, Haut-Lomami, Lualaba Provinces), Ghana, Guinea, Guinea-Bissau, Ivory Coast, Senegal.

Comments. I have not examined the type specimen. Dejean states in the original description that he had only one specimen at his disposal and that it was heavily damaged by mould (Dejean 1831: 604). I also did not find any potential lectotype designated by Chaudoir in the Bates-Oberthür collection at the MNHN. Nevertheless, the species is easily identifiable from the original descriptions: in size it belongs to the smallest species of the subgenus *Microschemus* and, consequently, of the entire genus *Craspedophorus*. The descriptions of coloration and pronotal shape provided by both Dejean and Chaudoir are unambiguous. Serrano (2005: 72, Fig. 19) published a photograph of this species. I attach photographs of two specimens deposited in the NMP and determined by Jedlička, which correspond well to the descriptions by Dejean and Chaudoir (Tab. III: Figs. 24, 25).

Craspedophorus (*Microschemus*) *laetus* (Dejean, 1831) comb. nov.
(Fig. 71)

Dejean, 1831: 603 (*Panagaeus*; type loc.: "Sénégal"); LaFerté-Sénectere 1850: 393, 397; LaFerté-Sénectere 1851: 222 (*Isotarsus*); Schaum 1853: 28; Chaudoir 1861: 348 (*Epicosmus*); Gemminger et Harold 1868: 209 (*Eudema*); Chaudoir 1879: 144 (*Microcosmus*); ?Basilewsky 1948: 37 (*Microcosmus*); Basilewsky 1964: 172 (*Microcosmodes*), 1968a: 94; Serrano 2005: 64; Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com).

Material examined: Burkina Faso, 1 ♂: "Haute Volta. Ouagadongou", (cMH); Ivory Coast, 1 ♂: "Mandaloa, Cte d'Ivoire", (cMH); Niger, 1 ♂: "Dosso-Maradi. Nigeria Afr. occ.", (cMH); Sierra Leone, 1 (unsexed): "Rhobomp / Sierra Leone", (Tab. VI: Fig. 71, MNHN).

Distribution: Burkina Faso, Guinea, Guinea-Bissau, Ivory Coast, Niger, Senegal, Sierra Leone, (?Democratic Republic of the Congo (Kongo Central).

Comments. This taxon was based on a single specimen from Senegal. It differs from the two other species described by Dejean (1831: 603) among other characters by its elytral coloration, which represents the most common type of such coloration within the entire subgenus *Microschemus*. According to published records, the species is widespread mainly in West and Central West Africa. I did not locate Dejean's original type specimen (in the Bates-Oberthür collection at the MNHN), but in the general collection I found a specimen determined by Alluaud that corresponds exactly to the descriptions by both Dejean and Chaudoir and can be used as a comparative reference for identifying this species (Tab. VI: Fig. 71). I am convinced that within this group of species with similar elytral coloration there are indeed three distinct taxa (see below). The specimen from Senegal designated as *M. symei* Murray, 1857 on the website Carabidae.org is, in my opinion, more likely referable to Dejean's *C. laetus*; however, no body proportions are provided there (see below, comments on *C. symei*).

Craspedophorus (*Microschemus*) *vicinus* Murray, 1857 comb. nov.
(Figs. 26-29, 77-79)

Murray, 1857: 125 (type loc.: "Old Calabar"); Chaudoir 1861: 348 (*Epicosmus*); Gemminger et Harold 1868: 210 (*Eudema*); Chaudoir 1879: 140 (*Microcosmus*); Burgeon 1930: 162; Burgeon 1935: 183; Basilewsky 1952: 244, 1960: 130, 1964: 172, 1968a: 94 (*Microcosmodes*); Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Nève et al. 2022: 315; Anichtchenko 2024 (www.carabidae.com).
Panagaeus laetus Boheman (non Dejean!) 1848: 126.
Craspedophorus exaratus Schaum, 1863: 84 (syn. by Chaudoir, 1879: 141).
Microcosmus natalensis Péringuey 1896: 483 (type loc.: "Natal (Maritzburg, Frere, D'Urban, Tugela River)"); Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com), **syn. nov.**

Type material. Paralectotype (secondary type ♂): "NATAL / Estcourt (printed in black) / Tugela (handwritten in black on white label) // *Microcosmus* / *natalensis* / *31* (handwritten in black on wite label) // SAM-Col- / A007/88 (nadwritten in black on red label)" (Tab. VI: Fig. 79, SAMC).

Basilewsky's comparative material: 1 (♂): "Malvern, / Natal. (printed in black and separated by a blue line from:) G.A.K. Marshall. / 1917-55 (printed in black o a white label) // MUSÉE DU CONGO (printed in black on white label) // R. DÉT. (printed) / HH (handwritten) / 3015 (printed in black on white label) // exemplaire identique / au TYPE de / "*Panagaeus laetus*" (handwritten in black) / P. Basilewsky det., 19) printed in black) / Bohem., non Dejean / (vu au Mus. Stockholm / VIII. 1954) (handwritten in black on white label)" (Tab. VI: Fig. 77, MRAC); 1 ♀: "Salisbury, / Mashonaland. (printed in black and separated by a blue line from:) G.A.K. Marshall. / 1917-55 (printed in black on a white label) // MUSÉE DU CONGO (printed in black on white label) // R. DÉT. (printed) / HH (handwritten) / 3015 (printed in black on white label) // *Microcosmus* / *natalensis* / Péringuey (handwritten in black on white label)" (Tab. VI: Fig. 78, MRAC).

Other material examined: Benin, 1 ♂: "5 km nw Tanguieta, direction Tanougou", (Tab. III: Fig. 26 a, b, cMH); DR Congo, 1 ♂: "Kasaï-Orient. Kasongo-Fuamba, 80 km n from Mbuji-Mayi, 5°38'32.4»S 23°36'28.1»E", (Tab. III: Fig. 28, cMH); Guinea Equatorial, 2 ♂♂: "(Nyefang) Mossumu", (cMH); Republic of South Africa, 1 ♂: "Mpumalanga. Kruger National Park, Skukuza 24°59'30»S 31°35'09»E", (Tab. III: Fig. 29, cMH); 1 ♂: "KwaZulu-Natal, Mkhuze GR, Mantume Camp env., 27°35.85'S 32°13.1', (cPB); Zimbabwe, 1 ♀: "Manicaland Province, 42 km nw of Birchenough Bridge, 19°57'28.84»S 32°04'30.38»E", (Tab. III: Fig. 27, cMH).

Distribution: Benin, DR Congo (Kasaï-Oriental), Gabon, Guinea Equatorial, Ivory Coast, Nigeria, Republic of South Africa (Mpumalanga), São Tome e Principe, Senegal, Zimbabwe.

Comments. Murray himself admitted that this species might represent only a larger variant of *Craspedophorus symei*. I have not examined the type (possibly housed in the BMNH), but Murray accurately described the distribution and overall shape of the humeral elytral macula and provided body dimensions (length 3.75 lines, width 1.5 lines), which were later converted to millimetres by Chaudoir (1879: 140): "length 7-8.25 mm, width 3-3.5 mm". Based on this combination of characters, the species cannot be confused. Chaudoir added an important diagnostic feature in his redescription by emphasizing the thickness of the antennomeres, which are thicker and relatively shorter than in other species of the genus *Microcosmus* (here subgenus *Microschemus*). He also documented the variability of the elytral maculae based on three specimens from Gabon. From his description it follows that the elytral margins in this taxon always remain black and that the humeral and apical maculae never reach or merge with them. Specimens from South Africa that correspond exactly to Chaudoir's redescription can therefore be regarded as conspecific (Tab. VI: Figs. 77-79). This also applies to Boheman's specimen from "Portus Natalensis" (now KwaZulu-Natal, South Africa), which Boheman (1848: 126) identified as *Panagaeus laetus*. Boheman's description is too brief for a precise determination, but he mentions "an almost triangular shoulder spot, which does not reach the shoulder, and an apical one, which is almost transverse…". This pattern may correspond both to Chaudoir's taxon *Microcosmus laetiusculus* (1879; see below) and to the South African population later described by Péringuey. The body size given by Boheman (6-8 mm) also fits Murray's *C. vicinus*, but no direct comparison of types has been made. Péringuey (1896) later described another similarly sized taxon, *Microcosmus natalensis*, based on specimens from Tugela (present-day KwaZulu-Natal, South Africa); its type is illustrated here (Tab. VI: Fig. 79). The coloration of this taxon corresponds closely to that described for *C. vicinus*. The last author to examine Boheman's specimen was Basilewsky, who studied the type in the Stockholm Museum and selected a specimen from Marshall's South African material (from Malvern, now KwaZulu-Natal) that he considered identical to Boheman's specimen (Tab. VI: Fig. 77). He deposited it in the MRAC and added further specimens of identical appearance from Marshall's collections, which he identified as *M. natalensis* (Tab. VI: Fig. 78). Basilewsky never published these conclusions and did not explicitly compare them with *C. vicinus*. However, his comparative specimen corresponds not only to the type of *M. natalensis*, but also to Chaudoir's redescription of *Microcosmus vicinus*. I therefore consider all the above-mentioned taxa to be conspecific.

Craspedophorus (*Microschemus*) *symei* Murray, 1857 comb. nov.

(Figs. 34-37, 73, 74)

Murray, 1857: 124 (type loc.: "Old Calabar"); Chaudoir 1861: 348 (*Epicosmus*); Gemminger et Harold 1868: 210 (*Eudema*); Basilewsky 1953a: 175 (*Microcosmodes*), *1953b: 539, *1956: 470, 1960: 130, *1968a: 94; Baehr 2003: 413; Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com).

Microcosmus laetus var.? Chaudoir 1879: 144 (partim); Burgeon 1935: 183; Basilewsky 1948: 37.

Microcosmodes cf. *villosuslus* (Chaudoir, 1879) Anichtchenko (www.carabidae.com) det. M. Häckel 2021.

Microcosmus perrieri Jeannel, 1949: 851 (type loc.: "Andranofotsy, près de Maroansetra, baie d'Antongil"); Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com), **syn. nov.**

Type material. Paratype (unsexed): “King. Calabar / Murray (handwritten in black on white label) // *Symei* / Murray (handwritten in black on white label) // PARATYPE (printed in black) / *Symei* / Murr. (handwritten in black on red label)” (Tab. VI: Fig. 73, MNHN).
Type (unsexed): “Somalia it. / Bidi - Scionde / Basso Giuba / Patrizi 1924 (handwritten in black on white label) // *Microcosmus* / *Patrizii* / Type (handwritten in black) / Alluaud, det. 1927 (printed in red on white red framed label) (Tab. VI: Fig. 74, MNHN).

Other material examined: Kenya, 1 ♂, 2 ♀♀: “Lamu Province, e of Garsen” (cMH); 1 ♀: “(Tsavo) Voi” (cMH); Tanzania, 1 ♀: “Pwani region. 4 km e Utete, at Rufiji River 35m”, (cMH).

Distribution: Democratic Republic of the Congo (Haut-Lomami, Mongala), Ghana, Kenya, Nigeria, Somalia, Tanzania (*Gambia, *Guinea, *Guinea-Bissau, *Ivory Coast, *Senegal, *Togo).

Comments. The taxon was described by Murray in considerable detail. Subsequently, Chaudoir (1861: 351) listed the taxon *symei* among species whose types he had not yet seen (“parmi les petites espèces il faut citer encore: …”), but reassigned it to the genus *Epicosmus*. In the same work, Chaudoir classified Boccandé’s specimen from “Sénégambie portugaise” (present-day Guinea-Bissau) within Dejean’s taxon *laetus* (1861: 348). He also separated Laferté’s taxon *obscuricornis* from *laetus* as a distinct species. However, in his later monograph (1879), Chaudoir treated Boccandé’s specimen as conspecific with Murray’s taxon, whose paratype he had meanwhile obtained, and thus considered *symei* a variant of *laetus*, implying a wide West African distribution from Senegal to southeastern Nigeria. Boccandé’s specimen, still regarded as a variant of *laetus*, then served in Chaudoir’s monograph as evidence that a pattern of elytral coloration in which the humeral yellow macula reaches the shoulders is common within populations of *laetu*s. My own observations support this conclusion, as shown by specimens of *C. laetus* from Far West Africa, for example Sierra Leone (Tab. VI: Fig. 71). Chaudoir, however, did not comment on possible differences in body proportions between Boccandé’s specimen and Murray’s *symei*. He further supported his view by stating (1879: 144) that a variant with yellow humeri, identical to the description of *C. symei*, was already known to Laferté within *laetus*. Yet a careful examination of Laferté’s works (1850, 1851) shows that the “variant of *laetus*” cited by Chaudoir actually corresponds to Laferté’s redescription of a different taxon, *obscuricornis*. Among other characters, *C. obscuricornis* clearly differs from *laetus* sensu Dejean, notably by longer antennae and a different palpal shape (Tab. II: Fig. 13). I did not find Boccandé’s specimen in the Bates--Oberthür collection (MNHN); only Murray’s paratype was present. Nevertheless, I have examined several specimens of laetus corresponding in body proportions to Dejean’s type, originating from nearby localities (Senegal, Sierra Leone), and showing yellow shoulders. In my opinion, Murray’s species differs from Dejean’s laetus primarily in body size and proportions, whereas the identical humeral coloration represents a variable, non-specific character. Other authors largely followed Chaudoir’s interpretation (Basilewsky 1948), but Basilewsky already listed *Microcosmodes symei* as a distinct species in 1953 (p. 175) without detailed justification and continued to treat it as such. He thus accepted that the yellow coloration of the shoulders is not species-specific and depends rather on body size and the length of the appendages.

From this perspective, Basilewsky's earlier records of both taxa must also be reconsidered: "*laetus*" from Kongo Central in the DR Congo (possibly referable to *C. vicinus* or *C. chaudoiri*) and "*symei*" from Guinea (1956: 470), Ivory Coast (1968: 94), and Togo (1953b: 539). At least the first of these might belong to Dejean's *laetus* with humeral yellow maculae extending to the shoulders. As I did not photograph the cited specimens in the MRAC, I leave them under their original determinations and merely indicate them with an asterisk (*) in the list.

Alluaud selected one specimen collected by Marquis S. Patrizi in 1924 in Somali Jubaland and labelled it as the type of a new species, *Microcosmus patrizii*. In his article (1923: 128), Alluaud stated that this was only a preliminary list of Carabidae collected mainly in Italian Jubaland and that certain difficult groups would be treated in a second note in 1924. However, he did not mention the newly designated "type" in the 1923 paper and referred only to a later contribution, which I have not found in the literature. In the 1923 article, Alluaud also dedicated all new types to the Museum in Genoa, whereas the "type" of *M. patrizii* is deposited in the general collection of the MNHN (Tab. VI: Fig. 74). It can therefore be assumed that he abandoned the description of this specimen as a new species and concluded that it belonged to an already described taxon. Basilewsky later (1968b: 9) reported the occurrence of *M. chaudoiri* also in Somalia (Balad, Uebi Shebbeli). In the MRAC I observed several specimens labelled as *chaudoiri* that do not match the description of that species; these represent East African material that I classify here as *C. symei*. I am convinced that the MNHN specimen labelled "*patrizii*" is conspecific with *C.* (*M.*) *symei*. The specimen from Ghana illustrated on Carabidae.org, which I tentatively identified in 2021 as cf. *villosulus*, is likewise a misidentification and clearly belongs to the western population of *C. symei*.

In conclusion, within this group of species with similar elytral coloration, at least three distinct taxa can be recognized. The taxon *laetus* appears to be a strictly West African species of small size and shorter appendages, regardless of whether the humeral macula reaches the shoulder. The taxon *symei* is larger-bodied with relatively longer appendages and ranges from Central West Africa to East Africa, where populations may show a markedly broader orange crest pattern. The taxon *chaudoiri* (see below) occupies a similar range to *symei* but differs from laetus by reduced elytral maculation and slightly smaller size, and from sympatric *symei* by pronotal proportions and distinctly different elytral coloration. A fourth taxon with similar elytral coloration, Chaudoir's *M. villosulus* (see below), is based on a single female specimen, making it impossible to determine whether it represents a valid species or merely a variant of Dejean's *laetus*. A comparable pattern is also observed in populations of *C. laetiusculus* (Chaudoir, 1879) from Africa and Madagascar, which nevertheless differ in elytral and pronotal proportions from all taxa discussed here.

***Craspedophorus* (*Microschemus*) *villosulus* (Chaudoir, 1879) comb. nov.**

(Figs 72, 39a, b)

Chaudoir 1879: 145 (*Microcosmus*; type loc."Sénegambie portuguaise"); Basilewsky 1968a: 94 (*Microcosmodes*); Serrano 2005: 68; Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com).

Type material. Lectotype (♂): "TYPE (printed in black) / *villosusulus* (handwritten in black on red label) // Sénég: portug / Boccandé (handwritten in black on white label) // *villosusulus* / *Chaud* (handwritten in black on white label)" (Tab.VI: fig 72, MNHN, Bates-Oberthür Collection).

Other material examined: Ghana, 1 ♂: "Northern Province, Savelugu env." ? cf. *Villosuslus*, (Tab. III: Fig. 39 a, b, cMH).

Distribution: Guinea-Bissau, *Ivory Coast, *Ghana.

Comments. This taxon was based on a single female specimen (see also comments under *C. symei*), so it is not possible to decide whether it represents a valid species or merely a variant of Dejean's taxon *C. laetus*. I have never seen any additional specimen fully matching Chaudoir's description in the MNHN, MRAC, or other collections examined, but I respect later authors who have referred material to this species. Basilewsky reported five specimens from Bingerville (Ivory Coast) collected in 1962 and 1963, without specifying sex, and Serrano reported two males and two females collected recently (2005) in Guinea-Bissau. The difficulty lies in the fact that the type specimen in the MNHN, despite considerable damage (Tab. VI: Fig. 72), corresponds quite precisely to Chaudoir's original description, whereas in Serrano's illustrated male from Guinea-Bissau (Serrano 2005: Fig. 18), identified as *M. villosulus*, the pronotum is less transverse than in the specimen illustrated on the same page (ibid., Fig. 17) and identified as *M. laetus*. This directly contradicts the original diagnostic data. One can therefore only speculate about possible variation in pronotal proportions between sexes; Serrano's illustrated specimen is a male. I also have one specimen from Ghana in my collection that appears similar to Serrano's concept of "*villosulus*", likewise a male. I present it here with a photograph (Tab. III: Fig. 39).

Craspedophorus (*Microschemus*) *planicollis* (Chaudoir, 1876) comb. nov.

(Figs. 30-33)

Chaudoir 1876: 355 (*Eudema;* type loc.: "Abyssinia." (=Ethiopia)), Chaudoir 1879: 146 (*Microcosmus*); Csiki 1929: 362; Müller 1942: 73; Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com); Yashitla et al. 2023: 91 (*Microschemus*).

Material examined: Ethiopia, 1 ♂: "Oromiya Region. Sidamo Prov., ca 50 km ne Mega, 1400m", (Tab. III: Fig. 30, a, b,cMH); 1 ♂: "Oromiya Region. 6 km nw Dolomena, 1400m", (Tab. III: Fig. 31, cMH); Kenya, 1 ♂, 1 ♀: "Coast Province, Voi env. Sagalla hills", (Tab. III: Figs. 32, 33, cMH); 1 ♀: "Tsavo, Voi", (cMH).

Distribution: Eritrea, Ethiopia, Kenya, Somalia.

Comments. This taxon was described on a single specimen collected by Raffray in Abyssinia. Chaudoir (1876: 355) did not mention the sex of the type specimen, and I was not able to locate it in the MNHN. Müller (1942: 73) subsequently reported additional specimens from Benadir (Somalia) and Eritrea. Several Ethiopian and Kenyan specimens examined by me fit Chaudoir's description well and are therefore assigned to this taxon, although direct comparison with the type material was not possible.

Craspedophorus (*Microschemus*) *laetiusculus* (Chaudoir, 1879) comb. nov.
(Figs. 46-50, 75)

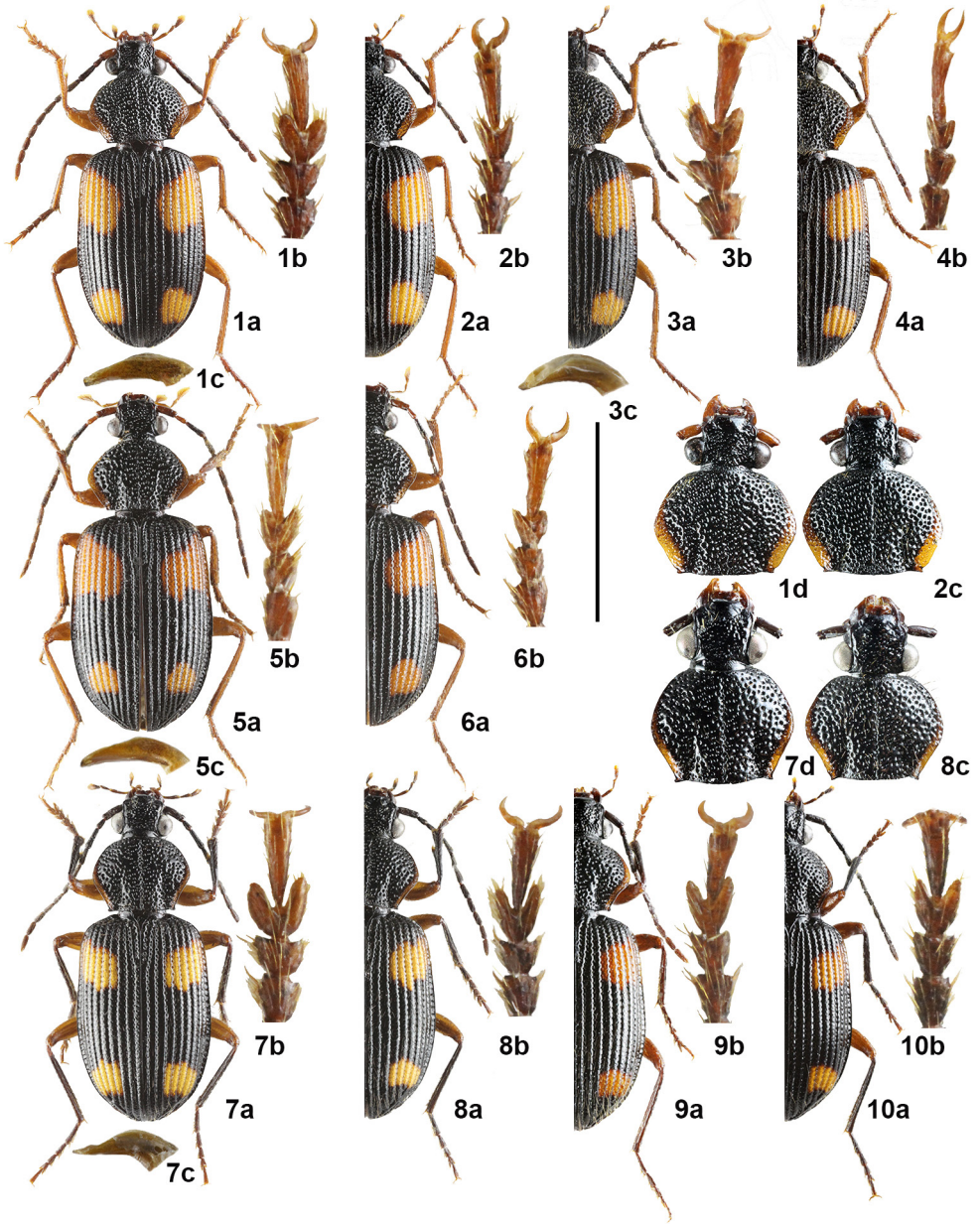
Chaudoir, 1879: 143 (*Microcosmus*; type loc.: "lac N'gami" (=northern Botswana)); Péringuey 1896: 483; Lorenz 2005: 322 (*Microschemus*); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com).
Microschemus perrieri Jeannel, 1949: 851 (type loc.: "Andranofotsy"); Lorenz 2005: 322; Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com), **syn. nov.**

Type material. Type (♂) of *Microschemus perrieri* Jeannel, 1949: "TYPE (printed in black on red label) // ♂ (hanwritten in black on orange label) // Andranofotsy (handwritten in black) // Madagascar / R^op. Maroantsetra / III. 38. (handwritten in black) Vadon! (printed in black) // *Perrieri* / sp. nov. (handwritten in black) // MUSÉUM PARIS / 1938 / J.VADON et E. LEBIS (printed in black on blue label" (Tab. V, Fig. 75, MNHN).

Other material examined: Botswana, 3 ♂♂, 1 ♀: "Central district, ca 110 km nw of Francistown (road to Maun), Baobab camp", (Tab. IV: Fig. 48, cMH); Ethiopia, 1 ♀: "S.N.N.P.Region, Gamo Gofa Zone, 20 km ne Arba Minch", (Tab. IV: Fig. 50, cMH); Guinea Equatorial, 2 ♂♂, 1 ♀: "(Nyefang) Mossumu" (cMH, cSF); Namibia, 1 ♂: "Oshikoto region, Andoni, ne Etosha Pan, 1090m", (Tab. IV: Fig. 49, cMH); Republic of South Africa, 1 ♀: "Limpopo (Transvaal), Modimole", (cMH); 1 ♂: "KwaZulu-Natal Mkuze River env., 25 km s Mbazwana", (cMH); 1 ♂: "Western Cape, Kogelberg NW borders, Rooiers riv. banks, 34°18.0'S 18°49.4'E", (cPB); Zambia, 1 ♂, 1 ♀: "Kasanka National Park, Kabwe 3 Camp, 12.52309S 30.21330E, 1183m", (cMH); Zimbabwe, 1 ♂, 1 ♀: "Masvingo Prov., Gonarhezou NP (North) nr. Broken Bridge, Save River, 308m, 21°17'07"S 31°54'50.12"E", (Tab. IV: Fig. 46 a, b, cMH); 1 ♂, 1 ♀: "Matabeleland North Region, Bulawayo, Shangani Naletale Ruins", (Tab. IV: Fig. 47, cMH); 1 ♀: "Ne Masvingo, w of Birchenough Bridge, 19°57'28.84"S 32°04'30.38"E", (cMH).

Distribution: Botswana, Ethiopia, Guinea Equatorial, Madagascar, Namibia: Oshikoto; Republic of South Africa: KwaZulu-Natal, Limpopo, Western Cape, Zambia, Zimbabwe.

Comments. This taxon was based on a single specimen collected in Botswana. In Chaudoir's original description, the species is primarily distinguished from *C. tenuipunctatus* (LaFerté); these differences need not be repeated here. Unfortunately, far less attention is paid to its distinction from the subsequently described species (*C. aurantiacus*, see below). Péringuey (1896: 482) constructed a key to four South African species without examining any type material. He relied on published descriptions of three species and described a fourth (*M. natalensis*), which is here synonymized with *C. vicinus* (see above). Later, Péringuey (1926: 583) revised his opinion, stating that Chaudoir's two species (*M. aurantiacus* and *M. laetiusculus*) could not be separated, and he synonymized them. This view was subsequently adopted by Lorenz and other authors. However, based on my observations and measurements, these taxa represent two distinct species with fairly uniform pronotal shape and proportions, and-more importantly-with stable and markedly different elytral coloration. For *C. laetiusculus*, the pronotal ratio is PW/PL = 1.52 and the antennal ratio AR = 0.93 : 0.55 : 0.87. The species is also very similar to Murray's *C. symei* from Central Africa, but differs clearly in size (Chaudoir gives 8 mm for *laetiusculus* and 6-7 mm for *symei*) and especially in the much more prominent, bulging eyes. In contrast, the type of Jeannel's *M. perrieri* from Madagascar, deposited in the MNHN, is completely indistinguishable from South African populations of *C. laetiusculus*. I therefore synonymize *M. perrieri* with *C. laetiusculus* here.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Tab. I. *Craspedophorus* (*Adischissus*) species from Africa (scale bar 5 mm), Figs. 1-10:
1- *C.* (*A.*) *chaudoirianus* sp. nov., HT: a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) apex of aedeagus, lateral view, d) head and pronotum, dorsal view;
2- *C.* (*A.*) *chaudoirianus* sp. nov., PT (female of Nigeria): a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) head and pronotum, dorsal view;
3- *C.* (*A.*) *chaudoirianus* sp. nov., PT (male of Cameroon): a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) apex of aedeagus, lateral view;
4- *C.* (*A.*) *chaudoirianus* sp. nov., PT (female of Guinea Equatorial): a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view;
5- *C.* (*A.*) *barkeri* (Fedorenko, 2015), male of Eastern Cape, South Africa): a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) apex of aedeagus, lateral view;
6- *C.* (*A.*) *barkeri* (Fedorenko, 2015), female of Eastern Cape, South Africa): a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view;
7- *C.* (*A.*) *angularis* Schaum, 1863, male of Guinea Equatorial): a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) apex of aedeagus, lateral view, d) head and pronotum, dorsal view;
8- *C.* (*A.*) *angularis* Schaum, 1863, female of Guinea Equatorial): a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) head and pronotum, dorsal view;
9- *C.* (*A.*) *angularis* Schaum, 1863, female of Guniea: a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view;
10- *C.* (*A.*) *angularis* Schaum, 1863, female of Gabon: a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view.

Craspedophorus (*Microschemus*) *aurantiacus* (Chaudoir, 1879) comb. nov., bona species

(Figs. 51-54, 76)

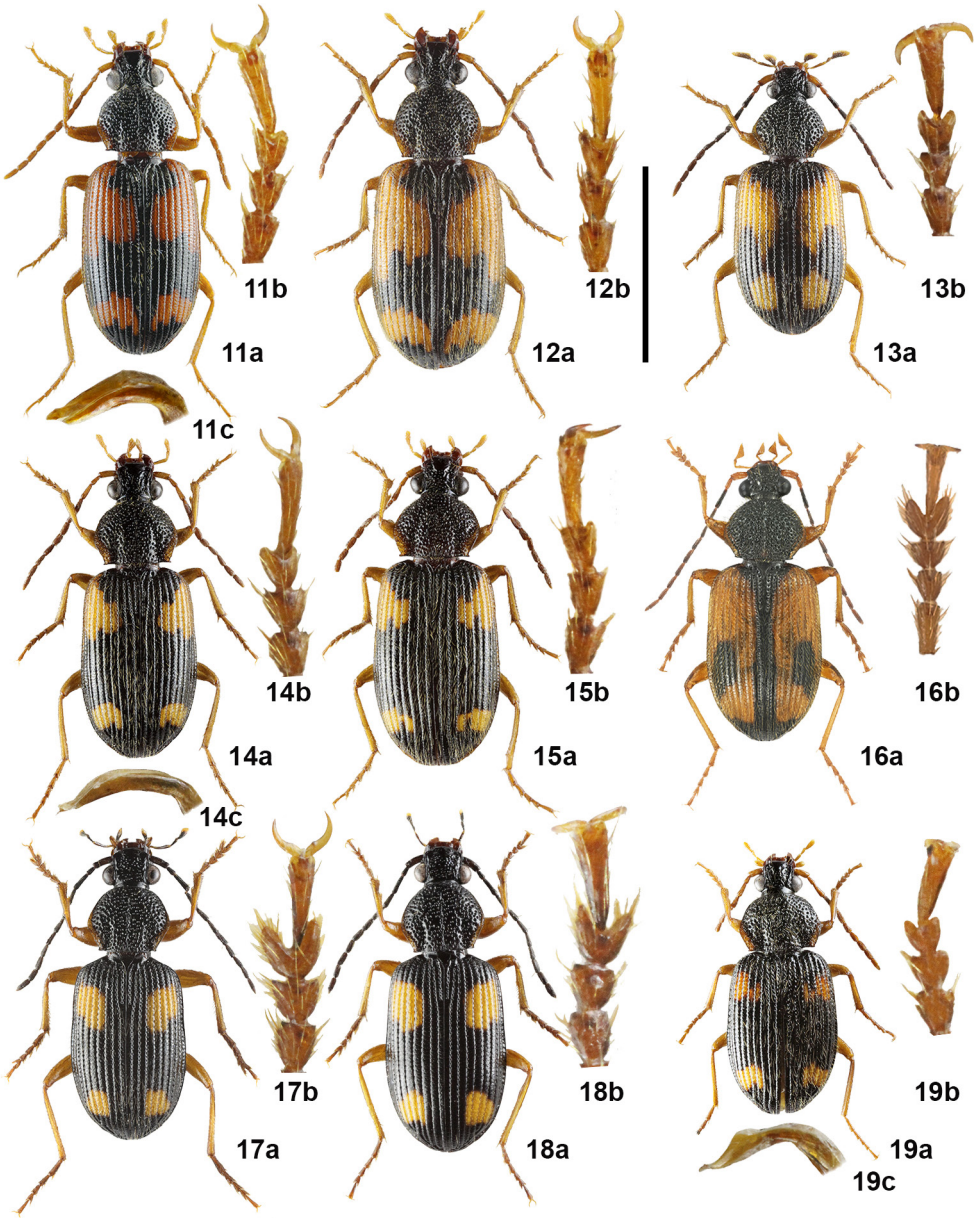
Chaudoir, 1879: 143 (*Microcosmus*; type loc.: "lac N'gami" (=northern Botswana)); Péringuey 1896: 483; 1926: 583 *Microcosmus laetiusculus* Péringuey (non Chaudoir!) 1926: 583, Péringuey's synonymisation (erroneous); Lorenz 2005: 322; Häckel et Farkač 2012: 88.
Microcosmus luebberti Kuntzen, 1919: 148 (type loc.: "Deutsch Südwestafrika" (= Namibia)); Lorenz 2005: 322 (*Microschemus);* Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com), **syn. nov.**
?*pierronii* Fairmaire, 1880 (*Microcosmus,* type loc.: "Nossi-Bé" (=island near Madagascar)).

Type material. Comparative type (established by Basilewsky) (♀): "COLL. MUS. CONGO / D.S.W.A.: Outjo (handwritten in black) / Col. P. Basilewsky (printed in black on white label) // *Microcosmodes / Lübberti* Kuntz. / (handwritten in black) / P. Basilewsky det., 19(printed in black) 56 (handwritten in black on white label" (Tab. VI: Fig. 76, MRAC).

Other material examined: Botswana, 2 ♂♂, 3 ♀♀: "North-West district, cca 50 km sw Maun, Toteng env.", (Figs. 53, 54 cMH); Namibia, 1 ♂: "Khomas region, 1-2 km e Seeis, 1610m", (Fig. 51 a, b, cMH); 1 ♀: "Oshikoto Region, ne Etosha, Pan Andoni, 1090m", (Fig. 52, cMH); Republic of South Africa, 1 ♂: "Mpumalanga (Transvaal), Graskop: Manausta Lodge", (cMH); 1 ♀: Limpopo, Krüger National Park, Mopani District", (cMH); Zimbabwe, 1 ♂: "Masvingo Prov., Gonarhezou NP (North) nr. Broken Bridge, Save River, 308m, 21°17'07"S 31°54'50.12"E" (cMH).

Distribution: Botswana, Namibia: Khomas, Oshikoto; Republic of South Africa: Limpopo, Mpumalanga; Zimbabwe.

Comments. This taxon was described by Chaudoir and compared with the then known South African species *Microcosmus tenuipunctatus* (LaFerté-Sénectere, 1851) and Murray's taxon *vicinus*. Later, Péringuey created a key (1896: 482; see above) and subsequently,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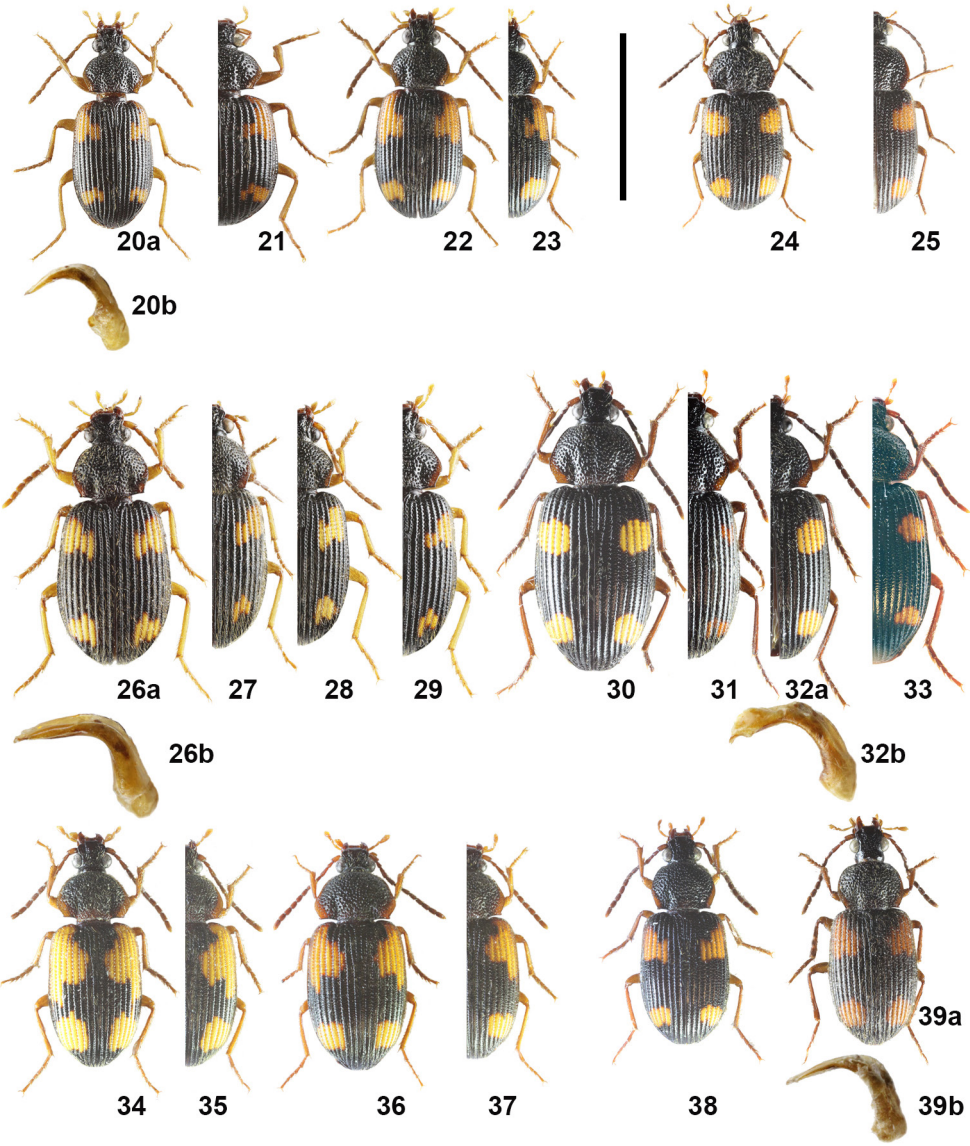
Tab. II. *Craspedophorus* (*Adischissus*) species from Africa (scale bar 5 mm), Figs. 11-18:
11- *C.* (*A.*) *behoka* sp. nov., HT: a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) apex of aedeagus, lateral view;
12- *C.* (*A.*) *behoka* sp. nov., PT (female of Zambia): a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) apex of aedeagus, lateral view;
13- *C.* (*A.*) *obscuricornis* (LaFerté-Sénectere, 1850), female of Zambia: a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view;
14- *C.* (*A.*) *kasanka* sp. nov., HT: a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) apex of aedeagus, lateral view;
15- *C.* (*A.*) *kasanka* sp. nov., PT (female of Zambia): a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view;
16- *C.* (*A.*) *repertus* (Basilewsky, 1949), male from Zanzibar, Tanzania: a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) apex of aedeagus, lateral view;
17- *C.* (*A.*) *amoenulus* (Péringuey, 1899), male of Zambia: a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) apex of aedeagus, lateral view;
18- *C.* (*A.*) *amoenulus* (Péringuey, 1899), female of Zambia: a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view;
19- *C.* (*Microschemus*) *angolensis* (Chaudoir, 1879), male of Zambia: a) habitus of imago, dorsal view, b) detail of protarsomere, dorsal view, c) apex of aedeagus, lateral view.

based on similar considerations (1926: 583), declared Chaudoir's species *M. laetiusculus* indistinguishable from *M. aurantiacus*, creating new synonyms that are, in my opinion, erroneous. In the same paper, he also mentions very small specimens (5 mm) from Natal; these, however, most probably represent a different species altogether (see *C. bulirschi* sp. nov.). Péringuey's view was adopted by Lorenz (2005: 322), who, however, reversed the priority of the two taxa during synonymisation and retained *M. laetiusculus* as the valid name. This concept was subsequently followed by other authors (Häckel & Farkač 2012). After detailed study, I consider *laetiusculus* and *aurantiacus* to be two distinct species that may occur sympatrically in some regions (e.g. in Zimbabwe). Only the westernmost populations of *C. aurantiacus*, including those described from Namibia, show some variability in elytral coloration. On the basis of Basilewsky's comparative type, these western populations are conspecific with the Namibian taxon described as *M. luebberti* by Kuntzen, which is therefore synonymised here.
The two species (*laetiusculus* and *aurantiacus*) differ not only in elytral coloration but also in pronotal shape: in *C. aurantiacus* the anterior angles of the pronotum are rounded but slightly more pronounced, whereas in *C. laetiusculus* they are completely rounded. In addition, the eyes are markedly more bulging in *C. laetiusculus*. Consequently, the ratio of pronotal width to head width (including eyes) is higher in *C. aurantiacus* (PW/HW = 1.75) than in *C. laetiusculus* (PW/HW = 1.68), despite identical pronotal proportions in both species (PW/PL = 1.52). For *C. aurantiacus*, I record here PW/PL = 1.52 and the antennal ratio AR = 0.89 : 0.55 : 0.89.).

Craspedophorus (*Microschemus*) *pierronii* (Fairmaire, 1880) comb. nov.

?syn. of *C.* (*M.*) *aurantiacus* (Chaudoir, 1879)
Fairmaire 1880a: 236 (*Microcosmus*; type loc.: "Nossi-Bé"), 1880b: 324; Alluaud 1900: 39; Jeannel, 1949: 851 (*Microschemus*); Lorenz 2005: 322; Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com).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Tab. III. *Craspedophorus* (*Microschemus*) species from Africa (scale bar 5 mm), Figs. 20-39:
20- *C.* (*Microschemus*) *bulirschi* sp. nov. HT: a) habitus of imago, dorsal view, b) aedeagus, lateral view;
21- *C.* (*Microschemus*) *bulirschi* sp. nov. PT male from Botswana, habitus of imago, dorsal view;
22- *C.* (*Microschemus*) *bulirschi* sp. nov. PT male from Western Cape (South Africa), habitus of imago, dorsal view;
23- *C.* (*Microschemus*) *bulirschi* sp. nov. PT female from Limpopo (South Africa), habitus of imago, dorsal view;
24- *C.* (*Microschemus*) *amabilis* (Dejean, 1831), female from Central African Republic, habitus of imago, dorsal view;
25- *C.* (*Microschemus*) *amabilis* (Dejean, 1831), female from Ghana, habitus of imago, dorsal view;
26- *C.* (*Microschemus*) *vicinus* Murray, 1857, male from Benin: a) habitus of imago, dorsal view, b) aedeagus, lateral view;
27- *C.* (*Microschemus*) *vicinus* Murray, 1857, female from Zimbabwe, habitus of imago, dorsal view;
28- *C.* (*Microschemus*) *vicinus* Murray, 1857, male from DR Congo: a) habitus of imago, dorsal view,
29- *C.* (*Microschemus*) *vicinus* Murray, 1857, male from Mpumalanga (South Africa): a) habitus of imago, dorsal view;
30- *C.* (*Microschemus*) *planicollis* (Chaudoir, 1876), male from Ethiopia: a) habitus of imago, dorsal view;
31- *C.* (*Microschemus*) *planicollis* (Chaudoir, 1876), male from Ethiopia: a) habitus of imago, dorsal view;
32- *C.* (*Microschemus*) *planicollis* (Chaudoir, 1876), male from Kenya: a) habitus of imago, dorsal view, b) aedeagus, lateral view;
33- *C.* (*Microschemus*) *planicollis* (Chaudoir, 1876), female from Kenya: a) habitus of imago, dorsal view;
34- *C.* (*Microschemus*) *symei* Murray, 1857, male from Kenya, habitus of imago, dorsal view;
35- *C.* (*Microschemus*) *symei* Murray, 1857, female from Kenya, habitus of imago, dorsal view;
36- *C.* (*Microschemus*) *symei* Murray, 1857, female from Kenya, habitus of imago, dorsal view;
37- *C.* (*Microschemus*) *symei* Murray, 1857, female from Tanzania, habitus of imago, dorsal view;
38- *C.* (*Microschemus*) *chaudoiri* (Raffray, 1886), female from Central African Republic, habitus of imago, dorsal view;
39- *C.* (*Microschemus*) cf. *villosulus* (Chaudoir, 1879), male from Ghana: a) habitus of imago, dorsal view, b) aedeagus, lateral view.

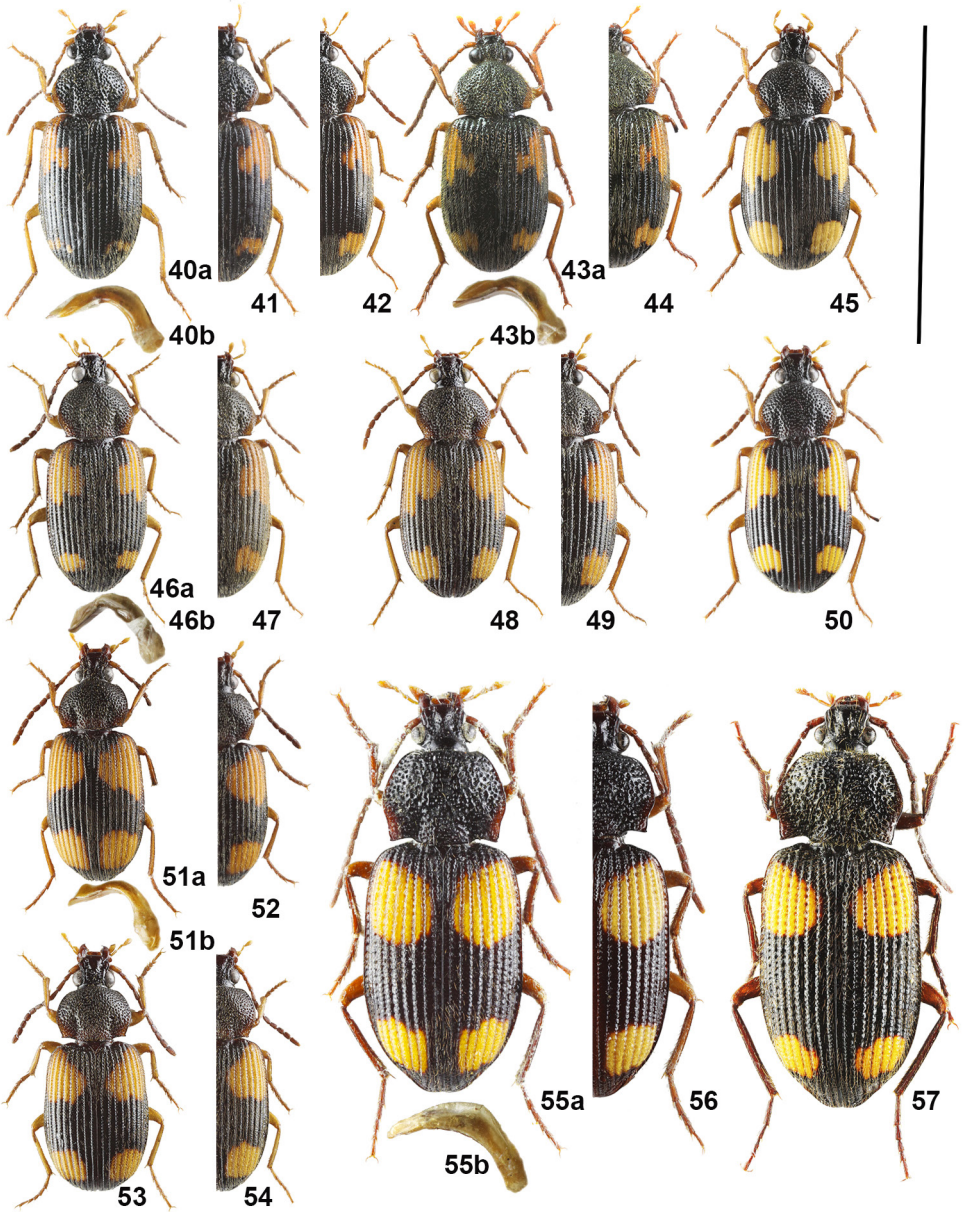
Distribution area. Madagascar (Nossi-Bé).

Comments. This taxon was based on a single specimen collected in Nossi-Bé, an island near Madagascar. The author of the description compares it with the then known South African species *Microcosmus tenuipunctatus* (LaFerté-Sénectere, 1851). Fairmaire distinguishes his new species by a narrower and smaller body, shorter frontal impressions and rougher punctation of the head, a shorter second antennomere, a less transverse pronotum, deeper elytral striae, and a more extensive humeral yellow macula of a different shape. Practically the same characters are given by Chaudoir when he distinguishes his new species *M. aurantiacus* from *M. tenuipunctatus* (Chaudoir 1879: 143). I did not find the type in the Bates-Oberthür collection at the MNHN, but according to the description and illustration (Fairmaire 1880b: 324, pl. XI, Fig. 2), the type specimen closely resembles the species *C.* (*Microschemus*) *aurantiacus* Chaudoir, 1879, with which it may be conspecific.

Craspedophorus (*Microschemus*) *cheranganensis* (Burgeon, 1936) comb. nov.
(Fig. 80)

Burgeon 1936: 140 (*Microcosmus*; type loc.: "Kenya, Marakwet, Campi Chenrangani"); Lorenz 2005: 322 (*Microschemus);* Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com).

Type material. Cotype (♀): "KENYA / Chip Cherangani / MARAKWET / 3.500 m. (printed in black on white label) // MUSÉUM DE PARIS / Mission de l'Omo / C. ARAMBOURG / P. A. CHAPPUIS & R. JEANNEL / 1932-1933 (printed in black on blue label) // *Microcosmus* / *cheranganensis* / Burgeon / cotype (handwritten in black on white label)" (Tab. VI: Fig. 80, MNHN).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Tab. IV. *Craspedophorus* (*Microschemus*) species from Africa (scale bar 10 mm), Figs. 40-57:
40- *C.* (*Microschemus*) *tenuipunctatus* (LaFerté-Sénectere, 1851), male of KwaZulu-Natal (RSA): a) habitus of imago, dorsal view, b) aedeagus, lateral view;
41- *C.* (*Microschemus*) *tenuipunctatus* (LaFerté-Sénectere, 851), female of KwaZulu-Natal (RSA), habitus of imago, dorsal view;
42- *C.* (*Microschemus*) *tenuipunctatus* (LaFerté-Sénectere, 1851), female of Mpumalanga (RSA), habitus of imago, dorsal view;
43- *C.* (*Microschemus*) *uigensis* sp. nov. HT: a) habitus of imago, dorsal view, b) aedeagus, lateral view;
44- C. (*Microschemus*) *uigensis* sp. nov. PT, female from Uige, Angola, habitus of imago, dorsal view;
45- *C.* (*Microschemus*) cf. *uigensis* sp. nov. PT, female of Western Cape (RSA), habitus of imago, dorsal view;
46- *C.* (*Microschemus*) *laetiusculus* (Chaudoir, 1879), male of Zimbabwe: a) habitus of imago, dorsal view, b) aedeagus, lateral view;
47- *C.* (*Microschemus*) *laetiusculus* (Chaudoir, 1879), female of Zimbabwe, habitus of imago, dorsal view;
48- *C.* (*Microschemus*) *laetiusculus* (Chaudoir, 1879), male of Botswana, habitus of imago, dorsal view;
49- *C.* (*Microschemus*) *laetiusculus* (Chaudoir, 1879), female of Namibia, habitus of imago, dorsal view;
50- *C.* (*Microschemus*) *laetiusculus* (Chaudoir, 1879), female of Ethiopia, habitus of imago, dorsal view;
51- *C.* (*Microschemus*) *aurantiacus* (Chaudoir, 1879), male of Namibia: a) habitus of imago, dorsal view, b) aedeagus, lateral view;
52- *C.* (*Microschemus*) *aurantiacus* (Chaudoir, 1879), female of Namibia, habitus of imago, dorsal view;
53- *C.* (*Microschemus*) *aurantiacus* (Chaudoir, 1879), male of Botswana: a) habitus of imago, dorsal view;
54- *C.* (*Microschemus*) *aurantiacus* (Chaudoir, 1879), female of Botswana, habitus of imago, dorsal view;
55- *C.* (*Microschemus*) *grandis* (Basilewsky, 1947), male of Senegal: a) habitus of imago, dorsal view, b) aedeagus, lateral view;
56- *C.* (*Microschemus*) *grandis* (Basilewsky, 1947), female of Senegal, habitus of imago, dorsal view;
57- *C.* (*Microschemus*) *grandis* (Basilewsky, 1947), female of Ethiopia, habitus of imago, dorsal view.

Distribution: Kenya.

Comments. This taxon was based on five specimens of relatively large size within the genus (8-9 mm), collected during an expedition to the mountains in Kenya at an altitude of 3500 m. It is probably a local montane endemic species .

Note: I believe that the sympatric (albeit at different altitudes) populations of Burgeon's taxa *M. marakwetianus* and *M. cheranganensis* differ only in elytral coloration. Both are, in my opinion, conspecific with Chaudoir's taxon *M. planicollis*, the type of which I have not seen; therefore, I leave both species as valid for now.

***Craspedophorus* (*Microschemus*) *marakwetianus* (Burgeon, 1936) comb. nov.**
(Fig. 81)

?syn. of *C.* (*M.*) *planicollis* (Chaudoir, 1876)
Burgeon 1936: 139 (*Microcosmus*; type loc.: "Kenya, Marakwet, Campi Cherangani"); Lorenz 2005: 322 (*Microschemus);* Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com).

Type material. Cotype (♀): "KENYA / Campi Cherangani / MARAKWET / 3.000 m. (printed in black on white label) // MUSÉUM DE PARIS / Mission de l'Omo / C. ARAMBOURG / P. A. CHAPPUIS & R. JEANNEL / 1932-1933 (printed in black on blue label) // *Microcosmus* / *marakwetianus* / Burgeon / cotype (handwritten in black on white label)" (Tab. VI: Fig. 81, MNHN).

Distribution: Kenya.

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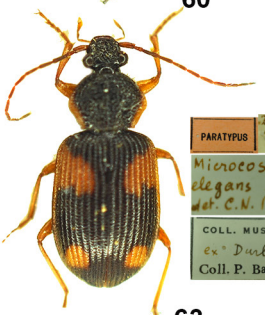

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Tab.V. *Craspedophorus* (*Adischissus*) and *C.* (*Microschemus*) species, type and some comparative specimens, Figs. 58-69:

58- *C.* (*Adischissus*) *angularis* Schaum, 1863, female from Equatorial Guinea (Bioko Is.), comparative type of Basilewsky (1952) deposed in MRAC, left: habitus of the specimen; right: labels;

59- *C.* (*Adischissus*) *angularis* Schaum, 1863, female from Gabon, Chaudoir's lectotype (1879) of *Dischissus pradieri* Chaudoir, 1879, pinned and labelled by the author in the row in Bates-Oberthür Collection, MNHN, left: habitus of the specimen; right: labels;

60- *C.* (*Adischissus*) *angularis* Schaum, 1863, female from DR Congo (Kisantu), Basilewsky's comparative type (1948) of *Dischissus pradieri* Chaudoir, 1879 deposed in MRAC (recorded by Burgeon 1935), left: habitus of the specimen; right: labels;

61- *C.* (*Adischissus*) *angularis* Schaum, 1863, female from Kamerun, Basilewsky's comparative type (probably 1951) of *Dischissus obscuricornis* (Laferté-Sénectere, 1850) deposed in MRAC, left: habitus of the specimen; right: labels;

62- *C.* (*Adischissus*) *chaudoirianus* sp. nov., PT, unsexed specimen from Gabun, Chaudoir's lectotype (1879) of *Dischissus angularis* (Schaum), pinned and labelled by the author in the row in Bates-Oberthür Collection, MNHN, left: habitus of the specimen; right: label;

63- *C.* (*Adischissus*) *barkeri* (Fedorenko, 2015), PT female of *Microcosmus elegans* Barker, 1922 from Kwa-Zulu Natal (South Africa) deposed by Basilewsky in MRAC, left: habitus of the specimen; right: labels;

64- *C.* (*Adischissus*) *obscuricornis* (Laferté-Sénectere, 1850), unsexed specimen, probably male, Chaudoir's lectotype (1879) pinned and labelled by the author in the row in Bates-Oberthür Collection, MNHN, left: habitus of the specimen; right: label;

65- *C.* (*Adischissus*) *obscuricornis* (Laferté-Sénectere, 1850), female from Mananara (Madagascar), Jeaanel's type of *Microschemus vadoni* Jeannel, 1949 deposed in MNHN, left: habitus of the specimen; right: labels;

66- *C.* (*Adischissus*) *amoenulus* (Laferté-Sénectere, 1850), lectotype (Péringuey's type) male from Rikatla (Mozambique) deposed in SAMC, left: habitus of the specimen; right: labels;

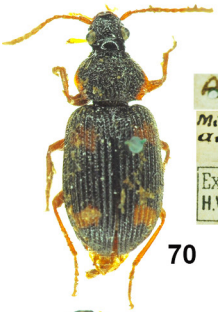
67- *C.* (*Adischissus*) *repertus* (Laferté-Sénectere, 1850), PT male from Zanzibar, reported as *Dischissus obscuricornis* (Laferté-Sénectere, 1850) by Raffray and Chaudoir 1879, respectively and deposed in MNHN, determined by Basilewsky (1947), left: habitus of the specimen; right: labels;

68- *C.* (*Adischissus*) *repertus* (Laferté-Sénectere, 1850), HT (unsexed specimen but probably male) deposed in MRAC, left: habitus of the specimen; right: labels;

69- *C.* (*Microschemus*) *diversopictus* (Laferté-Sénectere, 1850), PT unsexed (probably female) from Xinavane (Mozambique) deposed in MRAC, left: habitus of the specimen; right: labels.

Comments. This taxon was based on several specimens collected at altitudes of 3000 and 3500 m during an expedition to Kenyan Marakwet in the former Rift Valley Province. They closely resemble *C. chaudoiri* (Raffray, 1886) in stature and elytral coloration, but differ from it in the extent of the yellow elytral maculae. The inner spot of the humeral macula reaches up to interval VII and the apical one occupies five intervals. Burgeon states other differences from *M. chaudoiri*, among others in the pitting of the head, which is less coarse in his species, the clypeal suture being indistinct, and in the dimensions of the pronotum, which is less transverse, with maximum width after midlength. However, it cannot be ruled out that Burgeon's species is merely a colour variant of *C. planicollis* (Chaudoir, 1876), the type of which I could not find in the MNHN. The species *C. planicollis* lives sympatrically with *C. marakwetianus*; the shape of the body and pronotum are very similar, and the only difference is the shape of the yellow humeral maculae, which in *C. planicollis* are mostly circular and do not expand on the outer interval.

I believe that the sympatric (albeit at different altitudes) populations of Burgeon's taxa *M. marakwetianus* and *M. cheranganensis* differ only in elytral coloration. Both are, in my opinion, conspecific with Chaudoir's taxon *M. planicollis*, the type of which I have not seen; therefore, I leave both species as valid for now.



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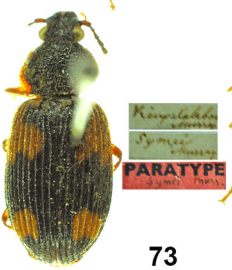

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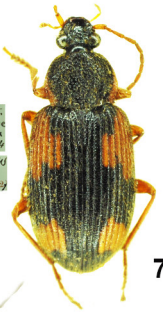

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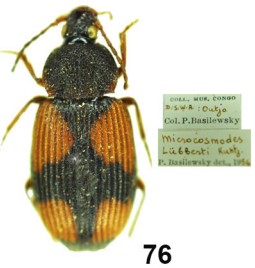

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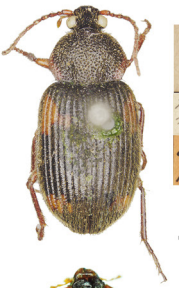

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Tab. VI. *Craspedophorus* (*Adischissus*) and *C.* (*Microschemus*) species, type and some comparative specimens, Figs. 70-82:
70- *C.* (*Microschemus*) *angolensis* (Chaudoir, 1879), male from Angola, Chaudoir's lectotype pinned and labelled by the author in the row in Bates-Oberthür Collection, MNHN, left: habitus of the specimen; right: labels;
71- *C.* (*Microschemus*) *laetus* (Dejean, 1831), unsexed specimen from Sierra Leone determined by Alluaud and deposed in, MNHN, left: habitus of the specimen; right: labels;
72- *C.* (*Microschemus*) *villosulus* (Chaudoir, 1879), HT deposed in MNHN, left: habitus of the specimen; right: labels;
73- *C.* (*Microschemus*) *symei* Murray, 1857, PT (unsexed) from Old Calabar (Nigeria) deposed in MNHN, left: habitus of the specimen; right: labels;
74- *C.* (*Microschemus*) *symei* Murray, 1857, male from Somalia (labelled as *Microcosmus patrizii* by Alluaud but never published), left: habitus of the specimen; right: labels;
75- *C.* (*Microschemus*) *laetiusculus* (Chaudoir, 1879), male from Madagascar, type of *Microschemus perrieri* Jeannel, 1949 Madagascar deposed in MNHN, left: habitus of the specimen; right: labels;
76- *C.* (*Microschemus*) *aurantiacus* (Chadoir, 1879), female from Namibia, Basilewsky's comparative type (1956) of *Microcosmodes luebberti* (Kuntzen, 1919) deposed in MRAC, left: habitus of the specimen; right: labels;
77- *C.* (*Microschemus*) *vicinus* Murray, 1857, male from Malvern (KwaZulu-Natal, South Africa) deposed in MRAC, Basilewsky's comparative specimen with Boheman's *Panagaeus laetus*, left: habitus of the specimen; right: labels;
78- *C.* (*Microschemus*) *vicinus* Murray, 1857, female from Salisbury (Zimbabwe) deposed in MRAC, determined as *Microcosmus natalensis* (Péringuey), left: habitus of the specimen; right: labels;
79- *C.* (*Microschemus*) *vicinus* Murray, 1857, lectotype male of *Microcosmus natalensis* Péringuey, 1896 from Tugela (KwaZulu-Natal, South Africa) deposed in SAMC, left: habitus of the specimen; right: labels;
80- *C.* (*Microschemus*) *cheranganensis* (Burgeon, 1936)5, paralectotype (cotype), unsexed specimen from Chip Cherangani (3500 m) near Marakwet deposed in MNHN, left: habitus of the specimen; right: labels;
81- *C.* (*Microschemus*) *marakwetianus* (Burgeon, 1936)5, paralectotype (cotype), unsexed specimen from Chip Cherangani (3000 m) near Marakwet deposed in MNHN, left: habitus of the specimen; right: labels;
82- *C.* (*Microschemus*) *grandis* (Basilewsky, 1947), paratype female from Pundu, „Ober Volta" (today Burkina-Faso) deposed in MRAC, left: habitus of the specimen; right: labels.

Craspedophorus (*Microschemus*) *grandis* (Basilewsky, 1946) comb. nov.
(Figs. 55-57, 82)

Basilewsky, 1946: 17 (*Microcosmodes*; type loc: "Haute Volta (=Burkina Faso): Pundu"), 1953b: 539; Serrano 2005: 68; Lorenz 2005: 322 (*Microschemus);* Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com).

Type material. Paratype (♀): "PARATYPUS (printed in black on red circumscribed label) // Ob. Volta / Pundu / *Olsufiew* (printed in black) // *Microcosmus* / *grandis* / Basilew. (handwritten in black) // COLL. MUS. CONGO (printed in black) / Col. P. Basilewsky // *Microcosmus* / *grandis* m. / paratype (handwritten in red) / P. Basilewsky det. (printed on white label)" (Tab. VI: Fig. 82, MRAC).

Other material examined: Mali, 1 ♂, 1 ♀: "75 km ssw of Bamako, nr. Ouronina, 396m, 12°6'11.2" N 8°24'40.0" W", (NMP); Senegal, 4 ♂♂, 2 ♀♀: "West Africa, south-eastern Senegal, Niokolo Koba National Park", (Tab. IV: Figs. 55 a, b, 56, cMH); Ethiopia, 1 ♀: "c-Ethiopia, Oromiya region, Shewa prov., Ambo env.", (Tab. IV: Fig. 57, cMH).

Distribution: Benin, Burkina Faso, Ethiopia, Guinea-Bissau, Mali, Senegal.

Comments. This taxon was established on a series of 10 specimens collected in "Haute Volta" (today Burkina Faso). It is the African species with the largest body size within the subgenus so far (12.5-13.7 mm). The body dimensions of specimens from the eastern part of

the range (Ethiopia) may differ slightly: the Ethiopian specimen is somewhat more elongate, and the elytral maculae are more reduced (Tab. IV: Fig. 57).

Craspedophorus (?*Microschemus*) *quadrinotulatus* (Motschulsky, 1864) comb. nov.

Motschulsky, 1864: 332 (*Epicosmus*; type loc.: "Cap. b. Sp." (=Cape Province, South Africa); Häckel et Farkač 2012: 88 (*Microcosmodes*); Anichtchenko 2024 (www.carabidae.com)

Comments. Motschulsky's description of this species is too brief, and I have not seen the type. I therefore leave the species classified in the subgenus *Microschemus*.

Craspedophorus (*Microschemus*) *uigensis* sp. nov.
(Figs. 43-44)

Type locality. "Bembe env., Provincia do Uige, Angola"

Type material. Holotype (♂): "sw Africa nw-Angola, Provincia do Uíge, Bembe env. III - 2025, lgt. I. Martinů", (Tab. IV: Fig. 43, cMH). Paratypes: (2 ♀♀): same data as the holotype, (Tab. IV: Fig. 44, cMH, cRK).

Description of holotype. BL 8.51 mm, EW 3.49 mm. Proportions. Head and pronotum (PW/PL 1.47, PW/HW 1.76), elytra (EW/PW 1.31, EL/EW 1.47).

Coloration. Body black, pronotum with lateral margins lightened yellow, each elytron with two yellow maculae; humeral macula irregular, extending from interval IV to the elytral margin (and also passing to the epipleural margin), broadly covering two intervals (VII + VIII), irregular, not reaching the elytral base (shoulders remain black); apical macula transverse, covering intervals VI-VIII, lateral margin remaining black subapically. Palpi and antennomeres ferruginous, darkened distally from the fifth antennomere (inclusive); femora, genua, tibiae and tarsi ferruginous.

Head subquadrate (length-to-width ratio 1.05), densely punctate, clypeus smooth and glabrous, neck punctured medially. Antennae shorter within the genus, extending to the first third of elytral length; scape slightly shorter than antennomere 3 (AR = 0.87 : 0.62 : 0.75) and twice as long as the eye tubercle. Labrum with apical margin slightly incised and with four setae, inserted at half the length and on the margins and edges of the inner third of the labral width. Terminal palpomeres dilated (in females), maxillary palpomeres with outer angle acute and inner angle very obtuse, labial palpomeres with apex less oblique and outer (terminal) angle more rounded than in the maxillary palpomere. Penultimate labial palpomere nearly cylindrical, with two setae inserted near the inner margin.

Pronotum semilunar, clearly transverse, 1.47 times wider than long, convex on disc, coarsely and irregularly pitted over the entire surface, without distinct microsculpture, its maximum width distinctly beyond midlength; anterior margin strongly curved forward, anterior angles indistinct (completely rounded); lateral margins beyond midlength narrowing posteriorly, almost straight, tapering to basal angles which stick out laterally; lateral rims flattened, tapering anteriorly and absent in the anterior half; median longitudinal line not deep but distinct.

Elytra convex (EL/EW 1.47), widening slightly behind the middle, almost parallel,

humeri rounded but distinct, subapical sinuation indistinct, scutellar striae moderately long, ending at 1/4 of elytral length. Striae deep, coarsely and regularly pitted, intervals convex, each with irregular finer pits; microsculpture weakly distinct, isodiametric; interval three without distinct setigerous puncture. Lateral margin flattened, with a series of coarse pits.

Ventral side black, smooth, glabrous, ventrites with a dense row of large punctures along the bases, ventrite VII with two setigerous pores on each side subapically.

metepisterna posteriorly elongated, trapezoidal (macropterous species).

Legs of medium length (but shorter within the genus), slender; tarsi light brown; protarsomeres 4 without a distinct slit, only slightly incised in both sexes.

Aedeagus. Median lobe and apex with very indistinct corrugation (Tab. IV: Fig. 43 a, b)

Derivatio nominis. The species is named after the only known locality**.**

Differential diagnosis. *C.* (*M.*) *uigensis* sp. nov. differs from similar species living sympatrically mainly in body proportions, shape of the pronotum and elytral coloration. Morphologically, the closest species is *C.* (*M.*) *tenuipunctatus* (LaFerté-Sénectere, 1851) from South Africa (and also *C.* (*M.*) *laetiusculus* from southern African countries). The bodies of both species are significantly narrower than that of *C. uigensis* sp. nov. (elytral ratio EL/EW = 1.6 in *C. tenuipunctatus*, whereas EL/EW = 1.47 in *C. uigensis* sp. nov.). The anterior pronotal angles of both mentioned species are obtuse but distinct, in contrast to the completely rounded and indistinct anterior pronotal angles in *C. uigensis* sp. nov. Elytral coloration also differs: in both mentioned species the orange humeral macula extends to the base of the elytra on the three outer intervals and along the elytral margin (thus covering the entire shoulder), whereas in *C. uigensis* sp. nov. the orange humeral macula does not reach the elytral base and does not cover the shoulder even on the outermost intervals.

Distribution: Angola: Uige Province.

Comments. I am also adding a photograph of a female from the Cape Town area. Its body proportions and surface relief correspond to the newly described species *C. uigensis* sp. nov., but its elytral coloration is completely different. I do not know the male, so I am not providing a description.

Craspedophorus (*Microschemus*) cf. *uigensis* var., 1 ♀: "Western Cape, Table Mts. NP, Buffelsfontein env., 34°18.6'S 18°27.0'E, dam" (Tab. IV: Fig. 45, cPB).

ACKNOWLEDGMENTS. The author would like to thank his colleague and friend František Kovařík (Prague, Czech Republic) for his help during the creation of the photo documentation. Special thanks go to Barbara Häckel (Prague, Czech Republic) for help with the language.

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