#### Enzo Colonnelli

# THE GENUS CEUTORHYNCHUS GERMAR IN TROPICAL AFRICA (Coleoptera Curculionidae)

ABSTRACT - COLONNELLI E., 2006 - The genus *Ceutorhynchus* Germar in tropical Africa (Coleoptera Curculionidae).

Atti Acc. Rov. Agiati, a. 256, 2006, ser. VIII, vol. VI, B: 47-74.

Are described nine new species of the genus *Ceutorhynchus* from tropical Africa, which brings the total number of the native species from Ethiopian region to eleven. Four of them belong in the *assimilis* group: *Ceutorhynchus sebastiani* n. sp., *C. arcanus* n. sp., *C. inops* n. sp. all from South Africa, and *C. remotus* n. sp. from South Africa and Namibia. All the remaining ones are to be placed in the *obstrictus* group: *Ceutorhynchus afer* n. sp. from Namibia, *C. centralis* n. sp. from the Republic of Congo and Rwanda, *C. tropicalis* n. sp. from Uganda, Republic of Congo, Rwanda and South Africa, *C. sperans* n. sp. from South Africa, *C. tabularis* n. sp. from South Africa, *C. distans* Hustache, 1930 and *C. maracaensis* Hustache, 1934, both from Ethiopia and Kenya. A key to the species of the *obstrictus* group is included.

KEY WORDS - Coleoptera, Curculionidae, *Ceutorhynchus*, tropical Africa, New species.

RIASSUNTO - COLONNELLI E., 2006 - Il genere *Ceutorhynchus* Germar nell'Africa tropicale (Coleoptera Curculionidae).

Sono descritte nove nuove specie del genere *Ceutorhynchus* dell'Africa tropicale, il che porta il totale delle specie indigene della regione etiopica ad undici. Quattro di esse appartengono al gruppo *assimilis*: *Ceutorhynchus sebastiani* n. sp., *C. arcanus* n. sp., *C. inops* n. sp. tutti del Sudafrica, e *C. remotus* n. sp. di Sudafrica e Namibia. Tutte le altre specie vanno poste nel gruppo *obstrictus*: *Ceutorhynchus afer* n. sp. di Namibia, *C. centralis* n. sp. della Repubblica del Congo e del Ruanda, *C. tropicalis* n. sp. di Uganda, Repubblica del Congo, Ruanda e Sudafrica, *C. sperans* n. sp. del Sudafrica, *C. tabularis* n. sp. del Sudafrica, *C. distans* Hustache, 1930 e *C. maracaensis* Hustache, 1934, entrambi di Etiopia e Kenya. Una chiave dicotomica per il riconoscimento di tutte le specie del gruppo *obstrictus* viene anche stilata.

Parole Chiave - Coleoptera, Curculionidae, *Ceutorhynchus*, Africa tropicale, Nuove specie.

#### INTRODUCTION

The absolute majority of the members of *Ceutorhynchus* Germar, 1824 are widespread all over the Holarctic region. Of the 382 extant species so far described (Colonnelli 2004, 2005a, 2005b; Korotyaev 2004; Korotyaev & Gültekin 2004; Gültekin 2005) only a few are known to occur outside this area, and most of these have been spread by man through the cultivation of crucifers, mainly cabbage.

To date only two species, *C. distans* Hustache, 1930 and *C. maracaensis* Hustache, 1934, both from Ethiopia and Kenya, have been described from tropical Africa. Two additional species were recorded from South Africa by Colonnelli (2004), of which one, *C. pallidactylus* (Marsham, 1802), is a Palaearctic species introduced in a number of countries outside its native range, whereas the indication of *C. obstrictus* (Marsham, 1802) from Namibia by Voss (1960) refers to a new species described is in this paper. All the remaining tropical African species described in the past by several authors as *Ceutorhynchus* belong actually in different genera (Colonnelli 2004).

The above mentioned two native African species, the types of both of which were studied, are close each other and belong in the *obstrictus* group as defined by Korotyaev (1980). In addition, within the *obstrictus* group are to date comprised a number of mostly European taxa (Colonnelli 2004) and also some of the new tropical species described below.

To the same group belong, in addition to a number of mostly European taxa, some of the new tropical species described below, plus *C. buettikeri* Colonnelli, 1985 and *C. farsetiarum* Peyerimhoff, 1930.

Four other species of *Ceutorhynchus* are to be found in the African continent at the southern limit of the Palaearctic region. *Ceutorhynchus longipennis* Schultze, 1900, is only known upon a single example from Tangasi in Sudan. The eremic *C. priesneri* (Hustache, 1934), was described from Gebel Elba at the border between Egypt and Sudan and was recollected also in the warm and semi-arid southeastern corner of Mediterranean Turkey near Adana, according to a specimen from the Hoffmann collection recently studied in the Muséum National d'Histoire Naturelle of Paris, France. *Ceutorhynchus buettikeri* Colonnelli, 1985 occurs in the south of Saudi Arabia, and the Saharan *C. farsetiarum* Peyerimhoff, 1930 has been reported also in the desert of Sudan.

Measures of the new species are taken as explained in Colonnelli (2005a). Photographs of insects were taken using a JVC GC-X1 camera associated to a Wild M5 microscope. Labels borne by specimens are reported as written or printed under quotation marks. Semicolons

preceded by a space indicate a change of line on the same label, whereas slashes denote successive labels borne by the same example.

Abbreviations are as follows: BMNH = The Natural History Museum, London, England; COL = Enzo Colonnelli collection, Rome, Italy; MRAC = Musée Royale de l'Afrique Centrale, Tervuren, Belgium; MZLU = Lund University, Lund, Sweden; MURT = Museo di Zoologua dell'Università «Roma Tre», Rome, Italy; MZUL (Museo di Zoologia dell'Università di Roma «La Sapienza», Rome, Italy); SAMC = South African Museum, Cape Town, South Africa; SANC = South African National Collection of Insects, Pretoria, South Africa; TMSA = Transvaal Museum, Pretoria, South Africa; ZMHB = Museum für Naturkunde der Humboldt-Universität, Berlin, Germany; ZSMC = Zoologische Staatsammlung, München, Germany.

### Ceutorhynchus remotus n. sp.

#### Diagnosis

Forma aedeagi aliquo modo C. resedae (Marsham, 1802) e regione palaearctica occidentale relatus, sed pedibus omnino rufis atque pronoto tuberculis lateralibus destituto ab illo et ab aliis speciebus turmae C. assimilis (Paykull) subito diversus.

## Type series

South Africa: «Pretoria; 30.IX.1975; L. Vári; e. l. ex galls», 1 ♂ holotype (TMSA) and 1 ♀ paratype (TMSA); «Pretoria; 27.3.'05; (swierstra) / 162», 1 ♂ paratype (TMSA); «Pretoria; 5.X.1975; L. Vári: e. l. ex galls», 2 ♂ and 1 ♀ paratypes (2 COL, 1 TMSA); «Pretoria; 1.X.1975; L. Vári; e. l. ex galls», 1 ♂ and 1 ♀ paratypes (TMSA); «Pretoria; 3.X.1975; L. Vári; e. l. ex galls», 1 ♂ and 2 ♀ ♀ paratypes (TMSA); «Pretoria; 3.X.1976; L. Vári; e. l. ex galls», 1 ♂ paratype (TMSA); «Pretoria; 3.X.1976; L. Vári; e. l. ex galls», 1 ♂ paratype (TMSA); «S. Africa; R.E. Turner; Brit. Mus.; 1923-45. / Aliwal North; Cape Province; Dec 1922», 1 ♂ and 1 ♀ paratypes (1 COL, 1 BMNH); «S. Africa; R.E. Turner; Brit. Mus.; 1923-70; Aliwal North; Cape Province; 4350 ft; 1-13.i.1923», 3 ♀ ♀ paratypes (BMNH); «S. Africa; R.E. Turner; Brit. Mus.; 1923-189; Umtata; Transkei; 18.ii - 18.iii.1923», 1 ♀ paratype (BMNH); «S. Africa; R.E. Turner; Brit. Mus.; 1927-117 / Orange F. State; Harrismith; Feb. 1927». 1 ♂ paratype (BMNH); «S. Africa; R.E. Turner; Brit. Mus.; 1930-480; Cape

Province; Somerset East; Sept. 1930» 1 \( \text{paratype} \) paratype (BMNH); «S. Africa; R.E. Turner; Brit. Mus.; 1930-561 / Cape Province; Somerset East; October 1930», 2 or and 1 \( \text{paratypes} \) and 1 \( \text{paratypes} R.E. Turner; Brit. Mus.: 1930-593 / Cape Province; Somerset East; November 1930», 4♀♀ paratypes (BMNH); "S. Africa; R.E. Turner; Brit. Mus; 1931-95; Cape Province; Somerset East; 1-26.i.1931», 1♀ paratype (BMNH); «S. Africa; R.E. Turner; Brit. Mus.; 1931-102 / Cape Province; Somerset East; 27-31.i.1931»,  $2 \circlearrowleft 3$  and  $1 \circlearrowleft 9$  paratypes (2 COL, 1 BMNH); «S. Africa; R.E. Turner; Brit. Mus; 1921-450 / Mossel Bay; Cape Province; October 1921», 1º paratype (BMNH); «S. Africa; R.E. Turner; Brit. Mus.; 1932-206 / Cape Province; Mossel Bay; May 1932», 1♀ paratype (BMNH); «South Africa, O.F.S.; Adullam Farm near; Clarens. 28.32S; 28.28E 20-26.ii; 1980 W. A. Harrop», 1 o paratype (SANC); «R. S. Africa 9.xi.1997; 34°27.2'S/20°24.2'E Cape; Prov.: De Hoop NR: De; Hoop Vlei: *Phragmites*; sievings, leg. M. Uhlig», 1♀ paratype (ZMHB); "South Africa, Natal; Nottingham road; 29.22S 29.59E; 15.xi.1981. I. Miller», 1♀ paratype (SANC); «South Africa, Natal; Nottingham road; 29.22S 29.59E; 15.i.1981. S. J. vab; Tonder & C. Kok», 399 paratypes (1 COL, 2 SANC).

Namibia: «S.W.A., Khomashochl; Farm Wissenfels; 23°20'S-16°25'E / 8.III.1975; E.Y: 727; groundtrap 178 day; leg. Endrödi-Younga / ground traps; with meat bait»,  $3 \, \circ \circ$  and  $5 \, \circ \circ$  paratypes (2 COL, 6 TMSA).

# Holotype

Length: mm 2.63. Piceous with same shade of dark brown, rather dull, coarsely and quite finely punctured, antenna, legs, tip of rostrum reddish-brown, under side of anterior margin of pronotum and posterior margin of elvtra ferrous-red. Dorsal vestiture on head and pronotum consisting of slightly slanted brownish hairlike scales pointing backward on head and forward on pronotum, where some recumbent white lanceolate scales can be seen on basal and apical third of dorsal sulcus. Head with whitish almost recumbent hairlike scales. Elytral intervals with two irregular rows of slightly lifted golden and brownish scales. In addition, some oval white lanceolate scales are scattered on elytral intervals and on pronotal sides. Under side clothed by rather dense rectangular-elongate white scales more condensed on mesepimera. Rostrum 0.84 times the length of prothorax, rather strongly curved and slightly tapering at extreme apex, coarsely punctured, dull and tricarinate up to just basad of antennal insertion, then finely punctured, glabrous, and shining. Antenna inserted about at middle of rostrum, scape

clubbed, funiculus 7-jointed, joints 1 and 2 elongate, 3 to 7 slightly diminishing in length, conical, not transverse, club fusiform, about as long as joints 5-7 together. Frons flat, strongly punctured, eyes quite convex. Pronotum 0.76 as long as wide, slightly constricted at apex, base only faintly bisinuose, sides regularly rounded. Disc convex, coarsely punctured, dorsal sulcus complete, deeper at base and at apex, lateral tubercles wanting, maximum pronotal width at the level of basal third. Elytra 1.12 as long as wide, convex, widest about in the middle, sides curved and narrowing toward preapical tubercles, humeral calli evident, preapical ones very weak. Strial furrows deep, catenulate, with fine recumbent hairlike whitish scales. Intervals wider than striae, rather flat, coarsely punctured and transvesely wrinkled. Legs robust, Femora clubbed, all with a tooth more obtuse on front femora and marked by a tuft of white lifted scales. Tibia slightly curved basally and slightly widening toward apex, meso and metatibia with strong, rather obtuse mucro. Tarsi robust, claws appendiculate at base. Urosternites 1-2 flat, 5 with shallow fovea. See also fig. I: 1. The distal three joints of the right middle tarsus are missing.

### Paratypes

Variation is low. Males are similar to the holotype. Females have rostrum slightly longer than that of the holotype, the antennal insertion is just basad of midpoint of the finer punctuated rostrum, and they lack sternal depressions and tibial mucros. Aedeagus: fig. III: 4. Length: 2.04-2.63 mm.

## Etymology

The Latin name, meaning distant, refers to South Africa, a locality far from the countries where almost all other species of the genus are known to occur.

#### Remarks

*C. remotus* belongs in the *assimilis* group as defined by Dieckmann (1975), group thus far comprising of species all from the Palaearctic. Outline of the aedeagus of the new African species and its larval development taking place inside root galls produced by the weevil larvae are similar to those of all the remaining members of the group whose biology is known. The *assimilis* group comprises also the Southern African

species *C. sebastiani* n. sp., *C. arcanus* n. sp. and *C. inops* n. sp. described in this paper. The entirely reddish colour of legs distinguishes *C. remotus* from all the related African and Palaearctic species, except for *C. resedae* (Marsham, 1802) from Western Palaearctic and the close *C. dcbskii* Pic, 1920 from the Eastern Sahara. Both Palaearctic species, however, have usually at least basal half of femora brown, much less convex prothorax and elytra, thicker vestiture, lateral pronotal tubercles clearly developed (figs I: 1, 2, 3, III: 4, 5, 6) and on average larger size (up to mm 3).

### **Ecology**

Larvae induce the formation of galls (fig. I: 6) at the apex of roots of the cruciferan genus *Heliophylla* (fig. I: 7), like *C. sebastiani* n. sp. An unidentified parasite wasp (figs I: 4, 5) was also obtained from the root galls. Host plants of *C. resedae* are in the genus *Reseda*, whereas that of *C. debskii* is *Ochradenus baccatus* Delile, another member of Resedacee.

# Ceutorhynchus sebastiani n. sp.

# Diagnosis

Itidem aliquo modo speciebus turmae C. assimilis (Paykull) affinis, sed unguiculis simplicibus, corpore planatiore, vestitura rariore facile agnoscendus.

# Type series

South Africa: «S. Afr. Namaq. Coast; Buffelsrivier; 29.55 S - 17.39 E / 28.8.1977, E-Y:1348; groundtraps, 59 days; leg. Endrödy-Younga / ground traps with meat bait», 1♂ holotype (TMSA); «S. Afr., Namaqual; Spectacle Pass; 29.42 S - 17.40 E / 31.8.1978, E-Y:1190; groundtraps, 33 days; leg. Endrödy-Younga / ground traps with faeces bait», 1♀ paratype (TMSA); «S. Afr., Namaqual; Vogelklip; 29.50 S - 17.48 E / 27.8.1977, E-Y:1344; groundtraps, 60 days; leg. Endrödy-Younga / ground traps with faeces bait», 1♀ paratype (TMSA); «S. Afr., Namaqualand; Kamieskroon; 30.12 S - 18.01 E / 27.8.1977, E-Y:1341; shore washing; leg. Endrödy-Younga», 1♀ paratype (COL); «RSA - C. P. - m 700/800; Messelpad Pass; 14.IX.1994 - P. Audisio», 1♂ paratype (MZUL); «C. P.: 30 Km N Citrusdal; 29.X.1981; V. B. Whitehead / ex gall on *Heliophylla*»,

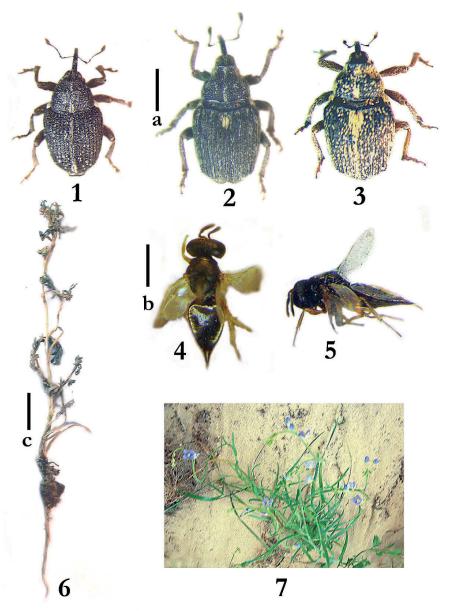


Fig.I. Habitus of: 1) *Ceutorhynchus remotus* n. sp., holotype – 2) *Ceutorhynchus resedae* (Marsham) male from Italy, Abruzzes, Barisciano – 3) *Ceutorhynchus dcbskii* Pic male from Egypt, Sinai, El Mafareq. A parasite wasp emerged from larva of *Ceutorhynchus remotus* n. sp.: 4) dorsal wiew – 5) lateral view. Root gall caused by the larva of *Ceutorhynchus remotus* n. sp. on *Heliophylla* sp.: 6). An unidentified species of *Heliophylla* photographed by the author in South Africa, Western Cape, surroundings of Worcester: 7). Scale bars: a = mm 1 (figs 1, 2, 3); b = mm 0.5 (figs 4, 5); c = cm 1 (fig. 6).

3 ♀ ♀ paratypes (SAMC); «S. Afr. Cape-Cederbg; jeep track, 1130 m; 32.28 S - 19.14 E / 7.11.1983, E-Y: 2055; sifted, marsh shore; leg. Endrödy-Younga», 2 ♂ ♂ and 2 ♀ ♀ paratypes (2 TMSA, 2 COL); «S. A. 1999; Seder berg, 500-1100 m; Clanwilliam distr C. P.; Humus under bushes; and large stones; IV.1962, N. Leleup», 1 ♂ paratype (MRAC).

## Holotype

Length: mm 2.33. Piceous with some shade of dark brown, a little shining, rather coarsely and finely punctured, antenna, apex of tibiae and tip of rostrum brown, under side of anterior margin of pronotum ferrous-red. Dorsal vestiture on head and pronotum consisting of slanted brown hairlike scales, some of which white and almost recumbent and situated on basal and on apical third of dorsal sulcus. Head with some fine whitish almost recumbent hairlike scales along midline. Elytral intervals with two irregular rows of half-lifted golden, whitish and more often brownish hairlike scales. Under side clothed by sparse recumbent comma-like white scales that are condensed on mesepimera. Rostrum 1.05 times the length of prothorax, quite strongly curved and very faintly tapering toward apex apicad of antennal insertion, longitudinally coarsely punctured, dull and tricarinate up to just apicad of antennal insertion, then finely punctured, glabrous, and shining. Antenna inserted hardly apicad of middle of rostrum, scape clubbed, funiculus 7jointed, joints 1 and 2 elongate, 3 to 7 conical, diminishing in length but not transverse, club fusiform, elongate, slightly less long than joints 4-7 together. From faintly depressed, strongly and finely punctured, eves a little convex. Pronotum 0.71 as long as wide, slightly constricted at apex, base only faintly bisinuose, sides weakly rounded. Disc feebly convex, very coarsely punctured, dorsal sulcus complete, deeper at base and apex, lateral tubercles weak, maximum pronotal width at basal third. Elvtra 1.02 as long as wide, weakly convex and somewhat depressed on disc, widest about in the middle, sides gently curved and slightly narrowing toward preapical tubercles; humeral calli quite robust, preapical ones feeble. Strial furrows deep, catenulate, with excessively fine recumbent hairs. Intervals much wider than striae, quite flat, transversely wrinkled. Legs quite robust. Femora not very strongly clubbed, all with a tooth bearing a kind of tuft of white lifted scales, and being the tooth of front femora clearly weaker that those of middle and hind ones. Tibia a little curved basally and slightly widening toward apex, meso and metatibia with rather minute sharp mucro. Tarsi quite robust, tarsal joint 3 not much wider than the preceding one,

claws simple. Urosternites 1-2 flat, 5 with small round fovea. See also fig. II: 1. Aedeagus: fig. III: 7. The left elytron is slightly displaced and the left mid tarsus is lacking of joints 2-4.

### Paratypes

Very similar to the holotype. Some examples have a plumper body shape. Females differ by the usual lack of tibial mucros, sternal depressions, and by their a trifle longer and more shining rostrum. Length: mm 1.94 - 2.66.

### Etymology

The species is named in memory of the late Sebastian Endrödy-Younga, who has so significantly improved the knowledge of Southern African fauna through his methodical exploration of the country.

#### Remarks

The new species and the two following ones are very close each other, and undoubtedly belong in the assimilis group, although C. sebastiani and C. arcanus n. sp. do not have the appendiculate claws of the remaining members of this group. Ceutorhynchus sebastiani and C. *inops* n. sp. share the rather thin and long half-lifted elytral hairlike scales, a circumstance that makes rather easy to isolate them from all other Palaearctic species, except C. difficilis Schultze, 1898 from eastern Europe and western Asia (fig. II: 5). Ceutorhynchus sebastiani is immediately distinguishable from C. difficilis by the simple claws and the narrower tarsal joint 3, whereas *C. inops* is much more finely punctured than C. difficilis, and its vestiture is also sparser and composed of hairlike scales entirely brownish instead of mingled whitish and brownish ones like those of the Palaearctic weevil. On the other hand, C. arcanus n. sp. is already separated from the Palaearctic species by its simple claws and the apex of aedeagus rather convex. Among the African species of the assimilis group, C. sebastiani is extremely akin to C. *inops*, but is immediately separated from it by the simple claws.

# Ecology

According to the labels borne by some paratypes, the larva feeds on plants of the genus *Heliophylla*, inducing the formation of galls at the

apex of roots. It seems thus that the biology of this new species is similar to that of *C. remotus* n. sp.

### Ceutorbynchus arcanus n. sp.

#### Diagnosis

Praecedenti simillimus, sed colore saturate niger, setis elytrarum reclinatis, prothorace convexiore magisque profunde sulcato atque lateribus magis rotundatis, squamulibus ventris candidis necnon apice aedeagi rotundatus abunde differens.

### Type series

South Africa: «Table Mt.; Cape of G. Hope; W. Bevins; 1906 - 167»  $1 \, \circ$  holotype (BMNH) and  $2 \, \circ \circ \circ$  paratypes (1 BMNH, 1 COL).

### Holotype

Length: mm 2.53. Piceous, somewhat shining, finely and densely punctured; antenna, tip of rostrum, tarsal joints 3 and 4 brown. Dorsal vestiture on head and pronotum consisting of half-lifted golden-brownish sparse hairs pointing backward on head and forward on pronotum and arranged on elytral intervals in 1-2 rather irregular rows. White hairlike recumbent scales are along dorsal sulcus and on elytral striae, and similar scales are sparse on under side and more condensed on mesepimera. Rostrum 1.09 as pronotum, uniformly curved, finely punctured, tricarinate up to a distance from apex about equal to rostral width, then shining and glabrous. Antenna inserted apicad of midpoint of rostrum, scape gradually clubbed, funiculus 7-jointed, joints 1-2 elongate, 3-6 clearly longer than wide, 7 rounded and not transverse, club fusiform elongate, as long as joints 4-7 together. Frons rather flat, finely punctured, eyes a little convex. Pronotum 0.73 as long as wide, widest at basal third, moderately constricted at apex, base slightly bisinuate, sides moderately curved. Disc rather convex; punctures fine, coarse, deep; antero-lateral depressions quite shallow; fore margin slightly elevated, dorsal sulcus complete, lateral tubercles wanting. Elytra 1.14 as long as wide, rather convex and slightly flattened near scutellum, widest at basal third, sides very slightly and uniformly curved up to preapical weak tubercles, humeral calli not very prominent. Striae rather deep,

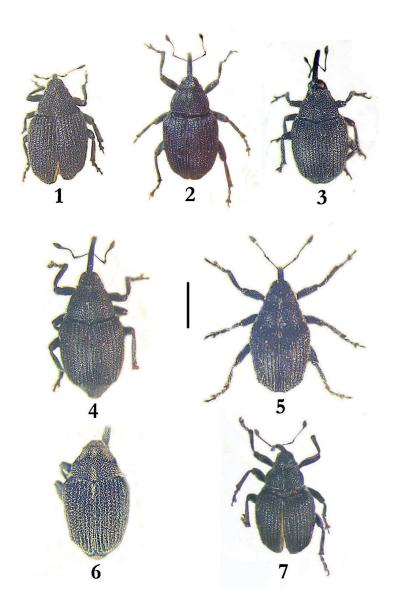


Fig. II. Habitus of: 1) Ceutorhynchus sebastiani n. sp., holotype – 2) Ceutorhynchus arcanus n. sp., holotype – 3) Ceutorhynchus inops n. sp., holotype – 4) Ceutorhynchus inops n. sp., female paratype – 5) Ceutorhynchus difficilis Schultze, male from Armenia, surroundings of Erevan, and compared with the type – 6) Ceutorhynchus afer n. sp., female paratype from Okahandja – 7) Ceutorhynchus centralis n. sp., holotype. Scale bar = mm 1.

sulciform. Intervals much wider than striae, flat, and with transverse wrinkles and sometime granules. Legs fairly elongate; femora clubbed, meso and metafemora with minute tooth, tibia almost straight, meso and metatibia with a rather strong acute mucro, claws edentate. Urosternites 1-2 flattened together, 5 with very shallow fovea. See also fig. II: 2. Aedeagus: fig. III: 8.

### Paratypes

Females are very similar to the holotype. Apart the usual sexual differences of convex abdomen and lack of tibial mucros, their antennae are inserted about in the middle of rostrum, which is 1.3 times as long as pronotum. Length: mm 2.4-2.5.

### Etymology

The name of the new species, from the Latin arcanus (= far) makes reference to the country where it was collected.

#### Remarks

The new species is very close to *C. sebastiani* n. sp., being however rather easily recognised by the darker integument, the fairly convex pronotum with more rounded elytral sides, the dorsal channel complete and of about the same depth, and the light white scales of underside, apart the rounded aedeagal apex.

# Ecology

Nothing is known about the host plant of the new species.

# Ceutorhynchus inops n. sp.

# Diagnosis

In multo C. arcano n. sp. et C. sebastiani n. sp. similis, sed unguiculis intus denticulatis facile agnoscendus.

# Type series

South Africa: «RSA Cape Province; near Stilbaai; 34°2'S 21°25'E; 1.XI.1988-E. Colonnelli / on *Heliophylla* sp.», 1 & holotype (TMSA)

and 1♀ paratype (COL); «Lesotho, Drakensberg; Sani Pass Valley; 29.38 S - 28.12 E / 10.3.1978;E-Y:1082; shore washing; leg. Endrödy-Younga», 1♂ paratype (COL); «S. Afr. Basutoland; Makheke Mnts 10 miles; NE Mokhotlong; 7.IV.51 No. 267 / Swedish South Africa; Expedition; 1950-1951; Brinck-Rodebeck», 1♂ paratype (MZLU).

### Holotype

Length: mm 2.66. Black, somewhat shining, rather coarsely punctured, antenna and tibia brown, tip of rostrum, tarsal joint 3 and claws dark ferrous-red like the lower anterior edge of pronotum. Dorsal vestiture similar to that of *C. sebastiani*, but sparser and more irregularly arranged in rows on elytral intervals. Under side clothed by sparse recumbent comma-like whitish scales just a little more condensed on mesepimera. Rostrum about as long as pronotum, rather strongly curved, slightly tapering at apex in side view, tricarinate up to antennal insertion, then shining and glabrous. Antenna rather short and inserted about in the middle of rostrum, scape clubbed, funiculus 7-jointed, joints 1-2 elongate, 3-4 clearly longer than wide, 5-6 nearly as long as wide, 7 transverse, club elongate fusiform, as long as joints 4-7 together. Frons flattened, very coarsely punctured, eyes a little convex. Pronotum 0.73 as long as wide, widest near its base, quite strongly constricted at apex, base slightly bisinuate. Disc weakly convex, punctures coarse, antero-lateral depressions evident, dorsal sulcus complete, shallow in the middle and deeper toward base and apex, lateral tubercles wanting. Elytra 1.26 as long as wide, rather flat, widest about at middle, sides very slightly and uniformly curved up to preapical tubercles, humeral calli not so strongly bulging, preapical ones very weak. Striae rather deep, catenulate, with extremely thin recumbent hairs. Intervals clearly wider than striae, flat, rather shining, with spaced transverse wrinkles and granules more evident on lateral interspaces. Legs quite robust; femora clubbed, middle and hind ones with a weak tooth, anterior femora almost edentate, tibiae a little curved basally and slightly widening toward apex, meso and metatibia with rather minute sharp mucro, tarsi quite short, claws appendiculate. Urosternites 1-2 with shallow common impression, 5 with small shallow fovea. See also fig. II: 3. Aedeagus: fig. III: 9.

# Paratypes

The other male is very similar to the holotype, and its length is mm 2.44. The female (fig. II: 4) has rostrum thinner, much more finely punc-

tured in apical half and 1.11 times longer than pronotum, antenna inserted just basad of midpoint and lacks sternal depressions and tibial mucros: its length is mm 3.2

### Etymology

The Latin name inops (= poor) was chosen to remark the sparse vestiture of hairlike scales of the new species.

#### Remarks

*Ceutorhynchus* inops differs from the very similar *C. sebastiani* n. sp. and *C. arcanus* n. sp. by the more shining integument, the sparser dorsal clothing, the finely punctured upper surface, the less convex pronotum with dorsal sulcus almost wanting in the middle, the appendiculate claws and the aedeagal shape (figs III: 7, 8, 9).

### **Ecology**

Very likely, the host plants of the new species are in the cruciferan genus *Heliophylla* since two of the types were collected on this plant.

# Ceutorhynchus afer n. sp.

# Diagnosis

Ab omnibus speciebus Africae tropicalis diversus squamis latis dorsi partim castaneis illisque elytrae intervalli noni squamorum ventris similibus.

# Type series

Namibia: «S.W. Africa, R.E. Turner; Brit. Mus. 1928-119; Okahandja; 6-23.ii.1928», 1 ♂ holotype (BMNH) and 4 ♂♂, 3 ♀♀ paratypes (7 BMNH); «S.W. Africa, R.E. Turner; Brit. Mus. 1928-119; Okahandja; 3-9.ii.1928» (1♀ COL); «S.W. Africa, R.E. Turner; Brit. Mus. 1928-131; Okahandja; 10-16.ii.1928», 1♀ (COL); S.W. Africa; R.E. Turner; Brit. Mus. 1928-144; Okahandja; 17-23.ii.1928», 1 ♂ (COL); «Namibia; Otijwarongo distr.; Abachaus; IV.1957, G. Hobhom leg.», 1♀ paratype (ZSMC); «Namibia; Osona b. Okahandja;

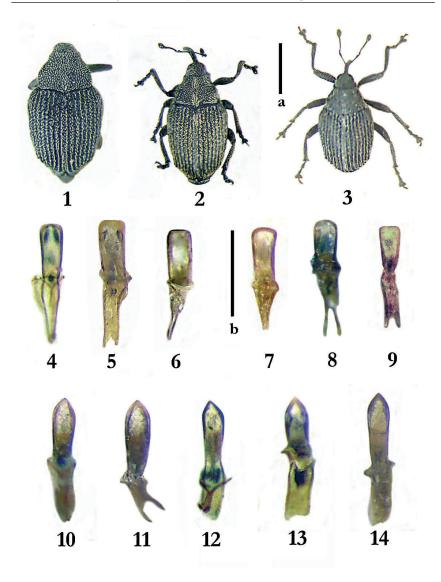


Fig. III. Habitus of: 1) Ceutorhynchus tropicalis n. sp., holotype – 2) Ceutorhynchus sperans n. sp., holotype – 3) Ceutorhynchus tabularis n. sp., holotype. Aedeagus of: 4) Ceutorhynchus remotus n. sp., paratype from Somerset East - 5) Ceutorhynchus resedae (Marsham) from Italy, Abruzzes, Barisciano – 6) Ceutorhynchus dchskii Pic from Egypt, Sinai, El Mafareq – 7) Ceutorhynchus sebastiani n. sp., holotype – 8) Ceutorhynchus arcanus n, sp., holotype – 9) Ceutorhynchus inops n, sp., holotype – 10) Ceutorhynchus afer n. sp., paratype from Okahandja – 11) Ceutorhynchus tropicalis n. sp., paratype from Goma – 12) Aedeagus of Ceutorhynchus centralis n. sp., holotype – 13) Ceutorhynchus sperans n. sp., paratype from Stilbaai – 14) Ceutorhynchus tabularis n. sp., paratype.

22°01'S/16°°56'E; 27.ii-2iii.2001; leg. U. Göllner», 1 ♂ paratype (ZMHB).

## Holotype

Length: mm 2.4. Piceous; antenna, tip of rostrum, ocular lobes, knees, apex of tibia, tarsi, preapical elytral tubercles and extreme apex of elytra brown. Dorsal vestiture of half-lifted not dense gold-yellowish linear double-pointed scales, dirty-white recumbent scales are along basis and pronotal sulcus and form the inner row of scales on sutural interval. Under side rather densely clothed by irregularly polygonal recumbent greyish scales. Rostrum about as long as pronotum, slightly curved, tricarinate at base. Antennal insertion immediately before the middle of rostrum. Antenna robust. Pronotum 0.65 as long as wide, strongly constricted at apex, base only slightly bisinuose. Disc quite convex, coarsely punctured, antero-lateral depressions and dorsal sulcus evident, lateral tubercles formed by a transverse series of minute granules. Elytra 1.16 as long as wide, widest immediately behind middle. Strial furrows deep and with a row of recumbent hairlike thin whitish scales. Intervals only slightly wider than striae, granulate, almost flat. Legs robust. Femora thickened. Tibia widened toward apex and slightly bisinuate, middle and hind tibia with a sharp apical mucro, tarsi slender, only slightly bilobe. Claws edentate. Urosternites 1 and 2 shallowly impressed, 5 with a deep fovea.

# Paratypes

Males are similar to the holotype. Aedeagus: fig. III: 10. Females have rostrum slightly longer, antennal insertion at the midpoint of rostrum and lack sternal depressions and tibial mucros. Length: 2.3-2.5 mm. See also fig II: 6.

# Etymology

The species is named after the continent in which has been found. The Latin name «afer» is the substantive for «the African» and is here used as a noun in apposition to the generic name

#### Remarks

This new species, as well as all the other described below, belongs

to the *obstrictus* group, as defined by Korotyaev (1980, sub *assimilis* group). The paratype from Abachaus was cited by Voss (1960) as *C. assimilis* (Paykull, 1792), a name that, according to Colonnelli (1993, 2004), was misapplied at that time to the Palaearctic *C. obstrictus* (Marsham, 1802). Scales on dorsal side at least in part brownish or yellowish, and those clothing elytral interval 9 clearly differing from scales on under side make it rather easy to identify this Namibian species from the close African ones described in this paper, also with the help of the key below.

#### **Ecology**

Nothing is known about the possible host plant of the new species.

### Ceutorbynchus centralis n. sp.

#### Diagnosis

Ab aliis speciebus turmae Ceutorhynchi obstricti facile distinguitur corpore curto, prothorace elytrisque convexis, colore fusco, antennis tarsisque castaneis, vestitura parca.

# Type series

Republic of Congo: «Congo Belge: P.N.A.; 10-15-IV-1953; P. Vanschuytbroek &; J. Kekenbosch 2869-74 / Massif Ruwenzori; Moyenne Lume; 1760 m, Kiribata; (Migeri), ex P.N.A.», 1 & holotype (MRAC) and 1 & paratype (COL); «Zaire - Nord Kivu; Alimbongo-Biggi; 2120 m 1.IX.1990; G. Carpaneto», 1 & paratype (MURT).

Rwanda: «Coll. Mus. Congo; Ruanda: Kayove; 2000 m. terr. Kisenyi; P. Basilewsky 14/II-53 / *Ceuthorrhynchus*; sp. 4; Det. G.A.K. Marshall», 1♀ paratype (MRAC).

# Holotype

Length: mm 2.0. Pitchy-brown, shining, antenna, tip of rostrum, ocular lobes, knees, apex of tibia, tarsi, preapical elytral tubercles and extreme apex of elytra reddish-brown. Dorsal vestiture of slanted sparse gold-yellowish linear scales with some dirty-white recumbent ones along sulcus of pronotum, golden scales on elytral intervals arranged general-

ly in one row. Under side rather sparsely clothed by comma-like recumbent grey-yellowish scales. Rostrum 1,24 as long as pronotum, quite strongly and regularly curved, slightly tapering toward apex, tricarinate up to antennal insertion then smooth and bare. Antenna robust, inserted about in the middle of rostrum. Pronotum 0.64 as long as wide, strongly constricted at apex, base only slightly bisinuose. Disc quite convex, very coarsely punctured, antero-lateral depressions strong, dorsal sulcus evident; lateral tubercles formed by a transverse series of minute granules. Elytra 1.05 as long as wide, convex, widest about in the middle. Strial furrows deep and apparently bare. Intervals hardly wider than striae, granulate, feebly convex. Legs relatively elongate. Femora clubbed. Tibiae somewhat widened toward apex and slightly bisinuate, middle and hind tibia with a sharp and robust apical mucro. Tarsi comparatively slender. Claws edentate. Urosternites 1 and 2 flat, 5 with a small shallow fovea. See also fig II: 7. Aedeagus: fig III: 12.

### Paratypes

The other male is similar to the holotype, only having elytral intervals with hairlike scales arranged in 1-2 irregular rows. Females have rostrum slightly longer, antennal insertion a trifle basad of the midpoint of rostrum and lack sternal depressions and tibial mucros. Length: 1.8-2.01 mm

# Etymology

The species was collected in central Africa, and is named after this circumstance.

#### Remarks

It is quite easy to identify this species by its pitchy-brown integumental colour, its tarsi and antennae ferrous-brown, its plump body with pronotum and elytra convex. The shining integument with a faint brassy lustre is shared with *Ceutorhynchus buettikeri* Colonnelli, 1985 from southern Saudi Arabia: however the Arabian species is larger and has body much more elongate, as detailed in the key below.

### Ecology

No possible host plants have been recorded.

### Ceutorbynchus tropicalis n. sp.

#### Diagnosis

A C. afro, cui simillimus, subito distinguitur squamulis dorsi unice albo colore.

#### Type series

Rwanda: «Coll. Mus. Congo; Ruanda: Gatsibu; 1800 m. terr. Biumba; P. Basilewsky 6-II-1953 / *Ceuthorrhynchus* sp. 3; Det. G.A.K. Marshall», 1♀ holotype (MRAC).

Republic of Congo: «Zaire, N. Kiwu; Goma, 14.VII.1990; S. Zoia», 1♂ paratype (COL); «Musée du Congo; Kivu: Rutshuru; 15-25.IX.1933; G.F. de Witte; Parc Nat. Albert / R. Det.; JJ; 4470 / *Ceuthorrhynchus*; sp.», 1♀ paratype (MRAC).

Uganda: «Uganda; Kampala; 6-xi-1932; H. Hargreaves / Ex *Brassi-ca* sp.», 1♀ paratype (BMHN).

#### Other material

South Africa: «S. Afr.; Pretoria; Fountains; 25.57 S - 20.12 E / 13.11.1985; E-Y:2264; on vegetation; leg. Endrödy-Younga»,  $2 \circlearrowleft \circlearrowleft (1 \text{ TMSA}, 1 \text{ COL})$ ; «S. Afr., Namaqualand; Springbok, Mesklip; 29.49 S - 17.52 E / 30.8.1976; E-Y:1887; on flowers; leg. Endrödy-Younga»,  $1 \circlearrowleft (TMSA)$ ; «South Africa, Western Cape; 22 Km S Yzerfontein (R27); m 30, 10.IX.1994 fynbos; P. Audisio; M. Biondi & M. A. Bologna leg.,  $1 \circlearrowleft (MZUL)$ .

## Holotype

Length: mm 2.17. Piceous, antenna, tip of rostrum, ocular lobes, knees, apex of tibia, bilobe joint of tarsus brown. Dorsal vestiture of almost recumbent rather dense whitish comma-like scales, some ligulate also whitish ones are along sulcus and base of pronotum, scales on elytral intervals are arranged generally in one-two irregular rows. Under side densely clothed by oval recumbent whitish scales. Rostrum 1.05 as long as pronotum, regularly curved, very faintly tapering toward apex, tricarinate up to antennal insertion then smooth and bare. Antenna rather thin, inserted about in the middle of rostrum. Pronotum 0.71 as long as wide, constricted at apex, base only slightly bisinu-

ose. Disc quite flat, coarsely and densely punctured, antero-lateral depressions comparatively moderate, dorsal sulcus evident, lateral tubercles fairly weak. Elytra 1.06 as long as wide, somewhat convex, widest immediately behind humeri. Strial furrows deep and apparently bare. Intervals only slightly wider than striae, granulate, almost flat. Legs quite robust. Femora clubbed. Tibiae a little widened toward apex and slightly bisinuate, middle and hind tibia with a sharp and robust apical mucro. Tarsi comparatively slender. Claws edentate. Urosternites 1 and 2 flat, 5 with a small shallow fovea. See also fig III: 1.

## Paratypes

Males are basically similar to the holotype. Aedeagus: fig. III: 11. The female has rostrum a trifle longer, and of course has no sternal depressions and tibial mucros. Length: 2.0-2.4 mm.

## Other specimens

The South African examples (all females) were not included in the type series because of their vestiture a little denser. In addition, one of them has somewhat more parallel-shaped elytra. Perhaps they may represent different species, but with such a scarce material it seems unwise at the moment to consider them separate from the central African examples.

# Etymology

The species was collected in some countries of tropical Africa, and its name was chosen to remark this fact.

#### Remarks

The new species is very similar to *Ceutorhynchus afer* n. sp. from Namibia, and can be differentiated from it essentially by the lack of brownish dorsal scales which are all entirely whitish or grey-whitish. The central African examples and almost all of the southern African ones are also a little more convex than those of *C. afer*. See also the key below.

# Ecology

The host plant of the new species is a member of the cruciferan genus *Brassica*, as reported on a label borne by the paratype from Uganda.

## Ceutorbynchus sperans n. sp.

#### Diagnosis

Praecedenti simillimus, sed elytrarum interstitio nono squamulis densissimis praedito certe agnoscendus.

### Type series

South Africa: «RSA-Cape Province; near Stilbaai; 34°25'S 21°25'E; 1.XI.1988-E. Colonnelli / on *Heliophylla* sp.», 1 & holotype (BMNH) and 48 paratypes (4 BMNH, 37 COL, 7 TMSA); «S. Africa; R.E. Turner; Brit. Mus. 1930-561; Cape Province; Somerset East.; October 1930», 8 paratypes (7 BMNH, 1 COL); «S. Africa; R.E. Turner; Brit. Mus. 1927-117; Orange F. State; Harrismith; Feb. 1927» 2 exx. paratypes (1 BMNH, 1 COL).

### Holotype

Length: mm 2.3. Piceous, antenna, tip of rostrum, bilobe joint of tarsus dark brown. Dorsal vestiture consisting of almost recumbent dense triangularly narrow whitish and golden-brown scales arranged generally in two rows on elytral intervals. Oval white squamae are along sulcus and base of pronotum, are scattered on intervals of elvtra, and cover elvtral suture where they are very dense or even embricate. Under side densely clothed by oval recumbent whitish scales which extend also on interval 9 of elvtra. Rostrum 1.23 as long as pronotum. thin, gently curved, tricarinate up to antennal insertion then smooth and bare. Antenna thin, inserted about in the middle of rostrum. Pronotum 0.69 as long as wide, constricted at apex, base only slightly bisinuose. Disc quite flat, densely punctured, antero-lateral depressions comparatively moderate, dorsal sulcus complete, lateral tubercles in the form of transverse keels. Elytra 1.18 as long as wide, rather flat, widest behind humeri. Strial furrows deep and with a series of thin recumbent hairlike white scales. Intervals clearly wider than striae, very rugosely punctured, flat. Legs robust. Femora clubbed. Tibiae a little widened toward apex and almost straight, middle and hind tibia with a robust apical mucro. Tarsi comparatively stout. Claws edentate. Urosternites 1 and 2 flat, 5 with a rather deep fovea. See also fig. III: 2.

#### **Paratypes**

Variation involves the colour of the scales on upper surface, which can be even entirely whitish. In some specimens the vestiture is sometime less dense, and the scales can be thinner than those of the holotype. Aedeagus: fig. III: 13. Females differ by the lack of mucros and sternal depressions, the rostrum a little longer, thinner and smoother than that of males, and their antenna inserted just basad of middle of rostrum. Length: mm 2.30-2.36.

### Etymology

The name, meaning in Latin hopeful, was chosen since the locality where the holotype was collected is in the Western Cape province not far from the Cape of Good Hope.

#### Remarks

The new species much resembles *Ceutorhynchus afer* n. sp. and *C. tropicalis* n. sp., but surely differs from both by the scaled interval 9 of elytra. Other characters are exposed in the key below.

# Ecology

All specimens from Stilbaai were collected among the leaves of an unidentified species of *Heliophylla* which grew in a sandy spot, and which must be surely considered as one of the host plant of *C. sperans*.

# Ceutorbynchus tabularis n. sp.

# Diagnosis

Satis diversus ab aliis speciebus Africae australis elytrarum squamis intervallorum parium omnino una serie dispositis.

# Type series

South Africa: «Table Mt.; Cape of G. Hope; W. Bevins; 1906-167» 1 ♂ holotype (BMNH) and 3 ♂♂, 3 ♀♀ paratypes (4 BMNH, 2 COL).

### Holotype

Length: mm 1.9. Piceous, tip of rostrum, tibiae and antenna dark brown. Pronotum rather dull and finely coarsely punctured, elytra pretty shining. Dorsal vestiture of almost recumbent white hairlike scales intermingled on pronotum and elytra with elongate-oval recumbent white ones, condensed along dorsal channel, on sides, on antero-lateral depressions and along base of pronotum. Oval scales are scattered on disc of elvtra and cover the whole suture and the most part of intervals 9 and 10. Elytral intervals with one row of hairlike white scales, which in some interspaces are partly arranged in two rows. Under side with rather thick narrowly lanceolate or oval white scales. Rostrum 1.4 as long as pronotum, thin, regularly curved, scaled and strigose up to just beyond antennal insertion, then shining and glabrous, slightly tapering at apical third both in frontal and in side view. Antenna inserted in the middle of rostrum, scape clubbed, funiculus 7-jointed, joints 1 to 3 elongate, 4-6 longer than wide, 7 rounded not transverse, club shortly fusiform, about as long as joints 5-7 together. Frons flat, strongly punctured, eyes weakly convex, vertex carinate. Pronotum 0.64 as long as wide, strongly constricted at apex, base slightly bisinuose, fore margin strongly elevated, sides seemingly subangulate near the middle to make room for strong lateral tubercles, maximum width at basal third. Disc flat, antero-lateral depressions strong, dorsal sulcus entire, lateral tubercles strongly prominent and with a row of small granules. Elytra 1.07 as long as wide, rather flat, widest at basal fourth, sides slightly and uniformly curved up to muricate preapical tubercles, humeral calli moderate. Strial furrows deep, catenulate, bare. Intervals not wider than striae. flat, shining, with minute rasp-like granules that become stronger on lateral interspaces and near elytral apex. Legs rather elongate, femora moderately clubbed and edentate, tibia almost straight, weakly enlarged from base to apex, inner margin of meso and metatibia with strong sharp mucros at apex, tarsi slender, joint 3 strongly bilobe, claws edentate. Urosternites 1-2 flat, 5 with rather deep fovea. See also fig. III: 3.

# Paratypes

Variation is little, involving mostly the upper elytral vestiture, which in some specimens is denser: in this case the hairlike scales on intervals are usually arranged in 2 rather regular rows, but at least the most part of even-numbered ones has still a single row. Rostral length is also slightly variable. Female have antenna inserted in the middle of rostrum and lack mucros and sternal impressions. Length: mm 2- 2.25. Aedeagus: fig. III: 14.

#### Etymology

The Latin name refers to the locality where the new species was collected.

#### Remarks

This species is rather easy to identify by at least the scales of evennumbered elytral intervals arranged for the most part in a single row, that gives to *C. tabularis* a slightly darker appearance than that of other South African species. See also the key below.

#### Ecology

No data available.

#### KEY TO SPECIES OF THE OBSTRICTUS GROUP

The following key should facilitate the separation of all the species of the *obstrictus* group, Palaearctic and tropical African. Note that, apart few exceptions, the shape of aedeagus of most of them is similar to such an extent that it is impossible to use it for identification purposes.

- Elytral intervals so densely clothed by embricate milk-white sericeous scales that it is impossible to see the integument. Sahara, Israel ....... farsetiarum Peyerimhoff, 1930

4	- Body pitchy brown. Antenna and tarsi reddish-brown. Pronotun and elytra plump, quite convex. Dorsal vestiture thin and rathe sparse, insect fairly shining. Republic of Congo, Rwanda
4.3	
4'	- Not with all the above characters
5	- Scales on upper surface at least in part brownish or yellowish and elytral interval 9 not with adpressed white oval scales similar to
<b>-</b> ،	those that cover the under side. Namibiaafer n. sp
5'	- Scales on upper surface whitish. If they are in part brownish, there elytral interval 9 with the same thick white vestiture that clothe the under side
6	- Scales on upper surface half-lifted, giving to the insect quite a hair
O	appearance. Ethiopia, Kenya maracaensis Hustache, 1934
6'	- Scales on upper surface recumbent or nearly so
7	- At least even-numbered elytral intervals for the most part with
′	single row of hairlike scales, and rostrum tapering on apical third
	(fig. III: 3). Antenna inserted at midpoint of male rostrum, and
	hardly basad of it in female one. South Africa tabularis n. sp
7'	- Not with all the above characters
8	- Elytral interval 9 with the same dense white vestiture of oval scale
O	that cover the under side, thus appearing as a lateral stripe in brown
	scaled specimens. South Africa sperans n. sp
8'	- Vestiture of the elytral interval 9 not differing from that of the
O	adjacent intervals. Republic of Congo, Rwanda, Uganda, Soutl
	Africa tropicalis n. sp
9	- Scales of elytral intervals thin and brownish. Ethiopia, Kenya
)	- Scales of crystal intervals thin and brownish. Ethiopia, Renya  distans Hustache, 1930
9,	- Scales of elytral intervals never brownish. Palaearctic
	- Most part of female rostrum shiny and glabrous from very nea
10	
	the base; male rostrum shiny and glabrous still basad of antenna
	insertion and shorter than head and pronotum. Vestiture formed
	by dense elongate whitish scales. Apex of aedeagus rounded. Med
	iterranean, Middle East, southeastern part of European Russia
10	
10'	- Female rostrum shiny and glabrous at most starting from antenna
	insertion; male rostrum shiny and glabrous only apicad of anten
	nal insertion. Aedeagus usually sharply pointed: if rounded, ther
	rostrum at least as long as head and pronotum
11	- Rostrum just a little curved, at least as long as the combined lengtl
	of head and pronotum in both sexes. Deep pronotal sulcus and
	elytral suture so densely clothed by scales to appear as an eviden

	white stripe from fore margin of pronotum to pigydium. Apex of aedeagus rounded. Algeria, Morocco
	lacteonotatus Colonnelli, 2005
	Not with all the above characters. Apex of aedeagus sharp 12  - Distance between hairlike recumbent scales of striae hardly shorter than the length of one of them. Upper clothing sparse, formed on elytral intervals by thin hairlike recumbent scales arranged in 1-2 irregular rows. Integument grey-bluish
12'	- Tip of each strial scale touching the base of the following one, or the distance between them is very short
	- Upper clothing denser, so that the insect appears grey. Pronotal disc less convex; lateral tubercles more evident and forming a longer transverse keel. Elytra less convex; humeral calli stronger; sides just a little curved. Male meso and metatibial mucros very long and unusually sharp. Female rostrum basally almost straight, then more evidently curved; antenna inserted clearly basad of midpoint of rostrum. Tarsi shorter; joint 3 weakly bilobe. On the average smaller (mm 2.15-2.55). Southern Italy, Sicily, Algeria
	sides clearly curved. Male meso and metatibial mucros short and normally sharp. Female rostrum regularly curved; antenna inserted about in the middle of rostrum. Tarsi elongate; joint 3 strongly bilobe. On the average larger (mm 2.15-3). West Palaearctic, imported in Korea and North America
14	- Lateral tubercles of pronotum unapparent, since they are formed by a series of small granules. Female rostrum parabolic. Western Mediterranean
	- Lateral tubercles of pronotum sharp or transversally keeled 15
	- Rostrum in both sexes shorter than the combined length of head and pronotum. Dorsal clothing rather dense, consisting of hair-like scales somewhat thick or of broader whitish scales. Elytra rather flattened and parallel-sided. Third tarsal segment comparatively weakly bilobe. Size not exceeding mm 2.55
15'	- At least female rostrum not shorter than the combined length of head and pronotum
16	- Dorsal clothing denser and consisting on elytral intervals at least in part of whitish scales. Apical mucros of male meso and metatib-

16' -	iae thicker and less sharp. Aedeagus thinner, its apex obviously sharp. Western Mediterranean sardeanensis Schultze, 1903 Dorsal clothing sparser and consisting on elytral intervals only of hairlike scales. Apical mucros of male meso and metatibiae thinner, longer and sharper. Aedeagus thicker, its apex less sharp.
	Southern Italy, Sicily, Algeriasatanas Colonnelli, 2005
17 -	Apex of each of the recumbent seta at least on basal half of elytral striae touching the base of the subsequent one, so that they ap-
	pear as continuous thin white lines. Europe
	gallorhenanus F. Solari, 1949
17' -	Apex of each of the recumbent seta on elytral striae not touching the base of the subsequent one
18 -	Internal row of scales of suture consisting of oval white scales
	whereas the external one on the same interspace is formed of hair-
	like scales. Clothing of remaining intervals rather thick, consisting
	of 2-4 irregular rows of hairlike scales and of some scattered oval
	scale so that the insect appears light grey. Europe
	gallorhenanus F. Solari, 1949
18' -	Both rows of suture consisting of hairlike scales. Dorsal vestiture
	sparser so that the insect appears dark grey19
19 -	Male meso and metatibial mucros very long and sharp. Female
	rostrum parabolic and antenna inserted basad of middle of ros-
	trum. Tarsi shorter, third joint comparatively weakly bilobe. Size
	on average smaller (mm 2.15-2.55). Southern Italy, Sicily, Algeria
	satanas Colonnelli, 2005
19' -	Male meso and metatibial mucros shorter, thicker and moderately
	sharp. Female rostrum regularly curved and antenna inserted about
	in the middle of rostrum. Tarsi quite long, third joint compara-
	tively strongly bilobe. Size on average larger (mm 2.15-3). West
	Palaearctic, imported in Korea and in North America
	obstrictus (Marsham 1802)

#### ACKNOWLEDGEMENTS

Several colleagues helped me during the preparation of this paper, both by sending me specimens and giving me information about localities, literature and host plants. I would thus like to heartily thank the following scientists: Prof. P. Audisio, Università di Roma «La Sapienza», Rome, Italy; Dr. M. Baehr, Zoologische Staatsammlung, München, Germany; Prof. M. Bologna and Prof. G. Carpaneto, Università «Roma Tre», Rome, Italy; Dr. R. Danielsson, Lund University, Lund, Sweden; Dr. J. Decelle, formerly at the Musée Royale de l'Afrique Centrale, Tervuren, Belgium; the late Dr.

S. Endrödy-Younga, formerly at the Transvaal Museum, Pretoria, South Africa; Dr. R. Oberprieler, formerly at the South African National Collection of Insects, Pretoria, South Africa; R. T. Thompson, The Natural History Museum, London, England; Dr. M. Uhlig, Museum für Naturkunde der Humboldt-Universität, Berlin, Germany; Dr. V. B. Whitehead, formerly at the South African Museum, Cape Town, South Africa. This paper was supported by grants from Italian Ministero dell'Istruzione, dell'Università e della Ricerca (PRIN 20040557217 «Zoogeography of the Mediterranean-Southern African disjunct distribution by a multimethod approach») and from the University of Rome «La Sapienza» (60% funds «Aspetti genetici e morfometrici della biodiversità animale in aree africane e medio-orientali a basso impatto autropico»).

#### LITERATURE

- COLONNELLI E., 1993 The Ceutorhynchinae types of I. C. Fabricius and G. von Paykull (Coleoptera: Curculionidae) *Koleopterologische Rundschau*, 63: 299-310.
- COLONNELLI E., 2004 Catalogue of Ceutorhynchinae of the world, with a key to genera (Insecta: Coleoptera: Curculionidae), Barcelona *Argania editio*, 124 pp.
- COLONNELLI E., 2005a New species of Ceutorhynchinae from Western Palaearctic (Insecta, Coleoptera: Curculionidae) *Aldrovandia*, 1: 89-101.
- COLONNELLI E., 2005b Ten new species of Palaearctic Ceutorhynchinae (Coleoptera, Curculionidae) Bollettino della Società entomologica italiana, 137(1): 27-44.
- DIECKMANN L., 1975 Neue vorder- und mittelasiatische Rüsselkäfer (Coleoptera: Curculionidae) *Beiträge zur Entomologie*, 25: 201-208.
- GÜLTEKIN L., 2005 A new species of the weevil genus *Ceutorhynchus* Germar from Eastern Mediterranean Turkey (Coleoptera: Curculionidae) *Zootaxa*, 883: 1-5.
- Korotyaev B.A., 1980 Materialy k poznanyu Ceutorhynchinae (Coleoptera, Curculionidae) Mongolii i SSSR *Nasekomie Mongolii*, 7: 107-282.
- KOROTYAEV B.A. 2004 In: B. A. KOROTYAEV and K.-J. HONG.
- Korotyaev B.A. & Gültekin L., 2004 In: V. I. Dorofeev, B. A. Korotyaev and L. Gültekin, 2004 Novyj vid roda *Stroganowia* Kar. et Kir. (Cruciferae) iz severno-vostochnoj Turtsii i svyazannye s nim dolgonosikoobraznye zhuki (Coleoptera, Curculionoidea) *Byulleten' Moskovskogo Obshchestva Ispytatelej Prirody. Otdel Biologicheskij*, 109(2): 72-76.
- KOROTYAEV B. A. & HONG K.-J., 2004 A revised list of the weevil subfamily Ceutorhynchinae (Coleoptera: Curculionidae) in the Korean fauna, with contribution to the knowledge of the fauna of neighbouring countries *Journal of Asia-Pacific Entomology*, 7(2): 143-169.
- Voss E., 1960 In Südwest-Afrika aufgefundene Curculioniden *Opuscula Zoologica*, 38: 1-13.

Indirizzo dell'autore: Enzo Colonnelli - Via delle Giunchiglie, 56 - I-00172 Roma, Italia