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New holarctic species of Ceutorhynchinae

(Coleoptera: Curculionidae)

With 67 figures on four plates

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Summary

The following new species of Ceutorhynchinae are described: Ceutorhynchus excelsus sp. n. from China (Sichuan); C. francisci sp. n. from Turkey; C. magnisinus sp. n. from Texas; C. montanus sp. n. from Bulgaria; C. zonatus sp. n. from Mexico; Coeliodes caucasius sp. n. from Armenia and Gruziya; C. jelineki sp. n. from southwestern Iran; Glocianus superstes sp. n. from Greece; Pericartius flavisquamis sp. n. from Algeria; Thamiocolus comptus sp. n. from Turkey; T. phaleratus sp. n. from Turkmenia; and T. roessleri sp. n. from northern Italy. The following new synonymies are proposed: Hypohypurus HUSTACHE, 1920 (= Orientohypurus KOROTYAEV, 1981; syn. n., = Hemilioxyonyx COLONNELLI, 1984; syn. n.); Hypohypurus testaceirostris Hustache, 1930 (= Lioxyonyx sibitiensis Hoffmann, 1968; syn. n.); Hypurus bertrandi (PERRIS, 1852) (= Ceutorhynchus oleraceae MARSHALL, 1935; syn. n.). New combination are: Hypohypurus medvedevi (KOROTYAEV, 1981), H. minor (KOROTYAEV, 1981), H. ponomarenkoi (KOROTYAEV, 1981) and H. simplicipes (KOROTYAEV, 1981) (all comb. n. from Orientohypurus); Hypurus hovanus (DALLA TORRE & HUSTACHE, 1930), H. litoralis (COLONNELLI, 1979), H. madagascariensis (HUSTACHE, 1920), H. madecassus (HUSTACHE, 1920) (all comb. n. from Hypohypurus), Hypurus portulacae (MARSHALL, 1916) (comb. n. from Ceutorhynchus); Pericartius abyssinicus (HUSTACHE, 1934), P. aequatorialis (HUSTACHE, 1934), P. amaranthi (VOSS, 1963) (all comb. n. from Hypohypurus). Hypohypurus perrieri HUSTACHE, 1920 is selected as the type species of Hypohypurus HUSTACHE, 1920. A Lectotype is designated for Thamiccolus hexatomus (PENECKE, 1922), stat. n., which is raised to species rank. The name of the tribe Lioxyonychini COLONNELLI, 1984 is emended. A key to the genera of Hypurini is included.

Zusammenfassung

Die folgenden neuen Ceutorhynchinen-Arten werden beschrieben: Ceutorhynchus excelsus sp. n. aus China (Sichuan); C. francisci sp. n. aus der Türkei; C. magnisinus sp. n. aus Texas; C. montanus sp. n. aus Bulgarien; C. zonatus sp. n. aus Mexico; Coeliodes caucasius sp. n. aus Armenien; C. jelineki sp. n. aus dem Südwest-Iran; Glocianus superstes sp. n. aus Griechenland; Pericartius flavisquamis sp. n. aus Algerien; Thamiocolus comptus sp. n. aus der Türkei; T. phaleratus sp. n. aus Turkmenien; und T. roessleri sp. n. aus Norditalien. Folgende neue Synonymien werden festgestellt: Hypohypurus HUSTACHE, 1920 (= Orientohypurus KOROTYAEV, 1981; syn. n., = Hemilioxyonyx COLONNELLI, 1984; syn. n.); Hypohypurus testaceirostris HUSTACHE, 1930 (= Lioxyonyx sibitiensis HOFFMANN, 1968; syn. n.); Hypurus bertrandi (PERRIS, 1852) (= Ceutorhynchus oleraceae MARSHALL, 1935; syn. n.).

Neukombinationen sind: Hypohypurus medvedevi (KOROTYAEV, 1981), H. minor (KOROTYAEV, 1981), H. ponomarenkoi (KOROTYAEV, 1981), H. simplicipes (KOROTYAEV, 1981) (alle comb. n. aus Orientohypurus); Hypurus hovanus (DALLA TORRE & HUSTACHE, 1930), H. litoralis (COLONNELLI, 1979), H. madagascariensis (HUSTACHE, 1920), H. madecassus (HUSTACHE, 1920) (alle comb. n. aus Hypohypurus), Hypurus portulacae (MARSHALL, 1916) (comb. n. aus Ceutorhynchus); Pericartius abyssinicus (HUSTACHE, 1934), P. aequatorialis (HUSTACHE, 1934), P. amaranthi (VOSS, 1963) (alle comb. n. aus Hypohypurus). Hypohypurus perrieri HUSTACHE, 1920 wird als Typus-Art für die Gattung Hypohypurus HUSTACHE, 1920 designiert. Für den in den Artrang erhobenen Thamiocolus hexatomus (PENECKE, 1922), stat. n. wird ein Lectotypus designiert. Der Name der Tribus Lioxyonychini COLONNELLI, 1984 wird berichtigt. Für die Gattungen der Hypurini wird ein Bestimmungschlüssel vorgelegt.

To describe new species without including them in a revisionary study is deemed often unsuitable. We need however also not to defer for years the publication of their discovery. Groups like Ceutorhynchinae, in which much of alpha-taxonomy has still to be done, do not allow us to neglect descriptions of new species. This for a revisionary work on the subfamily, even partial, has been undertaken (Colonnelli, 1979a, 1979b, 1980, 1983, 1984, 1986, 1992, 1995; DIECKMANN, 1972, 1973, 1975; KOROTYAEV, 1980, 1981, 1982, 1989, 1992, 1994), and thus a quite satisfactory assignement of the new taxa is possible. Therefore a number of species discovered during the latest surveys are described in this paper. Their order is alphabetical. The following abbreviations are used: BEH (BEHNE collection, Eberswalde); BML (British Museum, Natural History, London); BOR (BOROVEC collection, Nechanice); COL (COLON-NELLI collection, Rome); DEI (Deutsches Entomologisches Institut, Eberswalde); FRE (FREY collection, Munich); HOL (HOLECOVÁ collection, Bratislava); KOR (KOROTYAEV collection, Sankt Peterburg); KOŚ (KOŠTÁL collection, Hradec Králove); MAD (Museo Nacional de Ciencias Naturales, Madrid); MCR (Museo Civico di Zoologia, Rome); MNP (Muséum National d'Histoire Naturelle, Paris); MPW (Uniwerzytet Wrocławski, Muzeum Przyrodnicze, Wrocław); MUR (Museo di Zoologia dell'Università "La Sapienza", Rome); NMP (Národni Museum, Prague); NMW (Naturhistorisches Museum, Wien); OBR (O'BRIEN collection, Tallahassee); OSL (OSELLA collection, L'Aquila); RÖS (RÖßLER collection, Wunsiedel); SAC (SACCO collection, Rome); STR (STREICEK collection, Prague); SUP (SUPPANTSCHITSCH collection, Wien); USM (United States National Museum, Washington); VOR (VORÍSEK collection, Kladno); ZIL (Zoologiska Institutionen, Lunds Universitet, Lund); ZSM (Zoologische Staatsammlung, Munich).

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Ceutorhynchus excelsus sp. n.

Diagnosis: C. languido SCHULTZE aliquo modo similis, sed corpore robustiore, vestitura potius squamulis quam setis constante, squamulis multo minus erectis, femoribus muticis, forma alia rostri aedeagique subito distinctus.

Type series: CHINA: Northeastern Sichuan, 60 km S of Hongyuan, about 4200 m, 27./29.VI. 1991, 1 male holotype [DEI], and 5 males and 9 females paratypes [1 MUR, 13 COL], J. KALÁB leg.

Holotype: Length: 1.9 mm. Piceous; densely punctured, and thus rather dull. Dorsal vestiture of half recumbent brownish hairlike scales arranged in 2-3 irregular rows on elytral intervals, and of white lanceolate scales. These latter are condensed on sides, on depressions and on base of pronotum; form a scutellar patch and a thin white stripe at base of elytral intervals 1-6; and are scattered on elytra. Ventral vestiture of rather sparse recumbent hairlike scales, and of lanceolate white scales more condensed on mesepimera. Rostrum 1.33 as pronotum, regularly curved, rather shining and dorsally strigose up to apex. Antenna inserted about in the middle of rostrum; scape regularly widened apically; funiculus 7-jointed, all joints longer than wide; club acuminate-oval, about as long as the preceding 4 joints. Frons flat, eyes quite convex. Pronotum 1.44 as long as wide, rather strongly costricted apically; base bisinuose. Disc quite flat, strongly punctured; antero-lateral depression and dorsal channel evident; tubercules acute. Elytra 1.06 longer than wide, widest at middle, sides regularly curved; humeral and preapical calli not very strong. Strial furrows punctate and with extremely thin setae very difficult to see. Intervals rugosely punctured, flat, not much wider than striae. Legs quite robust; femora with no trace of tooth; tibia straight; tarsi rather short; claws with a minute basal tooth. See also fig. 1 (p. 392). Paratypes: Other females are very similar to holotype. Males differ by the antennal insertion situated immediately apicad of the middle of rostrum; the apical mucro of middle and hind tibia; the presence of common depression on urosternites 1-2, and of small fovea on 5. Paratypes show some variation in the amount of white scales of dorsal vestiture, and also in the shape of the hairlike ones which are more or less thin, Length: 1.9-2.0 mm. Aedeagus: figs 34, 35.

Etymology: The very high elevation above the sea level of the type locality suggested the specific name, from the Latin excelsus (= topmost).

Remarks: The new species is similar, although not very closely related, to the species of the viator group, as defined by KOROTYAEV (1980): among them, the only one with toothed claws is C. languidus SCHULTZE, 1902 from eastern and central Asia. This differs from C. excelsus by the rostrum carinate basad of antennal insertion, which is situated apicad of middle also in the female; the female rostrum thinner and much more curved, the elongate shape of body, the half-lifted hairlike scales, the toothed femora and the different shape of aedeagus (figs 2, 36, 37). C. excelsus is immediately distinguished from C. opacus KOROTYAEV, 1980 (the only other Ceutorhynchus thus far known from Sichuan) by the rather densely clothing, the acute pronotal tubercles and the unarmed femora.

Ecology: Nothing is known about the circumstances in which the new species has been collected.

Ceutorhynchus francisci sp. n.

Diagnosis: C. erivano SCHULTZE ex Armenia simillimus, sed squamulis imbricatis densissimis albicantisque undique tectus, fronte incisura longitudinali praedita, sulco prothoracis evidentiore, forma aedeagi latiore satis differre videtur.

Type series: TURKEY: Nevshehir province, Göreme, m 1250, 19.VII.1988, 1 male holotype

[DEI] and 64 paratypes [4 MUR, 4 NMW, 4 MCR, 4 OSL, 2 SAC, 2 ZIL, 2 MPW, 4 DEI, 35 COL], F. SACCO leg. on an unidentified Brassicaceae. TURKEY: Nigde prov., Hüyük, 7.VI.1981, 1 female paratype [MUR], G. SAMA leg.

Holotype: Length: 2.4 mm. Piceous; legs and antenna brown, tarsi and knees slightly paler. Dorsal vestiture of imbricate recumbent whitish strigose apically truncate scales, which entirely conceale integument. Ventral side with dense adpressed lanceolate or irregularly polygonal whitish scales. Rostrum 1.18 as pronotum, rather thick, slightly curved, carinate, rugosely punctate and scaled basad of antennal insertion which is in the middle. Antenna quite robust; scape slightly clavate; funiculus 7-jointed; segment 7 not transverse; club oval acuminate, rather small. Frons with longitudinal incision, eyes lateral. Pronotum 0.69 as long as wide, widest immediately apicad of basal third, constricted from here to only slightly elevated apex, a little narrowing to bisinuate base. Disc rather flat, coarsely punctate; dorsal channel entire; lateral tubercles acute. Elytra 1.01 longer than wide, widest at middle; sides rounded; humeri evident; preapical calli muricate. Intervals flat, strongly punctured. Striae in the form of punctate furrows, with no evidence of scaling. Legs robust; femora without tooth; middle tibia with apical mucro, hind tibia with very small hook; claws appendiculate. Common depression on urosternites 1-2 very shallow, fovea on 5 rather deep. Aedeagus: figs 39, 40. See also fig. 3. Paratypes: Other males have essentially the same appearance of the holotype. Females have rostrum slightly longer and lack tibial mucros and sternal depressions. A slight variation of the colour and density of the scales can be appreciated. Length: 2.35-2.60 mm.

Etymology: The species is named after its collector, my good friend FRANCESCO SACCO.

Remarks: C. francisci is closely related to C. erivanus SCHULTZE, 1898 from Armenia, Gruziya (KOROTYAEV and CHOLOKAVA 1989), and East Turkey (Erzurum, personal record). The new species differs from C. erivanus by the upper clothing formed by very dense imbricate whitish scales wholly concealing integument on pronotum and arranged to form on head a thin frontal longitudinal furrow; the longitudinal channel of prothorax entire; the broader aedeagus (figs 38, 39). Scales of C. erivanus are yellowish, much less dense, and do not wholly conceale integument on head and prothorax, whereas the frons has no trace of furrow, and the dorsal sulcus of prothorax is evident only at base and apex. Note that SCHULTZE (1902:221) mentions a "var. coniensis" from Turkey (Konya) of C. erivanus: this variety, having been never described, is a nomen nudum. The unique Ceutorhynchus from Konya [NMW] of the coarctatus group (to which all these species belong) which I could study is a rather densely scaled individual: such specimens are not uncommon in the eastern populations of C. coarctatus GYLLENHAL, 1837 (see COLONNELLI 1994): they are however definitely different from both C. erivanus and C. francisci by their vestiture of white lanceolate not adpressed scales, and by the sharp apex of aedeagus.

Ecology: The collector beat all specimens off an unidentified flowering small perennial species of Brassicaceae.

Ceutorhynchus magnisinus sp. n.

Diagnosis: C. adspersulo DIETZ admodum similis, sed corpore planatiore, rostro elytrisque piceis, tuberculis apicalis elytrarum majoribus, setis hispidioribus, aedeago cuspidato facile distinctus.

Type series: TEXAS: Big Bend National Park, Paint Gap Hill, m 1100, 29.IV.1991, 1 male holotype [USM], and 64 paratypes [4 DEI, 4 MUR, 4 MCR, 4 NMW, 4 OBR, 4 USM, 40

COL], E. COLONNELLI leg., on *Nerisyrenia camporum* (GRAY) GREEN. TEXAS: Big Bend National Park, Rio Grande near Santa Elena Canyon, m 300, 30.IV.1991, 1 paratype [COL], E. COLONNELLI leg.

Holotype: Length: 2 mm. Shining, piceous; tip of rostrum, antenna and claws brown; legs ferrous-red. Dorsal vestiture of rather close oval recumbent (or nearly so) white scales, forming an ill-defined sutural vitta and three vague longitudinal stripes on pronotal disc; also with halflifted brown or golden hairlike scales irregularly directed forward on prothorax, and forming a rather regular row on each elytral interstice. Striae of elytra with a row of lanceolate recumbent white scales. Under side with dense recumbent lanceolate whitish scales. Rostrum 1.32 as pronotum, regularly curved, slightly tapering and smoot apicad of antennal insertion which is about in the middle; base finely strigose. Antenna rather slender; scape thin, slightly clubbed; funiculus 7-jointed; joint 1 about as long as 2; 3-7 diminishing in length; club oval, about as long as the four preceding joints. Frons flat, with a patch of white ligulate scales. Pronotum 0.71 as long as wide, constricted in front, deeply and roughly punctured; disc quite flat, medial sulcus evident, tubercles fairly acute. Elytra 1.12 longer than wide, widest at rather prominent humeri; preapical tubercles quite strongly muricate. Interstices flat, not so roughly puctured. Striae in the form of thin furrows. Legs slender: femora mutic: middle and hind tibia with rather strong mucro; tarsi slender: tarsal segment 4 projects beyond 3 slightly more than 3' length; claws appendiculate basally. Common depression on urosternites 1-2 quite evident; fovea on 5 shallow. Aedeagus: figs 41, 42. See also fig. 4.

Paratypes: Some variation is shown by the density of vestiture of whitish scales, this making the dorsal pattern more or less evident. Two paratypes have femora brownish. Few others show only the base of femora darker. The depressions of male urosternites can be more or less deep. Females have venter flat, and lack tibial mucros; their rostrum is slightly longer and smoother than that of males, and the antenna are inserted a trifle basad of middle of rostrum. Length: 1.72-2.21 mm.

Etymology: The Latin name magnisinus, meaning "of the big bend", refers to the locality where the new species was collected.

Remarks: The new species, which must be placed in the convexicollis group (sensu DIETZ 1896), resembles C. adspersulus DIETZ, 1896 from California, Arizona, Texas, Mexico (O'BRIEN and WIBMER 1982), and New Mexico (pers. rec.). C. magnisinus is immediately recognishable by the dark integument of rostrum, prothorax and elytra; the less convex body; the larger preapical calli of elytra; the vague sutural vitta; the more irregularly disposed ligulate lifted scales; the larger basal tooth of claws; the large common fovea on urosternites 1-2, and the faint impression of 5; and the sharp pointed aedeagus. C. adspersulus is usually brown or even reddish-brown, its sutural vitta is evident, the ligulate erect scales are more regularly disposed, the body is convex, the basal tooth of claws is minute, the male abdomen lacks common fovea on urosternites 1-2 whereas the one on 5 is deep, the aedeagus is truncated (figs 5, 43, 44). In addition, C. adspersulus can be usually found on Descurainia and Thlaspi alpestre L. (pers. rec.). It is impossible to confuse C. magnisinus with any other American Ceutorhynchus thus far described.

Ecology: All type specimens (one excepted) were collected while feeding on *Nerisyrenia* camporum (GRAY) GREEN (Brassicaceae), which is almost surely the host plant of *C. magnisinus*.

Ceutorhynchus montanus sp. n.

Diagnosis: C. griseo C. BRISOUT summa similitudine, sed sculptura fortiore, prothoracis apice magis constricto, elytris brevioribus, secundo articulo tarsorum vix quam lato longiore, forma alia aedeagi ab illo differens.

Type series: BULGARIA: Pirin Mountains, Vichren, Kabata pass, 13.VI.1987, 1 male holotype [DEI], and 11 paratypes [3 DEI, 3 COL, 2 OSL, 1 HOL, 1 KOŠ, 1 KOR], L. ZERCHE and L. BEHNE leg. at the border of a snow-field; same locality, 10.VI.1989, 12 paratypes [10 BEH, 2 COL], L. ZERCHE and L. BEHNE leg.

Holotype: Length: 2.05 mm. Piceous. Upper surface sparsely clothed with thin half-lifted greyish and brownish hairs, arranged in 2 very irregular rows on each elytral interspace. Under side with light grey sparse lanceolate scales. Rostrum 1.25 as pronotum, curved, punctured and subcarinate basally, shining apicad of antennal insertion, which is at apical 2/5 of rostrum. Antenna robust; scape abruptly clavate; club oval, hardly longer than the last four joints of the 7-segmented funicle. Head rugosely punctured, eyes rather convex. Pronotum 0.7 as long as wide, strongly punctured, abruptly constricted in front, base slightly bisinuate; lateral tubercles weak; dorsal channel not deep. Elytra 1.01 longer than wide, subrectangular; sides weakly rounded; humeral and preapical calli evident. Striae sulciform, punctured, and with a row of whitish recumbent scales. Intervals 1,5 wider than striae, almost flat and rugosely punctured. Legs robust; middle and hind femora weakly toothed, profemora with so weak a tooh that is very difficult to appreciate; tibia almost straight, middle and hind tibia with a short strong apical hook. Tarsi short; joint 2 hardly longer than wide; claws toothed. Urosternites 1 and 2 with a common depression, 5 with a very weak impression in the middle. Aedeagus: fig. 45, 46. See also figs 9, 18.

Paratypes: Similar to holotype. Females lack abdominal impressions and apical tibial hooks. Lenght: 2-2.2 mm.

Etymology: The species is named after the alpine zone in which it was collected, from the Latin montanus (= highlander).

Remarks: The new species is closely related to *C. griseus* C.BRISOUT, 1869 from Europe, Turkey, Armenia and Turkmenia. This latter has however more elongate body shape, more evident humeral calli, less coarse dorsal punctuation, joint 2 of tarsi longer than wide, and different shape of aedeagus (figs 10, 19, 47, 48). Also *C. leonhardi* F. SOLARI, 1932 from south-eastern Italy (Monte Gargano) is very similar to *C. montanus*: the Italian species, however, has only one quite regular series of subcrect hairs on each elytral interval, and the aedeagus sharply pointed (figs 49, 50).

Ecology: The type series was collected close to a snow-field. Very probably *C. montanus* lives on one of the small Brassicaceae such as *Draba*, *Thlaspi*, *Iberis* or *Alyssum* which usually grow on this habitat.

Ceutorhynchus zonatus sp. n.

Diagnosis: C. pauxillo DIETZ simillimus, sed plagis albis prothoracis elytrisque, tarsorum unguiculis denticulo basali perparvo, foveola maris abdominis sat profunda aegre distinctus.

Type series: MEXICO: Distrito Federal, Mexico, m 2200, V-VI.1971, J. Ross leg., 1 male holotype [MUR] and 13 exx. paratypes [1 MUR, 2 USM, 1 NMW, 9 COL]. MEXICO: untraced state, Monte Telapon, m 3500, VII.1969, J. Ross leg., 1 female paratype [COL]. MEXICO: Oaxaca, 23 Km N of Oaxaca along highway 175, m 2650, 8.X.1990, 2 males paratypes, R. BARANOWSKI leg. by sifting litter of a pine-oak forest [LUN].

Holotype: Length: 1.62 mm. Pitchy brown, shining. Upper side rather sparsely clothed with halflifted yellow-brownish ligulate or hairlike scales, and with half-recumbent white oval scales. These latter form a postscutellar patch, and 2 vague antero-lateral spots on pronotum; are arranged to form a faint longitudinal stripe on dorsal channel, and aligned along base of prothorax; and are scattered on elytral intervals. Dense white small scales are on mesepimera. Under side with dirty white not dense lanceolate recumbent scales. Rostrum 1.56 as pronotum, thin, slightly curved; punctured, scaled, and subcarinate basally; smooth apicad of antennal insertion which is at basal 11/25 of rostrum. Antenna quite robust; scape abruptly clavate; funiculus 7-jointed; club fusiform elongate, about as long as the four last joints of funiculus. Head rugosely punctured, eyes large, lateral, rather convex. Pronotum 0.64 as long as wide, strongly rugosely punctured, constricted in front, base bisinuate; lateral tubercles acute; dorsal channel entire, although not deep. Elytra 1.05 longer than wide; sides weakly rounded; humeral and preapical calli weak, the latter muricate. Striae sulciform, punctured, each point bearing a recumbent whitish thin hairlike scale. Intervals about twice wider than striae, slightly convex and finely punctured. Legs robust; femora not toothed; tibia slightly bisinuose, middle and hind tibia with a robust apical hook. Tarsi rather elongate; joint 4 about as long as 2+3; claws with a minute basal tooth. Urosternites 1 and 2 with a shallow common depression; 5 with an evident impression in the middle. See also fig. 7.

Paratypes: The evidence of elytral and pronotal patches of white scales shows some variation, mostly depending on the freshness of the specimen. Also the colour of tibiae and tarsi is variable, ranging from reddish-brown to piceous. Females have slightly longer rostrum, and no tibial mucros nor ventral depressions. Aedeagus: figs 51, 52. Length: 1.45-1.67 mm.

Etymology: The Latin name zonatus (= spotted) refers to the white patches of prothorax and elytra.

Remarks: C. zonatus, a species very close to C. pauxillus DIETZ, 1896 from British Columbia, Alberta, Manitoba, Saskatchewan, North Dakota, Illinois, Colorado, New Mexico (HATCH 1971, O'BRIEN and WIBMER 1982), is recognishable by the evident (in fresh specimens) upper pattern of white scales, the extremely minute basal tooth of claws, the rather deep fovea of urosternite 5 of male. C. pauxillus has no spots (or sometime only a very obscure elytral postscutellar patch), claws nearly bifid, and ill-defined fovea on urosternite 5 of males. C. pusillus LECONTE, 1876 from Idaho, Oregon, Washington, Colorado, Texas, Arizona, California and Baja California (O'BRIEN and WIBMER 1982) has body shape much more elongate (fig. 8), and an evident interocular patch of whitish scales. Other species of the convexicollis group are at least 1.8 mm sized, and cannot be confused with C. zonatus.

Ecology: Nothing is known about the possible host plant of the new species, most probably a member of Brassicaceae.

Coeliodes caucasius sp. n.

Diagnosis: C. siculo SCHULTZE simillimus et affinis, rostro maxima parte nigro aedeagoque latiore tantummodo differre videtur.

Type series: ARMENIA: Jerevan area, Mount Alibek [m 2200-2600], 5.VI.1911, 1 male holotype [ZSM] and 59 paratypes [46 ZSM, 7 COL, 6 DEI], H. KULZER leg. (all these specimens were marked by pink-redddish labels "Type" and "Cotype" of a manuscript name by H. WAGNER; one of them bears also a label with another manuscript name by K. DANIEL). ARMENIA: Zachkadsor (50 km N Jerevan), m 2300, 20.IX.1987, 1 male paratype [COL], 1 male paratype [DEI], OEHLKE leg. by sifting litter of an oak forest (this specimen was

compared with the type of *C. strigirostris* SCHULTZE by myself in 1993, and it was found different); same locality, m 1900, 8.VI.1980, 1 male paratype [STR], J. STREJČEK leg.; same locality, m 2300, 9.VI.1980, 1 female paratype [COL], J. STREJČEK leg.

Holotype: Length: 2.75 mm. Reddish, shining; rostrum (extreme base and tip excepted), base of pronotum and base of elytral suture, prosternum, mesosternum, metasternum and abdomen piceous-black; antenna and tip of tarsal joint 4 red-brown. Upper side sparsely clothed with thin recumbent brownish hairlike scales, and with white not dense small triangular scales: these latter are arranged to form the pattern of fig. 6. Under side with a rather dense vestiture of white narrow recumbent scales. Rostrum 1.33 as pronotum, slightly curved; punctured, scaled, and subcarinate basally; shining apicad of antennal insertion which is at the middle of rostrum. Antenna thin; scape gradually clavate; club fusiform, narrow, about as long as the last three joints of funicle. Head rugosely punctured, eyes lateral, quite convex. Pronotum 0.68 as long as wide, strongly punctured, constricted in front, base bisinuate; disc somewhat convex; dorsal channel very faint; no lateral tubercles. Elytra 1.1 longer than wide; sides weakly rounded; humeral and preapical calli weak, the latter with some small black granules. Striae punctured. Intervals more than 1.5 wider than striae, somewhat convex. Legs robust; femora very weakly toothed; tibia almost straight, middle and hind tibia with a short, robust apical hook. Tarsi robust; joint 4 slightly shorter than 2+3; claws appendiculate. Sternal groove deep, reaching the middle of metasternum. Urosternites 1 and 2 with a wide, shallow, common depression, limited behind on sternite 2 by an U-shaped keel; sternite 5 with an impression in the middle. See also fig. 6.

Paratypes: Paratypes are very similar to the holotype. Only a slight variation can be observed in the elytral pattern. The base of rostrum can be red-brown to at most 1/5 of the rostral length. Females lack sternal foveas and tibial mucros, their rostrum is longer (1.5 as pronotum) and smoother, and the antennal insertion is situated immediately behind the middle of rostrum. Aedeagus: figs 53, 54. Length: 2.62-2.87 mm.

Etymology: The Latin name of the species, meaning "inhabitant of Caucasus" refers to the area in which it was collected.

Remarks: The new species, belonging to the trifasciatus group as defined by FREMUTH (1986), is extremely close to C. siculus SCHULTZE, 1901 from Italy, Slovakia and "Syria" (very probably eastern Turkey), from which differs markedly by the rostrum blackish at least in the apical 4/5, and by the wider shape of aedeagus (figs 53, 55). This last character approaches C. caucasius also to C. trifasciatus BACH, 1854 from central and southern Europe, and Caucasus: this latter is however on the average larger; has usually paler integument, and whiter upper vestiture; and its rostrum, like that of C. siculus, is reddish with only the apex darker. Note that C. caucasius was reported from Gruziya (Georgia) under the name of C. strigirostris SCHULTZE, 1898 by KOROTYAEV and CHOLOKAVA (1989); it is useful to remind that C. strigirostris is a synonym of C. trifasciatus (COLONNELLI 1994).

Ecology: Although nothing is known on its host, we can be sure that *C. caucasius*, like all *Coeliodes*, lives on a species of oak.

Coeliodes jelineki sp. n.

Diagnosis: A reliquis speciebus generis vestitura densis squamulis albo-sericeis marisque meso et metatibiis unguiculo apicali destitutis subito differens.

Type series: IRAN: Fars, Zagros Mountains, 48 km north of Masiri (locality n. 238), m 2230, 12. VI. 1973, 1 male holotype [NMP], and 4 males and 4 females paratypes [7 NMP, 1 COL],

expedition of the NMP leg. IRAN: Fars, Zagros Mountains, Sisakht (locality n. 240), m 2400, 13.-15.VI.1973, 4 males and 1 female paratypes [3NMP, 1 COL], expedition of the NMP leg. Holotype: Length: 2.9 mm. Reddish, shining; elytral suture, mesosternum, metasternum, and abdomen piceous. Upper side densely clothed with recumbent dense golden scales, and with whitish triangular ones, these latter having a silky lustre. A vague pattern showing two yellowish patches behind eyes on head, a central one on pronotum and three transverse white stripes on elytra bent forward. Under side with silky-white dense recumbent scales; half-lifted ligulate scales are on coxae and on each side of sternal groove. Rostrum as long as pronotum, slightly curved; punctured, scaled, and subcarinate basally; shining apicad of antennal insertion, which is at basal 3/4 of rostrum. Antenna thin; scape gradually clavate; club fusiform, hardly shorter than the last three joints of funicle. Head elongate, rugosely punctured, eyes lateral, rather flat. Pronotum 0.73 as long as wide, strongly punctured, constricted in front, base bisinuate; no lateral tubercles nor dorsal channel. Elytra 1.06 longer than wide; sides weakly rounded; humeral and preapical calli weak. Striae sulciform, punctured. Intervals at least twice wider than striae, flat and rugosely punctured. Legs robust; femora weakly toothed; tibia almost straight, with no apical hook. Tarsi elongate; joint 4 about as long as 2+3; claws toothed. Sternal groove deep, reaching the base of metasternum. Urosternites 1 and 2 flat; 5 with a very weak impression in the middle. Aedeagus: figs 56, 57. See also fig. 11.

Paratypes: Some variation is shown by the upper pattern: the golden scales can be even ligulate, and the elytral stripes can be more or less evident. One sample has only the apical half of elytra whitish, whereas the basal 2/3 are clothed only with thin not so dense ligulate golden scales. Some paratypes have a basal elytral spot whiter than the remaining part of the pattern. Integument is often paler than that of the holotype. Females have rostrum slightly longer than prothorax, and lack of impression on urosternite 5. Length: 2.1-3.05 mm.

Etymology: The species is named after one of its collectors, my good friend JOSEF JELÍNEK, director of the entomological section of the National Museum of Prague.

Remarks: The dense golden and silky-white scaling of the new species make it impossible to confuse C. jelineki with any other Coeliodes thus far described. A dense white vestiture is also shown by C. aequabilis SCHULTZE, 1898 from Rhodos and Turkey: scales of this species are however ligulate rather than triangular, and not arranged to form stripes; the male has the usual meso and metatibial hooks; the apex of rostrum is brownish; and the aedeagus is quite different (figs 56-59). Males of all other Coeliodes have more or less evident apical mucro at the inner apical margin of meso and metatibiae, and, apart for the different pattern, are immediately recognishable from C. jelineki.

Ecology: Surely the species of plant on which the new species was collected is *Quercus brantii* LINDL., the only oak growing in both type localitities (HOBERLANDT 1981). Since all *Coeliodes* develops on oaks, *Q. brantii* is very likely the host plant of *C. jelineki*.

Glocianus superstes sp. n.

Diagnosis: G. herbsti (FAUST) simillimus et affinis, sed rostro breviore, antennis tibiisque fuscioribus, elytra magis quadratis vix distinctus.

Type series: GREECE: Attikí, Várkiza, 8.V.1993, 1 male holotype [NMP] and 36 paratypes [2 DEI, 4 NMP, 2 NMW, 2 MUR, 2 MCR, 2 OSL, 22 COL], E. COLONNELLI leg. on *Scorzone-ra crocifolia* Sibth. & SM.

Holotype: Length: 3.5 mm. Rather shining, piceous; antenna, tibia and tarsi brown. Upper surface sparsely clothed with thin recumbent golden-brownish hairs, arranged in 2-3 irregular rows on each elytral interspace; a patch on basal third of suture, a small one in the middle of pronotum immediately behind the raised fore margin, and the apical 2/3 of intervals 9 and 10 with recumbent white lanceolate scales. Under side with whitish not dense lanceolate scales. Rostrum as long as prothorax, feebly curved, punctured and subcarinate between antennal insertion which is at apical 5/6 of rostrum. Antenna robust; scape abruptly clavate; club lanceolate-oval, hardly longer than the last four joints of the 7-segmented funicle. Head rugosely punctured, eyes feebly convex. Pronotum 0.69 as long as wide, convex, strongly punctured and granulate, abruptly constricted in front, base slightly bisinuate; no lateral tubercles nor dorsal channel. Elytra as long as wide, subrectangular; anterior half of disc depressed, sides weakly rounded; humeral calli evident, preapical ones weak. Striae sulciform, punctured and with a row of whitish recumbent scales. Intervals twice wider than striae, almost flat and rugosely punctured. Legs robust; femora not toothed; tibia slightly curved, middle tibia with a short strong apical hook, the one of hind tibia very small. Tarsi relatively narrow; claws bifid. Urosternites 1 and 2 with common depression, 5 with central fovea flanked by some half-lifted setae. Aedeagus: fig. 60. See also figs 12, 14.

Paratypes: Very similar to holotype. Females differ by the rostrum slightly longer (1.12-1.22 as pronotum) and smoother in its apical half, the antennal insertion situated at basal 5/11 of rostrum, and the lack of sternal depressions and tibial mucros. Length: 2.85-3.7 mm.

Etymology: The suburban environment in which the new species was collected was set on fire, and the original flora was replaced by plantations of *Thuya*, *Eucalyptus* and *Nerium* among which only few native plants grew. On one of these the weevil could still survive: this suggested its name, the Latin for survivor.

Remarks: The new species is very closely related to *G. herbsti* (FAUST, 1895) from oriental Europe, Caucasus, Iran and western Kazachstan. *G. superstes* can be distinguished by the shorter rostrum, the darker antenna and tibiae, and the slightly plumper body outline (figs 12-15). The shape of aedeagus is very similar to that of *G. herbsti*. This is not uncommong in *Glocianus*, several species of which have very resembling aedeagal appearance.

Ecology: All the specimens were collected on the flower heads of *Scorzonera crocifolia* SIBTH & SM. (Asteraceae): many of the females had the rostrum deeply thrust in them. The attacked flowers were recognishable by the holes caused by the weevils. It is therefore sure that *S. crocifolia* is the host plant of *G. superstes*. The close *G. herbsti* also lives on *Scorzonera* (KOROTYAEV and CHOLOKAVA 1989).

Pericartius flavisquamis sp. n.

Diagnosis: P. abyssinico (HUSTACHE) ex Africa tropica maxime comparandus, corpore tamen minus rotundatus, macula flava metathoracis apicis, antennis tibiisque nigricantibus, forma alia aedeagi abunde differens.

Type series: ALGERIA: Annaba province, Oued Mafray, 2.V.1976, 1 male holotype [OSL] and 1 male paratype [COL], DOGUET leg.

Holotype: Length: 2.25 mm. Very coarsely punctured, piceous; antennal funicle dark brown; under side of fore margin of prothorax, preapical elytral tubercles, knees and tarsi ferrous-red. Dorsal vestiture of rather sparse hairlike intermingled whitish and brownish scales; a patch of sulphur-yellow lifted scales on mesepimeron. Ventral side clothed by sparse intermingled recum-

bent whitish scales and hairs. Rostrum 1.04 as pronotum, rather thin, curved. Antenna inserted 0.56 the rostral length from base, quite robust; scape slightly clavate; funiculus 7-jointed; segment 7 transverse; club oval acuminate, with sparse erect setae. Frons depressed, eyes lateral and with supraorbital ridge. Pronotum 0.65 as long as wide, widest at about basal third, from here to apex conical, and then constricted to the narrowing crenulate base. Disc flat, roughly punctate; dorsal channel entire, but very shallow in the middle; lateral tubercles evident, not acute. Elytra 1.02 longer than wide, widest at prominent humeri; sides convergent to weak muricate preapical calli. Intervals flat, much wider than strial furrows, each point of which bears a recumbent elongate white scale. Legs rather thin; femora strongly toothed, metafemora slightly more robust than others; tibia curved, middle and hind tibia with strong apical mucro; tarsi short; claws with minute basal tooth. Rostral channel deep on pro and mesosternum. Common depression on urosternites 1-2 evident, fovea on 5 rather faint. Aedeagus: figs 61, 62. See also fig. 20.

Paratype: Similar to holotype: the scales of upper side are partly abraded. Length: 2.3 mm. Etymology: The name of the new species, meaning in Latin "with yellow scales" refers to the colour of the apex of mesepimera.

Remarks: The new species is assigned to Pericartius HOFFMANN, 1968. This genus, originally included in Phytobiini (HOFFMANN 1968) but later (COLONNELLI 1986) moved to Hypurini, comprised thus far only the type species P. chariensis HOFFMANN, 1968 from Chad. Check of HOFFMANN', HUSTACHE' (MNP) and MARSHALL' (BML) types, and correspondence with Dr B. KOROTYAEV made evident that a lot of confusion arose on tropical Hypurini, in particular concerning the separation between Hypurus REY, 1882; Hypohypurus HUSTACHE, 1920; Pericartius Hoffmann, 1968; Orientohypurus Korotyaev, 1981; Indohypurus Korotyaev, 1981; and Hemilioxyonyx Colonnelli, 1984. The last genus was originally included in Lioxyonychini, nomen emendatum [incorrectly spelled Lioxyonyxini by Colonnelli (1984)]. The present study led to establish the following new synonymies in the genus-group names: Hypohypurus HUSTACHE, 1920 [type species by present designation: Hypohypurus perrieri HUSTACHE, 1920] (= Orientohypurus Korotyaev, 1981, syn. n.; = Hemilioxyonyx Colonnelli, 1984, syn.n.). In the species-group names the following synonymies were discovered: Hypurus bertrandi (PERRIS, 1852) (= Ceutorhynchus oleraceae MARSHALL, 1935; syn. n.); and Hypohypurus testaceirostris Hustache, 1930 (= Lioxyonyx sibitiensis Hoffmann, 1968; syn. n.). The above genera can be distinguished as follows:

- Dorsal vestiture of lifted or half-lifted intermingled whitish and brownish hairlike scales not forming an evident dorsal pattern. Size generally smaller (mm 2-2.4). Legs longer. Claws short, with a basal tooth. Africa Pericartius HOFFMANN, 1968

The true phylogenetic picture of non-Palaearctic Hypurini is completely unresolved by the above generic arrangement, since to each genus were simply assigned all the species which have <u>not</u> the characters of the remaining couplets. The present proposal is thus intended as provisional until a careful revision of Oriental, Afrotropical and Australian Hypurini will indicate the true relationships between these weevils. The following species, in alphabetical order, must be assigned to Pericartius: P. abyssinicus (HUSTACHE, 1934); P. aequatorialis (HUSTACHE, 1934), P. amaranthi (Voss, 1963) (all comb. n. from Hypohypurus), the type species P. chariensis HOFFMANN, 1968, and P. flavisquamis sp. n. Hypurus includes: the type species H. bertrandi (PERRIS, 1852) (= oleraceae (MARSHALL, 1935), syn. n.), plus H. hovanus (Dalla Torre & Hustache, 1930), H. litoralis (Colonnelli, 1979), H. madagascariensis (HUSTACHE, 1920), H. madecassus (HUSTACHE, 1920) (all comb. n. from Hypohypurus), and H. portulacae (MARSHALL, 1916) (comb. n. from Ceutorhynchus GER-MAR, 1824). The only two species of Hypurus whose biology is known both develop on common purslane, Portulaca oleracea L. To Hypohypurus belong: H. gibbicollis HUSTACHE, 1956, H. medvedevi (KOROTYAEV, 1981) and H. minor (KOROTYAEV, 1981) (both comb. n. from Orientohypurus), the type species H. perrieri HUSTACHE, 1920, H. ponomarenkoi (KOROTYAEV, 1981) and H. simplicipes (KOROTYAEV, 1981) (both comb. n. from Orientohypurus), H. testaceirostris Hustache, 1930 (= Lioxyonyx sibitiensis (Hoffmann, 1968); syn. n.). Nothing is known about their biology.

The new species, which is the single *Pericartius* from the Palaearctic, appears related to *P. abyssinicus* from Ethiopia and South Africa, but it is readily differentiated from it by the more rectangular body shape, the yellow patch of scales on mesepimera, the dark brown antenna and tibia, the shape of aedeagus (figs 20, 21, 61-64). *P. aequatorialis* from Zaire, Madagascar, South Africa and St. Helena has integument ferrous-red, and a scutellar whitish patch. *P. amaranthi* from Ethiopia differs from the new species by the rostrum shorter than prothorax, the scape with apical hook, the lack of yellow mesepimeral patch, the thicker hind femora (Voss 1963).

Ecology: No information is available about the habitat in which this species was collected nor about its possible host plant. It can be reminded that *P. chariensis* feeds on *Achiranthes aspera* LAM. (Amaranthaceae) (HOFFMANN 1968), *P. amaranthi* develops on *Amaranthus caudatus* L. (VOSS 1963), and *P. aequatorialis* was beaten off *Sueda fruticosa* (L.) FORSKAL (Chenopodiaceae) (DECELLE and VOSS 1972).

Thamiocolus comptus sp. n.

Diagnosis: Differt a T. uniformi (GYLLENHAL), cui maxime affinis, statura majore, thoracis elytrarumque disco planatiore, pedibus crassioribus, feminae rostro maris fere aequali.

Type series: TURKEY: Antalya province, Termessos, m 1000, 9.V.1992, 1 male holotype [SUP] and 16 paratypes [11 SUP, 1 NMW, 4 COL], W. SUPPANTSCHITSCH leg. on *Phlomis* sp.; same locality and date, 59 paratypes [48 BEH, 5 COL, 2 DEI, 2 FRE, 1 KOŠ, 1 MUR], L. BEHNE leg. TURKEY: Antalya province, Kursunlu, 2.V.1991, 2 paratypes [BOR], B. ZBUZEK leg. TURKEY: Mersin province, 10 km N of Silifke, m 800, 2 paratypes (1 KOŠ, COL), M. Koštál leg. on *Phlomis* sp.

Holotype: Length: 3.95 mm. Piceous, funiculus and tarsi brown. Upper side rather thickly clothed with yellowish recumbent hairlike scales, pointing backwards on rostrum, to the vertex on head, forward on frontal constriction of pronotum, to the pronotal midline on disc, and arranged in 2-4 irregular rows on elytral intervals: the weevil appears light grey and dull. Under side with yellowish rather thick recumbent scales, which are lighter, thicker and impressed on mesepimeron. Urosternite 5 and pygidium with thick yellow half-lifted hairlike scales. Rostrum 0.82 as pronotum, almost straight, constricted apicad of antennal insertion which is at distal 3/4 of rostrum. Antenna robust, scape abruptly clubbed, first 2 funicular joints lengthened, 3 and 4 equal in length, 5 as long as wide, 6 and 7 trasverse, club oval. Frons flattened, eyes not much convex. Pronotum 0.79 as long as wide, sides rounded basad of apical constriction, base slightly bisinuate, disc rather convex and impressed before scutellum. Elytra 1.02 longer than wide, widest in the middle, sides regularly rounded, humeral calli evident, apical ones weak. Striae sulcate, with extremely thin hairs difficult to see. Intervals flat, odd interspaces slightly wider than striae. Legs robust, femora mutic, tibia straight, middle and hind tibia with apical mucro, tarsi slender, claws bifid. Urosternites 1 and 2 flattened, 5 with central sulcus. Aedeagus: fig. 65. See also fig. 24.

Paratypes: The intraspecific variation is very low. Males are similar to holotype. Females can be distinguished for the lack of tibial mucros and sternal depressions: no differences are obviously evident in the shape of rostrum (figs 16, 17). The 2 paratypes (male and female) from the surroundings of Silifke do not differ from the remaining specimens. Length: 3.9-4.15 mm. Etymology: From the Latin *comptus* (= spruce), in reference to the "combed" appearance of the upper clothing of hairlike scales.

Remarks: The closest species to T. comptus is T. uniformis (GYLLENHAL, 1837) from eastern Mediterranean, Caucasus and central Asia: this latter is however smaller (2.6-3.2 mm), has the dorsum of elytra and particularly of prothorax more convex, the femora thinner, the rostrum of female evidently longer and apically smoother than that of male, the setae of tibial apical comb more numerous and smaller (figs 26, 27). T. hispidirostris (IABLOKOV-KHNZORIAN, 1971) from Tadzhikhstan and Uzbekhstan has the same light grey appearance, but its rostrum is not subulate, is much longer than prothorax and has erect hairs on apical half. All other Thamiocolus with uniform dorsal vestiture of greyish hairlike scales are much less densely clothed to appear dark grey, and more or less shining.

Ecology: The types were all collected on an unidentified species of Phlomis (Lamiaceae).

Thamiolocus phaleratus sp. n.

Diagnosis: T. imperiali (SCHULTZE) valde affinis, sed signatura alia, statura minore, rostroque magis recto et haud attenuato subito distinctus.

Type series: TURKMENIA: Kopetdag Mts., Kara-Kala, 7 km NE Kasardagh Mt., m 1500, 7.V.10989, M. Koštál leg., 1 male holotype [KOŠ], and 1 male and 4 females paratypes [3 KOŠ. 2 COL1.

Holotype: Length: 2.65 mm. Black-brownish; funicle brown, femora and tibiae red-brown. Upper side clothed by recumbent elongate rectangular brown-blackish scales and by larger oval embricate white scales forming the pattern of fig. 22. A whitish transverse stripe on external side of femora at about 2/3 of their length. Under side with adpressed white lanceolate scales; a vague common dark spot on lateral side of urosternites 1-2; a central black common spot on sternites 3-4; and two lateral dark spots on urosternite 5. Pygidium with lanceolate yellowish scales not very adpressed. Rostrum 1.25 as pronotum, faintly curved, rugosely punctured, clothed by blackish setae slightly lifted and directed backward basad of antennal insertion, then half lifted and directed forward apically. Antenna short, inserted in the distal fourth of rostrum; scape gradually clubbed; funicular joint 1 thicker and a little longer than 2; 3-6 decreasing in length; 7 transverse; club elongate-oval about as long as the preceding four joints. Frons depressed. Pronotum 0.66 as long as wide; fore margin constricted; lateral tubercles very weak but evident, since they are clothed by black scales surrounded by white ones; finely punctured disc feebly convex; antescutellar sulcus clothed by white scales. Elytra 1.54 longer than wide, widest at humeri; sides converging to the weak preapical calli. Striae thin. Intervals flattened, rugosely punctured. Legs short; femora clubbed and toothed; middle tibia with a mucro much more evident than that of hind tibia; tarsi elongate; claws bifid. Urosternite 5 with a fovea. See also figs 22, 24.

Paratypes: Females differ from males by the lack of tibial mucros and sternal fovea. Integumental colour may be piceous (femora and tibia comprised). The variation of dorsal pattern is very low. The urosternites 2 and/or 5 show a central dark patch in some specimen. Length: 2.33-2.65 mm.

Etymology: The Latin name *phaleratus* (= with a saddle-cloth) refers to the white transverse stripe of elytra.

Remarks: The new species is closely related to *T. imperialis* (SCHULTZE, 1895) from oriental Europe and Caucasus: *T. phaleratus* can be rather easily differentiated by the smaller size, the rostrum nearly straight and not subulate apically, the different elytral pattern (figs 22-25). No other *Thamiocolus* thus far known can be confused with the new species.

Ecology: All the type specimes were collected by sweeping in a forest. Their host plant is surely a member of the family Lamiaceae, since all *Thamiocolus* whose biology is known are predators of these plants.

Thamiocolus roessleri sp. n.

Diagnosis: T. signato (GYLLENHAL) summopere affinis, statura paullulo majore, rostro pedibusque validioribus, elytris convexioribus, aedeagi apice magis attenuato, et victo differente ab illo diversus.

Type series: ITALY: Verona province, Monte Baldo, Bocca di Navene, 23.VI.1986, 1 male holotype [DEI] and 1 paratype [RÖS]; same locality, 1.VII.1988, 23 paratypes, and 27.VI. 1988, 16 paratypes [1 DEI, 16 BEH, 16 RÖS, 6 COL], G. RÖßLER leg.; same locality, 8.VII. 1995, 18 paratypes, W. SUPPANTSCHITSCH leg. [SUP]; all 59 specimens on *Stachys alpina* L.

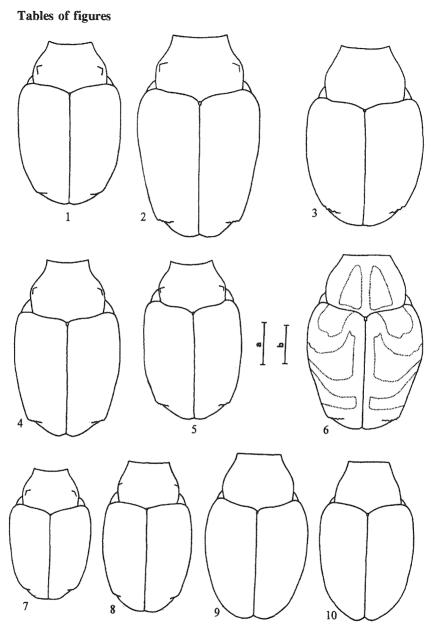
Holotype: Length: 2.8 mm. Piceous, rather shining; knees, apical comb of setae, tarsi and antenna (club excepted) ferrous-red. Dorsal vestiture of rather sparse recumbent hairlike whitish and brown scales; and of recumbent lanceolate embricate white scales, forming a pattern very similar to that of T. signatus (GYLLENHAL, 1837) (fig. 17 in DIECKMANN 1973). Ventral side clothed by sparse recumbent whitish scales. Rostrum 1.33 as pronotum, rather thick, curved, rugosely punctured, slightly tapering apicad of antennal insertion in lateral view. Antenna quite robust, inserted 0.375 the rostral length from apex; scape sinuated, slightly clavate; segment 7 of funiculus transverse; club oval acuminate, about as long as the four preceding joints. Frons flat; eyes lateral, slightly convex. Pronotum 0.66 as long as wide, widest at about basal third, from here to apex conical, and then constricted. Disc slightly convex, rugosely punctate; dorsal channel only evident in the basal fourth; faint lateral tubercles formed by some small granules. Elytra 1.08 longer than wide, widest at middle; sides from here converging to weak muricate preapical calli. Intervals flat, about as wide as striae; these latter sulciform, punctured. Legs robust; femora strongly clavate and with a very weak tooth, metafemora slightly more robust than others; tibia slightly sinuose, widened toward apex, middle tibia with an evident apical hook, the one of hind tibia extremely minute; tarsi relatively slender; claws appendiculate. Common depression on urosternites 1-2 shallow, fovea on 5 evident. Aedeagus: fig. 66. See also figs 28, 30, 32.

Paratypes: Very similar to holotype. Females have rostrum slightly longer and smoother in the apical half, and lack sternal impressions and tibial mucros. Length: 2.8-3.2 mm.

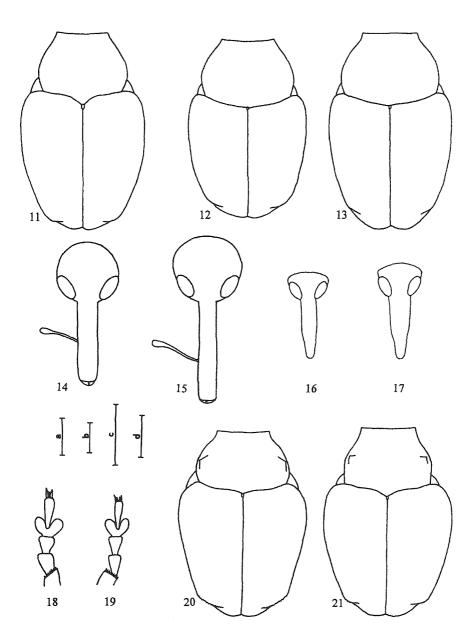
Etymology: The species is named after GERHARD RÖBLER, its collector.

Remarks: T. roessleri is extremely close to T. signatus (GYLLENHAL) from Europe and Caucasus: this latter is however on the average smaller (2.3-3.2 mm), has slenderer rostrum and legs, less curved sides of pronotum and elytra, apex of aedeagus less sharply pointed (figs 28-33, and 66-67): in addition it develops monophagous on Stachys recta L. T. hexatomus (PENECKE, 1922), stat. n. was erroneously considered a variety of T. signatus by DIECKMANN (1973); the study of the female lectotype (present designation) in DRE (labelled: "Küstenland Triest / Type / Ceuthorhynchus hexatomus PEN., PENECKE det. / Sammlung K. A. PENECKE, Geschenk 1940.20 / signatus f. hexatomus PEN. / T. signatus f. hexatomus PEN., DIECKMANN det. 1972 / Lectotypus 9, Ceuthorhynchus hexatomus PENECKE, E. COLONNELLI des. 1995 / Thamiocolus hexatomus (PENECKE), E. COLONNELLI det. 1995"), of the female paralectotype (present designation) in DEI (labelled: "Kustenland Triest / Typus / Ceuthorhynchus hexatomus PEN., PENECKE det. / Sammlung K.A. PENECKE, Geschenk 1940.20 / T. signatus f. hexatomus PEN., DIECKMANN det. 1972 / signatus f. hexatomus PEN. / Paralectotypus \(\bar{Q}, Ceuthorhynchus \) hexatomus PENECKE, E. COLONNELLI des. 1995 / Thamiocolus hexatomus (PENECKE), E. COLONNELLI det. 1992") and of additional samples from northern Slovenia (Salvore), and from Croatia (Rijeka) [NMW] revealed that it is a good species, differing from T. signatus, apart from the 6-jointed funiculus, by the long and slender female rostrum, the paler antenna, the elytral sides more converging toward apical calli: it is worthy of note that T. hexatomus is only known upon females. The slender rostrum and the other characters above mentioned also make it impossible to confuse T. hexatomus with T. roessleri.

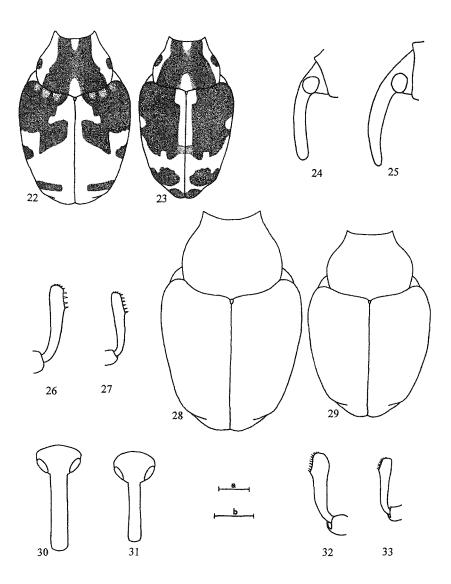
Ecology: All the typical specimens were collected on Stachys alpina L., surely the host plant of the new species.



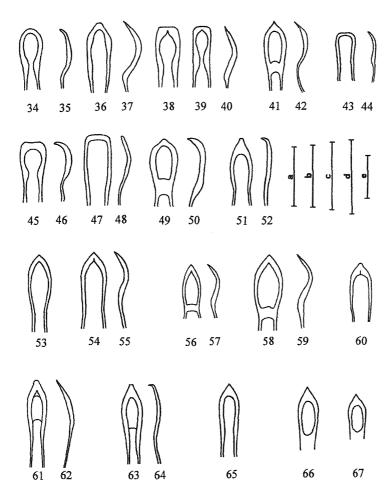
Figs 1-10: Body outline of: Ceutorhynchus excelsus sp. n., holotype (1); C. languidus SCHULTZE from Turkey: Kayseri (2); C. francisci sp. n., holotype (3); C. magnisinus sp. n., holotype (4); C. adspersulus DIETZ from New Mexico, Lake Roberts (5); Coeliodes caucasius sp. n., holotype (6); Ceutorhynchus zonatus sp. n., holotype (7); C. pauxillus DIETZ, paratype from California (8); C. montanus sp. n., holotype (9); C. griseus C. BRISOUT from Italy: Barisciano (10). Scale bars (0.5 mm): a = figs 1-5, and 7-10; b = fig. 6. Schematic drawings.



Figs 11-21: Body outline of: Coeliodes jelineki sp. n., holotype (11); Glocianus superstes sp. n., holotype (12); G. herbsti (FAUST) from Turkey: Erzurum (13); Pericartius flavisquamis sp. n. (20); P. abyssinicus (HUSTACHE), paratype (21). Head of male of: Glocianus superstes sp. n., holotype (14); G. herbsti from Turkey, Erzurum (15); Thamiocolus comptus n. sp., paratype from Termessos (16). Head of female of Thamiocolus comptus sp. n., paratype from Termessos (17). Fore tarsus of: Ceutorhynchus montanus sp. n., holotype (18); C. griseus C. BRISOUT from Italy: Barisciano (19). Scale bars (0.5 mm): a = fig. 11; b = figs 12, 13; c = figs 18, 19; d = figs 20, 21. Scale bar (1 mm): c = figs 16, 17. Schematic drawings.



Figs 22-33: Body outline of: Thamiocolus imperialis (SCHULTZE) from Russia: Pjatigorsk (22); T. phaleratus sp. n., holotype (23); T. roessleri sp. n., holotype (28); T. signatus (GYLLENHAL) from Armenia: Lake Sevan (29). Head and rostrum of: T. phaleratus sp. n., female holotype (24); T. imperialis (SCHULTZE), female from Russia: Pjatigorsk (25); T. roessleri sp. n., male holotype (30); T. signatus (GYLLENHAL), male from Armenia, Lake Sevan (31). Fore tibia of: T. comptus sp. n., holotype (26); T. uniformis (GYLLENHAL) from Armenia: Lake Sevan (27); T. roessleri sp. n., holotype (32); T. signatus (GYLLENHAL) from Armenia: Lake Sevan (33). Scale bars (0.5 mm): a = figs 22, 23; b = figs 24-33. Schematic drawings.



Figs 34-67: Aedeagus of: Ceutorhynchus excelsus sp. n., holotype, frontal (34) and side (35) view; C. languidus SCHULTZE from Kazakhstan: Akmolinsk region, frontal (36) and side (37) view; C. erivanus SCHULTZE from Armenia, Suchoj Fontain (38); C. francisci sp. n., holotype, frontal (39) and side (40) view; C. magnisinus sp. n., holotype, frontal (41) and side (42) view; C. adspersulus DIETZ from Texas: Mount Elephant Wildlife Management, frontal (43) and side (44) view; C. montanus sp. n., holotype, frontal (45) and side (46) view; C. griseus C. Brisout from Italy: Barisciano, frontal (47) and side (48) view; C. leonhardi F. Solari from Italy: Monte Gargano, frontal (49) and side (50) view; C. zonatus sp. n., paratype from Mexico city, frontal (51) and side (52) view; Coeliodes siculus SCHULTZE from Sicily: Messina (53); C. caucasius sp. n., paratype from Alibek, frontal (54) and side (55) view; C. jelineki sp. n., holotype, frontal (56) and side (57) view; C. aequabilis SCHULTZE from Turkey: Usak, frontal (58) and side (59) view; Glocianus superstes sp. n., holotype (60); Pericartius flavisquamis sp. n., holotype, frontal (61) and side (62) view; P. abyssinicus (HUSTACHE) from Transvaal: Pretoria, frontal (63) and side (64) view; Thamiocolus comptus sp. n., holotype (65); T. roessleri sp. n., holotype (66); T. signatus (GYLLENHAL) from Armenia: Lake Sevan (67). Scale bars (0.5 mm): a = figs 34-37, and 61-64; b = figs 38-40, and 45-48; c = figs 41-44; d = figs 51, 52; e = figs 49, 50, 53-59, and 65-67. Schematic drawings.

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Anschrift des Verfassers

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Besprechungen

Chrysomelidae Biology / edit. by P.H.A. JOLIVET & M.L. COX. - vol. 1-3. - Amsterdam: SPB Academic Publishing, 1996. - vol. 1: The Classification, Phylogeny and Genetics. - 444 S.: zahlr. Abb.; vol. 2: Ecological Studies. - 465 S.: zahlr. Abb.; vol. 3: General Studies. - 335 S.: zahlr. Abb. - US \$ 450.00

Chrysomelidae gehören zu den Gruppen mit der höchsten Biodiversität. Die Zahl der beschriebenen Arten dürfte zwischen mehr als 35.000 (Vorwort zu Bd. 1), mehr als 37.000 (VERMA: S. 317) und 40.000 (SCHMITT: S. 57) liegen, und mindestens so viele sind noch unbeschrieben.

Band 1 beginnt (Teil 1 "Classification") mit einem Überblick über die Klassifikation der höheren Taxa seit LATREILLE (1802) und dem Vorstellen einer neuen Klassifikation der höheren Taxa, in der die Familie Chrysomelidae 10 Unterfamilien und 20 Triben enthält. Hier sind aber noch substantielle Veränderungen zu erwarten, denn der Autor (K. Suzuki) vertritt die Hypothese, aus der Klassifikation der Superfamilie Chrysomeloidea heraus sei die Familie Chrysomeloidea polyphyletisch (S. 3-54).

Der 2. Teil "Phylogeny" beginnt mit einer Arbeit von SCHMITT "The phylogenetic system of the Chrysomelidae - history of ideas and present state of knowledge" (S. 57-96). SCHMITT extrahiert aus 18 verschiedenen taxonomischen/phylogenetischen Arbeiten von 15 Autorenteams, beginnend mit CHAPUIS (1874) bis zur Gegenwart, die Hypothesen über die stammesgeschichtliche Verwandtschaft der Blattkäfer-Unterfamilien und stellt sie jeweils in Stammbäumen dar. Er spricht sich dafür aus, daß weitere Studien einer strikten phylogenetischen Methodologie folgen und versuchen sollten, neue Merkmale zu analysieren. Er zeigt monophyletische Taxa auf und weist auf Kenntnisdefizite hin. Das Kapitel "4. Discussion ", in dem er sich mit Grundsätzen des phylogenetischen Arbeitens sensu HENNIG auseinandersetzt, ist auch den Nicht-Chrysomelidae-Spezialisten zu empfehlen. Die strikte Trennung von Phylogenetischer Systematik und Klassifikation scheint aus vielen praktischen Gründen heraus wichtig. Sie wird auch vom Rezensenten vertreten (ZERCHE 1990).

Mit den phylogenetischen Beziehungen zwischen Galerucinae und Alticinae befaßt sich eine Arbeit von R.A. CROWSON & E.A. CROWSON (S. 97-118), wobei besonders die Mandibeln der Imagines, die Metendosternite und Ovipositore, aber auch larvale Merkmale berücksichtigt werden. Die Orsodacninae werden als wahrscheinliche Schwestergruppe der Galerucinae festgestellt.

M.C. Cox (S. 119-265) untersucht die Brauchbarkeit von pupalen Merkmalen sowohl als Indikatoren der Verwandtschaft als auch für ihre taxonomische Verwendbarkeit.

Die verbindenden Strukturen zwischen Elytren und Körper mittels SEM-Aufnahmen untersucht G.E. SAMUELSON (S. 267-290) und diskutiert ihre phylogenetische Eignung zur Aufklärung höherer Kategorien.