Contribution to the Knowledge of the Weevil Subgenera Nilepolemis Rtt., Udonedus Rtt., Otismotilus Rtt., and Motilacanus Rtt., Genus Otiorhynchus Germ. (Coleoptera, Curculionidae), from the Caucasus and Turkey

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Abstract—Otiorhynchus kataevi sp. n. (subgenus Nilepolemis Rtt.); O. aibgae sp. n., O. kovali sp. n., O. leventi sp. n., O. alexeevi Korotyaev et Davidian, sp. n. (subgenus Udonedus Rtt.); O. dvaleticus sp. n., O. tatyanae sp. n., O. belousovi sp. n., O. tshistyakovae sp. n., O. svetgaricus sp. n., O. oezbeki sp. n., O. abashae sp. n., O. madinae sp. n., O. akibae sp. n., O. titae sp. n., O. maganicus sp. n., O. granulatostriatus mamisonicus subsp. n., O. granulatostriatus khetagi subsp. n. (subgenus Otismotilus Rtt.) from the Caucasus and Turkey are described. Keys to 22 species are given.

The study is based on the collections of the Zoological Institute, Russian Academy of Sciences, St. Petersburg (ZIN); Department of Entomology, Biological Faculty, Moscow State University (MSU), and material collected during many years by the first author. Additional material was supplied by Yu.G. Arzanov, D.G. Kasatkin, M.V. Nabozhenko, and I.V. Shokhin (Rostov-on-Don); I.A. Belousov, B.M. Kataev, and A.G. Koval' (St. Petersburg); V.G. Gratshev, M.Yu. Savitskii, and V.Yu Savitskii (Moscow); and A.I. Miroshnikov and A.S. Zamotailov (Krasnodar).

Lectotypes are designated to provide stability of use of the names of the taxa examined in this study.

Twenty-three species are dealt with in this review; 16 new species and 2 new subspecies are described. Holotypes and most of paratypes of the new taxa are deposited in the collection of the Zoological Institute, St. Petersburg.

GENUS OTIORHYNCHUS GERMAR, 1824

Subgenus Nilepolemis Reitter, 1912

Reitter, 1912: 7-8.

Type species *Otiorhynchus foraminosus* Boheman, 1843, by original designation.

Otiorhynchus (Nilepolemis) kataevi Davidian et Yunakov, sp. n. (Figs. 19, 27, 43)

Description. Rostrum 1.21 times as long as wide, strongly narrowing to pterygia and forming common

cone with head capsule, narrowest proximal to the middle; maximum width of rostrum 1.31 times its minimum width. Rostral dorsum flattened, without median carina, shallowly sulcate medially in basal part, weakly rugose in middle part. Frons shallowly depressed. Epistomal angles not protruding beyond head outline. Eyes oval, small, shallowly sunken; anteroventral edge of eye somewhat attenuate obliquely to ventral side and prolonged in a sulcus on underside of rostrum.

Antennae thick; scape parallel-sided, abruptly narrowing at base, densely covered with coarse oblong punctures. Funicle at base about as wide as scape, gradually narrowing apically. First segment of flagellum asymmetrical, as long as wide; 2nd segment oblong, 3rd as long as wide, 4–7th segments strongly transverse. Club ovate, somewhat wider than 2nd segment of funicle and about as long as 5–7th funicular segments combined.

Pronotum 1.25 times as wide as long, noticeably narrowing basally from near middle. Disc with obsolete median sulcus, covered with pupillate granules, those on pronotal sides low, conical.

Elytra wide, short-oval, flattened dorsally; sides in basal 1/5 straightly converging to the arcuately concave base. Intervals all equally keel-shaped convex due to the conical granules on them arranged in single row; 4th interval lower at base. Striae wider than interval, composed of large, deep, clearly separated

punctures; spaces between punctures not granulate. Length of elytra 4.7 mm.

First and second ventrites moderately depressed medially; anal ventrite flat, coarsely and densely punctate.

Femora mutic. Fore tibia straight, its outer apical angle rectangular, inner angle with sharp dent; hind tibia with smooth inner margin. Tarsi moderately wide; first segment oblong, about 1.2 times as long as wide; 2nd segment distinctly transverse, noticeably shorter than the bilobed 3rd segment; claw-segment protruding from 3rd segment approximately by the length of the latter.

Body black, matte because of the fine isodiametrical microsculpture. Vestiture very sparse, composed only of setae and hairs, with no scales present. Setae on pronotum sitting on granules, intervals between granules bare. Elytra appearing bare, their intervals with rows of reclinate dark brown setae arising from small shining granules; setae shorter than strial punctures bearing minute setae. Antennae with subrecumbent dark brown acuminate setae.

Spermatheca as in *O. oezbeki* sp. n., with widely separated ramus and collum.

Body length 6.95, width, 3.75 mm.

Comparative notes. In the structure of the head and legs and in the sculpture of the pronotum and elytra the new species is the most similar to O. sulcatellus Dan. from southern Tirol. It differs from this species in the larger size; very thick antennae with strongly transverse 4-7th segments of the funicle, 7th segment being the narrowest; noticeably depressed medially two first ventrites and flat anal ventrite; and the structure of the spermatheca. The new species differs from O. diabolicus Rtt. in the absolutely flat eyes not protruding beyond head contour, mutic femora, and structure of the spermatheca. From O. oezbeki, it differs in the rostral dorsum weakly widening to antennal base. From both O. diabolicus and O. oezbeki, it differs also in the elongate, narrow head; 3rd segment of the antennal funicle which is as long as wide; large granules on pronotal disc; rectangular outer apical angle of fore tibia; depressed medially 1st and 2nd ventrites, and very sparse vestiture consisting only of hair-like setae.

Material. Holotype: female, NE Turkey, Artvin Prov., Gül Dagi, 25 km N of Sarygöl, 24.VI. 1998 (A.Yu. Solodovnikov, B.M. Kataev). The apex of scape and all funicle with club of left antenna in the holotype are lacking.

Subgenus *Udonedus* Reitter, 1912

Reitter, 1912 : 62.—*Udosellus* Reitter, 1912 (Magnano, 1998b : 55, 64).

Type species *Otiorhynchus diabolicus* Reitter, 1895, by original designation.

The subgenus comprises *O. diabolicus* Rtt., *O. koenigi* Fst., *O. aibgae* sp. n., *O. galinae* Arzanov, and *O. kovali* sp. n. We tentatively place in it also *O. alexeevi* Korotyaev et Davidian, sp. n., and *O. leventi* sp. n., in spite of their considerable differences from the rest of species.

In all the species listed elytral intervals and rows of setae on them are uniform. The species also share the following characters: granules on elytral intervals conical; ventrites in male more or less distinctly striate; femoral dent usually small; aedeagus broadly blunted apically and moderately bent dorso-ventrally. Head behind eyes bare. Spermatheca with approximate ramus and collum (except in *O. alexeevi* and *O. leventi*).

A Key to Species of the Subgenus Udonedus Rtt.

- 1 (12). Head behind eyes bare; body usually with sparse vestiture.
- 2 (9). Rostral dorsum usually matte, with fine microsculpture, not carinulate, only in *O. diabolicus* occasionally with sparse shallow punctation. Femora with distinct, occasionally rather large dent.
- 4 (3). 1st segment of antennal funicle as long as, or longer than 2nd. 1st and 2nd ventrites in male deeply striate. Body width 1.70–2.83 mm.
- 5 (8). Rostrum wider, at the pterygia level 1.47–1.58 times as wide as in the narrowest place. 1st segment of antennal funicle longer than 2nd. Spaces between punctures in elytral striae with small setiferous granules.
- 7 (6). Antennal scape wider, usually noticeably curved at one-third way from base and strongly widening apically thereafter; at apex, about as wide as

rostral dorsum in narrowest point and 1.33 times as wide as fore tibia

...... O. koenigi validiscapus Stierlin.

- 9 (2). Rostral dorsum finely carinulate. Femora with minute granule-like denticle or mutic.
- 11 (10). Body sparsely pubescent, with a few hair-like scales dorsally; elytral intervals with rows of fine hair-like setae. Femora mutic......

- 12 (1). Head behind eyes covered with scales; body densely clothed with narrow-lanceolate or rounded scales.
- 13 (14). 1st segment of antennal funicle spindle-shaped, narrowing apically almost from its middle. Pronotal disc with well-developed median sulcus. Elytra ovate, 1.36–1.41 times as long as wide. Punctures in elytral striae wider than elytral intervals. Body densely covered with recumbent scales. Length of erect scales lobiformly widening apically exceeding width of elytral intervals; setae on spaces between strial punctures not longer than half puncture diameter. (Male unknown)

Otiorhynchus (Udonedus) diabolicus Reitter, 1895 (Figs. 21, 44, 64, 65, 84)

Reitter, 1895: 22; 1913 (1914): 62 (Udonedus).

This, the largest species of the subgenus *Udonedus* known to us, was described from Pontian Alps in NE Turkey.

Description. Rostral dorsum, except for lateral margins, and frons matte, with fine isodiametrical

sculpture; rarely frons weakly shining, obsoletely finely punctate. Antennae weakly or moderately thickened; scape somewhat widening apically or parallel-sided; shape of funicular segments varying. First segment usually somewhat shorter than second, rarely these segments having equal lengths; 3rd–7th segments usually round, more rarely transverse; 7th segment oblong in the male from Zigana Pass. Antennal club more or less spindle-shaped, 1st segment of club shorter than the rest of segments combined.

Pronotal disc noticeably convex, with well-pronounced median sulcus and dense, strongly convex, pupillate, shining granules.

Elytra oval, evenly rounded at sides, elytral sides in basal 1/5 straightly or, rarely, concavely converging to base. Elytral base as wide as, or slightly wider than pronotal base. Striae composed of large, deep, clearly separated punctures. Intervals more or less convex, usually all of the same width and mostly somewhat narrower than striae, with single row of small granules; diameter of the granules less than that of strial punctures. In lateral view, granules acute, conical.

Second ventrite in male weakly striate in apical half; in female, lacking striation. Male anal ventrite shallowly depressed.

Femora with small but distinct denticle. Fore tibia straight or weakly incurved. Inner margin of hind tibia with distinct fine granules.

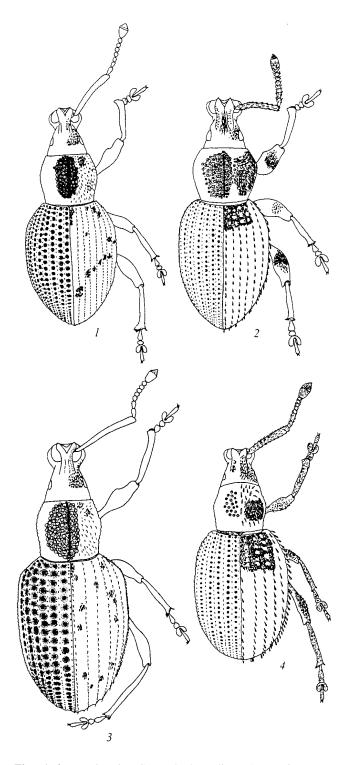
Scaling more or less dense but not contiguous. Lanceolate and oblong-oval scales with copper tint forming indistinct pattern. Intervals of elytra with rows of subrecumbent, narrow-lanceolate, recurved, dark brown setae slightly shorter than half of strial puncture diameter. Strial punctures bearing short seta. Scales on femora of about the same shape as those on head; middle and hind femora with bands of dense shining scales.

Penis parallel-sided, weakly widening to the truncate apex, occasionally constricted in middle part; in lateral view, weakly but distinctly bent in middle part. Walls of endophallus in basal part of penis densely covered with minute round sclerites.

Body length 4.3–6.7, width, 2.4–3.4 mm.

Comparative notes. Differs from other species of *Udonedus* in the proportions of the antennae with 1st funicular segment as long as, or shorter than 2nd.

Material. NE Turkey. Lazistan Mt. Range: S of Trabzon, SE of Sumela, alpine meadow, 2000–



Figs. 1–4. *Otiorhynchus* Germ., body outline. (*1*) *O. aibgae* sp. n. (male), (*2*) *O. kovali* sp. n. (male), (*3*) *O. koenigi koenigi* Fst. (female), (*4*) *O. alexeevi* Korotyaev et Davidian, sp. n.

2300 m, 31.V.1996 (Davidian), 5 specimens; Kalkanli Daglari, 9–15 km SE of Zigana Pass, alpine zone, 2300–2500 m, 10.VI.1998 (B.M. Kataev, A.Yu. Solodovnikov), 2 specimens; Kalkanli Daglari, NW slopes,

8 km E of Zigana Pass, alpine zone, 1700–1800 m, 9.VI.1998 (B.M. Kataev, A.Yu. Solodovnikov), 4 specimens; E of Salmankash Geç., Erikli Yayli, 1700–2250 m, 11–12.VI.1996 (Davidian), 2 specimens; S slope of Karakaya-Kyrklar Dagi, 2200–2400 m, 16.VI.1996 (Davidian), 1 specimen; N slope of Soganli Geç., 1700–2000 m, 14.VI.1996 (Davidian), 5 specimens; 5–10 km E of Ovitdagi Pass, N slope, 24.VI. 1996 (Davidian), 1 specimen; Rize, Gül Dagi NW slopes, Çaglayan Dere River valley, timberline—subalpine zone, 1800–2000 m, 26.VI.1998 (B.M. Kataev, A.Yu. Solodovnikov), 1 specimen.

Habitats. The species occurs above timberline.

Otiorhynchus (Udonedus) koenigi koenigi Faust, 1888, stat. n. (Figs. 3, 31)

Faust, 1888: 150; Reitter, 1913 (1914): 62; Magnano, 1998a: 465.—opertosus Reitter, 1889: 101; 1913: 62.

Described from Uch-Dere Village on the Black Sea coast of Krasnodar Territory (north of Dagomys) based on E. König collections. There is a female in the ZIN collection, probably from the type series, labeled "West-Caucasus, Utsch-Dere, E. König" (printed) and "*Udosellus* Rttr. *königi* Fst., G. Suvorov det."

O. opertosus was also described from Uch-Dere, based on material collected by A. Starck, and later correctly synonymized with O. koenigi by Reitter himself. We examined two syntypes, a male and a female, from E. Reitter's collection in Budapest. The male is labeled "Caucas occid. Utschdere Starck" with date of collection "25.VII.88" on backside, small square with "sp. n. 2?," "O. opertosus m. 1888" and "koenigi Fst.," the latter two in Reitter's handwriting; "Coll. Reitter;" a museum label with red margins "Holotypus Otiorrhynchus opertosus Reitter, 1889;" "Otiorrhynchus königi Faust det. Csiki, 1944." This specimen is designated here as lectotype. The female is provided with 3 labels: Starck's label "20.V.87," "Coll. Reitter," and the museum red-margined label "Paratypus Otiorrhynchus opertosus Reitter, 1889." The lectotype lacks right fore leg. Body length of the lectotype is 4.35, and width, 1.98 mm.

Description. Eyes flat, not protruding beyond head contour. From with fine isodiametrical microsculpture. Antennal scape weakly and evenly curved, weakly widening apically from the end of basal third; at apex, 0.75 times as wide as rostral dorsum in its narrowest part, as wide as middle part of fore tibia. In

male, scape 6.11–7.14, in female, 6.42–7.31 times as long as wide. Measurements from *O. opertosus* syntypes fall within this range; the only exception is a female from Kalezh Village (former Krasnoaleksandrovskii Village) with the value of this index being 5.8.

Pronotal disc with distinct median sulcus, intervals between granules finely microsculptured. Elytral striae wide, noticeably wider than intervals, composed of large, deep, foveiform punctures. Body sparsely clothed with elongate, curved, light scales.

In male, 1st, 2nd and, partly, 3rd ventrites striate medially, and anal ventrite shallowly depressed in the middle. In female, only 2nd ventrite striate near apex.

Femora with distinct dent. Outer apical angle of fore tibia beveled. Aedeagus short, parallel-sided, moderately bent dorso-ventrally, with widely rounded and blunted apex.

Body length 4.40–5.87, width, 2.70–2.83 mm.

Comparative notes. This subspecies differs from *O. koenigi validiscapus* Stierl. primarily in the more slender scape of antennae.

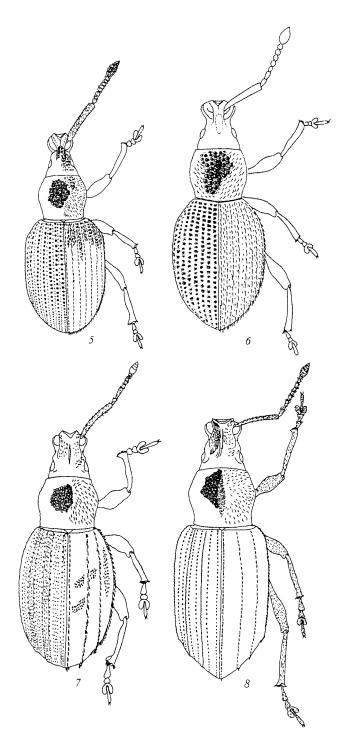
Material. Western Caucasus. Russia. Krasnodar Terr.: Kalezh Vill. S of Tuapse, VIII.1984 (A.G. Koval'), 1 specimen; Lazarevskoye Vill.: Mar'ino Vill., Psezuapse River valley, 200 m, 31.VII–25.IX.1988 (I.A. Belousov), 2 specimens; Vardane Vill., oak forest litter, 8.VII.1998 (Yu.G. Arzanov), 4 specimens; Zubova Shchel' Vill., 7.VI–16.VII.1985 (A.G. Koval'), 5 specimens; Kudepsta, 25.V.1992 (S. Khvylya), 2 specimens; Khosta, 12.VI.1988 (V. Semenov), 2 specimens; Sochi, 10.VIII.1998 (Yu.G. Arzanov), 1 specimen. Adygea, Maikop Distr., Mt. Fisht, 1700 m, VII.1984 (A.G. Koval'), 1 specimen.

Habitats. Most of the specimens were collected in the litter of the foothill and middle mountain zone forests.

Otiorhynchus (Udonedus) koenigi validiscapus Stierlin, 1894, stat. n. (Figs. 30, 67, 102)

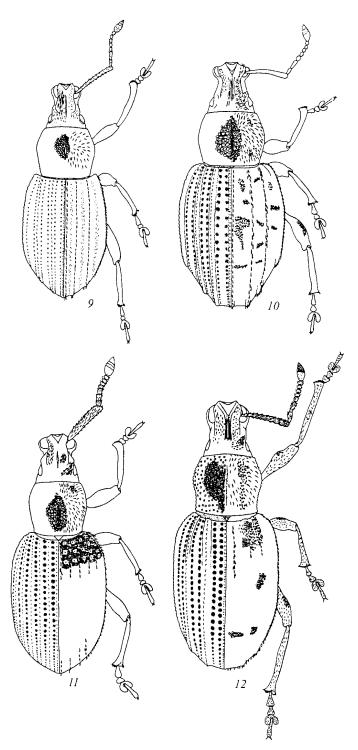
Stierlin, 1894: 113; Reitter, 1913 (1914): 62.

This form was described as a distinct species from "Circassia" based on C. Rost's collections and was subsequently placed in synonymy with *O. koenigi* Fst. (Reitter, 1913). The two forms differ primarily in the proportions of the antennae. There is a specimen in the ZIN collection, apparently from the type series, with a



Figs. 5–8. Otiorhynchus Germ., body outline. (5) O. leventi sp. n. (male, holotype); (6) O. galinae Arzanov (female, holotype), (7) O. tatyanae sp. n., (8) O. dvaleticus sp. n.

hand-written label "Circassia, Rost, *Otiorhynchus validiscapus*." Examination of the material from the Western Caucasus makes it possible to resurrect the name *O. validiscapus* Strl. from synonymy and consider this taxon a subspecies of *O. koenigi*.



Figs. 9–12. Otiorhynchus Germ., male body outline. (9) O. belousovi sp. n. (holotype), (10) O. tshistyakovae sp. n. (holotype), (11) O. svetgaricus sp. n. (holotype), (12) O. madinae sp. n.

Description. Antennae thickened, scape often noticeably curved in basal third and strongly widening apically thereafter; at apex, 1.33 times as wide as middle part of fore tibia and almost as wide as rostral dorsum in its narrowest part. In male, scape 4.3–5.2, in female, 4.50–5.27 times as long as wide. The

male from Khuap Village, with this index equal to 5.8, falling out of the variation range. Club asymmetrical, widest somewhat distal to the middle, sharply narrowing apically, with 1st segment usually slightly longer than the rest of the segments combined.

A single female from Gagrskii Range collected at altitude of about 2000 m differs from the piedmont specimens in the slender antennae, almost like those in *O. koenigi koenigi*.

Body length 3.9-5.8, width, 1.9-2.7 mm

Comparative notes. This subspecies differs from *O. koenigi koenigi* Stierl. primarily in the thicker scape of antennae.

Material. Western Caucasus. Russia. Krasnodar Terr.: upper reaches of the Bol'shaya Khosta River, Vorontsovka Vill., 27.V-24.VIII.1993 (I.A. Belousov), 2 specimens; "Caucasus occ., Krasnaja Polana," V.1907 (Kiritschenko), 1 specimen; Achishkho Range, 1800 m, 21.VIII.1987 (I.A. Belousov), 1 specimen; Aibga Range, 500 m, 29.IV-11.IX.1992 (A.G. Koval'), 1 specimen, Georgia. Abkhazia: "Gagry, Cauc. occ.," VI.1910 (A. Zolotarew), 4 specimens; same place, VI.1918 (Ignatowitsch), 2 specimens; Gagrskii Range, Khashupse River tributary in 3 km from Gantiadi, 500-1300 m, 7.VI.1991 (Davidian), 4 specimens; "Arabica Geb." (E. König), 1 specimen; W spur of Mt. Arabika, 1900-2200 m, 9.VI.1991 (Davidian), 1 specimen; Gudauta Distr., Khuap Vill., forest, 500 m, 31.V-25.VII.1986 (A.G. Koval'), 11 specimens; Barmysh Vill., 30.VI-4.VIII.1985 (A.G. Koval'), 3 specimens; same place, 6.VI.1987 (I.A. Belousov), 1 specimen; Otkhara Vill., 29.VI-4.VIII.1985 (A.G. Koval'), 1 specimen; Bsybskii Range near source of the Mchishta River, 8.VI-24.VIII.2000 (A.G. Koval'), 4 specimens; Mingrelia: Mingrelskii Range, 17.VIII.1990 (A.G. Koval'), 1 specimen.

Habitats. The subspecies is distributed in the eastern part of *O. koenigi* range and occurs in mountain forests from Bol'shaya Khosta River to Mingrelia.

Otiorhynchus (Udonedus) aibgae Davidian et Yunakov, sp. n. (Figs. 1, 26, 103, 110)

Description. Rostrum as long as wide; its width at pterygia 1.35–1.47 times its minimum width. Epistome triangular, its apex prolonged in fine carina running backward to somewhat behind antennal insertion; epistomal angles obtuse or rectangular, not protruding beyond head contour. Basal part of rostral dorsum shallowly depressed, with fine isodiametrical microsculpture; lateral margins of dorsum weakly diverging posteriorly, more or less keel-shaped. Eyes flattened, scarcely protruding from head outline.

Antennae moderately thick; scape noticeably wider than funicle and more slender than tibiae, weakly bent in basal half and gradually widening apically. First segment of funicle as long as, or, rarely, longer than 2nd; 2nd segment somewhat less than twice as long as 3rd; 3rd–7th segments round. Club asymmetrical, widest at, or somewhat distal to the middle, gradually narrowing basally and sharply, apically. First segment of club usually slightly longer than the rest of the segments combined, more seldom as long as these.

Pronotum weakly transverse, widely rounded at sides, occasionally weakly compressed near base. Disc moderately convex, with distinct median sulcus, densely covered with strongly convex granules somewhat shining apically.

Elytra oval with evenly rounded sides; at base, as wide as, or somewhat wider than pronotal base. Striae composed of large, deep, clearly separated punctures. Intervals weakly convex, usually all equal in width, somewhat narrower than striae, each with single row of small granules separated by 1.5–2 their diameters. Diameter of granules less than that of strial punctures.

First and second ventrites in male noticeably convex in apical half, covered with fine, partly broken striae extending also on 3rd ventrite. Anal ventrite coarsely punctate, flattened, with shallow preapical depression and blunted apical margin; no tufts of setae present. First to third and, to a lesser extent, fourth ventrites covered with small shining, occasionally elongate granules. In female, apical half of 1st ventrite flat, that of 2nd ventrite distinctly striate; anal ventrite rounded apically.

Legs moderately swollen, femora with small, but well-visible denticle. Fore tibia straight or weakly evenly curved, its inner margin S-curved. Outer apical angle of fore tibia somewhat rounded, inner angle attenuate and ending in a dent. Outer margin of hind tibia straight. Tarsi shortened, 2nd segment transverse, claw-segment extending beyond 3rd segment by the length of the latter.

Scaling sparse; elongate yellow scales arranged in wide stripe along dorsal margin of eye; on elytra, oval scales arranged in sparse small macules. Intervals of elytra with single row of subrecumbent, weakly widening apically, lanceolate dark brown scales of length shorter than strial puncture diameter. Strial punctures bearing small seta. Scales on femora of the same shape as those on head, forming no clear rings.

Aedeagus parallel-sided, weakly widening to the truncate apex; in lateral view, weakly but noticeably

angular in middle part. Walls of endophallus with numerous small granules. Basal sclerite membranous, indistinct.

Body length 3.5–4.7, width, 1.7–2.3 mm; in holotype 3.5 and 1.7 mm, respectively.

Comparative notes. Closest to *O. koenigi*, differing from it in the less widening apically rostrum, eyes weakly protruding beyond head contour, equal length of 1st and 2nd segments of antennal funicle, oval scales of the clothing, convex in apical half anal ventrite, and the endophallic armament.

Material. Western Caucasus. Russia. Krasnodar Terr.: Aibga Range E of Krasnaya Polyana Vill., 600–1300 m, 10.VI.1997 (Davidian), 8 specimens, including male holotype; as above, 900 m, pitfall traps, 17.VIII.1994 (A.G. Koval'), 1 specimen; 12 km E of Krasnaya Polyana, right bank of the Pslukh River, 800–1000 m, 31.VII.1994 (A.Yu. Solodovnikov), 1 specimen; Kavkazskii Nature Reserve, Mt. Aishkho, 1900–2000 m, subalpine meadow and sparse forest of maple and birch with *Rhododendron* bushes, 12.VIII.1986 (S.I. Golovach), 1 specimen (MSU).

Otiorhynchus (Udonedus) kovali Davidian et Yunakov, sp. n. (Figs. 2, 23, 101)

Description. Rostrum about as long as wide, strongly narrowing to pterygia. Maximum width of rostrum 1.27–1.42 times its minimum width. Dorsum of rostrum longitudinally rugose, with cariniform lateral margins, wide median depression and fine median sulcus turning into carina reaching epistome. Epistomal angles blunted. Eyes flattened, scarcely protruding from head outline.

Antennae rust-red, moderately thickened; scape weakly bent, more or less widening apically, lacking sharp basal constriction, usually somewhat narrower than fore tibia. Funicle slightly but noticeably narrower than scape; 1st segment noticeably longer than the oblong 2nd segment, 3rd–6th segments more or less transverse, 7th weakly transverse or, more rarely, almost round; club short, spindle-shaped.

Pronotum weakly transverse or as long as wide, widest at the middle, with widely rounded sides and weakly convex disc, occasionally weakly compressed near base. Disc densely covered with small shining granules, intervals between them with irregular microsculpture; median sulcus distinct, not granulate.

Elytra oblong-oval; at base, scarcely wider than pronotal base; disc weakly convex, occasionally some-

what flattened. Sides more or less rounded; in basal 1/5, widely rounded. Striae composed of deep punctures with sharp margins. Intervals uniform, convex, as wide as, or somewhat narrower than striae. Granules on intervals minute, visible only at large magnification, arranged in a single row. Granules on areas between strial punctures still smaller.

In male, median part of 1st ventrite shallowly depressed, 1st–3rd and, to a lesser extent, 4th ventrites finely striate; anal ventrite flat, coarsely punctate, shallowly depressed near apex.

Legs rust-red, robust; femora swollen, mutic. Tibiae weakly bent in apical part or straight, with weakly beveled outer apical angle. Second tarsal segment transverse, third segment widely bilobed; claw-segment extending beyond 3rd segment by the length of the latter.

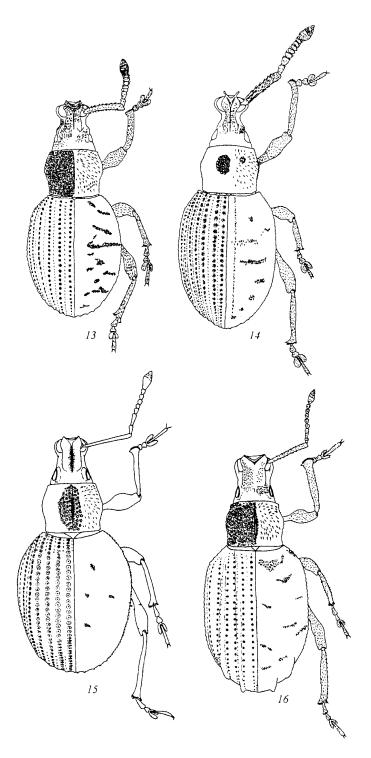
Aedeagus parallel-sided, widely rounded and weakly blunted at apex. Basal sclerite of endophallus small.

Dorsal surface densely covered with brown broadlanceolate and greenish or pinkish oval scales with pearly shine, arranged in diffuse spots and forming indistinct marble pattern. Intervals of elytra each with single row of subrecumbent, moderately widening apically, narrow-lanceolate scales; length of scales almost equal to width of intervals. On head, scales condensed in groups along upper eye margin. Scape of antennae and legs covered with subrecumbent pale setae; femora also with dense oval shining scales. Scales on pronotum condensed in spots along median sulcus.

Body length 3.8–4.5, width, 1.60–2.18 mm; in holotype, 4.30 and 1.86 mm, respectively.

Comparative notes. The closest relative of the new species is *O. galinae* Arzanov, from which it differs in the following: 1st segment of antennal funicle longer than 2nd; 3rd to 7th segments transverse; rostral dorsum distinctly longitudinally rugose; granules on pronotal disc weakly shining, with setiferous puncture in the middle; outer margin of fore tibia straight; dorsal surface of body densely covered with oval scales. From other species of the subgenus *Udonedus O. kovali* differs in the longitudinally rugose rostral dorsum and in the structure of the aedeagus.

Material. Western Caucasus. Russia. Krasnodar Terr., Sochi, Lazarevskoye Vill., pitfall traps, 3–23.VII. 1985 (A.G. Koval'), 2 specimens. Georgia, Abkhazia:



Figs. 13–16. Otiorhynchus Germ., body outline. (13) O. depressus Strl. (male), (14) O. oezbeki sp. n. (male), (15) O. quadratopunctatus Strl. (female), (16) O. akibae sp. n. (female, holotype).

Gagrskii Range, Mamdzyshka, 1600–1800 m, 3–24.VI. 1984 (A.G. Koval'), 2 specimens; as above, but at 1300 m, 27.VII.1984 (V.N. Prasolov), 1 specimen; Mt. Zontik, 2100 m, 17.VII–28.VIII.1988 (A.G. Koval'), 1 specimen; Mt. Ashkhabash, 1.VII.1985 (A.G. Koval'), 1 specimen; W spurs of Mt. Arabika, 1900–

2200 m, 9.VI.1991 (Davidian), 3 specimens, including male holotype.

Etymology. The species is named for A.G. Koval' in appreciation of his valuable contribution to the knowledge of weevils of the western Caucasus.

Otiorhynchus (?Udonedus) alexeevi Korotyaev et Davidian, sp. n. (Figs. 4, 48, 57)

The description of this species, made by B.A. Korotyaev, is supplemented here by G.E. Davidian on the basis of an examination of additional material.

Description. Rostrum as long as wide, as wide as head capsule at middle of eye; pterygia large. Rostral dorsum in narrowest part somewhat raised and only slightly wider than antennal pit; basal half of dorsum with wide longitudinal depression smoothened to frons. Apical part of rostrum with sharply limited epistomal area and sharp short keel running backwards from it. Frons flat, sparsely finely punctate, twice as wide as narrowest part of rostral dorsum. Eyes small, flat. Head strongly conically narrowing from pronotal margin to pterygia. Temples long; length of temples and vertex area covered with scales equal to about 2/3 length of eye. Antennae moderately thickened; scape of subequal width along its entire length, about 2/3 width of club, moderately bent in basal third, rest of it straight. Funicle noticeably narrower than scape, not widening apically; its two first segments of equal length, 2nd scarcely more slender; 3rd and 4th segments subspherical, 5-7th segments somewhat transverse. Club broad, spindle-shaped, slightly asymmetrical. Scape and 2 first antennal segments rugose, densely and coarsely punctate.

Pronotum weakly transverse, 1.16–1.18 times as wide as long, widest in the middle, weakly rounded at sides. Disc weakly convex, covered with large acute granules bearing long erect scale-like setae. Granules sparsely arranged, with intervals matte, covered with small deep punctures, partly concealed by oval scales. Narrow median stripe without granules, but not deepened.

Elytra oval, 1.4 times as long as wide, moderately rounded at sides, widest near middle; disc flattened. Punctures in striae large, rounded, deep; basal margin of each puncture bearing small rounded-triangular scale pointed toward puncture center. Intervals almost flat, uniform, as wide as striae. Small granules on intervals arranged in a single regular row and bearing long (about 4 times as long as wide, with length equal to width of interval) pale brown, erect, scale-like setae.

First ventrite weakly, but noticeably depressed in preapical part. All ventrites coarsely punctate, covered with minute rounded granules; pubescence formed mostly by hair-like setae, only sides of two first ventrites with few lanceolate scales.

Fore femur scarcely thicker and wider than hind femur, with inconspicuous prominence in the place of dent. Fore tibia weakly incurved apically, with shallowly bisinuate inner margin. Tarsi short, with nearly round 2nd segment.

Body dark brown, almost black; antennae and legs reddish brown. Dorsal surface rather evenly covered with small, broad-oval, pinkish and pale greenish, weakly shining scales separated by narrow gaps on entire surface. Condensations of slightly larger and paler scales forming indistinct mottled pattern. Pronotum and elytral intervals with long, erect, slightly reclinate, scale-like setae. Length of setae on areas between strial punctures constituting less than two their widths and not exceeding half of puncture diameter. Antennae clothed with rather coarse acuminate reclinate setae; scape also with sparse oblong-oval recumbent scales. Femora covered with long- and short-oval, lanceolate, and parallel-sided subrecumbent scales; tibiae lacking short-oval scales, tarsi covered only with hairs and sparse, very narrow, erect scales.

Spermatheca with large ramus (Fig. 57).

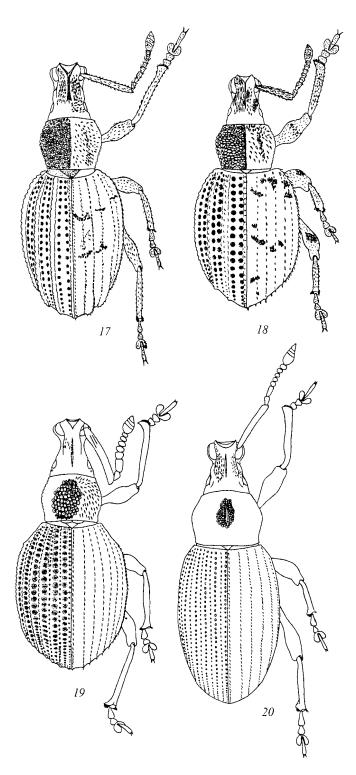
Males unknown.

Body length 3.9–4.5, width, 2.0–2.1 mm; in holotype, 4.1 and 2.0 mm, respectively.

Comparative notes. The new species is similar to species of the subgenus *Udonedus*, from which it differs in the presence of scales on the temples and vertex and in the structure of the spermatheca. From *O. leventi* it differs in the wider body, less thickened antennae, subspherical 3rd and 4th segments of the antennal funicle, larger granules and presence of the median sulcus on pronotal disc, dense vestiture of the body composed of broad-oval pinkish and pale greenish, weakly shining scales, and long, erect, weakly curved scale-like setae.

Material. Caucasus. Russia. North Ossetia, Tseiskoie Gorge, 1982 (S.K. Alekseev), 1 ♀. Georgia, Tushetia, Khakhabo, 13.VIII.1960 (A.O. Cholokava), 1♀. NE Turkey: Giresun Mt. Range, W of Mt. Gonderiç Tepesi, 1900–2100 m, 13.VI.1998 (Davidian), 2♀; SE of Trabzon, Gümüşhane, Soiran River basin, 1500–1800 m, 5–6.VI.1996 (Davidian), 1♀; S slope of Karakaya-Kyrklar Dagi, 2200–2400 m, 16.VI.1996 (Davidian), holotype♀.

Etymology. The species is named for S.K. Alekseev, who collected an extensive material on insects in the North Ossetian State Nature Reserve.



Figs. 17–20. Otiorhynchus Germ., body outline. (17) O. titae sp. n. (male), (18) O. maganicus sp. n. (male, holotype), (19) O. kataevi sp. n. (female, holotype), (20) O. granulatostriatus mamisonicus subsp. n. (male).

Otiorhynchus (?Udonedus) leventi Davidian et Yunakov, sp. n. (Figs. 5, 46, 58, 104)

Description. Rostrum strongly narrowing to pterygia, as long as wide; in widest part, 1.31–1.34 times as wide as in narrowest place. Rostral dorsum widen-

ing to base, with keel-shaped lateral margins, wide median depression and fine median carina, reaching epistome and more pronounced near it. Epistomal angles rectangular or blunted. Eyes weakly convex, usually noticeably protruding from head capsule. Antennae thickened. Scape noticeably bent, of subequal width along its entire length, scarcely narrowing in middle part and sharply constricted at base; as wide as, or slightly narrower than fore tibia. Funicle somewhat narrower than scape; 1st segment oblong, strongly narrowing to base, about as long as, or slightly shorter than 2nd, 3rd–7th segments transverse, 4–7th nearly disc-shaped. Club short-ovate.

Pronotum weakly transverse, widest at the middle, with broadly rounded sides and weakly convex disc. Disc with weak traces of median sulcus, densely covered with small shining granules separated by irregularly microsculptured intervals.

Elytra oblong-oval; at base, about as wide as pronotal base; parallel-sided, obsoletely rounded in middle part; widely rounded in basal 1/5. Disc weakly convex. Striae composed of deep, clearly outlined punctures. Intervals uniform, scarcely convex, as wide as, or slightly wider than striae. Granules on intervals minute, visible only at great magnification, arranged in a single row; granules on spaces between strial punctures still finer.

First ventrite shallowly depressed in middle part. First and second ventrites coarsely punctate and densely covered with low granules. Anal ventrite moderately convex in basal half, becoming flat in middle part, and shallowly depressed at apex.

Femora mutic; fore tibia in male weakly incurved in apical part; in female, with straight outer margin and beveled outer apical angle. Outer margins of middle and hind tibiae straight; inner margins, widely emarginate in apical part. Second tarsal segment transverse, third segment widely bilobed, claw-segment extending beyond apex of 3rd segment by slightly more than length of the latter.

Vestiture of dorsal surface rather dense. Scales on elytra reclinate, narrow, acuminate, brown. Intervals each with row of long, fine, reclinate setae; length of setae equal to width of intervals. Antennal scape without scales; femora with hair-like scales. Ventrites clothed with hair-like scales, 1st and 2nd ventrites on sides also with a few lanceolate scales.

Penis noticeably widening from base to apical third and pointed apically. Endophallus with large basal sclerite.

Body length 3.8–4.5, width, 1.6–2.0 mm; in holotype, 4.10 and 1.74 mm, respectively.

Comparative notes. In the vestiture of the head behind eyes and structure of the spermatheca, the new

species is the closest to *O. alexeevi* Korotyaev et Davidian, sp. n., but clearly differs in the sparser vestiture composed of narrow acuminate scales and setae, thickened antennae with transverse 3rd–7th funicular segments, elongate and narrower elytra, absence of scales on the antennal scape and on legs, and narrower setae on the elytra.

Material. NE Turkey. Giresun Mt. Range, E slope of Mt. Gonderiç Tepesi, 1900–2100 m, 15.VI.1998 (Davidian), 4 specimens, including male holotype.

Etymology. The species is named for Levent Gültekin, Ataturk University, Erzurum.

Subgenus Otismotilus Reitter, 1912

Reitter, 1912: 7.

Type species *O. granulatostriatus* Stierlin, 1876, by original designation.

We also include in this subgenus the Caucasian species *O. chaudoiri* Hochh., *O. quadratopunctatus* Strl., formerly placed in the subgenus *Lolatismus* Reitter, 1912 (Osella and Zuppa, 1994; Magnano, 1998a, 1998b), and several new species described below.

Species of the subgenus *Otismotilus* differ from representatives of the subgenus *Lolatismus* in the following characters: frons leveling with rostral dorsum and not separated from it by depression in lateral view; eyes flat; sides of rostrum more or less swollen at base to form wide fold and raised against eyes; head capsule behind eyes punctate and usually more or less densely squamose. The species also differ in the structure of the aedeagus and endophallus.

We distinguish 3 species-groups within the subgenus: *granulatostriatus*, *chaudoiri* and *quadratopunctatus* groups, which differ primarily in the sculpture and vestiture of the elytra.

The granulatostriatus group

This group includes a single species with 4 subspecies and is characterized by uniform sculpture and vestiture of the odd- and even-numbered elytral intervals.

Elytral intervals with rows of more or less strongly flattened granules; punctures in the striae very small, not larger than granules on intervals. Femora mutic. In male, median part of 2nd–4th ventrites with numerous elongate, short keel-shaped granules; anal ventrite

blunted apically, with rather deep fovea delimited by tufts of light hairs on sides at apical margin.

A Key to Subspecies of O. granulatostriatus Strl.

- 1 (4). Antennae more or less thickened; rostral dorsum in narrowest point 1.71–3.30 times as wide as middle part of antennal scape. Inner margin of hind tibia in male mostly with obtuse-angular keel-shaped prominence at apex.
- 2 (3). Inner margin of hind tibia in male mostly with weak obtuse-angular keel-shaped prominence at apex, not emarginate before prominence. Antennae usually thicker, 1st funicular segment as long as 2nd, twice as long as 3rd, the latter spherical or weakly transverse, 4–7th segments noticeably transverse. Aedeagus broadly blunted apically. Spermatheca with well-developed ramus. Body length 6–8 mm

..... O. granulatostriatus mamisonicus subsp. n.

- 4 (1). Antennae slender; rostral dorsum in narrowest point 3.0–4.75 times as wide as middle part of antennal scape. Inner margin of hind tibia in male mostly without obtuse-angular keel-shaped prominence at apex.
- 5 (6). Body slender, elytra parallel-sided, elytral intervals mostly cariniform raised, with distinctly convex granules. Inner edge of hind tibia in male mostly emarginate before apex. Aedeagus more or less widely rounded apically
 - .. O. granulatostriatus ronchettinus Rtt., stat. n.

Otiorhynchus (Otismotilus) granulatostriatus granulatostriatus Stierlin, 1876, stat. n. (Figs. 49, 82, 83, 86)

Stierlin, 1876: 495; 1877: 177; Reitter, 1913: 97.

It is stated in the original description that the species is described from the Caucasus; later (Stierlin, 1877) the type locality was given more precisely as Mt. Kazbek

Description. Rostrum as long as wide, maximum to minimum rostrum width ratio 1.28–1.38. Pterygia large, width of head at eyes to width at pterygia ratio 1.00–1.11. Epistomal angles mostly acute. Rostral dorsum separated from frons by shallow transverse saddle-shaped depression; in lateral view, weakly convex longitudinally. Toward base, rostral dorsum slightly widening; its surface flattened or scarcely depressed longitudinally, usually with fine median carina. Both rostral dorsum and frons coarsely punctate, punctures occasionally arranged in rows. Eyes nearly flat, not protruding beyond head contour.

Antennae slender; scape usually more or less strongly widening apically, more seldom parallel-sided; in middle part, 1/4–1/3 as wide as rostral dorsum in narrowest point. First and second funicular segments of similar shape and size, about twice as long as 3rd segment; 4–7th segments rounded, occasionally more or less transverse. Club oblong-ovate.

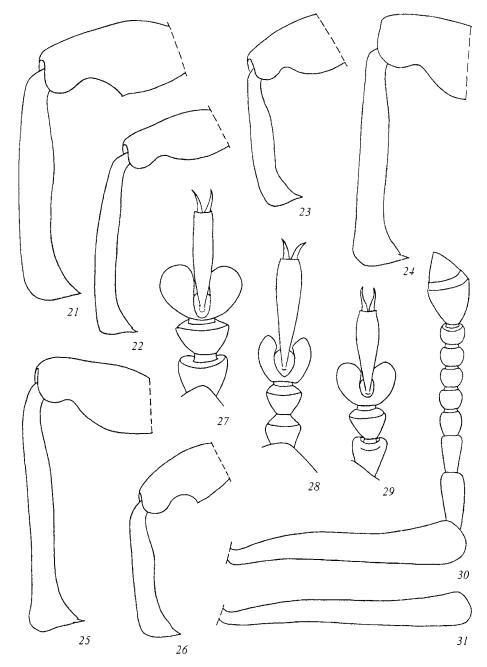
Pronotum mostly weakly transverse, widest somewhat before middle, occasionally weakly constricted near base. Disc more or less convex, with fine, occasionally broken median carina, more seldom without carina; densely covered with small, usually pupillate granules, separated by less than their diameter.

Elytra oblong-oval, mostly somewhat flattened dorsally; about as wide at base as pronotum; subparallel-sided in middle part, widely rounded in basal 1/5. Striae composed of small, distinctly outlined punctures. All intervals of equal width, usually weakly convex, at least twice as wide as striae; granules on intervals arranged in a single row, equal in diameter to granules on pronotum and strial punctures.

All ventrites densely granulate, granules in apical part of 2nd–4th ventrites elongate. In male, 1st ventrite shallowly but distinctly depressed; anal ventrite with deep transverse-oval fovea and small tufts of light setae at sides of the fovea.

Legs slender, femora mutic, tibiae with straight outer margin and noticeably produced inner apical angle. Outer edge of hind tibia emarginate before apex, corbels widened outward, inner edge of tibia scarcely emarginate before apex.

Body black or dark brown, antennae paler, tarsi rust-red.



Figs. 21–31. Right fore leg (21–26), female fore tarsus (27–29), right antenna (30), antennal scape (31). (21) Otiorhynchus diabolicus Rtt. (male); (22) O. dvaleticus sp. n. (male); (23) O. kovali sp. n. (male, Gagrskii Range); (24) O. quadratopunctatus Strl. (male, Askhi Plateau); (25, 29) O. titae sp. n. (female); (26) O. aibgae sp. n. (male); (27) O. kataevi sp. n.; (28) O. akibae sp. n.; (30) O. koenigi validiscapus Strl. (male, Gagrskii Range); (31) O. koenigi koenigi Fst. (male, Lazarevskoye Vill.).

Sparse vestiture formed by rows of setae on intervals and short setae in striae of elytra. Setae on intervals spindle-shaped, weakly reclinate and subrecumbent, arranged in 1 single almost regular row, their length slightly exceeding in diameter strial punctures. Femora covered only with hairs.

Aedeagus parallel-sided or weakly narrowed in apical part, with truncate apex. Distance between collum and ramus of spermatheca more than, or equal to width of ramus.

Body length 6.4–7.7, width, 2.8–3.5 mm.

Material. Central Caucasus. Russia. North Ossetia: Lateral (=Bokovoi) Range, Mt. Tepli, L'iadon River sources, 2600–3000 m, 11.VII.1997 (Davidian), 6 specimens; as above, but at 2500–3000 m, 9–10.VII. 1997 (Davidian), 9 specimens; Mt. Kazbek, 3000 m,

24.VIII.1929 (A.V. Bogachev), 5 specimens; as above, but at 2100–2900 m, 26.VIII.1986 (G.M. Abdurakhmanov), 3 specimens; as above, Krestovyi Pass vicinity, 2900 m, 9.V.1988 (M.L. Danilevskii), 2 specimens; upper reaches of Ardon River, 8.VIII.1998 (A.G. Koval'), 5 specimens; upper reaches of Fiagdon River, Khilak locality, N slope of Kurtatinskii Pass, 3200–3500 m, subnival zone, 10–13.VIII.1984 (S.K. Alekseev), 2 specimens; Kurtatinskoie Gorge, alpine meadow, 2800 m, under stone (D. Volkov), 1 specimen; "Caucasus" (Leder), 1 specimen.

The subspecies is known only from Lateral Range between Mt. Tepli in the West and Kazbek in the East.

Otiorhynchus (Otismotilus) granulatostriatus ronchettinus Reitter, 1909, stat. n. (Figs. 62, 78, 79, 88, 89)

Reitter, 1913: 97 (pro species).

Four specimens from the type series in E. Reitter's collection in Budapest have been examined. The lectotype is provided with the labels: "DV Ronchetti, Valle Ceja, 22.VII.1909;" "Ronchettinus m." (handwritten), "coll. Reitter;" "Holotypus 1909 Otiorhynchus ronchettinus Reitter" (museum label with red margins); "Otiorhynchus (Lolatismus) ronchettinus Reitt., L. Magnano det., 1998;" "Otiorhynchus ronchettinus Reitt., Lectotypus, & Des. L. Magnano 1998" (red). Magnano erroneously identified the sex designating the lectotype; it is actually a female. The specimen was remounted by us on a card; 3 apical segments of the left middle tarsus are missing. The paralectotypes are 2 females and a male. One of the females is labeled "Caucasus, Valle Ceja, 22.VII. 1909, Ronchetti leg." (handwritten); "coll. Reitter" (printed), "Paratypus, 1909 Otiorhynchus ronchettinus Reitter" (with red margins); "Otiorhynchus (Lolatismus) ronchettinus Reitt., L. Magnano det., 1998," "Otiorhynchus ronchettinus Reitt., Paralectotypus, Des. L. Magnano 1998" (red). The other female has the labels "Caucasus, Valle Ceja, 22. VII.1909, D.V. Ronchetti" (handwritten), "coll. E. Csiki" (printed), "Typus, 1909 Otiorhynchus ronchettinus Reitter," "Paratypus" (with red margins), and two labels by Magnano as in the preceding specimen.

The male from the type series is labeled "Kaukasus, Trsi-Pass" [Magnano (2001) misspelled the label as "Túra Pass"] (handwritten), "coll. Reitter" (printed), "Paratypus, 1909 Otiorhynchus ronchettinus Reitter" (museum label with red margins); "Otiorhynchus (Lolatismus) ronchettinus Reitt., L. Magnano det., 1998,"

"Otiorhynchus ronchettinus Reitt., Paralectotypus, Des. L. Magnano 1998 3" (red label). We identify this specimen as O. granulatostriatus granulatostriatus. It differs from the lectotype and other paralectotypes in the finer sculpture of elytra, scarcely emarginate inner face of hind tibia, and thicker antennae. The specimen originates from the Truso Pass in the Lateral Range, separating the sources of the Zakka River (Ardon basin in North Ossetia) and Terek River in Georgia.

Comparative notes. O. granulatostriatus ronchettinus is the closest to O. g. granulatostriatus and O. g. khetagi subsp. n. It differs from the former primarily in the finer antennae with scape usually widening apically and 0.21–0.33 times as wide as narrowest part of rostral dorsum. In addition, it differs from the nominotypical subspecies in the shallow preapical emargination on hind tibia in male, coarser sculpture of elytra, and the structure of genitalia in both sexes. Elytral intervals are weakly carinate, granules on them are arranged almost in a regular row. The apex of the aedeagus is widely rounded. The distance between spermathecal collum and ramus is greater than, or equal to the width of ramus.

From *O. g. khetagi* subsp. n. this subspecies clearly differs in the absence of the obtuse-angular prominence in preapical part of the inner margin of hind tibia and in the large pterygia: in *O. granulatostriatus ronchettinus* width of head at eyes to maximum width of rostrum ratio constitutes 1.0–1.1, being 1.10–1.22 in *O. granulatostriatus khetagi* subsp. n.

From O. g. mamisonicus subsp. n. it differs in the narrower elytra and fine antennae.

Body length 6.0–7.8, width, 2.53–2.60 mm.

Material. Central Caucasus. Russia. North Ossetia: North Ossetian Nature Reserve, Uilpatinskii Glacier vicinity, 2700–2800 m, 17.VII.1985 (I.M. Sokolov), 9 specimens; S slope of Tseiskii Range below Uilpatinskii Glacier, subalpine meadow, 2500 m, near snowfields, 7.VII.1984 (S.K. Alekseev), 1 specimen; Tseiskoie Gorge, 4.VII.1981, 28.VII–19.VIII.1982 (S.K. Alekseev), 15 specimens; left side of the Tseiskoie Gorge below Uilpatinskii Glacier, subalpine meadow, 3100 m, near snow-fields, 14.VII.1984 (S.K. Alekseev), 7 specimens; left side of the left tributary of the Uilpata-don River, SSW slope, 3100–3200 m, alpine meadow, 15–22.VII.1984 (S.K. Alekseev), 6 specimens; left tributary of the Uilpata-don, 2900 m, 28.VII.1982, 20.VII–26.IX.1984 (S.K. Alekseev)

seev), 23 specimens; Zaramagskaia Kettle, Zaramag Vill. vicinity, 3000 m, 23.VII.1986 (S.K. Alekseev), 2 specimens.

Otiorhynchus (Otismotilus) granulatostriatus mamisonicus Davidian et Yunakov, subsp. n. (Figs. 20, 51, 66, 69, 90, 91)

Description. Antennae noticeably thickened, scape almost parallel-sided, 0.30–0.58 times minimum rostral dorsum width. First and second funicular segments similar, twice as long as the spherical or weakly transverse 3rd segment; 4–7th segments noticeably transverse. Intervals of elytra flat, seldom weakly convex. Distance between ramus and collum of spermatheca equal to, or greater than width of ramus.

Body length 6–8, width, 2.8–3.8 mm; in holotype 7.0 and 3.1 mm, respectively.

Comparative notes. This subspecies differs from the rest in the usually transversely rugose sculpture of the elytra, obscuring granulation of the intervals; striae superficial. Setae on elytral intervals 5 times as long as wide. Apical part of inner edge of hind tibia in male keel-shaped sharpened and shallowly emarginate.

Material. Central Caucasus. Russia. North Ossetia: upper reaches of the Ardon River, Mamisonskoie Gorge, Mamison-don River valley, 2860 m, 16.IX. 1987 (S.K. Alekseev), 13 specimens, including male holotype; Mamisonskii Pass, 16.IX.1987 (S.K. Alekseev), 6 specimens, and 12.VII.1997 (Yu.G. Arzanov), 3 specimens.

In holotype, two apical segments of the funicle and the club of left antenna are missing.

We have also specimens from upper Ardon River, not included in the type series because they need further examination: North Ossetia, Ardon River basin, Lateral Range, subalpine zone, 2750 m, 20.VII.1985 (S.K. Alekseev), 3 specimens; Sadonskoie Gorge, subalpine zone, 2600–2850 m, 27.VII.1987 (O. Gvozdeva), 2 specimens; Lateral Range, Tseiskoie Gorge, 25.VII.1987 (S.K. Alekseev), 1 specimen.

Otiorhynchus (Otismotilus) granulatostriatus khetagi Davidian et Yunakov, subsp. n. (Figs. 35, 68, 85, 87)

Description. Very similar to *O. g. ronchettinus*, differing from this and the nominotypical subspecies in the wide obtuse-angular, keel-shaped sharpened prominence of inner edge of male hind tibia in preapical part; the area before prominence noticeably emar-

ginate. Rostrum narrower, pterygia smaller than in *O. g. ronchettinus*; width of head at eyes to maximum width of rostrum ratio 1.10–1.22. Elytral intervals in male usually raised, as in *O. g. ronchettinus*, with rows of large granules; erect setae on intervals narrow-lanceolate. In the single female available, intervals nearly flat, rows of large granules accompanied by smaller granules; erect setae noticeably narrower than those in males, 7–10 times as long as wide. Apex of aedeagus noticeably emarginate in the middle. Spermatheca lacking pronounced ramus, with merely a swelling in its place.

Comparative notes. This subspecies differs from the other three in the smaller size; from *O. g. mamisonicus* also in the more regular rows of granules on elytral intervals, in the shape of the prominence of inner margin of hind tibia in male, and in the slender antennae with 1st funicular segment slightly shorter than, or as long as 2nd; the latter 1.8 times as long as the weakly oblong 3rd segment, 4–7th segments spherical or weakly transverse.

Body length 5.2–6.2, width, 2.2–2.8 mm; in holotype, 5.2 and 2.8 mm, respectively.

Material. Central Caucasus. Russia. North Ossetia: Skalistyi Range,: Ardon River basin, Mt. Kariu-khokh, Khallon locality, 2600 m, subalpine meadow, 19.V. 1985 (S.K. Alekseev), holotype male; as above, but 17.VI.1986 (S.K. Alekseev), 1 specimen; Fiagdon River basin SE of Mt. Kariu-khokh, opposite to Fiagdon Vill., 3150 m, 6.VII.1986 (S.K. Alekseev), 1 specimen; as above, but alpine meadow, *Drias* association, 3000–3070 m, 7.VII.1986 (S.K. Alekseev), 1 specimen (MSU); N slope of Mt. Kiom-khokh, 2900–3000 m, 12.VI.1993 (A.S. Zamotailov), 1 specimen.

The chaudoiri group

We place in this group *O. chaudoiri* Hochh., *O. tshistyakovae* sp. n., *O. dvaleticus* sp. n., *O. belousovi* sp. n., *O. tatyanae* sp. n., and *O. svetgaricus* sp. n. They are characterized by the usually more strongly convex odd-numbered elytral intervals with a single row of the more or less strongly raised setae; setae on even-numbered intervals mostly minute, occasionally inconspicuous. *O. tshistyakovae* sp. n. and *O. svetgaricus* sp. n. differ from other bisexual species of this group in the shape of the aedeagus, more similar to that in *O. quadratopunctatus* Strl.

A Key to Species of the chaudoiri Group

- 1 (10). Antennae slender; scape in middle part less than half as wide as narrowest part of rostral dorsum. 1st and 2nd funicular segments noticeably longer than wide, 3rd and 4th segments spherical or weakly oblong. Vestiture mostly sparse; if dense, then still not contiguous; scales occasionally with faint metallic-green or golden shine. Odd-numbered intervals of elytra noticeably raised above even-numbered ones at least in basal half.
- 2 (5). Diameter of punctures in elytral striae greater than width of intervals; if equal to that, then scaling dense, with golden or green metallic shine.

- 5 (2). Diameter of punctures in elytral striae less than width of intervals. Dorsal scaling grayish brown without metallic shine. 1st segment of antennal funicle shorter than 2nd. Aedeagus with lamella more or less produced, narrowing apically.
- 7 (6). Intervals of elytra with more or less distinct scaling. Anal ventrite with foveiform depression only in male. Inner margin of male hind tibia with longitudinal keel near apex.

Otiorhynchus (Otismotilus) chaudoiri Hochhuth, 1851 (Figs. 61, 73, 76)

Hochhuth, 1851: 77; Reitter, 1913: 103 (*Lolatismus*); Magnano, 1998a: 455 (*Lolatismus*).

Description. Rostrum as long as, or scarcely longer than wide, 1.23–1.33 times as wide in widest part as in the narrowest one. Sides of rostrum coarsely longitudinally rugose, dorsum flattened, longitudinally rugose together with frons, with fine median carina. Eyes weakly convex, scarcely protruding from head outline, or flattened.

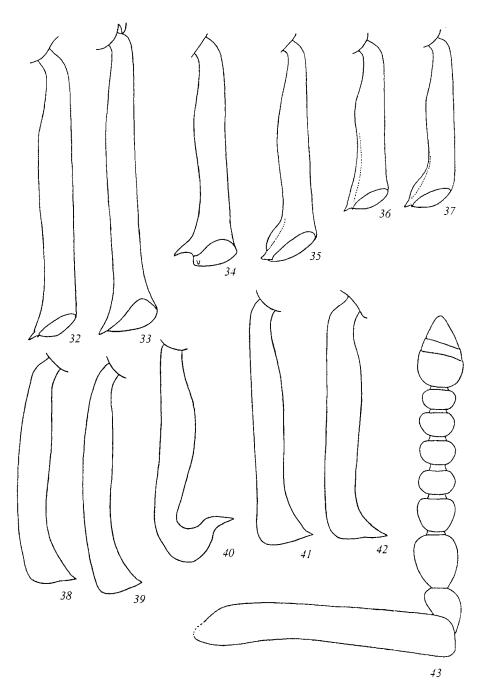
Antennae slender, with scape nearly straight, evenly widening apically. First segment of funicle about twice as long as wide, shorter than 2nd; 3rd segment scarcely oblong, 4–7th segments spherical.

Pronotum usually weakly transverse, occasionally as long as wide; widest at, or somewhat before middle; sides evenly rounded, or pronotum weakly compressed in basal half. Disc with shallow median sulcus and dense, contiguous granules, separated by linear intervals; granules finely microsculptured, matte; setiferous puncture shifted on their inner side.

Elytra oblong-oval or oblong-ovate, with convex disc. Elytral base usually noticeably wider than pronotal base. Intervals of subequal width, odd-numbered intervals (including sutural interval) raised, with small, less than strial punctures, granules arranged in a single row; even-numbered intervals scarcely convex, with or without indistinct granules. Interspaces between strial punctures without distinct granules. Striae composed of large round punctures, their diameter equal to, or exceeding width of intervals.

Femora mutic. Outer margin of fore tibia straight, outer apical angle widely rounded. Second tarsal segment weakly transverse; claw-segment protruding beyond 3rd segment by length of the latter.

Elytra with distinct but usually sparse vestiture of semi-erect setae and recumbent oval gray scales,



Figs. 32–43. Right hind tibia (32–37), right fore tibia (38–42), right antenna (43). (32, 42) Otiorhynchus oezbeki sp. n. [(32) female, (42) male]; (33, 41) O. quadratopunctatus Strl. [(33) female, Mt. Lasil'; (41) male, Mt. Sakornia]; (35) O. granulatostriatus khetagi subsp. n. (male); (36) O. belousovi sp. n. (male); (37) O. tatyanae sp. n. (male); (38, 39) O. maganicus sp. n. [(38) male, (39) female]; (43) O. kataevi sp. n.

mostly arranged in small macules; occasionally vestiture dense and macules merging.

Males unknown.

Body length 4.8–6, width 2.3–2.9 mm.

Comparative notes. Closest to *O. tshistyakovae* sp. n., differing from this species in the wider elytral

striae with diameter of punctures in them exceeding width of intervals; dorsal vestiture grayish brown without metallic shine; 1st segment of antennal funicle shorter than 2nd.

Material. Caucasus Major. Russia. Karachai-Cherkessia: Bol'shaya Laba basin, W slope of Arkasara Range, 1900–2000 m, 1.IX.1992 (V.Yu. Savitskii and

M.Yu. Savitskii), 4 specimens; as above, but 18.VI. 1997 (I.V. Shokhin), 2 specimens; as above, but 20-27.VI.1997 (Narkevich, Ivliev), 3 specimens; trail from Chegetchat Pass to Arkhyz, 2900-2800 m, 8.VII.1994 (Davidian), 1 specimen; Mt. Kursho, Leningradets Pass, upper reaches of Dzhampakol River, 31.VII.1988 (Davidian), 2 specimens; Teberdinskii Nature Reserve, Mukhu River gorge, 29.VI.1995 (Ivliev), 2 specimens; as above, but 18.VI.1997 (Yu.G. Arzanov), 5 specimens; Daut River gorge, 20.VII.1992 (Yu.G. Arzanov), 1 specimen; Epchik Pass, 3000 m, VI-VII.1989 (Yu.G. Arzanov), 3 specimens; S slope of Musat-Cheri Range, upper reaches of Dombai-Ul'gen River, 24-26.VI.1997 (Yu.G. Arzanov), 1 specimen; Badukskii Pass, 18.VIII.1998 (D.G. Kasatkin), 1 specimen; Kabardino-Balkaria: Upper Balkaria, upper reaches of Rtsyvashka, Dash Pass, 2800-3500 m, 28.V.1992 (Davidian), 2 specimens; Skalistyi Range, W of Mt. Lkha, 2500 m, 13.VII.1999 (Davidian), 1 specimen; Sugan-Su Canyon, 16-19.VII.1999 (A.V. Barkalov); Adyl-Su Canyon, 3000 m, 2.V.1986 (Kravets), 2 specimens; North Ossetia: trail from Komaki Vill. to Mamisonskii Pass, 11.VII.1981 (S.K. Alekseev), 2 specimens; Mamisonskii Pass, 1500-2200 m, 23.VII.1985 (I.A. Belousov), 1 specimen; as above, 12.VII.1997 (Yu.G. Arzanov), 2 specimens; upper section of Tseiskoie Canyon, subalpine meadow below Uilpatinskii Glacier, 2500 m, under stone, 7.VII.1984 (S.K. Alekseev), 1 specimen; Tseiskoie Canyon, 18.VII-31.VIII.1982 (S.K. Alekseev), 11 specimen; Krestovyi Pass, 2400 m, 4.VI.1982 (S.I. Golovach), 2 specimens; Bokovoi Range, Mt. Tepli, L'iadon River sources, 2600-3000 m, 11.VII. 1997 (Davidian), 1 specimen; Zaramag Vill., 11.VII. 1997, 10.VII.1999 (Yu.G. Arzanov), 2 specimens; upper reaches of Adaikomdon River, 10-13.VII.1997 (Yu.G. Arzanov), 5 specimens; Daghestan: Kodorskii Pass from Georgia to Daghestan, 25.VIII.1984 (Davidian), 6 specimens; Bogosskii Range, E slopes of Addala-Shukhgel'meer massif, 2900-3000 m, 3.VII.1997 (V.Yu. Savitskii and M.Yu. Savitskii), 3 specimens; as above, but S slopes, 4.VII.1997 (V.Yu. Savitskii and M.Yu. Savitskii), 1 specimen; Nukatl' Range, Nukatlinskoe Kara-Koisu River sources, 2500-2900 m, 6.X.1986 (I.A. Belousov), 18 specimens; Kurushskii Pass, alpine zone, 25.VIII.1986 (Davidian), 1 specimen; Agul'skii Distr. above Burshag Vill., 28.IV.1989 (Davidian), 3 specimens; as above, S slope of Mt. Dzhufudag, 2700 m, 29.IV.1989 (Davidian), 1 specimen; S slope of Samurskii Range, 26.VII.1997 (D.G. Kasatkin), 1 specimen. Azerbaijan. Belokanskii

Distr., upper reaches of Filischai River, subalpine zone, 22.VI.1984 (Davidian), 1 specimen; Teneroz (Tinovroso) Pass across Glavnyi Kavkazskii Range (=the Great Caucasus) from Azerbaijan to Daghestan via Belokany, 24.VI.1984 (Davidian), 7 specimens; Zakataly Distr., trail from Great Caucasus to Katekh Vill., alpine zone, 23–25.IX.1987 (Davidian), 36 specimens; Kutkashen, upper reaches of Damir-Aparanchai River, 1400-2500 m, 13-15.VII.1994 (V.Yu. Savitskii and M.Yu. Savitskii), 2 specimens. Georgia. Abkhazia: Abkhazskii Range, Dzhampal River basin, 1500-1600 m, 7.VI.1989 (I.A. Belousov), 2 specimens; upper reaches of Shoudidi River, 11.VI.1989 (A.S. Zamotailov), 1 specimen; Akiba Range, Mt. Apshara slopes, subalpine and alpine zones, 3.V. 1989 (I.A. Belousov), 1 specimen; Guagua Range, trail from Gua-gua (Gogua) Pass to Sakeni River valley, 2700 m, 3.VIII.1988 (Davidian), 2 specimens; Shtavler Range, Tita Pass to Nakra, 2800 m, 7.VIII.1988 (Davidian), 3 specimens; Mingrelia: trail from Mt. Tsekuri to Khaledula River, 3000-2200 m, 16.VII.1990 (Davidian), 8 specimens; Askhi Plateau, above 2400 m, 13.VII.1990 (Davidian), 1 specimen; Mingrel'skii Range near Tekhurish-Dudi Pass, 2600 m, 2.VII.1989 (A.G. Koval'), 1 specimen; upper reaches of Tekhuri River, 2000 m, 5.VII.1989 (A.G. Koval'), 2 specimens; Svanetia: S slope of Becho Pass, 2000-2900 m, 22–23.VII.1990 (Davidian), 28 specimens; NE of Mestia City, S spurs of Mt. Svetgar, alpine meadows, 10.VIII.1988 (Davidian), 7 specimens; Svanetskii Range: Latparskii Pass, 2200 m, 12–13.VIII. 1988 (Davidian), 20 specimens; NW spurs of Laila Mt., north-facing slope, alpine zone, 20.VII.1990 (Davidian), 4 specimens; 10-15 km E of Mt. Lasil', 2700 m, 14.VIII.1988 (Davidian), 3 specimens; Tskhenistskali River sources, Lasil' Mt., alpine zone, 15.VIII.1988 (Davidian), 1 specimen; Lechkhumskii Range S of Chekhureshi Vill., 2800 m, 26.VII.1985 (I.A. Belousov), 2 specimens; as above, N of Ambrolauri, 22. VII.1985 (I.A. Belousov), 1 specimen; South Ossetia, Rachinskii Range, Mt. Lebeurismta, 14-20.VIII.1987 (Davidian), 2 specimens. The Lesser Caucasus, Armenia, Sevanskii (Shakhdagskii) Range, Mt. Godzhadag, 27–28.VIII.1984 (Davidian), 6 specimens.

This species has the widest distribution in the mountains of the Caucasus Major and the Lesser Caucasus within the group; in different parts of its range it co-occurs with *O. tshistyakovae* sp. n., *O. dvaleticus* sp. n., *O. belousovi* sp. n., *O. quadratopunctatus*, *O. titae* sp. n., *O. svetgaricus* sp. n., and *O. granulatostriatus*.

Otiorhynchus (Otismotilus) tshistyakovae Davidian et Yunakov, sp. n. (Figs. 10, 108)

Description. Rostrum as long as wide; at pterygia, 1.23–1.33 times as wide as in narrowest point. Rostral dorsum flattened, with well-pronounced median sulcus and longitudinal rugosity obscuring median carina. Eyes flattened, with posterior margin weakly protruding from head outline.

Antennae slender; scape nearly straight, gradually and very weakly widening apically; 2nd funicular segment as long as 1st, noticeably longer than wide; 3rd–7th segments rounded.

Pronotum weakly transverse, rounded at sides, widest near middle. Disc scarcely convex, with indistinct median sulcus and moderately dense fine, weakly shining, pupillate granules; interspaces between granules about half as wide as granule diameter, with fine undulately striate microsculpture.

Elytra oblong-ovate in male, wider in female; sides noticeably rounded in basal 1/5. Disc more or less flattened. Punctures in elytral striae large, clearly outlined. Striae about as wide as intervals. Odd-numbered intervals, except sutural one, somewhat raised above the level of even-numbered intervals, more strongly so in basal 2/3, and bearing rows of very small granules; even-numbered intervals flattened.

Legs slender, femora mutic; fore tibia straight, with nearly rectangular outer apical angle; tibiae and tarsi reddish. In the single male available, inner edge of middle and hind tibiae shallowly emarginate in apical part, inner apical angle dentiform produced. Second tarsal segment as long as wide; claw-segment extending beyond 3rd segment by about the length of the latter.

Vestiture dense but not contiguous, composed of oval metallic-green and golden scales. Sides of pronotal disc with more or less distinct stripes of scales; elytra with diffuse spots. Odd-numbered intervals of elytra with 1 or 2 confused rows of subrecumbent elongate setae; length of setae subequal to width of strial punctures. Even-numbered intervals usually without conspicuous setae. Scape of antennae and legs covered with fine setae, femora also with oval scales forming ill-defined ring on hind femur.

Comparative notes. This species is the closest to *O. chaudoiri* differing from it in the denser metallicshining scaling, straight scape of antennae, absence of median sulcus on pronotal disc, and flattened disc of elytra.

Body length 4.5–4.9, width, 2.2–2.5 mm; in holotype, 4.5 and 2.2 mm, respectively.

Material. Georgia. Mingrel'skii Range, Lower Svanetia, Mt. Tsekuri, 2300–2700 m, 19.VIII.1988 (Davidian), 8 specimens, including male holotype; as above, but 2500 m, 20.VIII.1988 (Davidian), 1 specimen.

Notes. In addition to the type series, two females labeled "Mingrel'skii Range, Khobi env., 6–7.VI. 1988 (I.A. Belousov)" have been examined. They differ from the type series in the larger size (body length 5.4–5.5, width, 2.7–2.8 mm) and pale brown nonmetallic vestiture.

Etymology. The species is named for A.K. Chistyakova.

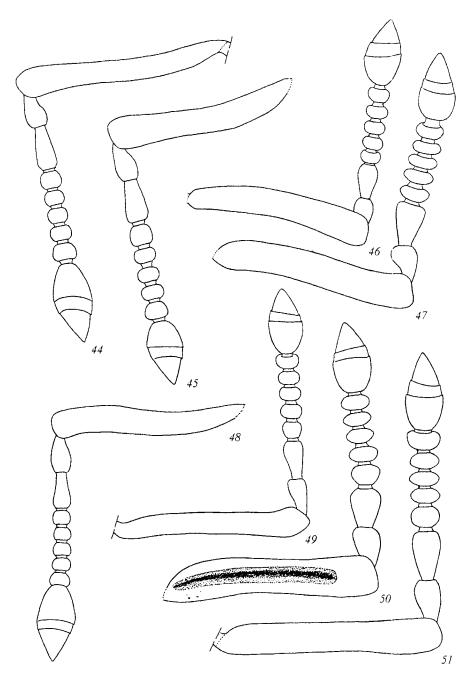
Otiorhynchus (Otismotilus) dvaleticus Davidian et Yunakov, sp. n. (Figs. 8, 22, 59, 72, 75, 105)

Description. Rostrum as long as, or slightly longer than wide; at pterygia, 1.12–1.21 times as wide as in narrowest point. Rostral dorsum weakly convex, longitudinally rugose, without distinct median sulcus, but with obsolete fine median carina. Eyes flattened, usually not protruding beyond head contour, with depressed anterior part and weakly convex posterior part.

Antennae slender; scape scarcely curved, weakly and gradually widening apically. First segment of funicle twice as long as wide, somewhat shorter than second segment; 3rd segment weakly oblong, 4–7th segments subspherical. Club spindle-shaped.

Pronotum more or less transverse, widest noticeably distal to the middle, weakly compressed in basal half, usually without median sulcus or, as an exception, with vestigial one in the form of shallow longitudinal depression having no granules. Disc covered with contiguous matte, pupillate granules with fine irregular microsculpture; interspaces between granules linear.

Elytra oblong-oval; in male, with sides usually parallel in middle part and widely rounded in basal 1/5. At base, elytra about as wide as pronotum. Disc flattened. Odd-numbered intervals almost as wide as even-numbered intervals, considerably (nearly twice as wide) wider than the narrow striae; odd-numbered intervals noticeably raised, even-numbered ones flat. Granules on all intervals arranged in more or less regular rows; as wide as strial punctures on odd-numbered intervals, half as wide on even-numbered intervals.



Figs. 44–51. Right antenna. (44) Otiorhynchus diabolicus Rtt. (male); (45) O. svetgaricus sp. n. (male); (46) O. leventi sp. n. (male); (47) O. depressus Strl. (female, Mt. Gomis-mta); (48) O. alexeevi Korotyaev et Davidian, sp. n. (female, Turkey); (49) O. granulatostriatus granulatostriatus Strl. (female); (50) O. oezbeki sp. n. (female); (51) O. granulatostriatus mamisonicus subsp. n. (male).

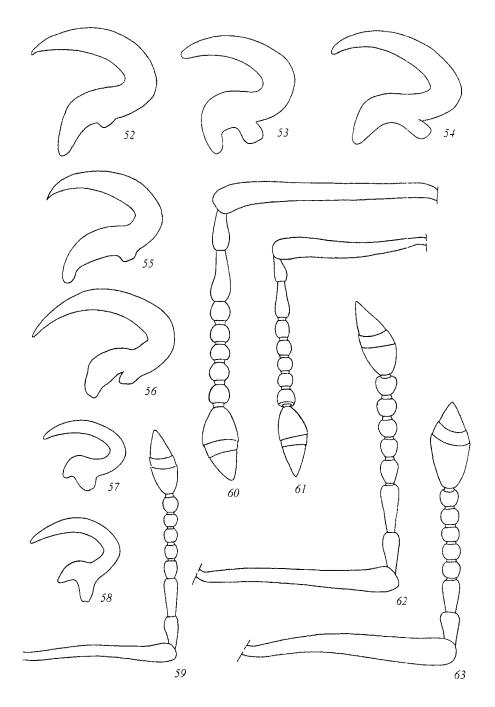
Legs slender and long, slightly differing between sexes. Femora mutic. Outer margin of fore tibia straight, outer apical angle widely rounded. Dent on inner apical angle of hind tibia larger in male. Second tarsal segment as long as wide, claw-segment protruding beyond lobes of 3rd segment by the length of the latter.

Vestiture composed only of setae. Odd-numbered elytral intervals with rows of short subrecumbent setae

at least twice as long as wide. Even-numbered intervals appearing bare, without conspicuous rows of setae, with only minute recumbent setae visible at great magnification. Scape of antennae and legs with fine, long brown setae.

Aedeagus pointed apically.

Body length 4.3–6.1, width, 2.0–2.8 mm; in holotype, 5.4 and 2.4 mm, respectively.



Figs. 52–63. Spermatheca (52–58) and right antenna (59–63). (52, 55, 56, 60) Otiorhynchus quadratopunctatus Strl. (bisexual form); (53, 54) O. depressus Strl.; (57) O. alexeevi Korotyaev et Davidian, sp. n. (Turkey); (58) O. leventi sp. n.; (59) O. dvaleticus sp. n. (female); (61) O. chaudoiri Hochh.; (62) O. granulatostriatus ronchettinus Rtt. (male); (63) O. aibgae sp. n. (male).

Comparative notes. The new species differs from the *O. belousovi* sp. n. co-occurring with it in the larger body size, less narrowing apically rostrum, and depressed anal ventrite in female. From *O. chaudoiri*, the new species differs in the absence of median sulcus on pronotum, flattened disc and narrow striae of elytra, and sparser pubescence. In the structure of

head, the new species is similar to *O. quadratopunctatus* Strl.

Material. Georgia. South Ossetia: "Ossetia mer., mt. Alchasenda, 2000 m, 29.VII–1.VIII.1928 (A.V. Bogatshev)," 4 specimens; "Ossetia, Sau Choch (N.S. Branskyj)," 1 specimen; Dvaletskii Rge., Mt. Khalatsa, 2500–3000 m, 22.VIII.1987 (Davidian),

79 specimens, including male holotype. Russia. North Ossetia, Caucasus Major, Kozskii Pass, 2800 m, 10.VIII.2001 (A.G. Koval'), 3 specimens.

Otiorhynchus (Otismotilus) belousovi Davidian et Yunakov, sp. n. (Figs. 9, 36, 106)

Description. Rostrum as long as wide, 1.25–1.33 times as wide at pterygia as in narrowest part. Rostral dorsum flat, without median sulcus, usually with distinct median carina, with pronounced longitudinally rugose sculpture. Eyes weakly convex, noticeably protruding beyond head contour.

Pronotum weakly transverse, widest somewhat before middle, with sides almost regularly rounded. Disc without median sulcus, with weak median carina and dense contiguous matte, pupillate granules separated by linear interspaces.

Elytra oval in male, oblong-ovate in female, with sides convex in basal 1/5; at base, usually noticeably wider than pronotum. All intervals of equal width, noticeably wider than fine striae. Odd-numbered intervals weakly convex, each bearing single row of granules with diameter subequal to that of strial punctures; even-numbered intervals nearly flat, with half as large granules separated by their diameter or more. Strial punctures small, usually more or less clearly separated.

Legs stout, somewhat paler than body; femora mutic, usually darker than tibiae, thickened in male. Outer margin of fore tibia straight, outer apical angle obliquely rounded in male, widely rounded in female. In male, inner edge of middle and hind tibiae emarginate; hind tibia in addition with sharp keel near apex ending in small dent. Second tarsal segment weakly transverse; claw-segment protruding beyond 3rd segment by the length of the latter.

Elytral intervals sparsely clothed with very small light elongate scales; odd-numbered intervals also bearing rows of fine subrecumbent setae with length somewhat less than width of intervals; even-numbered intervals lacking such setae. Scape of antennae and legs with long, narrow, flattened setae.

Aedeagus pointed apically.

Body length 3.9–5.0, width, 1.7–2.5 mm; in holotype, 4.0 and 1.8 mm, respectively.

Comparative notes. The new species is related to *O. tatyanae* sp. n., differing from it in the more strongly convex eyes and pointed apex of aedeagus; in

addition, fore tibia in male is less strongly bent. From *O. dvaleticus* sp. n. it clearly differs in the structure of hind tibia in male and flat anal ventrite in female.

Material. Georgia. South Ossetia, Dvaletskii Range, Mt. Khalatsa, 2500–3000 m, 22.VIII.1987 (Davidian), 53 specimens, including male holotype.

Etymology. The species is named for I.A. Belousov.

Otiorhynchus (Otismotilus) tatyanae Davidian et Yunakov, sp. n. (Figs. 7, 37, 71, 107, 109)

Description. Rostrum as long as wide, 1.25–1.50 times as wide at pterygia as in narrowest part. Rostral dorsum flattened, without median sulcus, usually with distinct median carina and pronounced longitudinally rugose sculpture. Eyes nearly flat, with posterior margin weakly stepwise raised.

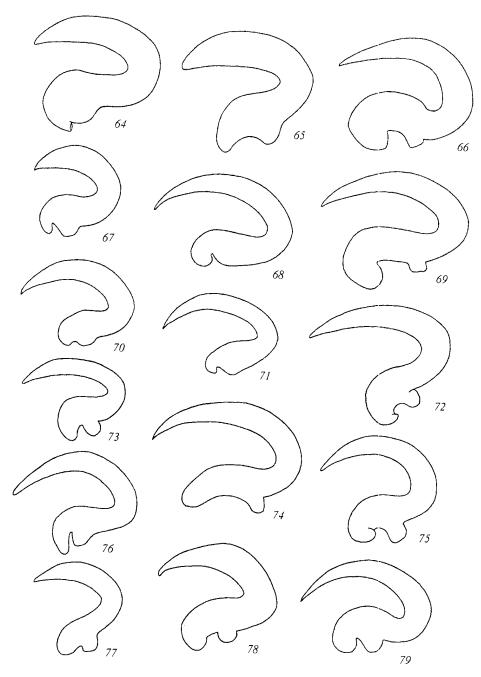
Antennae usually slender, reddish, lighter than body; scape almost straight, slightly evenly widening apically. First funicular segment oblong, somewhat shorter than second; 3rd and 4th segments rounded, 5–7th segments round or weakly transverse.

Pronotum as long as wide, widest slightly before middle, with sides almost regularly rounded. Disc without median sulcus, occasionally with weak median carina and dense contiguous shining pupillate granules separated by linear interspaces.

Elytra oval, more elongate in male, with sides in basal 1/5 rounded; at base, as wide as, or slightly wider than pronotum. All intervals of equal width, noticeably wider than fine striae. Odd-numbered intervals weakly convex, each bearing single row of granules with diameter subequal to that of strial punctures; evennumbered intervals nearly flat, with half as large granules separated by their diameter or more. Strial punctures small, inconspicuous due to complicated elytral sculpture.

Legs stout, reddish; femora mutic, in male thicker, than in female. Outer margin of fore tibia straight, with subrectangular outer apical angle in female; distinctly incurved in apical part in male. In male, outer edge of middle and hind tibiae emarginate; hind tibia in addition with sharp keel ending in small dent on innerapical angle. Second tarsal segment weakly transverse; claw-segment protruding beyond 3rd segment by slightly more than length of the latter.

Elytral vestiture consisting of moderately dense small narrow or wide grayish scales. Odd-numbered



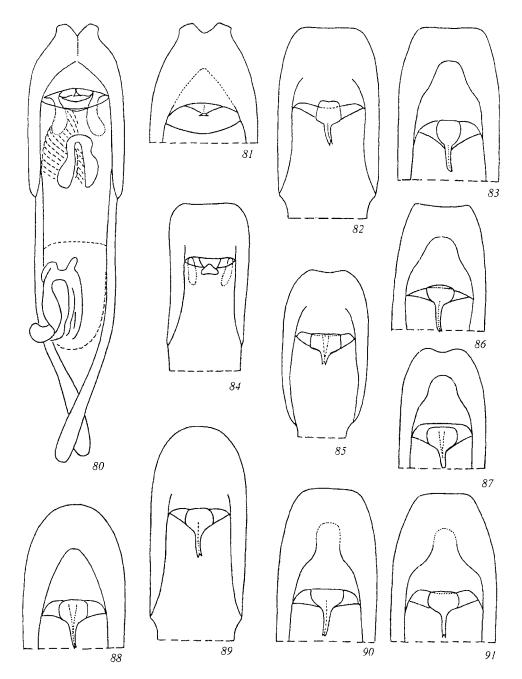
Figs. 64–79. Spermatheca. (64, 65) Otiorhynchus diabolicus Rtt.; (66, 69) O. granulatostriatus mamisonicus subsp. n.; (67) O. koenigi validiscapus Strl. (Otkhara Vill.); (68) O. granulatostriatus khetagi subsp. n.; (70) O. belousovi sp. n.; (71) O. tatyanae sp. n.; (72, 75) O. dvaleticus sp. n.; (73, 76) O. chaudoiri Hochh. [(73) North Ossetia, (76) Arkhyz]; (74) O. oezbeki sp. n.; (77) O. tshistyakovae sp. n.; (78, 79) O. granulatostriatus ronchettinus Rtt.

intervals bearing rows of reclinate setae with length subequal to width of intervals; even-numbered intervals with sparser setae not arranged in rows. Scape of antennae and legs with long, narrow, flattened setae.

Aedeagus narrowing apically and blunted at tip.

Body length 4.3–5.4; width 1.9–2.6 mm; in holotype, 4.7 and 2.1 mm, respectively.

Comparative notes. The new species is the most closely related to *O. belousovi* sp. n., differing from it in the more flattened eyes and blunted apex of the aedeagus. Male fore tibia is more incurved apically than in *O. belousovi* sp. n. and *O. dvaleticus* sp. n., and inner edge of hind tibia is noticeably emarginate before, and with sharp keel-shaped prominence near apex. In addition, *O. tatyanae* sp. n. differs from



Figs. 80–91. Aedeagus (80, 82, 84, 85, 89) and apex of aedeagus (81, 83, 86–88, 90, 91) dorsally. (80, 81) Otiorhynchus conspiciabilis Fald.: (82, 83, 86) O. granulatostriatus granulatostriatus Strl. [(82, 83) Mt. Teapli, (86) Mt. Kazbek]; (84) O. diabolicus Rtt. (Turkey, Zigana Pass); (85, 87) O. granulatostriatus khetagi subsp. n.; (88, 89) O. granulatostriatus ronchettinus Rtt.; (90, 91) O. granulatostriatus mamisonicus subsp. n.

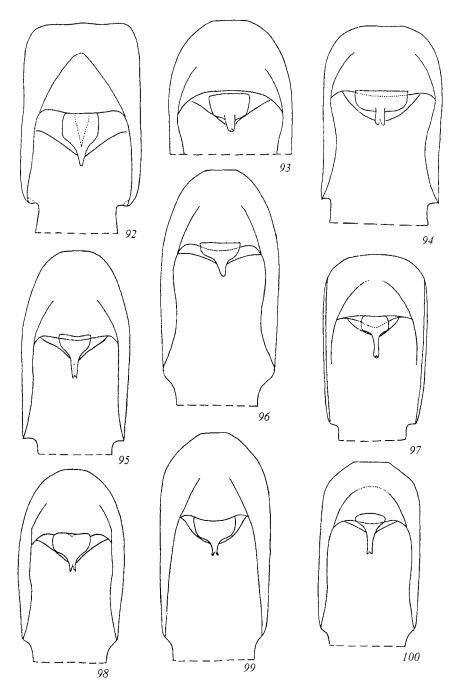
O. dvaleticus sp. n. in the absence of depression on anal ventrite in female.

Material. Georgia. South Ossetia, Rachinskii Range, Mt. Lebeurismta (=Dagerula), 17.VIII.1987 (Davidian), 28 specimens, including male holotype.

Etymology. The species is named for Tatyana Nikolaevna Yunakova.

Otiorhynchus (Otismotilus) svetgaricus Davidian et Yunakov, sp. n. (Figs. 11, 45, 97)

Rostrum as long as wide, its maximum to minimum width ratio 1.25–1.36. Dorsal surface of rostrum flattened, without median sulcus, usually with very fine median carina. Apical part of dorsum striate, sculpture of basal part concealed by vestiture. Eyes flat, not protruding beyond head contour.



Figs. 92–100. Aedeagus (92, 94–100) and apex of aedeagus (93) dorsally. (92) Otiorhynchus maganicus sp. n.; (93, 94) O. quadratopunctatus Strl.; (95) O. abashae sp. n.; (96) O. titae sp. n.; (97) O. svetgaricus sp. n.; (98) O. depressus Strl.; (99) O. oezbeki sp. n.; (100) O. madinae sp. n.

Antennae thick; scape scarcely curved, parallel-sided, sharply narrowing at base. Middle part of scape half as wide as rostral dorsum in narrowest part. First and second funicular segments of equal length, scarcely oblong; 3rd–7th segments noticeably transverse, club ovate.

Pronotum as long as wide or weakly transverse, widest slightly before middle. Disc scarcely convex,

without pronounced median sulcus, densely covered with small matte pupillate granules. Intervals between granules about half as wide as granules, with fine undulate microstriation.

Elytra oblong-oval, more or less flattened dorsally, rounded in basal 1/5. All intervals equally weakly convex, odd-numbered intervals occasionally slightly wider than even-numbered intervals. Granules on in-

tervals minute, visible only on denudated areas. Strial punctures large, distinctly separated; striae as wide as, or somewhat narrower than intervals.

Legs stout; femora mutic; fore tibia weakly but noticeably incurved apically, their outerapical angle roundly beveled. Inner edge of middle and hind tibiae weakly emarginate in apical half, innerapical angle of the tibiae angularly produced. Second tarsal segment scarcely transverse, claw-segment extending beyond 3rd segment approximately by the length of the latter.

Antennal scape densely covered with flattened setae, no scales present. Pronotal sides, in addition to setae, clothed with scales; disc usually with setae only. Elytra with dense broad-oval scales concealing integument. Odd-numbered intervals with single row of subrecumbent subparallel-sided setae about as long as strial punctures; setae on even-numbered intervals irregularly arranged and visible only on apical declivity of elytra. Punctures in striae bearing scales. Legs and antennal scape with elongate, somewhat raised recurved setae similar to those on elytra; hind femur with admixture of recumbent elongate scales forming no ring.

Aedeagus with widely rounded apex.

Body length 4.3–4.9, width, 1.9–2.4 mm; in holotype, 4.5 and 2.0 mm, respectively.

Comparative notes. This species is tentatively placed in the O. chaudoiri group, being similar to its members in the relatively small body size, setal arrangement on elytral intervals, and, to some extent, the structure of the head and antennae. The new species differs from other members of the O. chaudoiri group in the strongly thickened antennae with distinctly transverse 3rd-7th funicular segments and almost equally convex odd- and even-numbered intervals of elytra. In addition, O. svetgaricus differs from O. dvaleticus sp. n., O. belousovi sp. n., and O tatyanae sp. n. in the widely rounded apex of the aedeagus; and from O. madinae sp. n., it clearly differs in the almost uniformly weakly convex elytral intervals, incurved fore tibia, and absence of scaly rings on the femora.

Material. Georgia. Upper Svanetia, NE of Mestia City, S slope of Mt. Svetgar, alpine zone, 10.VIII.1988 (Davidian), 6 specimens, including male holotype.

The quadratopunctatus group

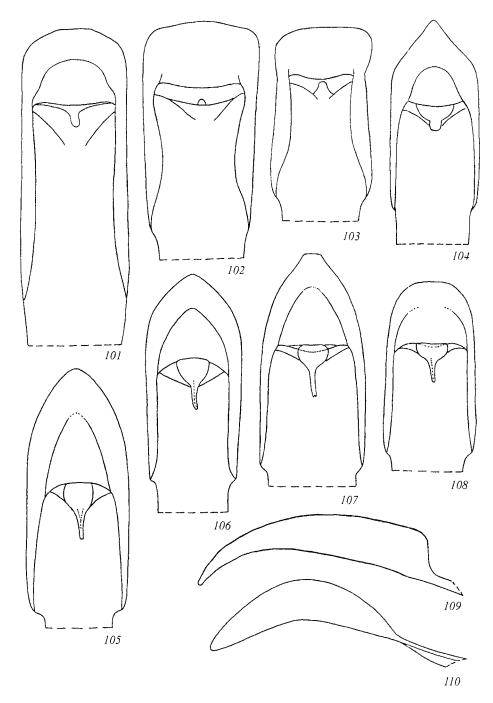
We include in this group 7 species most of which are distributed in the mountains of the Western Cauca-

sus south of the Great Caucasus Range. These species differ from the members of the *chaudoiri* group in the regular arrangement of setae on all elytral intervals and, to some extent, in the structure of the aedeagus. From the *granulatostriatus* group, they differ in the more or less dense dorsal vestiture and structure of the elytra with sharply different odd- and even-numbered intervals.

A Key to Species of the quadratopunctatus Group

- 1(10). Rostral dorsum in narrowest part 2.5–4.0 times as wide as middle part of antennal scape.
- 2(5). Scale-like setae on elytra wide, short, mostly about twice as long as wide.

- 5(2). Length of setae on elytra not more than 3.5 times their width.
- 6(7). Epistomal angles not projecting from head contour. Fore tibia incurved apically in both sexes. Inner margin of hind tibia not granulate. Odd-numbered intervals of elytra weakly keel-shaped. Each femur with light scaly ring. Aedeagus nearly truncate apically *O. maganicus* sp. n.
- 7(6). Epistomal angles sharp, noticeably projecting anteriorly. Fore tibia straight. Inner margin of hind tibia with distinct granules sitting at bases of hairs. Odd-numbered intervals of elytra weakly convex. Femora without light scaly rings, or ring present only on hind femur. Apex of aedeagus more or less rounded.



Figs. 101–110. Aedeagus, dorsal (101–108) and lateral view (109, 110). (101) Otiorhynchus kovali sp. n.; (102) O. koenigi validiscapus Strl. (Khuap Vill.); (103, 110) O. aibgae sp. n.; (104) O. leventi sp. n.; (105) O. dvaleticus sp. n.; (106) O. belousovi sp. n.; (107, 109) O. tatyanae sp. n.; (108) O. tshistyakovae sp. n.

- 10(1). Rostral dorsum in narrowest part no more than twice as wide as middle part of antennal scape.
- 11(12). Sides of elytra in basal 1/5 straight or shallowly concave. Maximum width of rostrum 1.50–1.67 times its minimum width. Epistomal angles in male horn-like projecting and slightly raised. Anal ventrite with sparse superficial pun-

12(11). Sides of elytra more or less convex near base. Maximum width of rostrum 1.21–1.41 times its minimum width. Epistomal angles weakly projecting anteriorly in male. Outer edge of hind tibia shallowly emarginate before apex. Anal

Otiorhynchus (Otismotilus) oezbeki Davidian et Yunakov, sp. n. (Figs. 14, 50, 74, 99)

Description. Rostrum strongly narrowing toward pterygia, mostly as long as, or slightly longer than wide; at pterygia, 1.50-1.67 times as wide as in narrowest part. Rostral dorsum nearly flat, in lateral view straight, usually with longitudinal depression, occasionally with fine median carina; surface coarsely punctate, rarely weakly rugose longitudinally. Epistomal angles in male horn-like projecting, pointed somewhat dorsally and laterally. Lateral margins of rostral dorsum obtusely cariniform, dorsum abruptly sloping to very steep sides. Eyes weakly convex, scarcely protruding beyond head contour. Antennae thick; scape nearly parallel-sided along its entire length, occasionally quadrate in cross-section, abruptly narrowing at base. Narrowest part of rostral dorsum less than twice as wide as middle part of antennal scape. First segment of funicle scarcely longer than wide, usually as long as second; 2nd segment mostly twice as long as the weakly transverse 3rd segment, 4–7th segments strongly transverse.

Pronotum weakly transverse, 1.15–1.25 times as wide as long, widest before middle. Disc strongly convex, densely covered with small, convex, weakly shining granules, with superficial median sulcus or without that. Base of pronotum as wide as elytral base.

Elytra oblong-oval, more or less flattened dorsally or weakly convex; sides in basal 1/5 straight or shallowly concave. All intervals equally weakly convex, as wide as, or slightly narrower than striae, all with a single row of uniform small granules much smaller than width of intervals. Strial punctures large, transverse-oval. Interspaces between strial punctures usually less than their diameter, each with minute granule much smaller than those on elytral intervals.

Median part of 1st ventrite in male stepwise raised over 2nd ventrite, 1st—4th ventrites densely covered with fine shining granules, anal ventrite nearly flat. In female, 1st ventrite almost flat, its median part leveling with 2nd ventrite; anal ventrite flat, without granulation, very finely punctate.

Legs slender; femora mutic; tibiae straight, their outer apical angle more or less beveled. Outer margin

of hind tibia straight, corbels not widening outward. Second tarsal segment more or less transverse, considerably narrower than 3rd; claw-segment extending beyond 3rd segment scarcely more than by the length of the latter.

Elytra with sparse uniform vestiture composed of elongate curved light gray or yellowish gray scales arranged in diffuse, merging in places macules. Granules on elytral intervals bearing fine short subrecumbent setae, which are noticeably darker than scales and weakly widening apically. Femora uniformly clothed with narrow, occasionally hair-like light gray recumbent setae.

Aedeagus widely rounded apically

Body length 6.2–7.2, width, 3.1–4.0 mm; in holotype, 6.4 and 3.2 mm, respectively.

Comparative notes. This species is most closely related to *O. depressus*, differing in the larger body size, structure of the head, ventrites, and tibiae, as well as in the sparser dorsal vestiture. From *O. diabolicus* the new species differs in the horn-shaped projecting epistomal angles, usually coarse punctation of the rostral dorsum, shallow median sulcus on pronotum, smaller granules on elytral intervals, and mutic femora.

Material. NE Turkey. Mt. Karçal-Dag: 2300–2500 m, 27.VI.1998 (Davidian), 33 specimens; as above, but SW slope, 2800–2300 m, 28.VI.1998 (Davidian), 21 specimens; SE slope, 3000–3200 m, 29.VI.1998 (Davidian), 18 specimens, including male holotype; as above, but NE slope, 2500–3000 m, 30.VI.1998 (Davidian), 60 specimens.

Etymology. The species is named for Professor H. Özbek, Ataturk University, Erzurum, Turkey.

Otiorhynchus (Otismotilus) depressus Stierlin, 1875 (Figs. 13, 47, 53, 54, 98)

Stierlin, 1875 : 483; 1883 : 55; Reitter, 1913 : 119 (incertae sedis); Magnano, 1998 : 455.

The lectotype has been designated by Magnano (1998). It is a male labeled "?Caucas. Heberh.," "depressus sp. n.," "coll. Kraatz," "Holotypus" (red), "coll. DEI Eberswalde," "Otiorhynchus depressus Stierlin, Lectotypus, Des. L. Magnano 1995." We remounted the originally pinned specimen on a card, with venter detached and placed on the same card. The genitalia in a microvial with glycerine are pinned together with the specimen. The lectotype does not dif-

fer significantly from the specimens from Mt. Gomismta; the dorsum of rostrum in it is only slightly convex, vestiture uniform, not spotted, scales without metallic shine.

Description. Rostrum as long as, or slightly shorter than wide, 1.21-1.41 times as wide at pterygia as in narrowest part, twice as wide there as antennal scape. Sides with fine longitudinal striae running in parallel to anterior margin of eye. Dorsal surface of rostrum with coarse and dense punctation, shallowly depressed along midline, or, occasionally, flat; with fine median carina. Lateral margins of dorsum finely raised in the form of keel. Epistomal angles in male moderately projecting. Frons longitudinally striate. Eyes flattened, with posterior margins slightly raised above head surface. Antennae thick; scape subparallel-sided along its entire length, sharply narrowing at base, somewhat facetted. First segment of antennal funicle weakly oblong, as long as, or somewhat longer than 2nd; 2nd segment more than twice as long as 3rd; 3rd-7th segments strongly transverse, disc-shaped.

Pronotum weakly transverse, widest somewhat before middle, weakly compressed in basal half. Disc scarcely or, less frequently, noticeably convex, more or less densely covered with fine granules ill-defined among the delicate irregular sculpture. Median sulcus linear, superficial, occasionally with finest obsolete carina along midline.

Elytra oval, with evenly convex or flattened disc; as wide at base as pronotum, with sides widely rounded in basal 1/5. All elytral intervals of same width, as wide as striae, weakly convex; odd-numbered intervals somewhat more strongly convex than even-numbered intervals. Each interval with a single row of minute granules concealed by vestiture; granules somewhat smaller than those on pronotum and several times smaller than punctures in elytral striae.

First to fourth ventrites densely and finely granulate. First ventrite in male with wide shallow depression; anal ventrite more or less convex in basal half, shallowly depressed medially before apex. In female, 1st ventrite with wide triangular depression in apical part, delimited by smooth convexity at base and gradually vanishing to base of 2nd ventrite; anal ventrite flat, with fine apical margination.

Legs stout; femora mutic; fore tibia in female straight, with outer apical angle nearly rectangular; occasionally tibia scarcely widened outwards at apex. In male, fore tibia usually straight, less frequently scarcely incurved apically. Outer face of hind tibia emarginate before apex, corbels noticeably widened outward. Claw-segment extending beyond 3rd segment somewhat less than by the length of the latter.

Vestiture of oval scales very dense but not imbricate. Dark brown scales forming background, on which spots of light scales clearly visible and occasionally arranged in transverse bands; rarely background formed by light scales. Intervals of elytra with 1 or 2 irregular rows of fine, short, subrecumbent dark setae visible in lateral view. Antennal scape densely clothed with elongate setae of the same kind as those on elytra and femora. On femora, oval scales present in addition to setae, occasionally forming ill-defined ring on hind femur.

Body length 5.3–7.1, width, 2.7–3.7 mm.

Comparative notes. The species is the most closely related to *O. abashae* sp. n., differing in the cariniform lateral margins or rostral dorsum, thick antennae with disc-shaped 3rd–7th funicular segments, and structure of 1st ventrite in female. From *O. oezbeki* sp. n., *O. depressus* differs in the smaller body size, structure of the head, tibiae, ventrites, and dense vestiture.

Material. Georgia. Adzharia, Meskhetskii Range: Mt. Gomis-mta (=Gomista), 10.VIII.1987 (Davidian), 61 specimens; Mt. Sakornia, 12.VIII.1987 (Davidian), 19 specimens; Mt. Tagunauri, above timberline, 27–30.VI.2000 (M.V. Nabozhenko), 4 specimens.

Otiorhynchus (Otismotilus) quadratopunctatus Stierlin, 1884 (Figs. 15, 33, 41, 52, 55, 56, 60, 93, 94)

Stierlin, 1884: 38. Reitter, 1913: 105.—foveolatostriatus Stierlin, 1896: 326; Reitter, 1913: 96.—luridus Stierlin, 1893: 57; Lona, 1936: 73.

Here, we designate lectotype of *O. quadratopunctatus*, a female labeled "Kaukas, Leder" (printed), "Kaukasus, Leder Reitter" (printed), "Syntypus" (red, printed), "coll. Stierlin" (printed), "*O. quadratopunctatus* Stl." (handwritten), "coll. DEI Eberswalde" (printed). The club and two apical segments of the funicle of right antenna are missing. A paralectotype female from E. Reitter's collection in Budapest bears labels "Kaukasus Swanetien Leder, Reitter" (printed), "*O. quadratopunctatus* Stierl. Type" (handwritten), "66 St.," "coll. Reitter," "Holotypus *Otiorhynchus quadro-punctatus* Stierlin, 1884" (museum label with red margins, species name misspelled. The paralectotype had been pinned; we remounted it on a card, the genitalia in a microvial with glycerine are pinned together

with the specimen. Length of fore tibia of this specimen is 2.21 times width of rostrum in narrowest part.

O. foveolatostriatus was described from material collected in Abkhazia by C. Rost. As lectotype, we designate here a female labeled "foveolatostriatus Strl., Abhasia, Rost" (handwritten), "Syntypus" (red, printed), "coll. L. v. Heyden, DEI Eberswalde" (printed). The specimen is in good condition except that the right hind tibia and tarsus are missing; we remounted it on a card. The paralectotype, a female, is provided with the following labels: "Abchasia, Rost," "coll. Stierlin" (handwritten); "O. foveolatostriatus Str." (handwritten), "Syntypus" (red, printed), "coll. DEI Eberswalde"(printed). Right hind leg, club and three apical funicular segments of left antenna are missing. Both the examined specimens belong to the parthenogenetic form of O. quadratopunctatus, which is distributed in alpine zone of eastern Abkhazia and Kabardino-Balkaria along the Great Caucasus Range.

O. luridus was described from material received from L. von Heyden and collected at the Latparskii Pass in Svanetian Range. Reitter (1913) considered O. luridus a variety of O. quadratopunctatus and placed it correctly in the Otismotilus species group. As lectotype, designate we here a female labeled "Latpari pass, Swanetia, Dieck" (handwritten), "135 Str." (printed), "luridus Strl. orig." (handwritten), "Daniel vid." (handwritten), "Syntypus" (red, printed), "coll. L. v. Heyden, DEI Eberswalde" (printed). A paralectotype, another female, is provided with labels "Swanetien" (handwritten), "coll. Stierlin" (printed), "O. luridus Stl." (handwritten), "Syntypus" (red, printed), "coll. DEI Eberswalde" (printed). The paralectotype lacks both fore and right middle tarsi. Both type specimens belong to the bisexual form of O. quadratopunctatus.

Description. Rostrum as long as, or somewhat longer than wide; in widest part, 1.18–1.31 times as wide as in narrowest part. Epistomal angles weakly but noticeably protruding beyond head contour. Rostral dorsum convex, with obtusely cariniform lateral margins; along midline depressed and bearing fine, occasionally obsolete carina. In the parthenogenetic form, dorsum scarcely convex, shallowly depressed along midline; when lateral margins weakly raised, median carina well pronounced. Surface coarsely punctate. Eyes flat, not protruding beyond head contour.

Antennae slender, scape weakly and evenly widening apically. First segment of antennal funicle elon-

gate, twice as long as wide, as long as, or slightly shorter than second segment; 3rd-7th segments mostly as long as wide, all about half as long as 2nd segment.

Pronotum transverse, widest slightly before middle, evenly rounded at sides; in male, scarcely compressed in basal half. Disc regularly convex, finely and moderately densely granulate.

Elytra oval, with flattened or weakly convex disc; sides widely rounded in basal 1/5. Even-numbered intervals as wide as odd-numbered intervals, all weakly convex. Striae formed by large, clearly separated punctures as wide as, or slightly narrower than intervals. Granules on intervals fine and sparse, often obsolete, arranged in a single row, similarly to those in *O. abashae* sp. n.

First to fourth ventrites densely covered with fine shining granules. Median part of first and second ventrites lying in the same plane plain. Anal ventrite coarsely and densely punctate, with shallow depression near apex.

Legs slender, femora mutic; fore tibia noticeably widened outward apically. Outer edge of hind tibia emarginate before apex. Length of fore tibia 2.03–2.36 times minimum width of rostrum. Second tarsal segment triangular, as long as wide; claw-segment protruding beyond 3rd segment by 1.2 length of the latter.

Elytra uniformly covered with small, more or less elongate, pointed and larger gray scales usually forming light spotted pattern; less frequently no spots present. Setae on elytra short and narrow, recumbent or subrecumbent. Antennal scape and femora clothed with fine dark setae. Specimens from Guagua Range differing in the denser metallic-shining vestiture dominated by greenish oval scales and in the presence of scales on femora.

Body length 5.8–8.8, width, 2.75–4.35 mm.

Comparative notes. This species is most closely related to *O. abashae* sp. n., from which it differs in the usually larger size and greater ratio of the length of fore tibia to minimum width of rostrum. From *O. akibae* sp. n. this species clearly differs in the structure of the head, usually weakly convex odd-numbered intervals of elytra, and more projecting epistomal angles.

Material. Russia. Kabardino-Balkaria: Baksan River valley, Adyrsu River basin, Koiavganaush Pass, 2700 m, 16–17.VII.1999 (Davidian), 9 specimens;

upper section of the Chegem Canyon, 2500-2700 m, 3.VIII.1998 (Brekhov), 2 specimens Georgia. Abkhazia: Guagua (Gogua) Range, Guagua Pass, trail to Sakeni River, 2700 m, 3.VIII.1988 (Davidian), 19 specimens; Kodorskii Range, Mt. Apchikva, subalpine zone, 28.VI-15.VIII.1986 (A.G. Koval'), 1 specimen; Mingrelia, Mingrel'skii Range: 17.VIII.1990 (A.G. Koval'), 3 specimens; trail from Mt. Tsekuri to Khaledula River, 3000-2200 m, 16.VII.1990 (Davidian), 1 specimen; Svanetia, Svanetskii Range, Latparskii Pass, watershed, 13.VIII.1988 (Davidian), 3 specimens; 15 km E of Mt. Lasil', 2700 m, 14.VIII.1988 (Davidian), 34 specimens; Mt. Lasil', sources of Tskhenistskali River, alpine zone, 15.VIII.1988 (Davidian), 93 specimens; sources of Khaledula River, 29.VII. 1985 (I.A. Belousov), 1 specimen; S slopes of Mt. Laila, above 2700 m, 19.VII.1990 (Davidian), 4 specimens; NE of Mestia City, S slope of Mt. Svetgar, alpine zone, 9-10.VIII.1988 (Davidian), 28 specimens.

In addition to *O. chaudoiri*, this is the only species in the subgenus *Otismotilus* for which parthenogenetic populations are known. The bisexual form of *O. quadratopunctatus* is known only from Svanetskii Range.

Otiorhynchus (Otismotilus) abashae Davidian et Yunakov, sp. n. (Figs. 24, 95)

Description. Rostrum weakly transverse or as long as wide, in widest place 1.17–1.29 times as wide as in the narrowest one. Dorsum somewhat depressed along midline, occasionally with very fine, linear median carina; punctation coarse, punctures occasionally merging in short striae extending to frons. Lateral margins of dorsum more or less raised obtusely cariniformly. Epistomal angles weakly, but noticeably protruding beyond rostrum outline. Eyes weakly convex, usually weakly protruding beyond head contour.

Antennae slender; scape scarcely bent, mostly hardly widening apically, noticeably narrower than fore tibia. First and second funicular segments of subequal length, third segment about half as long as 2nd one; 3rd–7th segments round or weakly transverse; club oyate.

Pronotum weakly transverse, widest somewhat before middle, with widely rounded sides and very weakly convex disc; disc with obsolete median sulcus, covered with fine, non-shining granules. At base, pronotum as wide as elytra.

Elytra oval, with weakly convex or flattened disc and widely rounded in basal 1/5 sides. All intervals of equal width, about as wide as, or slightly narrower than strial punctures, weakly convex; odd-numbered intervals scarcely more raised than even-numbered ones. All intervals with single row of small granules 0.5–0.7 times the size of granules on pronotum.

First to fourth ventrites densely covered with fine shining granules, anal ventrite coarsely punctate. In male, 1st and base of 2nd ventrites widely shallowly depressed; anal ventrite swollen medially, with foveiform depression before apex. Anal ventrite in female flat, with weak margination along apex.

Legs stout, femora mutic. Fore tibia with straight outer margin and widely rounded outer apical angle. Outer edge of hind tibia emarginate before apex. Second tarsal segment more or less transverse; claw-segment protruding from lobes of 3rd segment by 1.2 length of the latter.

Vestiture of elytra moderately dense, with small, occasionally merging spots of light oval scales. Subrecumbent setae on elytral intervals uniform, fine and short, mostly inconspicuous. Scape of antennae with fine, elongate, subrecumbent, acuminate brown setae. Femora with sparse scales, occasionally forming vague ring on hind femur.

Body length 4.9–7.1, width, 2.80–3.75 mm; in holotype, 5.7 and 3.3 mm, respectively.

Comparative notes. The new species is closely related to *O. depressus*, differing in the smoothened in basal part lateral margins of rostral dorsum and finer antennae with round or weakly transverse 3rd–7th funicular segments; 1st ventrite in female very shallowly depressed in apical part and lacking transverse swelling along basal margin. From *O. quadratopunctatus* the new species differs in the smaller (1.59–1.91) ratio of length of fore tibia to minimum width of rostrum.

Material. Georgia. Mingrelia: "Ms. Aschi, Prov. Kutais, 2.VII.1911" (=Askhi Plateau), 4 specimens; Askhi Plateau: 1000–2000 m, 11.VII.1990 (Davidian), 1 specimen; 2000–2400 m, 12.VII.1990 (Davidian), 19 specimens, including male holotype; above 2400 m, 13.VII.1990 (Davidian), 32 specimens; Lower Svanetia: "Svanetia inf., jug. Natachtaš (Natakhtash Pass, Lechkhumskii Range), 14.VII.1911," 1 specimen.

In addition to the material listed, there is a series of specimens from upper sections of the Tekhuri and Magana Rivers, similar to *O. abashae* sp. n. in the structure of the antennae, ventrites, and spermatheca,

but differing in the structure of the head, legs, and proportions of body. This series requires further examination.

Otiorhynchus (Otismotilus) maganicus Davidian et Yunakov, sp. n. (Figs. 18, 38, 39, 92)

Description. Rostrum as long as, or somewhat longer than wide; at pterygia, 1.25–1.33 times as wide as in narrowest part. Dorsum flattened, with shallow median depression and fine carina along midline; sides weakly raised, surface longitudinally striate, with rows of punctures at lateral margins. Epistomal angles not protruding. Eyes weakly convex, flattened, only their posterior margin somewhat protruding beyond head contour.

Antennae not swollen; scape scarcely bent, gradually and weakly widening apically; 1st and 2nd funicular segments of equal length, almost twice as long as wide; 3rd–7th segments subspherical.

Pronotum weakly transverse, mostly weakly convex on sides, widest slightly before middle, occasionally somewhat compressed in basal half. Disc weakly convex, usually with shallow median sulcus, densely covered with medium-sized matte granules with fine punctate microsculpture and setiferous apical point.

Elytra oval, more elongate in male; sides weakly convex in middle part, rounded in basal 1/5; at base, noticeably wider than pronotum. Intervals with single row of fine granules one-fourth to one-third as large as strial punctures; granules on sides of elytra conical. Odd-numbered intervals weakly keel-shaped, more strongly raised at base over even-numbered intervals; the latter weakly convex. Seventh interval keel-shaped, but less convex than in *O. titae* sp. n. Striae mostly wider than intervals; strial punctures large, funnel-shaped, with ill-defined margins; distance between punctures varied but not exceeding puncture diameter.

Legs stout; femora mutic; tibiae noticeably incurved apically in both sexes; outer apical angle of fore tibia rounded rectangular, not widened outward.

Body with moderately dense vestiture of light broad-oval scales concealing up to half of the elytral disc surface. Intervals on elytral disc with more or less uniform rows of short, weakly reclinate, subrecumbent brownish setae widening apically. Antennal scape with narrow subrecumbent brown setae noticeably narrower than those on elytra.; only in single specimen few scales present on scape. All femora with rings of light scales. Outer margin of tibiae with more or less dense brown scales.

Aedeagus parallel-sided, truncate apically, as in species of the subgenus *Udonedus*.

Body length 5.6–6.1, width, 2.9–3.4 mm; in holotype, 5.6 and 2.9 mm, respectively.

Comparative notes. The new species is similar in the head shape to *O. titae* sp. n. and *O. quadrato-punctatus*, differing from both in the presence of light ring on femora, incurved tibiae in both sexes, and parallel-sided aedeagus with truncate apex. In addition, it differs from the second species in the broad-oval shape of the elytra with the keel-shaped raised odd-numbered intervals, coarse strial punctures, and spotted vestiture of broad-oval scales.

Material. Georgia. Mingrelia, Mingrelskii Range, Magana River sources (Inguri River tributary), alpine zone, 5.VI.1988 (I.A. Belousov, B.M. Kataev), 5 specimens, including male holotype; Mt. Khvira, 2.VI. 1988 (B.M. Kataev), 1 specimen; near Bardzhashi Vill. and Dzhvari Reservoir, 700 m, 11.V.1991 (A.Yu. Solodovnikov), 1 specimen.

Otiorhynchus (Otismotilus) titae Davidian et Yunakov, sp. n. (Figs. 17, 25, 29, 96)

Description. Rostrum weakly narrowing toward pterygia, its maximum width 1.19–1.32 times minimum width, subequal to width at eyes. Rostral dorsum gutter-like depressed along midline from eyes to antennal insertion, occasionally with weak median carina; lateral margins of dorsum obtusely raised. Eyes flat, not protruding beyond head contour, their anterior edge somewhat sunken. Antennae slender; scape weakly thickening to apex; funicle noticeably narrower than scape, 1st segment somewhat shorter than 2nd which is twice as long as 3rd, 3rd–7th segments round.

Pronotum weakly transverse, widest somewhat before middle. Disc weakly convex, moderately densely covered with small matte granules separated mostly by their diameter; median sulcus superficial.

Elytra ovate, with sides noticeably convex in basal 1/5 and subparallel-sided in middle third. Disc moderately flattened; odd-numbered intervals strongly raised, keel-shaped; sutural and even-numbered intervals scarcely convex. Striae noticeably wider than even-numbered, and as wide as odd-numbered intervals. Strial punctures large, narrowly separated.

Fore tibia in female straight, weakly widened outwards at apex. Second tarsal segment weakly transverse, claw-segment protruding beyond 3rd segment by 1.3 length of the latter.

Elytral vestiture moderately dense, formed by oval scales. Subrecumbent, weakly curved setae on elytra wide, scale-like, somewhat longer than wide. Scape of antennae densely clothed with subrecumbent narrow setae mostly half as wide as those on pronotal disc. Elongate scales forming no ring on femora.

Aedeagus widely rounded and somewhat blunted apically.

Body length 5.7–6.7, width, 2.8–3.4 mm; in holotype, 5.7 and 2.8 mm, respectively.

Comparative notes. The new species is closely related to *O. akibae* sp. n., differing in the sparse vestiture of the elytra, wider setae on elytral intervals, and shallow median sulcus on pronotum. From *O. akibae* sp. n., *O. abashae* sp. n., and *O. quadratopunctatus* the new species differs in the strongly raised, keel-shaped odd-numbered elytral intervals, 5th and 7th intervals at base nearly ridge-shaped. In addition, *O. titae* sp. n. differs from *O. abashae* sp. n. in the more slender antennae with round or weakly oblong 3rd–7th funicular segments.

Material. Georgia. Western Svanetia, Shtavler Range, pass from Tita to Nakra villages, 2800 m, 7.VIII.1988 (Davidian), 6 specimens, including male holotype.

Otiorhynchus (Otismotilus) akibae Davidian et Yunakov, sp. n. (Figs. 16, 28)

Description. Rostrum about as long as wide, in widest place as wide as head capsule at eyes level and 1.25 times as wide as in narrowest point (at the end of basal third). Dorsum convex, separated from frons by shallow depression, uniformly coarsely punctate, without median carina; lateral margins weakly raised in the form of low obtuse carinae. Epistomal angles scarcely protruding beyond head outline. Length of fore tibia 2.05 times minimum width of rostral dorsum. Eyes oval, depressed in anterior part, hardly raised over head capsule in posterior part.

Antennae slender; scape gradually thickening from base to apex, noticeably narrower than fore tibia. First funicular segment somewhat shorter than 2nd; 2nd segment about twice as long as 3rd; 3rd–7th segments round.

Pronotum weakly transverse (1.17 times as wide as long), widest somewhat before middle. Disc moderately convex, with distinct median sulcus and weak linear carina along midline. Small matte granules moderately dense, interspaces between them with undulate rugose microsculpture, about as wide as granules; granules on pronotal sides in the form of small rounded tubercles.

Elytra ovate, with sides noticeably convex in basal 1/5 and subparallel in middle third. Disc moderately flattened; odd-numbered intervals more convex than even-numbered intervals, weakly raised, keel-shaped. Punctures in elytral striae large; striae somewhat wider than even-numbered intervals and narrower than odd-numbered intervals. Bases of 1st–3rd intervals lying in a single plane, somewhat raised over base of 4th interval; 5th and 7th intervals gradually becoming less convex to base, forming no ridges. Granules on intervals fine, acute; on odd-numbered intervals, larger and mostly arranged in irregular rows.

Legs long and slender, femora mutic. Fore tibia weakly but noticeably widened outwards at apex; inner margin of hind tibia very finely granulate. Second segment of fore tarsus as long as wide; claw-segment protruding beyond 3rd segment by 1.5 of its length. In hind tarsus, 2nd segment weakly oblong, hardly shorter than 3rd segment; claw-segment protruding beyond 3rd segment by its double length.

Vestiture dense, brown. Antennal scape clothed with fine flattened setae, no scales present. Granules on pronotum bearing widened apically setae; interspaces with smaller setiform scales. Elytra with vestiture denser than that on pronotum; even-numbered intervals with 1, odd-numbered intervals with 2 confused rows of elongate scale-like, subrecumbent setae which are mostly somewhat wider than the small neighboring scales. Background of elytral vestiture formed by brown scales, with yellowish scales being arranged in small spots and transverse fasciae. Elongate scales on femora forming no rings.

Body length 7.1, width 3.6 mm.

Comparative notes. The species is closely related to *O. titae* sp. n., but is readily distinguished by the denser elytral vestiture, longer setae on intervals of elytra, flat rostral dorsum, presence of median sulcus on pronotum, narrower 3rd and longer claw-segment of the tarsi. Bases of the 1st–3rd intervals of elytra are lying in the same plane, somewhat raised over base of 4th interval; 5th and 7th intervals are gradually be-

coming less convex to base and forming no ridges in contrast to *O. titae* sp. n., in which 5th, 7th and, to a lesser extent, 3rd intervals are keel-shaped. From *O. quadratopunctatus* the new species differs in the structure of the head with weakly protruding epistomal angles and in the weakly keel-shaped odd-numbered intervals of elytra: in *O. quadratopunctatus* epistomal angles are acute, distinctly projecting anteriorly, and odd-numbered intervals of elytra are somewhat more strongly convex.

Material. Georgia. Abkhazia, Akiba Range, Mt. Apchikva, 2300–2500 m, 19.VII.1986 (I.A. Belousov), holotype female.

Otiorhynchus (Otismotilus) madinae Davidian et Yunakov, sp. n. (Figs. 12, 100)

Description. Rostrum slightly oblong, its maximum width 1.28–140 times minimum width. Dorsum longitudinally depressed, with fine median carina and more or less raised lateral margins; epistomal angles weakly protruding beyond head outline. Eyes hardly convex, mostly not protruding beyond head contour. Antennae slender or moderately thickened. Scape weakly and gradually thickening apically, or subparallel-sided along its entire length. First funicular segment oblong, mostly as long as 2nd; 3rd–7th segments round or, less frequently, weakly transverse.

Pronotum weakly transverse, widest somewhat before middle. Disc scarcely convex, with superficial median sulcus occasionally obsolete among finely granulate sculpture more or less concealed by vestiture.

Elytra oval, with odd-numbered intervals distinctly raised, weakly keel-shaped, somewhat wider than even-numbered intervals. Sutural and even-numbered intervals weakly convex, about as wide as striae. Third, fifth, and seventh intervals raised at base, on apical elytral declivity as convex as even-numbered intervals. Punctures in elytral striae clearly separated, their interspaces lacking granulation. Intervals with minute sharp granules almost concealed by vestiture and arranged mostly in irregular rows.

Legs long and slender, femora mutic. Fore tibia straight, with nearly rectangular outer apical angle. Tarsi relatively wide, their 2nd segment weakly transverse, 3rd segment widely bilobed; claw-segment protruding beyond 3rd segment by its length.

Antennal scape densely clothed with flattened setae, with no scales present. Sides of pronotal disc mostly with longitudinal stripes of light scales. Elytra with

contiguous cover of oval and roundly widening apically scales and with rows of wide, weakly recurved, subrecumbent scale-like setae somewhat wider than the neighboring scales. On dark elytral background, spots of light scales present. Hind and, less frequently, fore and middle femora with ring of light scales.

Body length 4.95–6.60, width, 2.3–3.3 mm; in holotype, 5.40 and 2.55 mm, respectively.

Comparative notes. This species differs from O. titae sp. n. in the mostly smaller body size, presence of distinct median carina on rostrum, oval elytra with less convex odd-numbered intervals, thicker antennal scape, denser vestiture with clear spotted pattern of light scales on elytra, and presence of scaly rings at least on hind femur. O. madinae sp. n. is similar to O. svetgaricus sp. n., differing in the noticeably convex odd-numbered intervals of elytra and spotted pattern. From O. abashae sp. n., O. quadratopunctatus, and O. chaudoiri the new species may be readily distinguished by the wide scale-like setae on elytral intervals.

Material. Georgia, Mingrelia, Askhi Plateau, above 2400 m, 13.VIII.1990 (Davidian), 11 specimens, including male holotype.

Etymology. The species is named for Madina Sheikhovna Ismailova.

Subgenus Motilacanus Reitter, 1913

Reitter, 1913: 96; Magnano, 1998: 59.

Type species *Otiorhynchus conspiciabilis* Faldermann, 1839, by original designation.

Otiorhynchus (*Motilacanus*) *conspiciabilis* Faldermann, 1839b (Figs. 34, 40, 80, 81)

Dejean, 1837 : 293 (nom. nudum); Faldermann, 1839a : 193 (nom. nudum); 1839b : 22; Boheman in Schoenherr, 1843 : 353.—calcaratus Stierlin, 1875 : 337–338.—kaszabi L. Arnoldi, 1963 : 413–414, **syn. n.**

The name of this species was first published without any description of the species in the catalogue by Dejean (1837) and attributed to F. Faldermann. Faldermann (1839a) used this name (in the altered spelling "conspiciabilis" instead of "conspicabilis"), also providing no description, in the publication prepared in 1838. The first description of the species (as O. conspiciabilis) was published by Faldermann (1839b) in the subsequent publication of the same year. Thus,

1839 should be considered the year of publication. In the paper cited, published by Faldermann, the species name is followed by the name of C. Schoenherr, and at the end of the description text, the name of L. Gyllenhal is placed. In a later publication by Schoenherr (1843), the initial spelling of the species name is used, and C. Boheman is given as the author of the description. In the catalogues by Junk and Winkler, and also in the publications by Reitter (1912) and Arnoldli (1963), the spelling "conspiciabilis" was used, whereas Magnano (1998b, 2001) used the spelling *O. conspicabilis* Faldermann, 1938.

Although the form "conspicabilis" is correct grammatically, there is no reason to consider it to be more widely used than the alternative spelling, and we have to accept the latter one, i. e., "conspiciabilis."

The new synonymy established here is based on examination of the paratype of *O. kaszabi* deposited in the ZIN collection. We consider the small distinctions of the paratype from our material on *O. conspiciabilis* from the Caucasus and Turkey to fall within the range of intraspecific variation.

We have not examined the type of *O. conspiciabilis*. Reitter's (1912) description of this species is almost perfectly applicable to our specimens from Adzharia and can only be supplemented with some details reported below and liable to individual and geographical variation.

Description. Rostrum about as long as, or somewhat longer than wide, flattened dorsally, rarely convex, occasionally shallowly depressed along middle; no striation usually present. In some specimens from Mt. Gomis-mta in Adhzaro-Imeretinskii (=Meskhetskii) Range, rostrum with weak and fine median carina, whereas in the specimens from Mt. Sakornia, rostral dorsum densely coarsely punctate, lacking median carina. In specimens from Mts. Karchal-Dagh and Kachkar-Dagh in Turkey, dorsum not carinate, with sparse large punctures and fine isodiametrical microsculpture along midline. Epistomal keel mostly highly raised. Eyes flattened, slightly or not protruding from head outline.

Antennal scape not thickened, evenly narrowing to base. Shape of funicular segments widely varied; 1st segment usually noticeably shorter than 2nd, 3rd–7th segments oblong, less frequently subspherical or scarcely transverse.

Pronotum weakly transverse, densely covered with large, moderately convex, shining granules. Disc swollen, more strongly so in male.

Elytra oval, narrower in male. Sides in basal 1/5 straightly converging or shallowly concave. All intervals of equal width, as wide as, or somewhat narrower than striae. Shining granules on intervals large, occasionally occupying entire width of interval.

First ventrite in male shallowly depressed in median part, 2nd ventrite flat, anal ventrite convex in basal half, gently sloping to apical margin, occasionally foveate before apex. First and second ventrites in male densely covered with large shining granules, the rest of venter with finer granulation. First ventrite of female more or less convex, occasionally somewhat depressed medially; anal ventrite convex in basal half, sloping apically. Granulation on female ventrites considerably sparser and finer than that in male; anal ventrite with weak, but distinct punctation.

Coloration of legs varying; legs in Turkish specimens usually black, in Adzharian specimens red (brown in beetles from Goderdzskii Pass). Fore tibia in female straight, in male, with distinct bend in middle part and strongly incurved apically, with very large hook on inner apical angle and deep excision before it. Male middle tibia weakly incurved apically and deeply excised on inner margin, with apical hook smaller than that on fore tibia. Hind tibia not excised before apex, with narrow, perpendicular inner apical dent. Tarsi varying from wide and short to elongate and narrow. First tarsal segment somewhat wider than second, more conspicuously so in male; 2nd segment weakly transverse to weakly oblong; claw-segment protruding beyond 3rd segment by length of the latter or somewhat less. A single female from Kachkar-Dagh Range differs from the other specimens in the longer antennae and tarsi: claw-segment protruding beyond 3rd segment by more than length of the latter.

Vestiture rather dense. Temples bare; antennal scape, pronotum, and elytra clothed with uniform subrecumbent hair-like setae; elytral striae with small spots of oval or lanceolate light scales; femora without scaly rings. Male anal ventrite with dense hairs on apical margin.

Apex of aedeagus with angular excision medially.

Comparative notes. O. conspiciabilis can be easily differentiated from all related species by the structure of legs and shape of the apex of aedeagus. In addition, it differs from the sympatric O. oezbeki sp. n. in the weakly protruding epistomal angles in male, more slender antennae, large shining granules on pronotum and elytra, and denser vestiture.

Material. Georgia. Adzharia, Meskhetskii Range, Goderdzskii Pass, 2000–2400 m, 27.VI.1987 (Borisov, Solomatin), 2 specimens; Goderdzi, 2500 m, 26.VII. 1988 (M.L. Danilevskii), 2 specimens; Kintrishskii Nature Reserve, Mt. Khino, 1700–1800 m, 2–7.VII. 2000 (M.V. Nabozhenko), 15 specimens; Mt. Gomismta (=Gomista), 10.VIII.1987 (Davidian), 70 specimens; Mt. Sakornia, 12.VIII.1987 (Davidian), 24 specimens. NE Turkey: SE slope of Mt. Karçal Dagh, 3000–3200 m, 27–30.VI.1998 (Davidian), 21 specimens; Rize, Gül Dagi, NW slopes, Çaglayan Dere River valley, 1800–2000 m, timberline—subalpine zone (A.Yu. Solodovnikov, B.M. Kataev), 1 specimen.

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