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Contribution to the Fauna of Buprestid Beetles (Coleoptera, Buprestidae) of Afghanistan. III*

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Abstract. Data on 12 species of buprestid beetles of the subfamilies Agrilinae, Cylindromorphinae, and Trachininae from Afghanistan are reported. Four species are new to Afghanistan. The following new species are described: *Vanroonia afghanica*, *Meliboeus kabakovi*, *Agrilus afghanisticus*, *A. tschapidarensis*, *A. kabakovi*, and *Aphanisticus sugonjaevi* ssp. n. New synonymy is established: *Meliboeus reitteri* Semenov, 1889 = *M. klapperichi* Cobos, 1966, **syn. n.** *Trachys turanica* Semenov, 1893 = *T. bactriana* Semenov, 1895, **syn. n.** The general distribution and trophic links of each species are described; in some species bionomic data are also presented. A checklist and map of localities where O. N. Kabakov collected the buprestids are given. A checklist of 82 species of buprestids of Afghanistan is included for this paper (parts 1 to 3).

Key words: Coleoptera; Buprestidae; faunistics.

This concluding part of a paper on buprestid beetles of Afghanistan (see Alekseyev, Volkovich, and Kabakov, 1990, 1991) includes 12 representatives of Agrilinae, Cylindromorphinae, and Trachyinae, among which 6 species are described as new species, and 4 species are first records for the Afghan fauna. At the end of the paper a brief characterization and map of localities of collection of buprestid beetles by O. N. Kabakov, 1969-1973, in 16 of 28 provinces of Afghanistan and also a checklist of the fauna of Afghanistan are given.

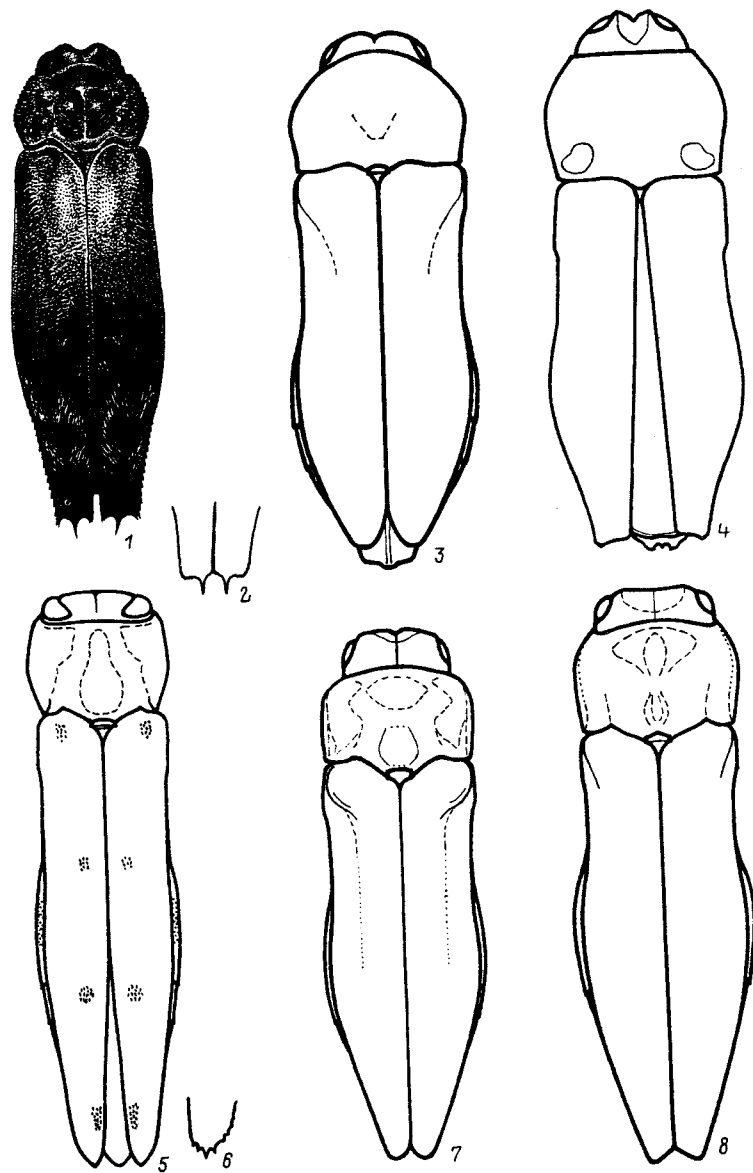
Names of provinces are given in Russian transcription accepted in the map of Afghanistan (Afghanistan, 1981); other names are cited by data on labels or bibliographic records and are followed by Russian transcription, if it is available on the same map. In text, abbreviations of names of collectors are as follows, O. K. for O. N. Kabakov, Kl. for I. Klapperich, an asterisk (*) is used to mark species found in Afghanistan for the first time and (!) indicates species recorded for the first time in the given province.

Types of new species are preserved in the collection of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg (IAN).

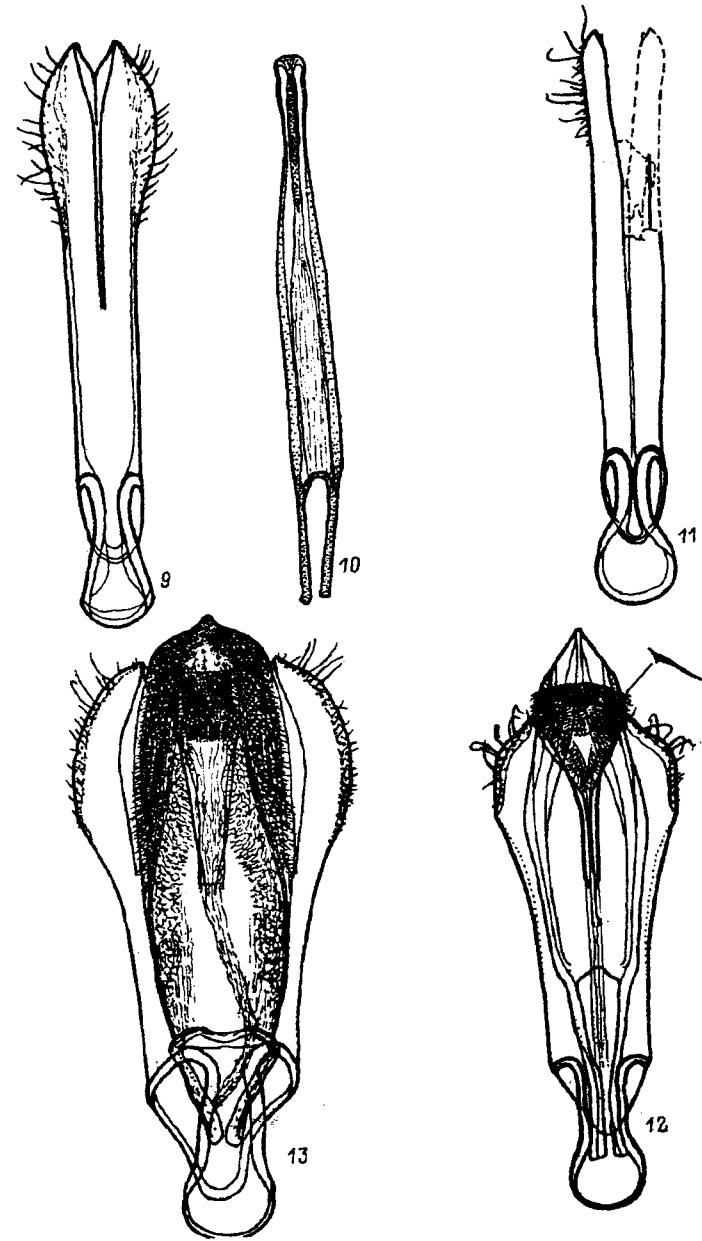
71. *Vanroonia afghanica* Alexeev et Volkovitsh, sp. n. (Fig. 1)

Holotype ♀; Kunar, N. Kamdes (Kamdesh), 1,500 m., 20.IX.1971, O. K. (IAN).

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Figs. 1-8. 1, 3-5, 7, 8) Outline of body: 1) *Vanroonia afghanica* sp. n. (drawing by N. N. Shilova), 3) *Meliboeus kabakovi* sp. n., 4) *Afghanisticus sugonjaevi* sp. n., 7) *A. tshapadarensis* sp. n., 8) *A. kabakovi* sp. n.; 2, 6) apices of elytra: 2) *Vanroonia himalayana* Obenb., 6) *Agrilus afghanisticus* sp. n.



Figs. 9-13. ♂ genitalia. 9, 10) *Meliboeus kabakovi* sp. n.: 9) tegmen, 10) penis; 11) *Agrilus afghanisticus* sp. n., tegmen; 12) *A. tshapadarensis* sp. n., aedeagus; 13) *A. kabakovi* sp. n., aedeagus.

Slightly elongate, 3.1 times as long as wide, rather convex, especially on ventral side; frons golden-bronze, anteriorly and on clypeus becoming purple; 1st antennal segment purple, other segments bronze; dark bronze, shiny, dorsally with purple and blue, ventrally with purple sheen on prothorax and last abdominal sternites; femora and tibia golden-bronze, foretibia and midtibia with reddish sheen, and tarsi blue. Covered with white ciliate scales, denser in depressions on frons and pronotum; forming asymmetric small spots on anterior 3/5 of elytra; 2 large, uncate, forwardly arcuate transverse spots in sutural depressions; 2 small oblique spots near lateral margins forming extensions of uncate spots; 2 posteriorly curved bands interrupted by suture between uncate spots and apices of elytra, not distinctly connected along suture with uncate spots in x-shaped pattern. Scales forming ventrally continuous white, wide stripe on sides of posterior part of thoracic segments and hindcoxae; semicircular arches near lateral margins of abdominal sternites II-IV and also small spots near hindcorners of sternite I and along lateral margins of anal sternite.

Head dorsally wide, protruding, in middle with strongly v-shaped depression; eyes protruding, large, irregular-oval. Antennae compact, very short, not reaching anterior margin of pronotum, 4th segment dentate in form, distal segments with blunt apices. Clypeus depressed between antennal pits, shagreened, with narrow, deep arcuate emargination on anterior margin. Epistomal carina reduced. Frons between eyes 1.2 times as wide as long, with weakly outwardly curved, almost parallel lateral margins; longitudinally convex and transversely flattened, with narrow, longitudinal, sharply deeper in anterior 2/3 depression and adjacent 2 transverse pits in middle part. Before pits with 2 weak lateral tubercles, posteriorly to them with 2 very large humps extended and entering base of cervix. Anterior part of frons with large unequal punctations, at some places fused into grooves; humps in upper part with coarse, concentrically punctate grooves turning inwardly to cervix, where they become thin and without traces of punctations. Cervix 3.6 times as wide as eye, strongly transversely convex, with medial depression extended to base, with elevated longitudinal suture at base, shagreened. Pronotum 1.7 times as wide as long, with two indistinct pits on anterior margin angulately protruding forward; its sides in posterior 1/3 sharply, with slight pits, dilated forward, then sharply angulately rounded and almost straight line before anterior corners slightly arcuately narrowed. Posterior margin of pronotum angulate with emargination, with wide, weakly rounded, flattened and slightly apically concave medial process and broken, curved lateral parts. Surface of pronotum weakly longitudinally and very evenly transversely convex, with 6 humps on disk. Two largest and highest humps occupying entire posterior half of disk, contiguous along medial line and slightly bent out along it posteriorly; on sides, at 2.5 of distance from middle of pronotum to its margins, with 2 small round tubercles parallel to medial line at equal distance from each other and from posterior and anterior margins of pronotum. Anterior half of disk with wide depression forming pitlike depressions near small anterior tubercles; lateral depressions large, but not deep; marginal depressions in anterior half weak, reaching anterior corners, in posterior half rather wide, becoming deeper anteriorly, where they are pitlike. Anterior and posterior marginal depressions divided by small tubercle; depression along base of pronotum narrow and weak. Supramarginal carina not large, but distinct, almost straight, parallel, beginning from hindcorners of pronotum and not reaching its middle. Marginal carinae curved S-wise, wavy, with semicrescent sculpturation on upper margin. Hindcorners of pronotum blunt, almost rounded. Surface of pronotum with dense, even, rather distinct punctations cut with grooves concentric on humps and in pits of anterior depressions; along lateral margin sculpturation punctate-grooved, anteriorly longitudinally, posteriorly transversely. Scutellum cordate, with strongly extended central part and weak longitudinal groove, shagreened. Elytra 2.8 times as long as wide at humeri; in anterior 3/5 slightly arcuately concave, dilated posteriorly, with maximal width at posterior 2/5; narrowed in apical 1/3 almost straight line to wide apices with 2 transverse pits. External pit of elytral apices wider and larger than inner pit, outer corner larger than sutural corner; both corners acute, bearing 2-3 small teeth; medial corner extended in form of oblique pointed part, as long as width of external pit. Humeral pit large, flat, diamond-shaped. Sutural depressions flat, not deep, distinct only in apical 2/3. Suture slightly

elevated in posterior 4/5, more elevated in posterior 1/3; remaining surface of elytra with effaced relief; sculpturation punctate-grooved, fine, at some places effaced and indistinct. Collar of prothorax well developed, with wide round-trapezoid emargination in middle of anterior margin in strongly transverse, extended triangular lobes on sides. Posterior process of prothorax narrow, roundly pentagonal, slightly narrowing to apex; weakly, rather evenly longitudinally convex, with weak, narrow longitudinal depression along entire length; transversely grooved, coarsely shagreened, almost finely granulose. Thorax and abdomen with punctate grooves, strongly effaced on abdomen. Inner margin of hindtibia almost straight, external margin with ridge of dense, erect equal-sized setae in apical 2/3, not reaching apex of tibia. 1st hindtarsal 1.5 times as long as 2nd segment. Anal sternite slightly transverse, with rather straight, strongly converging to wide semicircularly rounded apices; weakly longitudinally concave. Ovipositor destroyed. Length 9.7 mm, width 3.1 mm.

Finding of a representative of the paleotropical genus *Vanroonia* in Afghanistan considerably expands its range. With the exception of the Himalayan *V. himalayana* Obenb., all known species of this genus are distributed in southern and southeastern Asia and Africa. The new species differs from *V. himalayana* (holotype: Kumaon, Himalaya, Dehra Dun, People's Museum in Prague) in the following characters:

- 1 (2). Frons distinctly dilated to cervix; with 2 large, strongly convex longitudinal humps beginning in the middle of frons, reaching base of cervix and bearing brush-like tufts of blackish hairs. Clypeus with wide emargination anteriorly. Sides of pronotum slightly diverging at base, then regularly, arcuately founded, with large teeth above lateral carina. Pronotal disc with 2 large humps at base, 2 pairs of small tubercles lateral to them and 2 distinct transverse humps near anterior margin divided by deep longitudinal groove and restricted posteriorly by deep, transverse depression. Elytra along entire length with distinct close, and decumbent white and blackish hairs. Blackish hairs forming spots in anterior and posterior thirds of elytra and large brush-like tufts at level of posterior 1/3. Apices of elytra (Fig. 2) with long tooth and only small inner emarginations; outer corner widely and roundly rectangular and finely dentate. Posterior margin of hindcoxae deeply arcuately emarginate. *A. himalayana* Obenberger.
- 2 (1). Frons almost parallel-sided, with 2 small tubercles in anterior half and 2 large longitudinal tubercles beginning in upper 1/3 of frons and not reaching base of cervix; without brush-like tufts of hairs. Clypeus with narrow anterior emargination. Sides of pronotum almost straight-line diverging to middle and also converging anteriorly, angulately rounded in middle, with small indistinct teeth above lateral carina. Disk with 2 large tubercles at base and 2 pairs of lateral tubercles (Fig. 1), but without transverse humps near anterior margin; longitudinal medial groove touching triangular elevation in anterior 1/3 beginning near anterior margin and diverging transverse depression into 2 lateral parts. Elytra in anterior 2/3 almost bare, in posterior 1/3 with only close white and brown hairs forming spots and stripes, but without brush-like tufts. Apices of elytra (Fig. 1) with long medial tooth, almost equal inner and external emarginations and acute, pointed sutural and outer corners; sutural corner with 2 small teeth, outer corner with small lateral teeth. *V. afghanica* Alexeev et Volkovitsh, sp. n.

72. *Meliboeus (Meliboeus) kaszabi* Cobos, 1966.

Cobos, 1966: Kunar, Kabul (Pandsher River).

!Vardak: Tokana, 2700 m, 26.VI.1970, O. K., 1 spm. Kabul: Kabul (Kabul), Darufulun, 1800 m, 11.VI. 1953, Kl., 1 spm.; !Uruzgan: Gezab (Gizao), 1300 m, 12.VI.1970, O. K., 1 spm.; !Gazni: W

♂: anal sternite narrower, 1.6 times as wide as long. Aedeagus as in Fig. 12.

♀: anal sternite wider, 1.8 times as wide as long. Length 7.7-5.6 mm, width 2.3-1.7 mm.

Among Palearctic species known to us it is close only to *A. kabakovi* sp. n. *A. tshapadarensis* sp. n. differs from it in wider body (length 3.3-3.6 times width) (in *A. kabakovi* length 3.0-3.1 times width); less arcuately curved, in basal half pronotum almost straight with lateral margins. Pronotum 1.4 as wide as long (in *A. kabakovi* pronotum 1.5 times as wide as long). The new species also differs in anterior and posterior medial depression of the pronotum divided by transverse elevation (in *A. kabakovi* fused into longitudinal groove with indistinct transverse elevation); scaly spots in lateral depressions of pronotum, which are absent in *A. kabakovi*; narrower, 3.0 times as long as wide at humeral elytra (in *A. kabakovi* 2.8 times as long as wide); almost evenly rounded apices of elytra (in *A. kabakovi* angulate, cut upward to suture); even scale cover of elytra forming small spots only in humeral pits (in *A. kabakovi* interrupted along suture in middle 1/3 of elytra and forming cuneate spots near suture posterior to bare space; spots in humeral pits very weak); pure white scaly spots on ventral side (in *A. kabakovi* consisting of whitish and yellowish scales); narrower tegmen and also penis with triangularly pointed apex (Fig. 12) (in *A. kabakovi* tegmen greatly dilated, apex of penis wide, bluntly rounded, and bearing small triangular process; Fig. 13).

78. *Agrilus klapperichianus* Cobos, 1966.

Cobos, 1966: Kunar.

Kunar: SW Čapa-Dura (Chapadara), 1800 m, 20.VII.1971, O. K., 1 spm.; N Waygal (Vaygal'), 2200 m, 10.VII.1972, O. K., 2 spms. Beetles were collected in coniferous-hardwood forest.

Afghanistan, W Pakistan (ssp. *krupkai* Alexeev & Bily).

79. *Agrilus kabakovi* Alexeev, sp. n. (Fig. 8).

Holotype, ♂: Kunar: N Waygal (Valgal'), 2200 m, 10.VII.1972, O. K. (IAN). Paratypes: 2 ♂s, 1 ♀, same locality, O. K.: 1 ♂, 1 ♀ Upp. Waygal riv. (upper Vaygal' River), 2500 m, 28.VI.1972, O. K. (IAN).

Rather wide, 3-3.1 times as long as wide. Entirely pale bronze or dorsally golden, or with copper sheen; dorsally and ventrally covered with yellowish or white shiny ciliate scales, indistinct on cervix, absent on drop-like, posteriorly area dilated near suture, medial 1/3 part of elytra forming posteriorly thereof accumulations in form of small oblique spots; spots also in humeral depressions, small depressions near posterior corners mesad of carina and in anterior parts of lateral depressions of pronotum, on epimeres and episterna of mesothorax, sides of metathorax, on lateral, dilated part of hindcoxae, and on sides near base of abdominal sternites.

Head anteriorly rather flattened; eyes protruding from general outline became of elevation of frons at border with eyes, regularly oval, anterior margin reaching lower margin of antennal pits. Antennae dentate beginning from 3rd segment, short, 1.5 times as long as height of eye. Clypeus weakly depressed, with large, flat, very weakly depressed dots, shagreened; anterior margin with narrow and rather deep triangularly rounded emargination; distance between antennal pits 4 times width of frons at this site; its central part almost as long as wide. Frons between eyes in ♂ with slightly inwardly bent, in ♀ with almost straight, forwardly narrowed margins; 1.2-1.4 times as wide as long; with weak longitudinal depressions in posterior part and with deep transverse depression occupying about half width of frons at border between anterior and middle 1/3; 2 weaker depressions

extending posteriorly from frons, together with frons forming common medial horseshoe-like depression. Frons with punctate grooves, in upper part grooves extended more or less diagonally to medial line, in middle part (between arches of "horseshoe") grooves transverse, and in depression in middle of anterior part of "horseshoe" grooves arcuately directed with convex side anteriorly. Cervix 3.3 times as wide as transverse eye diameter; with effaced relief and depressed sutural line, with punctate grooves forming together with diagonal grooves of frons concentric pattern. Pronotum 1.5 times as wide as long; its lateral margins in posterior half almost straight or very weakly arcuate; in anterior 1/3 more arcuate, or sides almost evenly arcuately dilated; maximal width at anterior 2/5. Anterior margin unevenly biemarginate, sharply concave near forecorners and then weakly arcuately convex, forming very wide, occupying almost entire width of anterior margin medial lobe, not protruding. Posterior margin angularly biemarginate, with not-protruding, very wide, W-shaped medial lobe occupying 3/5 width of base of pronotum. Surface of pronotum weakly longitudinally and slightly, almost evenly transversely (in area of disc) concave; anterior and posterior depressions and transverse elevation between them barely marked; lateral depressions along margin rather well expressed. Sculpturation on disc transverse-rugulose, on sides diagonal. Hindcorners blunt, with rounded apex. Carinae in hindcorners of pronotum indistinct, sometimes in form of several irregular reliefs laterally bearing irregular grooved sculpturation of marginal part. Marginal carinae in anterior half curved, elevated, in posterior part straight; submarginal carinae anteriorly curved, in anterior 1/3 parallel marginal carinae, then straight, converging with them, in posterior 1/3 or 1/4 broken into separate parts, among which posterior fused before hindcorners with marginal carinae. Scutellum shagreened, with slightly trapezoid rounded or rectangular, weakly convex basal part separated from triangular part by low, sometimes diffused carina. Elytra 2.8 times as long as wide at humeri, in anterior 2/5 with almost parallel margins, then gradually dilated to posterior half, where from almost parallel narrowed to slightly extended, narrow, angulate, almost cut anteriorly to suture, rather weakly dentate apices. Relief of elytra effaced, sutural depressions and elevation of suture weakly expressed only in posterior half. Collar of prothorax with deep roundly triangular emargination; posterior process almost cuneately narrowed posteriorly, more cuneate in apical 2/5; weakly longitudinally and transversely convex, with punctate-grooved sculpturation; rest of surface punctate-grooved, shagreened.

♂: anal sternite narrower, evenly rounded at apex. Aedeagus as in Fig. 13.

♀: anal sternite wider, bluntly narrowed, sometimes truncate apex. Length 6.6-8.8 mm, width 2.2-2.9 mm.

This species is close to *A. tshapadarensis* sp. n. *A. kabakovi* sp. n. differs from *A. tshapadarensis* sp. n. in wider (3.0-3.1 times length) body (in *A. tshapadarensis* width of body 3.3-3.6 times length); more arcuate, evenly curved lateral margins of wider pronotum 1.5 times as wide as long (in *A. tshapadarensis* 1.4 times as wide as long); fused anterior and posterior medial depressions of pronotum forming common longitudinal groove (in *A. tshapadarensis* divided by transverse elevation); wider, (2.8 times as long as wide at humeri) elytra (in *A. tshapadarensis* 3.3 times as long as wide); angulate, apices of elytra cut anteriorly to the suture; scale cover interrupted along suture in medial 1/3 of elytra and forming cuneate spots (in *A. tshapadarensis* scale cover is even, except small spots in humeral pits); spots of whitish and yellowish scales on ventral side in *A. tshapadarensis* spots white); extraordinarily wide tegmen, and also penis with wide, bluntly rounded apex bearing small triangular process (Fig. 13) (in *A. tshapadarensis* tegmen narrower and apex of penis triangular; Fig. 12).

*80. *Paracylindromorphus subuliformis subuliformis* (Mannerheim, 1837).

Kunar: Upp. Waygal riv. (upper Vaygal' River), 2500 m, 28.VI.1972, O. K., 1 spm. Beetle was caught in coniferous-hardwood forest.

SE European Russia, Transcaucasia, C Asia, Kazakhstan, S Siberia, Turkey, Mediterranean, Mongolia. Living on Gramineae; usually developing in lower parts of stems of inflorescences of *Agropyron*.

81. *Aphanisticus sugonjaevi* Alexeev, sp. n. (Fig. 4).

Holotype, ♂, Nangarkhar: Dzhelalabad, 22.VII.1966, Ye. S. Sugonyayev (IAN).

Wide beetle, 3.1 times as long as wide; entirely shagreened, rather shiny, steel black, and bare; head hemispherical, convex in middle; pronotum convex; elytra longitudinally flattened and with coarsely reticulate sculpturation.

Head dorsally semiroundly protruding between eyes, semielliptically depressed, near forecorners along depression with carinate elevation; depression 3 times width of head. Width of head 2.2 times its length. Eyes anteriorly oval, laterally reniform. Antennae with sharply dilated 7-11th segments; undilated segments in depressions between lateral margin of clypeus and eye; dilated part in resting position fitting into oval depression along upper margin of tergosternal suture. Clypeus triangular, with arcuately concave lateral margins, narrowly extended and rounded upper corner, and wide, rather deep, gradually arcuately concave anterior margin separated from frons by deep depression. Frons 1.2 times as long as wide, strongly convex, especially in beginning of upper half, with deep longitudinal depression along entire width, rather sharply entering upper margin of frons. Pronotum 1.3 times as wide as long, with arcuately rounded lateral margins, maximal width slightly before middle, more narrowed anteriorly, before hindcorners with slightly arcuately concave margin; anterior margin very weakly, gradually arcuately concave; posterior margin with 4 emarginations, medial lobe weakly protruding, triangular, and with rounded apex. Hindcorners blunt, with slightly blunt apex. Surface weakly longitudinally and transversely convex; with narrow lateral margin flattened along anterior 2/3; with rather large reniform oblique pit-like depressions before posterior corners; with transverse depressions in anterior 2/5 and posterior 3/5. Scutellum narrow, cuneate, and longitudinal. Elytra 2.2 times as long as wide at humeri; lateral margins of anterior 1/5 straight, parallel, before apical 2.5 slightly arcuately concave, then narrowed to rather wide, slightly obliquely, arcuately cut anterior to suture, apices not distinctly dentate and slightly extended to sides. Humeral pits transverse, with small anterior and large posterior slopes limited posteriorly by semicircle. Sutural depressions wide, occupying 1st-4th intervals, in anterior 3/5 flat, in posterior 2/5 gradually deepening and narrowing to apices. Elytral striae with very large pit-like depressions, in posterior half much smaller, becoming depressed punctations erased at apices. Anal tergite with wide, bluntly rounded, apex slightly angularly emarginate in middle. Anterior margin of pronotum in middle with deep emargination as wide as anterior margin of clypeus; along entire margin with shallow depression forming wall in area of emargination. Posterior process of prothorax narrow, with almost parallel lateral margins, almost straightly dilated before triangular apical part, with slightly extended apical corner. Legs with femora strongly dilated to apical 1/3, bearing on inner side depressions for folding tibia and tarsi. Anal sternite 1.4 times as wide as long, roundly triangular, with narrow two-pitted emargination in middle of apical margin, in apical 1/3 with deep longitudinal, narrowing posteriorly and gradually disappearing medial depression bordered with ridge. Length 2.6 mm, width 0.8 mm.

This species in the sculpturation of elytra is very close to *A. sculpticollis* Bily., from which *A. sugonjaevi* differs well in semiround head (in *A. sculpticollis* head in dorsal view roundly triangular); shallower width and other shape of relief of medial depression of head; pronotum most dilated in middle (in *A. sculpticollis* before middle), and absence of transverse depression on pronotal disc (in *A. sculpticollis* medial falciform depression present); presence of reniform pits in hindcorners of pronotum, equal width of elytra in posterior 1/3 (in *A. sculpticollis* elytra considerably wider in

posterior 1/3); two-pitted apical margin of anal sternite of ♂ (in *A. sculpticollis* with deep roundly triangular emargination), and other characters.

82. *Trachys turanica* Semenov, 1893.

Semenov, 1893: 497.—*bactriana* Semenov, 1895: 351, syn. n.

Baglan: Dakhani-Karkar, vicinity of Puli-Khumri, 14.V.1967, M. V. Stolyarov, 9 spms. Uzbekistan, Tajikistan. Mines leaves of Lamiaceae.

Conspecificity of *T. turanica* and *T. bactriana* is established on basis of type specimens.

LOCALITIES OF COLLECTION OF BUPRESTID BEETLES BY O. N. KABAKOV IN AFGHANISTAN IN 1969-1973

Baglan Prov.

1. Banu, O Andarab (Andarab), 2300 m, 6.VIII.1972. N slope of Hindukush Mountains. Xerophytic shrubs: *Pistacia* sp., *Crataegus* sp., *Juniperus* sp., *Prunus amygdalus*, and *Rubus* sp.; along streams on Apiaceae, Asteraceae, Lamiaceae, *Rheum* sp., Graminaeae, etc.

2. Pulekhumri (Puli-Khumri), 1000 m, 25.V.1973. River valley with thickets of *Salix* spp., *Plantanus orientalis*, *Elaeagnus*, *Tamarix*, *Juncus* sp.; developed part of oasis.

3. Sasan (Shashan), 2800 m, 10.VIII.1972. Slope of Sasan above Sasan settlement. Montane semidesert with spiny cushion plants; at some places *Juniperus* sp. with thickets of xerophytic shrubs; in upper parts of valleys, alpine meadows. Vegetation very degraded as a result of overgrazing.

Takhar Prov.

4. Samti (Samti), Pandji Riv. (Pyandzh River), 1000 m, 10.V.1971. Pandji River and major terrace. In the floodplain remnants of thickets, *Salix*, *Populus*, *Elaeagnus*, *Tamarix*, and other trees and shrubs; in terrace ephemeric steppe as in montane foothills of Tajikistan.

Badakhshan Prov.

5. Futur, SW Eškašem (Ishkashim), 2600 m, 9.VIII.1971, 4.VII.1973. N slope of Hindukush in high-mountain zone of Pamir type; in the valley with thickets of *Juniperus* sp., *Salix* spp., *Betula* spp., *Hippophae rhamnoides*, *Rosa* sp., *Ribes* sp., and other shrubs.

6. Langar (Langar), Wakhan River, 3300 m, 15.VII.1973. Montane deserts of Pamir type.

Herat Prov.

7. Hasankula (Khasankula), 1100 m, 5.V.1972. Stationary sands with vegetation of Badkhyz type.

8. Adraskan (Kalaadrashan), 1100 m, 20, 26.VI.1972. Subtropical desert on rocky soils with plots of sparse shrub forest of *Prunus amygdalus*, *Ficus* spp. and *Pistacio* sp.; in valleys, *Tamarix* and thickets of *Phragmites* sp.

9. N Adraskan, 1600 m, 10.XI.1969. Pass in low spurs of Siakhok Mountains. Montane xerophyte-cushion plants of *Acantholimon*, etc.

10. NW Adraskan, 1100 m, 26.VI.1972. Rocky subtropic desert with patches of xerophytic sparse forest and shrubs: Kabul *Pistacio*, *Ficus* sp., and *Prunus amygdalus*; at some sites *Haloxylon* sp., *Tamarix* sp., and *Juniperus* sp.

11. Herat (Gerat), 900 m, 20.VIII.1970, 31.VII.1972. Oasis with fruit orchards and grapevine plantations, rice fields, and vegetable gardens.

12. S Herat, 900 m, 20.XI.1969. Along highway long-leaf pine trees; desert with stationary sands; vegetation very degraded as a result of overgrazing.

13. Karoch (Karukh), NE Herat, 1200 m, 14, 15.XI.1969. Montane foothill ephemeric semidesert of Badkhyz type; thickets of xerophytic shrubs, *Ficus* sp., *P. amygdalus*, and sometimes *Juniperus* sp.

Gor Prov.

14. Caghčaran (Chagcharan), 2200 m, 7, 10.VIII.1979. Montane semidesert with vegetation very degraded by overgrazing, *Cousinia*, *Astragalus* spp., Gramineae, sparse *Ferula* sp., etc.; in river valley remnants of tugais, predominately *Salix* spp.

15. Saghar (Sagar), 2500 m, 15.VIII.1970. Lowland in mountains with rich carbonate soils; in valleys forested sites of *Juniperus*, *Platanus*, and *Populus* spp.; in mountain slopes spiny cushions of *Ephedra* sp.; fruit orchards and other vegetation of oasis.

16. Šahrak (Shakhrak), 2500 m, 1.VII.1970. Mountain valley with *Salix* spp., *Tamarix* spp., and meadow vegetation.

17. Tulak (Tulak), 2500 m, 30.X, 2, 3. XI.1969. Mountain valley with richer vegetation because of carbonate soils; large thickets of Lamiaceae and *Rubus* sp.

Bamian Prov.

18. Bamyan (Bamian), 2500 m, 15.VII.1972. Mountain valley with remnants of tugai forests; oasis with anthropogenic vegetation.

*19. Behsud, 3000 m, 30.VI, 1, 2, 12, 27.VII.1971. High-mountain semidesert with spiny cushions; *Salix* forests in valleys, thickets of *Rubus* spp. and *Populus* spp. plantations.

*20. SW Behsud, 3200 m, 30.VI, 9.VIII.1971. High-mountain semidesert with spiny cushions; in humid sites thickets of *Rheum* sp. and diverse vegetation with Apiaceae, Asteraceae, and Gramineae.

21. Kohe-Baba, S Kalu (Kalu), 4000 m, 30.VI.1971. High-mountain desert with spiny cushions; humid sites alpine meadows with vegetation, which is poor because of overgrazing; moraine landscape with glacier lakes.

22. Panjao (Pandzhao), 2800 m, 1.VII.1972. Mountain valley with remnants of *Salix* sp. forests and plantations of *Populus* sp.; on mountain slopes spiny cushions.

Vardak Prov.

23. Tokana, 2700 m, 26, 27.VI.1970. Mountain valley with anthropogenic vegetation; plantations of *Populus* spp. and *Salix* spp.; on slopes ephemeric vegetation and sites with overgrazed

graminaceous and other herbaceous steppes; in humid sites diverse vegetation with Apiaceae, Asteraceae, etc.

Kabul Prov.

24. Kabul (Kabul), 1500 m, 20.III.1970; 1800 m, 23.III, 6, 18.IV, 1, 8, 15, 17, 28, 30.V, 17.VI, 18.VII.1970, 27.III, 9.IV, 27.V, 10, 15.VI, 10, 15.II.1972, 19.III, 1, 20.VI.1973; 2000 m, 9.I.1970, 27.III.1971. Oasis with sites of depressed steppe type vegetation on high elevation arid terraces and mountain slopes; plantations of *Populus* spp., *Pinus* sp., *P. amygdalus*, *Prunus* sp., *Vitis* sp., etc.

25. SE Kabul, 2000 m, 13.III.1970. Mountain semidesert with thickets of xerophytic shrubs, especially *Ficus* sp. and *Prunus* sp.

26. Paghman (Pagman), NW Kabul 2200 m, 17.VI.1973. E slope of Paghman Mountains with diverse trees; remnants of native vegetation are represented by shrub form of evergreen *Quercus baloot*, *Platanus*, Kabul *Pistacio*, *Salix* spp., *Tamarix* spp., and other shrubs.

28. Surobay (Surobay), E Kabul, 1100 m, 27.II.1970, 18.V.1973. Kabul River valley with reservoir and electric power plant; in vicinity savannah-type vegetation with single standing trees of *Q. baloot*, wild olive, *Ricinus*, *Tamarix* spp., *Prunus* spp., *Platanus*, etc.; in the underforest *Rubus* sp., *Crataegus* sp., *Rosa* sp., locusts, *Euphorbia* spp., etc.; grassy ephemera: *Papaver* spp., *Eremurus*, etc.

Lagman Prov.

29. Samkat (vicinity of Mekhtarlam), 1500-1800 m, 23.IV.1972. Vegetation similar to habitat 28, but less changed by overgrazing. In small valleys with tall grass *Q. baloot* forests, *Platanus*, and other hardwood trees; in underforest locusts and other shrubs of Fabaceae, wild *Asparagus* sp., *Rheum* sp., *Lappa* sp., and various succulents.

Kunar Prov.

30. Čapa-Dara (Chapadara), 1500 m, 31.V, 20.VI.1971; 1800 m, 25.V.1971. Mountain valley in mixed-forest zone of Nuristan type; in the valley remnants of subtropic tugais of tree-type *Tamarix* spp., *Platanus*, *Corylus* sp., wild olives with underforest of *Punica* sp., *Oleander* sp. and other shrubs; on mountain slopes sparse forests of *Quercus baloot*, *Acer* sp., *Fraxinus* sp., *Ulmus* sp., with mixture of *Pinus* sp. and *Picea* sp.

31. SW Čapa-Dara, 1500 m, 8, 15.VI.1971, 1600 m, 13.VI.1971; 1800 m, 17, 20.VII.1971. Montane foothills with rich mixed forests of Nuristan type; at some sites, in underforest, many *Corylus avellana*, Nepal *Alnus* sp., specific shrubs of *Fabaceae*, *Genista* sp., and *Ephedra* sp.

32. S Čapa-Dara, 1500 m, 25, 30.V.1971; 1600 m, 13.VI.1971; 2000 m, 23.V.1971. Similar to habitat 31.

33. N kamdes (Kamdesh), 1500 m, 20.IX.1971. Similar to habitat 31, but forests are better preserved and rich.

34. Upper Waygal River. (upper Vaygal' River), 2000 m, 7.VII. 1972; 2500 m, 28.VI.1972; 2750 m, 9.VII.1972; 3000 m, 2.VII.1972. Upper border of mixed and coniferous forests of Nuristan type; alpine meadows very impoverished by overgrazing; glaciers, and firm accumulation of ice.

35. Waygal, 2000 m, 11.VII.1972; 3000 m, 2.VII.1972. Vicinity of Vaygal'; rich mixed forests of Nuristan type; in the valley anthropogenic vegetation.

36. N Waygal, 2200 m, 10.VII.1972. Similar to habitat 35.

37. S Waygal, 1200 m, 21, 23.VI.1972; 2000 m, 23.VI.1972; 2750 m, 9.VII.1972. Valley of right tributary of the Vaygal' River with rich vegetation transient between subtropic sparse forests in lower course of the river to mixed coniferous and mixed forests of the Nuristan type in the upper river.

38. W Waygal, 1500 m, 28.VI, 13, 14.VII.1972; 2200 m, 11.VII.1972; 2500 m, 10.VI.1972. Valley of the right tributary of the Waygal River with rich mixed forests; many *Corylus avellana*, wild *Vitis* sp., *Ficus carica*, *Punica granatum*, and other shrubs.

39. SW Peč-Dara (Pech), 2000 m, 6, 18.VI.1971. Mixed forest of the Nuristan type.

40. S Peč-Dara, 2000 m, 24, 25.V.1971. Similar to habitat 39.

41. W Barikot [SW Kamu], 2000 m, 20.VI, 19, 22.VII.1972; 2500 m, 20, 22.VII.1972. Valley of the right tributary of Kunar River; in lower parts of the river subtropic forest with *Quercus baloot*, wild olive, *Platanus*, *Corylus avellana*, and numerous vines; in underforest *Oleander*, myrtle, *Euphorbia*, *Punica granatum*, *Genista* sp., locusts, etc.; in upper parts of the river mixed forests of the Nuristan type.

Nangarkhar Prov.

42. Jalalabad (Dzhelalabad), 650 m, 20.VII.1970. Rich subtropic anthropogenic vegetation; orchards, growths of fan palms, rice, and sugar cane plantations, citrus, and other crops; remnants of floodplain vegetation; on high terraces secondary subtropic savanna with succulents, small palms, and ephemeric vegetation: *Papaver* spp., *Tulipa* spp., *Eremurus*, etc.; at some sites many *Datura indica* and *Calotropis procera*.

43. W Jalalabad, 23.IV.1972. Secondary savannah, similar to habitat 42.

44. NW Jalalabad, [desert] Kamberan, 26.IV.1972. Desert Kamberan; lowland in mountains with sites with dune sands and psammophilic vegetation similar to vegetation of Karakum Desert: *Haloxylon* spp., *Calligonum* spp., *Ferula* spp., and *Salsola* spp.

Farrakha Prov.

45. Anardara (Anardara), 850 m, 12.IX.1972. Desert with stationary sands, rare dunes on N side of rocky areas; thickets of *Haloxylon* spp., *Calligonum* spp., *Astragalus* spp., various ephemeric plants, and other grassy and shrub vegetations; in narrow spaces among cliffs remnants of forests of Kabul *Pistacio*, *Platanus*, *Ficus* spp., and *Prunus* spp.

46. N Anardara, 1100 m, 23.III, 1.IV.1971. Desert with stationary sands similar to habitat 45.

**47. NO [NE] Nazarkhan, 900 m, 2.IX.1972. Predominately stationary sandy desert with large areas of saline soil; sites with rocky desert; very poor vegetation; at some sites thickets of *Haloxylon*, *Prunus* spp., *Ficus* sp., and other shrubs.

48. Nazarkhan (Kalatayi-Nazarkhan), 900 m, 29.XI.1969. In vicinity of Nazarkhan castle subtropic (growing in winter) desert; vegetation of stationary sands; gigantic *Ferula* sp., *Haloxylon persicum*; a typical feature of the landscape is large terrestrial termite structures.

49. Šindand (Shindand), 1100 m, 5.XII.1969; 22.III.1971. Oasis with anthropogenic vegetation among low-mountain rocky deserts with very depressed vegetation; river valley with park of *Platanus*,

Populus spp., and *Salix* spp.; plantations of long-leaf *Pinus* spp. and fruit orchards.

50. 70 km SW Šindand, 1100 m, 22.IX.1970. Subtropic desert on rocky soils.

51. Prešinjan (Peshindzhan), W Šindand, 900 m, 3.XI.1970. Sandy desert, similar to habitat 48.

Uruzgan Prov.

52. Gezab (Gizao), 1300 m, 11, 12, 18.VI.1970. Lowland among mountains cut by the Gilmend River valley; remnants of rich, transitional to subtropical tugai forests; in surrounding mountains of sparse forest of Kabul species of *Pistacio* sp., *Platanus*, and *Juniperus* sp.; in underforest many locusts, *Rosa* sp., *Vitis* sp., *Punica* spp., *Ficus* spp., and *Prunus* spp. occur; fruit orchards and rice paddies.

53. Khakeran [Khakeran NE of Uruzgan], 2700 m, IX.1970; 3000 m, 22.IX.1970. Very rich in species diversity of high-mountain cushion plants; in valleys remnants of tugai forests.

54. Šahrestan (Shakhristan), 2200 m, 2.VII.1970; 2300 m, 17.VII.1970; 2400 m, 20.VII.1970. Middle altitude plateau with cut through valleys and individual mountain peaks (up to 3500-4000 m), steppes and semideserts with vegetation very depressed by overgrazing; in valleys of springs very rich shrub vegetation with singly standing trees of the Kabul species of *Pistacio* sp., *Platanus*, and *Populus* spp.

55. Qonaq pass [Kunak Pass], N Šahrestan, 3000 m, 23.VIII, 1.VIII.1970. Pass over SW spurs of Baba Mountains; high-mountain cushion and meadow vegetation in sites with water, shallow mossy swamps, small glaciers, and accumulations of firn ice.

56. Tarin (Tarinkot), 1300 m, 1800 m, 7.VI.1970. River valley with remnants of tugai forests; mountain slopes with sparse forest of Kabul *Pistacio* sp., *Platanus*, and *Juniperus* sp.

57. SO [SE] Uruzgan (Uruzgan), 2500 m, 27.VI.1970. Xerophytic high-mountain cushion plants.

Gazni Prov.

58. Moqur (Mukur), 2000 m, 22, 24.VI.1970, 7, 13.X.1972, 23.V.1973; 2300 m, 29.V.1973. Wide, dry valley with low elevations, covered with semidesert vegetation on loess soils; *Artemisia* spp., in spring numerous ephemeric plants, especially *Eremurus* predominant; near human communities thickets of *Alhaqi camelorum* and *Glycyrrhiza* sp.

59. NW of Moqur, 2300 m, 24.V.1973. Similar to habitat 58.

60. W Moqur, 2300 m, 15, 19.IX.1972, 1.VII.1973. Wide, arid valley among limestone mountains; semidesert type vegetation, at some sites thickets of xerophytic shrubs, many *Rubus* sp., and *Ephedra* sp.

**61. Kharnay [Kharnay], SW Moqur, 1800 m, 25.V.1971, 5, 22.V.1973. River valley with remnants of tugai forests; montane semidesert.

62. Ghazni (Gazni), 2500 m, 1.VII.1972. Similar to habitat 62.

Kandagar Prov.

64. Ghbargay [Gbargey], 50 km N of Kandagar (Kandagar), 2000 m, 12.XI.1970. Limestone mountains of Shakh-Makhsud Range; in valleys remnants of rich *Platanus-Pistacio* forests with

thickets of locusts, *Rosa* sp., *Rubus* sp., *Ficus* spp., *Prunus amygdalus*, and *Punica* sp.; in high mountains growths of *Juniperus* sp.; at some sites *Ephedra* sp., *Pherula* spp., *Malva* sp., *Lappa* sp., *Mentha* sp., and *Tragopogon* sp. are abundant; in spring many ephemeric plants; *Eremurus*, tulips, poppies, etc.

65. W Spinboldak (Spinbuldak), 1100 m, IV, 10.V.1972. Subtropic semidesert with winter vegetation; in valleys remnants of rich tugai forests, many tree-like *Tamarix* sp.; along margins of the Registan Desert large areas of salty soils.

66. NW of Spinboldak, 1100 m, 10.V., 25.X.1972. Subtropic semidesert.

67. Baghtu (Bagtu), 1700 m, 14.IX, 1.X.1970; 1800 m, 16.IX.1970. Vegetation as in habitat 64.

Zabul Prov.

68. Kalat (Kalat), 1400 m, 18.VII.1972. Remnants of tugai forests in the Tarnak River valley.

Comment. In modern maps localities 19 and 20 belong to Vardak Prov. (*), 47 belongs to Herat Prov. (***) and 61 belongs to Zabul Prov. (***)

CHECKLIST OF BUPRESTID BEETLES OF THE FAUNA OF AFGHANISTAN DISCUSSED IN THIS PAPER (PARTS I-III)

Subfam. JULODINAE

1. *Julodis intricata semenovi* Alexeev, subsp. n. I: 63.
2. *J. kabakovi* Alexeev, sp. n. I: 66.
3. *J. euphratica* Laporte & Gory, 1835. I: 68.
4. *J. variolaris* (Pallas, 1773). I: 70.
5. *J. aeneipes* Saunders, 1869. I: 70.
6. *Julodella haarlovi* Descarpentries, 1965. I: 70.

Subfam. POLYCESTINAE

7. *Polycesta afghanica* Volkovitsh, sp. n. I: 70.

Subfam. ACMAEODERINAE

8. *Acmaeodera* (A.) *edmundi afghanica* Volkovitsh, subsp. n. I: 73.
9. A. (A.) *kabakovi* Volkovitsh, sp. n. I: 74.
- *10. A. (*Acmaeothya*) *uvarovi* Obenberger, 1928. I: 76.
11. A. (A.) *instabilis* Cobos, 1966. I: 77.
12. A. (A.) *mirabilis* Volkovitsh, sp. n. I: 77.
13. *Microacmaeodera* (M.) *longicornis* (Cobos, 1966). I: 78.
- *14. *Acmaeoderella* (A.) *caspica turkestanica* (Obenberger, 1934). I: 78.
- *15. A. (A.) *turanica* (Reitter, 1890). I: 80.
- *16. A. (A.) *nivetecta* Volkovitsh, 1976. I: 80.
17. A. (*Euacmaeoderella*) *boryi* (Brulle, 1832) [= A. (E.) *villosula* (Steven, 1830) (Volkovich, 1990)]. I: 80.
- *18. A. (E.) *subcyanea* (Reitter, 1890). I: 80.
- *19. A. (E.) *adamantina* (Reitter, 1890). I: 80.
20. A. (E.) *staudingeri* (Abeille de Perrin, 1900). I: 80.
- *21. A. (E.) *ballioni* (Ganglbauer, 1888) [= A. *xerxes* Obenberger, 1916, syn. n.; = A. *dubia* auct. (non Ballion, 1870), part. syn. n.]. I: 80.
22. A. (E.) *iranica* (Obenberger, 1934). I: 81.

Subfam. CHALCOPHORINAE

23. *Chalcophorella* (*Stigmatophorella*) *orientalis* Obenberger, 1924. I: 81.
24. *Capnodis tenebricosa* (Olivier, 1790). I: 81.
25. *C. sexmaculata* Ballion, 1870. I: 81.
26. *C. anthracina* (Fisher, 1839). I: 82.
27. *C. miliaris* (Klug, 1829). I: 82.
28. *C. parumstriata* Ballion, 1870. I: 82.

Subfam. SPHENOPTERINAE

- *29. *Sphenoptera* (S.) *glabrata* (Menetries, 1832). II: 852.
- *30. S. (S.) *herzi* Jakowlew, 1907. II: 853.
31. S. (S.) *rangnowi* Kerremans, 1909. II: 853.
32. S. (S.) *shindandensis* Alexeev, sp. n. II: 853.
- *33. S. (S.) *cyanea* Jakowlew, 1899. II: 855.
34. S. (S.) *chalybaea anardarensis* Alexeev, subsp. n. II: 855.
35. S. (S.) *exarata* (Fischer, 1824). II: 855.
36. S. (S.) *margellanica* Kraatz, 1882. II: 855.
- *37. S. (S.) *komarovi* Jakowlew, 1886. II: 855.
38. S. (*Deudora*) *unidentata* Jakowlew, 1890. II: 855.
39. S. (D.) *pseudounidentata* Alexeev, sp. n. II: 856.
- *40. S. (D.) *tibialis* Jakowlew, 1886. II: 856.
- *41. S. (D.) *sulciventris* Jakowlew, 1886. II: 858.
42. S. (D.) *kryzhanovskii* Alexeev, sp. n. II: 859.
- *43. S. (D.) *kepelensis* Alexeev & Zykov, in press. II: 860.
44. S. (D.) *surobayensis* Alexeev, sp. n. II: 860.
- *45. S. (*Rhaphidiochila*) *coerulea* Jakowlew, 1899. II: 861.
- *46. S. (*Chilostetha*) *canescens* Motschulsky, 1860. II: 861.
- *47. S. (C.) *?permixta* Obenberger, 1949. II: 861.
- *48. S. (*Chrysoblemma*) *beckeri* Dohrn, 1866. II: 861.
- *49. S. (C.) *scovitzii* Faldermann, 1835. II: 861.
- *50. S. (C.) *hauseri* Reitter, 1895. II: 861.
- *51. S. (C.) *punctatissima* Reitter, 1895. II: 861.
- *52. S. (C.) *artemisiae* Reitter, 1889. II: 861.
- *53. S. (C.) *viridiaurea* Kraatz, 1882. II: 861.
- *54. S. (*Hoplistura*) *semenovi* Jakowlew, 1889. II: 862.
55. S. (*Tropeopeltis*) *kaznakovi bicoloratus* Alexeev, subsp. n. II: 862.
56. S. (T.) *klapperichi* Cobos, 1966. II: 862.
57. S. (T.) *lafertei monticola* Cobos, 1966. II: 862.

Subfam. BUPRESTINAE

58. *Cypriacis costipennis* Fairmaire, 1891. II: 862.
59. *Anthaxia* (*Haplantaxia*) *kaszabi* Cobos, 1966. II: 862.
- *60. A. (*Euanthaxia*) *anatolica lucidiceps* Gory, 1841. II: 862.
- *61. A. (*Melanthaxia*) *aeneopicea* Kerremans, 1900. II: 863.
- *62. A. (M.) *montivaga* Bily, 1984. II: 863.
63. A. (*Cyclanthaxia*) *ephippiata* Redtenbacher, 1850. II: 863.
64. *Cratomerus* (C.) *fariniger* (Kraatz, 1882). II: 863.
65. C. (*Cryptocratomerus*) *fedtschenkoi* Semenov, 1895. II: 863.
- *66. C. (*Cryptocratomerus*) *elaegni* (Richter, 1945). II: 863.
67. *Trachypterus* (T.) *picta picta* (Pallas, 1773). II: 863.
- *68. T. (*Trachypterus*) *ignicola* (Champion, 1918). II: 863.

Subfam. CHRYSOBOTHRINAE

69. *Chrysobothris* (*C.*) *parvipunctata* Obenberger, 1914. II: 864.
70. *C.* (*C.*) *kabakovi* Alexeev, sp. n. II: 864.

Subfam. AGRILINAE

71. *Vanroonia afghanica* Alexeev & Volkovitsh, sp. n. III.
72. *Meliboeus* (*M.*) *kaszabi* Cobos, 1966. III.
*73. *M.* (*M.*) *staneki* Obenberger, 1935. III.
*74. *M.* (*M.*) *reitteri* Semenov, 1889 (= *M. klapperichi* Cobos, 1966, syn. n.). III.
75. *M.* (*M.*) *kabakovi* Alexeev, sp. n. III.
76. *Agrilus afghanisticus* Alexeev, sp. n. III.
77. *A. tshapadarensis* Alexeev, sp. n. III.
78. *A. klapperichianus* Cobos, 1966. III.
79. *A. kabakovi* Alexeev, sp. n. III.

Subfam. CYLINDROMORPHINAE

- *80. *Paracylindromorphus subuliformis subuliformis* (Mannerheim, 1837). III.

Subfam. TRACHYINAE

- *81. *Aphanisticus sugonjaevi* Alexeev sp. n. III.
82. *Trachys turanica* Semenov, 1893 (= *t. bactriana* Semenov, 1895, syn. n.). III.

ADDENDUM

In publications on the fauna of Afghanistan the following species are recorded which are absent in our materials.

Julodis faldermanni Obenberger, 1923 (Cobos, 1966, Bilý, 1972). We are not familiar with this form, but the presence of Transcaucasian *J. faldermanni* Mnnh. in Afghanistan seems unlikely. Most probably this name belongs to one of the forms of *J. variolaris* (Pall.) or *J. euphratica* (Lap.-Gory).

Julodis faldermanni badakhshanicus Cobos, 1966. Examination of the holotype showed that this form belongs to *J. variolaris*, possibly as a subspecies.

Julodis ormarensis Obenberger, 1924 (Bilý, 1972). It is close to *J. euphratica*, possible a form of this polytypic species.

Julodis gotwendensis Obenberger, 1924 (Cobos, 1966; *J. consobrina* subsp. *gotwendensis* Obenb.). Probably this form fits *J. kabakovi* Alexeev, 1990.

Julodis klapperichi Cobos, 1966. This species is close to *J. euphratica* and differs from it in large oval cells of elytra and very coarse punctation of intervals; short notch of parameres of aedeagus occupying approximately 1/3 of its length (in *J. euphratica* it occupies about half of its length), and wider aedeagus. Possibly it is a form of *J. euphratica*.

Julodella dilaticollis Semenov, 1893 (Bilý, 1972).

Acmaeoderella (*A.*) *casgica suturifera* (Reitter, 1904). It was described from Afghanistan (Serif-Kuh, N of Gerat).

Capnodis indica Thomson, 1879 (Rikhter, 1952).

Psiloptera (*Lampetis*) *catenulata* (Klug, 1829) (Cobos, 1966). This record belongs to *P. argentata* Mannh.

Sphenoptera (*S.*) *notata* Jakowlew, 1899 (Descarpentries, 1965).

Sphenoptera (*S.*) *plana haarlovi* Descarpentries, 1965.

Sphenoptera (*S.*) *krali* Obenberger, 1927 (Cobos, 1966).

Sphenoptera (*S.*) *lateralis* Faldermann, 1836 (Cobos, 1966). Finding of this species in S Afghanistan seems very unlikely.

Sphenoptera (*Chrysolemma*) *tamaricis* (Klug, 1829) (Cobos, 1966). Most likely this record belongs to *S. beckeri* Dohrn.

Sphenoptera (*Hoplistura*) *perroteti afganica* Cobos, 1966.

Sphenoptera (*Hoplistura*) *venusta seistanica* Descarpentries, 1965.

Anthaxia scheibei Thery, 1936.

Cratomerus (*Cryptocratomerus*) *angustipennis* (Klug, 1829) (Cobos, 1966). This record may belong to *C. fedtschenkoi* (Sem.).

Chrysobothris (*Sphaerobothris*) *globicollis* Reitter, 1895. It was described from Afghanistan (Serif-Kuh, N of Gerat).

Agrilus albojularis longepilosus Cobos, 1966.

Aphanisticus pygmaeus (Lucas, 1849) (Cobos, 1966; *pygmaeus* Illiger).

Trachys pumilus Illiger, 1803 (Cobos, 1966).

Thus, this paper (parts I-III) includes data on 82 species of buprestid beetles of the fauna of Afghanistan, among which 15 species and 4 subspecies are described as new species; 33 species are new records for the fauna of Afghanistan. In the literature (Descarpentries, 1965; Cobos, 1966; Bilý, 1972; etc.) about 25 more species were recorded that are absent in our materials, although many records need to be carefully verified. Including these data, 110 species of buprestid beetles were found in the fauna of Afghanistan. Because data on many species known in territories adjacent to Afghanistan, particularly Central Asia, Iran, and Pakistan, are absent and because of diversity of topography and vegetation of this country (Alekseyev et al., 1990) it is possible to suppose that fauna of buprestids of Afghanistan is considerably richer and may include up to 300-400 species.

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Contribution to the Systematics of Leaf-Beetles of the Genus *Thelyterotarsus* Wse. (Coleoptera, Chrysomelidae) from Transcaucasia, Central Asia, and Kazakhstan*

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Abstract. New species of the leaf beetles of the genus *Thelyterotarsus*, namely *T. limbatus* from Mongolia, *T. issykensis*, *T. korotyaevi*, *T. sogdianus*, *T. mogoltavicus*, and *T. karateginus* from Tajikistan, *T. gobustanus* from Azerbaijan, *T. przewalskii* from Kyrgyzstan, and *T. inopinatus* and *T. nurtavicus* from Kazakhstan are described.

Key words: *Thelyterotarsus*; Chrysomelidae; Coleoptera; new species.

In the process of constructing a key to species of *Thelyterotarsus* Wse. for a monograph on chrysomelids of Cryptocephalinae of the fauna of Russia and adjacent countries of the Palearctic Region I examined numerous collections of expeditions of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg (ZIS), zoological museums of several universities, and some private collections. In the process of this work I found several new species, expanded data on the ranges and food plants of previously known taxa, and studied ranges of variation in large series, which was necessary for the construction of keys. All type specimens were examined, including those from museums of France and West Germany.

In this paper I describe new species from Transcaucasia, Central Asia, and Kazakhstan. I am deeply grateful to G. S. Medvedev, M. G. Volkovich, and K. Z. Kulenova for their data, which they provided for examination. Type specimens of described species will be transferred to the collection of ZIS.

Thelyterotarsus limbatus Lopatin, sp. n.

This species belongs to the group of species with black body and is the closest to *T. medvedevi* Lop. from Mongolia. It differs clearly in the shape of the aedeagus and distinctly dilated ♂ foretarsi.

♂. Body narrow, small, elongate, moderately convex, and shiny; black labrum or only its margins, lateral edging stripe, and apices of elytra, 3-4 antennal segments ventrally and legs yellow ferruginous, base and dorsal side of femora, and sometimes apices of tibia and tarsi pitch-black.

Frons and cervix convex, covered with small, dense, and distinct punctations. Hairs of head long, sometimes erect, moderately dense, and easy to rub off. Antennae short, 4th and 5th segments of equal

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