First description of the male of *Tsherepanovia globosa* Korotyaev, 1992 (Coleoptera, Curculionidae) with new taxonomic data

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**Abstract**

A male of *Tsherepanovia globosa* Korotyaev, 1992 is described and illustrated. *Tsherepanovia* Korotyaev, 1992, placem. nov. is transferred from the subfamily Erirhininae to the subfamily Curculioninae. Key for the genera of the tribe Ellescini is given.

**Key words:** Biodiversity, Curculionoidea, Curculioninae, Ellescini, Turkmenistan.

**Introduction**

The genus *Tsherepanovia* Korotyaev, 1992 was described by a female collected by an expedition of Novosibirsk entomologists in 1987 in Turkmenistan (Korotyaev 1992). This genus was placed at the description in the subfamily Erirhininae close to the genera *Afghanocryptus* Voss, 1961 (=*Tadius* Pascoe, 1885), *Aralkumia* Bajtenov, 1974 and *Turancryptus* Korotyaev, 1988. A male of this species was found in the 1988 material from the type locality. Here a description of the male and illustrations of *Tsherepanovia globosa* Korotyaev, 1992 are given, and a new systematic placement of the genus *Tsherepanovia* is established.

**Material and methods**

Holotype and specimen are kept in the ISEA = the Institute of Systematics and Ecology of Animals, SB RAS (Novosibirsk).  
Descriptions and body measurements were prepared using the Zeiss Stemi 2000-C dissecting stereomicroscope.  
The terminology of the weevil body is according to Lawrence et al. (2010).
Systematics

Insecta: Coleoptera: Curculionidae: Curculioninae: Ellescini

Genus: Tsherepanovia Korotyaev, 1992, placem. nov.

Remarks. The subfamily Erirhininae is the most primitive group among the subfamilies of Curculionidae. Its first representatives appear at the end of the Early Cretaceous (Legalov 2012, 2014), while the finds of other subfamilies begin only in the Maastrichtian and the Paleocene (Legalov 2015, 2020b). This subfamily differs from the other subfamilies in the tegmen with well-developed tegminal plate and ventrite 5 with distinct anal setae (Legalov 2015). The well-developed tegminal plate is the most important character, but it is reduced in some groups (Dorytomini, Storeini, and Bagoini), and belonging to this subfamily is determined by the presence of anal setae and antennal scrobes directed towards the eyes (Legalov 2020a). The reduced tegminal plate and the absence of anal setae allow Tsherepanovia, placem. nov., to be placed in the subfamily Curculioninae. A preliminary report about this systematic position without justification was published by Legalov (2016). From 30 to 34 tribes belong to the subfamily Curculioninae (Alonso-Zarazaga and Lyal 1999; Caldara et al. 2014). The genus Tsherepanovia belongs to the tribe Ellescini based on the mandible not prominent, with dentate inner face, tarsal claws free at the base, pronomum bell-shaped, without lateral carinae, uncinate tibiae, eyes not protruding from the contour of head, abdominal ventrites 1 and 2 elongated, and ventrites 3 and 4 ventrites short. The subtribes Ellescina with the genera Ellescus Dejean, 1821, Pachyttychius Jekel, 1861 and Tsherepanovia, Acentrusina with the genus Acentrus Desmarest, 1839, Stphylinia with genera Orthocharaxtis Germar, 1823, Paraphilernus Desbrochers des Loges, 1892, Paroryx Reitter, 1913, Philernus Schoenherr, 1835, Pseudostyphlus Tournier, 1874, Styphlidius Penecke, 1936, Styphlus Schoenherr, 1826, Trachystyphlus Alonso-Zarazaga et Lyal, 1999, and Turanostyphlus Davidian et Savitsky, 2000 belong to the tribe Ellescini. The genus Tsherepanovia is a derivative of the diverse genus Pachyttychius, but it has adapted to living in the rocky desert.

Tsherepanovia globosa Korotyaev, 1992

Tsherepanovia globosa Korotyaev, 1992: 889-891.
(Figs. 1-2)

Material: Holotype. Female (ISEA), Turkmenistan, Central Kopet Dagh, 15 km W of Firjuza, Dushak Mt., 11.V.1987, V.V. Dubatolov, S. Kalabin. Specimen: 1 male (ISEA), idem, 16-21.V.1988, Yu. Chekanov.

Description

Body red-brown, glabrous.

Male. Rostrum 0.9 times as long as pronomum, subcylindrical, 3.1 times as long as wide at apex, 3.9 times as long as wide in middle, 3.4 times as long as wide at base, weakly curved, widened at apical third, with three indistinct longitudinal carinas, densely punctate. Apex of rostrum with two branches of setae directed anteriorly. Mandibles large, with curved outer edge. Antennal scrobes directed to base of rostrum, visible at base dorsally. Eyes quite large, quite coarsely-faceted, not protruding from contour of head, located laterally. Forehead flattened, densely punctate, barely narrower than width of rostrum basally. Temples shorter than eye, punctate. Vertex weakly convex, densely punctate. Head spherical, widened behind eyes. Antennae inserted in apical third of rostrum. Scape long, 8.4 times as long as wide at apex, not reaching eye. Antennomeres 2-11 with quite long setae. Antennomere 2 long-conical, 2.5 times as long as wide at apex, 0.3 times as long as and 0.9 times as narrow as scape. Antennomeres 3-5 conical. Antennomere 3 1.7 times as long as wide at apex, 0.5 times as long as and 0.8 times as narrow as antennomere 2. Antennomere 4 1.5 times as long as wide at apex, 0.9 times as long as and equal in width to antennomere 3. Antennomere 5 1.1 times as long as wide at apex, 0.9 times as long as and 1.2 times as wide as antennomere 4. Antennomeres 6-7 wide-conical. Antennomere 6 1.8 times as long as wide at apex, 0.9 times as long as and 1.1 times as wide as antennomere 5. Antennomere 7 equal in length and width, 1.1 times as long as and equal in width to antennomere 6. Antennomere 8 rounded, about 1.1 times as long as wide, 1.1 times as long as and 1.05 times as wide as antennomere 7. Antennal club compact, 2.0 times as long as wide in middle, 0.5 times as long as antennomeres 2-8 combined. Antennomere 9 0.7 times as long as wide, 1.1 times as long as and 1.7 times as wide as antennomere 8. Antennomere 10 0.6 times as long as wide, 0.8 times as long as and equal in width to antennomere 9. Antennomere 11 0.8 times as long as wide, 1.3 times as long as and 0.9 times as narrow as...
antennomere 10. Pronotum almost campanulate, 1.4 times as long as wide at apex, 0.9 times as long as wide in middle, 0.8 times as long as wide at base, with rounded sides. Maximal wide before base. Disk weakly convex, finely punctate. Distances between punctations much longer than their diameter. Scutellum very small, indistinct. Elytra almost rounded, 1.5 times as long as wide at base, subequal to wide at middle, 1.6 times as long as wide at apical fourth, 1.9 times as long as pronotum. Humeri absent. Elytral striae weak. Stria 9 short merges with stria 10 near level of metacoxa. Interstriae wide, flat, about 5.0-6.0 times as wide as elytral stria, sparsely punctate and finely transverse-rugose. Prosternum densely punctate, with rostral channel and with weak postocular lobes. Pre- and postcoxal portions of prosternum equal in length. Precoxal portion 0.3 times as long as length of procoxal cavity. Procoxal cavities contiguous. Metanepisternum 6.4 times as long as wide in middle, sparsely punctate. Metaventrite short, 0.5 times as long as length of metacoxal cavity, weakly concav, densely punctate. Abdomen densely punctate. Ventrites 1 and 2 concav in middle. Abdominal ventrite 1 0.9 times as long as metacoxal length. Ventrite 2 1.1 times as long as ventrite 1. Ventrites 3-5 flattened. Ventrite 3 0.5 times as long as ventrite 2. Ventrite 4 0.8 times as long as ventrite 3. Ventrite 5 3.0 times as long as ventrite 4, without anal setae. Legs long, with setae. Procoxae large, conical, coarsely punctate. Mesocoxae spherical, widely separated. Metacoxae weakly transverse. Trochanters with long seta. Femora thickened, densely punctate, with tooth. Tibiae almost biconcave, flattened, with distinct uncus. Tarsi quite long. Tarsomeres 1-3 with pulvilli ventrally. Tarsomere 1 long-conical. Tarsomere 2 conical. Tarsomere 3 bilobed. Tarsomere 5 elongate. Claws free, without teeth. Length of body (without rostrum): 4.4 mm. Length of rostrum: 1.2 mm.

Figure 1. Tsherepanovia globosa: a – male, dorsally, b – male, ventrally, c – female, holotype, dorsally, d – male, laterally, e - male, in front. Scale bar = 1.0 mm.
**Figure 2.** *Tshirepanovia globosa*: a – aedeagus, dorsally, b – tegmen, dorsally. Scale bar = 0.5 mm.

**Female.** Rostrum narrower, 2.8 times as long as wide at apex, 3.0 times as long as wide in middle, 2.5 times as long as wide at base. Ventrites 1 and 2 flattened. Length of body (without rostrum): 4.7 mm. Length of rostrum: 1.3 mm.

**Distribution:** South Turkmenistan, Kopet Dagh mountain range (Fig. 3).

### Key for the subtribes and genera of the tribe Ellescini

|   |   |   |
|---|---|---|
| 1. | Eyes almost connected ventrally | *Acentrus* (Acentrina) |
| - | Eyes widely spaced ventrally | 2 |
| 2. | Eyes located towards bottom of head | *Styphlina* |
| - | Eyes lateral (*Ellescina*) | 3 |
| 3. | 9th elytral stria complete. Prosternum without postocular lobes | *Ellescus* |
| - | 9th elytral stria merges with 10th striae near metacoxae. Prosternum with postocular lobes | 4 |
| 4. | Femora with teeth. Body glabrous. Elytra almost rounded | *Tshirepanovia* |
| - | Femora without teeth. Body with scales. Elytra suboval | *Pachytychius* |
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