

A new species of the genus *Megatoma* Herbst, 1791 from Mongolia (Coleoptera: Dermestidae: Megatominae: Megatomini)

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Abstract. A new species, *Megatoma* (s. str.) *thorni* sp. nov. recently collected in Mongolia is described, illustrated and compared with related species. Furthermore, new records of *Megatoma* (*Pseudohadrotoma*) *friebi* (Pic, 1938) and *Dermestes* (*Dermestinus*) *szekessyi szekessyi* Kalík, 1950 from Mongolia are reported.

INTRODUCTION

The genus *Megatoma* Herbst, 1791 consists of 28 different species, so far only four of those are known to occur in Mongolia. Recently, a new species of the genus was collected in that country, and is described herein. It was detected among some unidentified dermestids sent to the first author by Simon Thorn, a forest ecologist of the Julius-Maximilians-Universität Würzburg (Germany).

MATERIAL AND METHODS

All specimens were stored for seven days in a solution of 1% pepsin in hydrochloric acid to free them roughly from protein tissues and making the extremities of the body moveable. The abdomen was disconnected from the body and glued upside-down onto the same cardboard plate, just behind the beetle. Before doing this, the genitalia was excluded and then cleaned with a fine needle in a drop of 99% glycerol. Afterwards it was also glued onto the plate behind the beetle, firmly embedded in a drop of a solution consisting of polyvinylpyrrolidone, aqua demineralisata and diglycerin (the liquid solution becomes permanently solid after a few minutes). Photos of the body and the abdomen were taken with a Sony alpha 35 digital SLR camera, connected to a Nikon CF N Plan Achromat 4x 160/- objective and extension rings; for the photos of the genitalia and antenna a Bresser Junior USB-Handmikroskop at 200x magnification was used. Because of the low depth of field all photos were taken as layered images, afterwards combined by using the stacking program CombineZP. Nomenclature and systematics in this paper follow Háva (2024).

The following measurements were made:

total length (TL) - linear distance from anterior margin of pronotum to apex of elytra;
pronotal length (PL) - maximal length measured from anterior margin to posterior margin;
pronotal width (PW) - maximal linear transverse distance;
elytral length (EL) - linear distance from shoulder to apex of elytron;
elytral width (EW) - maximal linear transverse distance.

The mentioned material is deposited in the collection of the first author (AHEC).

The holotype of the new species described here is provided with a red, printed label with text as follows: „HOLOTYPE, *Megatoma* (s. str.) *thorni* sp. nov., A. Herrmann & J. Háva det. 2024”.

TAXONOMY

***Megatoma* (s. str.) *thorni* sp. nov.**
(Figs. 1a-c)

Type material. Holotype (♂) labelled: "MNG, N of Ulaan Baatar, Khandgait, Chingeltei Oul, 48.08304, 106.84640, 10.08.2010, leg. Müller", (AHEC).

Remarks. All the left legs of the specimen are damaged, and the middle tarsus as well as the final segment of the left antennal club is missing. The collecting method was beating branches in a forest consisting mainly of *Pinus sylvestris* Linnaeus and *Betula platyphylla* Sukachev. It was a very sparse forest as is typical for the southern Siberian taiga.

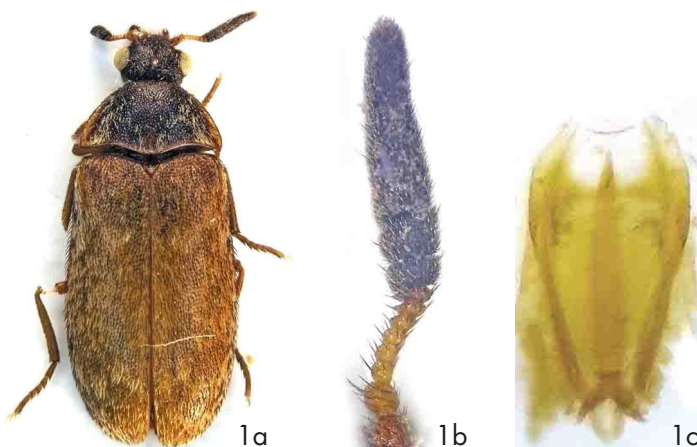


Fig. 1. *Megatoma* (s. str.) *thorni* sp. nov., holotype (male): a-habitus, dorsal aspect; b-antenna; c-genitalia.

Description of the holotype (male). Body measurements (mm): TL 3.7, PL 0.7, PW 1.7, EL 3.0, EW 1.8; body longish oval, head deep black, densely and coarsely punctate, dulled by the dense punctures, covered sparsely by suberect brown setae, some brighter ones intermixed. Eyes big with hardly visible microsetae. Ocellus distinctly present on frons. Pronotum two times broader than long, narrowed from the apical to the anterior edges, margins untoothed and visible from above, punctation almost as dense and coarse as on the head, covered somewhat sparsely by short strong setae which are dark and suberect, with a few brighter setae intermixed near the apical edges. Bulged in the middle of the anterior part, blackish brown, the lateral margins yellowish brown. Scutellum shiny brown, small, triangular rounded, naked and without punctation. The elytra also strongly, but less densely, punctate, so that the interspaces are shiny. Sparsely covered with suberect setae, with alternating patches of dark and light brown setae covering the surface indistinctly (Fig. 1a). The antennae consist of 11 antennomeres each; the shaft is yellow with a slightly darkened basal segment, whereas the club is entirely black; it is large and longish oval, its final segment conspicuously extended (Fig. 1b). Sternites I-V light brown,

with similar punctation and pubescens as on the elytra, covered sparsely with thin and short dark brown setae. Legs thin and brown, with sparse decumbent short light setae, tarsi subequal in length to the tibiae. Genitalia as in (Fig. 1c).

Female. Unknown.

Differential diagnosis. Because of the morphological characters, the new species belongs in the subgenus *Megatoma* Herbst, 1791. It differs from all other Asian species of this subgenus (Kadej & Háva 2016) especially from *M.* (s. str.) *pubescens* (Zetterstedt, 1828) and *M.* (s. str.) *jakutskiensis* Kadej & Háva, 2016 but differs from them by the colour of the elytral patterns, shape of the male antennae and genitalia.

Etymology. The species name is in honour of Simon Thorn (Germany).

Distribution. So far this species is known only from Mongolia.

FAUNISTIC RECORDS

Dermestes (Dermestinus) szekessyi szekessyi Kalík, 1950

Material examined: 2 ♂♂, 1 ♀, Mongolia, Atschit Nuur, Südufer, 49°25'00.0"N 90°40'00.0"E, 27.VII.2018 leg. G. Wagner, (AHEC).

Distribution. Europe; „Caucasus“; central and west Kazakhstan; Mongolia; Russia: Astrakhan, Novosibirsk, Stavropol, Tuva (Háva 2006, 2019, 2024). New locality data from Mongolia.

Megatoma (Pseudohadrotoma) friebi (Pic, 1938)

Material examined: 2 ♂♂, Mongolia, Tsagaannuur, Ölgii, Bayan-Ölgii, Altay, 49°03'49.5"N 90°10'48.7"E, 7.VI.2012 leg. J. Müller, (AHEC).

Distribution. North Mongolia; Russia: Altai, Chitinsk, Tomsk, Tuva (Háva & Kalík 2003, Háva 2024). New locality data from Mongolia.

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