

The identity of *Luperus (Calomicrus) minutus* Joannis, 1865 (Coleoptera: Chrysomelidae)

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Abstract: The identity of *Luperus (Calomicrus) minutus* Joannis, 1865 (currently *Taphinellina minuta*; Coleoptera: Chrysomelidae) is established and a redescription based on the type specimen is given. The classification of this species in the genus *Taphinellina* is confirmed.

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Introduction

From my friend Manfred Döberl I received a large series of a chrysomelid species (subfamily Galerucinae) from Mongolia for identification. The specimens proved to be close to *Taphinellina minuta* (Joannis) but the form of the aedeagus showed some remarkable differences with figures given by several authors. Therefore it was necessary to examine the type-specimen.

Luperus (Calomicrus) minutus was described by de Joannis (1865) from a single specimen from Daouri, a locality in Russia near the borders of Mongolia and China. De Joannis attributed this species to Mannerheim; an original description of *L. minutus* by Mannerheim, however, does not exist. The type-specimen, a male, was deposited in the collection of M. Reiche and is now kept in the Museum National d'Histoire Naturelle, Paris (MNHN).

In 1893 Weise suggested that *Luperus minutus* was described from a small, teneral, violet-blue specimen of *L. altaicus* Mannerheim (currently *Scelolyperus altaicus*). Ogloblin (1936) gives a redescription of *L. minutus* together with a detailed figure of the male aedeagus. The possible conspecificity of *L. minutus* and *L. altaicus*, suggested by Weise, was rejected because of large differences in the form of the aedeagi.

Gressit & Kimoto (1963) included *L. minutus* in their work on the Chrysomelidae of China and Korea as *Exosoma minuta* and

depicted its aedeagus. Wilcox (1973) proposed a new combination: *Taphinellina minuta*; unfortunately no arguments were included. In the most recent work on the Chrysomelidae of Mongolia (Medvedev, 1982) this species is again included in the combination *Luperus (Calomicrus) minutus*. The figure of the aedeagus in this work is very similar to that given by Ogloblin (1936).

Examination of the male genitalia of the type-specimen of *Luperus minutus* proved that the specimens from Mongolia under study belong to this species. The aedeagi figured by Ogloblin (1936), Gressit & Kimoto (1963) and Medvedev (1982) show remarkable differences with the aedeagus of *Luperus minutus* and belong to another yet undescribed species.

External morphological characters show that *L. minutus* has to be included in the genus *Taphinellina* Maulik, as suggested by Wilcox (1973): the second and third antennal joints are subequal in length and the front coxal cavities are separated by an elevated prosternal process.

To prevent further confusion a redescription of the species is presented.

***Taphinellina minuta* (Joannis)**
(figs. 1-2)

Material examined

Type: The male type-specimen from Daouri in

MNHNP is labelled as follows: "Luperus minutus Mannerh. Dauria", "Museum Paris ex. coll. R. Oberthur Reiche", "TYPE".

Because the type-specimen is clearly labeled, no further labels have been added.

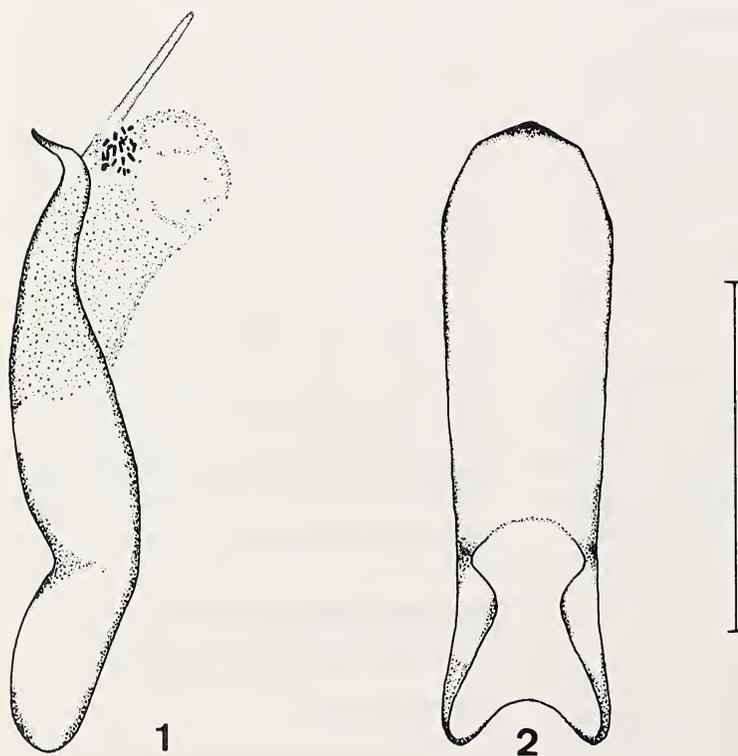
Apart from the type, specimens from the following localities have been examined: Mongolia, Chentejsky, 5 km west of Mörön, 1200 m, 25-26.vi.1976, leg L. N. Medvedev & N. Woronowa, 2 specimens (coll. Staatliches Museum für Naturkunde, Stuttgart (SMNS)). Mongolia oriental, Chentejsky ajmac del. Mörön-gol, vii.1985, leg. B. Malec, 5 specimens (coll. Döberl, coll. Beenen). Mongolia central, Centralni ajmac Ulan Batar env., vii.1985, leg. B. Malec, 32 specimens (coll. Döberl, coll. Beenen).

Description

Head: shining black; mouthparts brownish. Vertex without punctures. Eyes oval, of moderate size. Frontal tubercles flat, triangular;

smooth, surrounded by a narrow sulcus. Antennae: first antennal joint brown, the second and third are yellowish. The following joints become gradually darker. The last ones are brown. The second and third antennal joints are subequal in length and only a little longer than wide. The following joints are much larger than wide (more than three times as long as wide).

Thorax: Dorsal part of pronotum black with a shine of blue. Width about 1.5 times length. Sides and base moderately curved, with small margins. Front angles swollen, hind angles slightly produced. Lateral margins with rows of small hairs. Surface of pronotum moderately, evenly convex, without impressions and finely punctate. Scutellum flat, triangular and black. Elytra three times longer than wide and of the same color as the pronotum; punctuation definitely stronger than on pronotum, with a few hairs mainly in the apical half. Epipleura wide at base; narrowed rather abruptly just before middle, narrow to sutural



Figs. 1-2. *Taphinellina minuta* (Joannis). 1, left lateral side of aedeagus, with partly everted internal sac; 2, ventral side of aedeagus (Scale line 0.5 mm).

angles. Legs: femora dark brown with the apex a little lighter. Tibiae yellowish at base, darker to the apex. Tarsus and claws dark brown. The claws are appendiculate. Ventral surface dark brown to black. Front coxal cavities open and separated by an elevated prosternal process.

Male genitalia: aedeagus symmetrical. Basal parts parallel sided and abruptly narrowed near the apex. In side view the apex is more or less "S-shaped". The internal sac, if partly everted, shows a small parallel sided central piece and very small sclerites on the swollen sides (figures 1-2).

Length: 2.9-3.8 mm; width 1.2-1.6 mm.

The type specimen is coloured a little lighter, most probably due to immaturity. Instead of black with a shine of blue most parts are dark brown with a blueish tinge.

Distribution

Taphinellina minuta occurs in Mongolia and adjacent parts of Russia (the above mentioned localities). Previous records from Korea and China need confirmation.

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