Natura Somogyiensis 44: 21-26. Kaposvár, 2024 https://doi.org/10.24394/NatSom.2024.44.21
Submitted: 07.07, 2024; Accepted: 04.09, 2024; Published: 20.09 2024 www.smmi.hu/termtud/ns/ns.htm

On the taxonomic status of *Grammoptera geniculata* Kraatz, 1886 (Coleoptera: Cerambycidae)

Lukáš Skořepa,

Peč 13, 38001 Dačice, panjericho@centrum.cz

Skořepa, L. 2024: *On the taxonomic status of Grammoptera geniculata Kraatz, 1886 (Coleoptera: Cerambycidae). Natura Somogyienis 44: 21-26.*
Abstract: *Grammoptera ustulata* (Schaller, 1783) was described from Halle environs (Germany) but its area is extending to Euro-Anatolian species of oak forests. *Grammoptera ustulata* var. *geniculata* Kraatz, 1886 from Andalusia (Spain) was known as a variation. Based on the morphological differences, the status of *Grammoptera geniculata*, Kraatz, 1886 should be reinstated to the species level. The present paper provides additional morphological features of this taxon.

Keywords: taxonomy, status revision, longhorn beetle, Spain

Introduction

Currently, there are six recognized longhorn beetle species of the genus *Grammoptera* in Europe. The three species *G. abdominalis* Stephens, 1831; *G. ruficornis* Fabricius, 1781, and *G. ustulata* Schaller, 1783 are widely distributed across the Europe, while *G. auricollis* Mulsant & Rey, 1863; *G. baudi* Sama, 1985, and *G.viridipennis* Pic, 1893 have restricted ranges in the Mediterranean region.

Grammoptera ustulata (Schaller, 1783) is a widespread Euro-Anatolian species of oak forests, which has been described as *Leptura ustulata* from the surroundings of Halle (Germany). The present paper gives additional characters of *Grammoptera geniculata* Kraatz, 1886, which was described as a variation of *G. ustulata* var. *geniculata* Kraatz, 1886 from Andalusia (Spain).

Material and methods

During the field trip in southern Spain in February 2020, a 6 cm diameter oak branch infested with *Vuilleminia* sp. was collected. Subsequently, 10 specimens of the longhorn beetle *Grammoptera* sp. were reared from the branch. The longhorn beetle specimens obtained differed from other known European species of *Grammoptera*. The specimens were identified by Danilevsky (2021) as *G. ustulata* var. *geniculata* on the basis of the photographic documentation sent. Later, this taxon was listed as a valid species in the catalogue of Palaearctic Cerambycoidea by Danilevsky (2021), but the distinguishing characters of the species were missing.

ISSN 1587-1908 (Print); ISSN 2062-9990 (Online)

Results and discussion

The description refers to the darker coloured specimens of *G. ustulata* from Andalusia, Spain, which is easily distinguished by their dark red to black legs (including femora) and dark antennae. Kraatz's description emphasises the dark colouration of the hind legs.

However, the syntype material could not be found, but the newly collected specimens show exact morphological characteristics with Kraatz's description (in LEDER 1886).

Additional material:
(5♂♂, 6♀♀) Spain, Andalusia, Cadiz, 5km W Los Barrios, ex. Quercus,7.ii.2020, L. Skořepa lgt.

Cerambicydae
Grammoptera J. Müller, 1835
Grammoptera geniculata Kraatz, 1886

Diagnostic characters:
G. geniculata also has dark antennae and very dark red to black femora, especially on the hind legs. *G. geniculata* is also distinguished from *G. ustulata* by its pronotum, which is covered with dense, bright golden pubescence. It also has more convex elytra and face. It is also distinguished by the male genitalia, namely the parameres, the aedeagus and the last abdominal segment (Figs. 1 and 2). The parameres and aedeagus of *G. geniculata* are more elongated, slender and apically clearly pointed. The tip of the aedeagus is curved. In contrast, the aedeagus of *G. ustulata* is short, rounded at the apex, without a curved tip, and the parameres are also broad and short. Other diagnostic features between the two species are e.g. that *G. geniculata* is darker overall, has shorter antennae and a smaller extent of the dark (covered with black pubescence) apical part of the elytra. The body is more robust than that of *G. ustulata*. It is shown in Figs. 3 and 4, and female *G. geniculata* in Fig. 5.

Based on the added description and the characters listed, *G. geniculata* is undoubtedly a different species. The bionomy of *G. geniculata* is probably the same as that of *G. ustulata*, at least in the larval stage. *G. geniculata* may be distributed not only in Andalusia, Spain, but also in northern Morocco.

Based on the morphological differences, the status of *Grammoptera geniculata*, Kraatz, 1886 should be reinstated to the species level.

Acknowledgements

I would like to thank my friends T. Peterka and D. Šanc for their help with this study. Special thanks are due to David Navrátil (Litomyšl) for the preparation of photographs for this publication and to Jiří Foit (Mendel University in Brno, Faculty of Forestry and Wood Technology, Czech Republic) for his invaluable help in compiling the manuscript.

Fig. 1: Male genitalia (aedeagus, parameres, last abdominal segment) and abdomen (ventral view) of *Grammoptera geniculata* (Spain, Andalusia)

Fig. 2: Male genitalia (aedeagus, parameres, last abdominal segment) and abdomen (ventral view) of *Grammoptera ustulate* (Czech republic, south Bohemia)

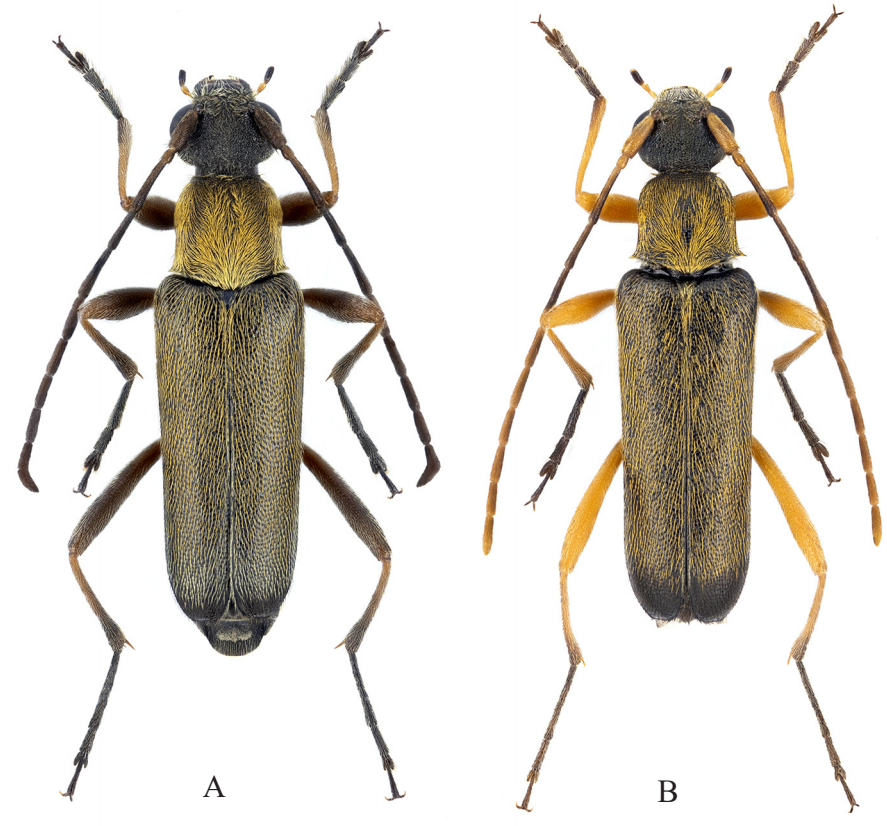

Fig. 3: Comparison habitus (dorsal view) males, A - *G. geniculata* (Spain, Andalusia) and B - *G. ustulata ustulata* (Czech republic, south Bohemia)

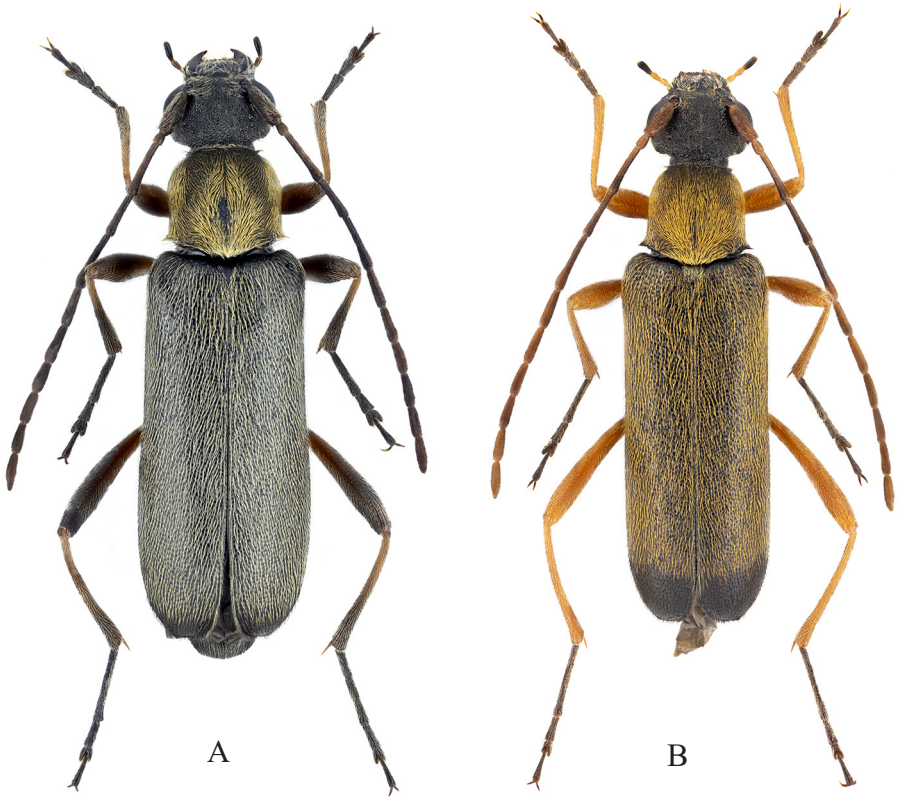

Fig. 4: Comparison habitus (dorsal view) females A - *G. geniculata* (Spain, Andalusia) and B - *G. ustulata ustulata* (Czech republic, south Bohemia)

References

Danilevsky, M. L. 2021. Catalogue of Palaearctic Cerambycoidea. - Available from: http://cerambycidae.net/catalog.pdf .

Leder, H. 1886: Die Coleopteren des Talysch-Gebietes. - In Die Fauna und Flora des südwestlichen Caspi-Gebietes. Wissenschaftliche Beiträge zu den Reisen an der Persich-Russischen Grenze. Gustav Radde, G. F. R. Brockhaus, Leipzig pp. 1-234, 3 pls.

Schaller J. G. 1783: Neue Insekten beschrieben. - Schriften der naturforscheden Gesellschaft zu Halle, pp. 217–328.