

First records of *Xylotrechus pantherinus* (Savenius, 1825) and *X. stebbingi* Gahan, 1906 (Cerambycidae: Cerambycinae) in Bulgaria

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Abstract. Two species of the genus *Xylotrechus* Chevrolat, 1860 are reported for the first time in Bulgaria. A single male of the rare species *X. pantherinus* (Savenius, 1825) was found among entomological materials collected in Sofia. A female specimen of *X. stebbingi* Gahan, 1906 alien in Europe was collected by light trapping in the vicinity of Lilyanovo Vill., SW Bulgaria.

Key words: *Xylotrechus stebbingi*, *X. pantherinus*, Bulgaria

Introduction

Three species of the genus *Xylotrechus* Chevrolat, 1860 are known in Bulgaria: *X. rusticus* (Linnaeus, 1758), *X. antilope* (Schoenherr, 1817) and *X. arvicola* (Olivier, 1795) (Migliaccio *et al.* 2007). In the present study, two new species of the genus are reported in the country - *X. pantherinus* (Savenius, 1825) and the alien species *X. stebbingi* Gahan, 1906.

Material and Methods

The specimen of *X. stebbingi* was collected at the end of June 2019 in the vicinity of Lilyanovo Vill., above the town of Sandanski, near Sandanska Bistritsa River (SW Bulgaria, Pirin Mts.). The specimen was attracted to light („light tower“ with a 160 W MBFT lamp, blacklight fluorescent tube and actinic lamp) on the road passing through a sycamore forest (Fig. 1). Most common tree species in the surrounding area are *Platanus orientalis* L., *Juglans regia* L. and *Alnus glutinosa* (L.). Solitary trees and shrubs of *Carpinus betulus* L., *Salix alba* L., *Corylus avellana* L., *Robinia pseudoacacia* L., *Malus domestica* Borkh., *Prunus* spp., *Pyrus* sp., and *Sambucus nigra* L. are also present in the habitat. The hill slope adjacent to the site is covered with *Quercus pubescens* Willd. and *Juniperus communis* L.

The specimen of *X. pantherinus* was collected by students in a field course in the city of Sofia and the surrounding area in June 2015. Additional data about the collection event are not available.

The examined specimens are deposited in the Zoological Collection of Sofia University "St. Kliment Ohridski", Faculty of Biology (BFUS).

Results and discussion

Xylotrechus (Rusticoclytus) pantherinus (Savenius, 1825) (Fig. 2: A)

Material examined: Bulgaria: Sofia, June 2015, 1 ♂ (unknown collector).

X. pantherinus is a Eurosiberian species with boreomontane distribution in Europe (Hellrigl 2012). The species is monophagous on *Salix* spp. (Salicaceae) (in the European part of its range - on *S. caprea* L.) (Sama 2002). Almost throughout all its European range, the species is considered to be rare (Laugsand *et al.* 2008, Kierdorf-Traut 2009, Serafim 2009, Ilić & Ćurčić 2015). Only in this century the species was reported in France (Brustel *et al.* 2002) and in Lithuania (Tamutis *et al.* 2011). The apparent rarity of *X. pantherinus* may be due to its fragmented distribution and peculiarities in its biology (e.g. Laugsand *et al.* 2008, Hellrigl 2012). Considering that the species is known from Romania (Serafim 2009) and Serbia (Ilić & Ćurčić 2015), its presence in Bulgaria is not surprising. The species has probably been overlooked in previous studies. New findings of this species from the country are desirable.



Fig. 1. Locality of *X. stebbingi* in Bulgaria (picture taken on 12.09.2019).

Xylotrechus (Xylotrechus) stebbingi Gahan, 1906 (Fig. 2: B)

Material examined: Bulgaria: Pirin Mts. above the town of Sandanski, SW Lilyanovo Vill., 41°36'44.85"N 23°18'42.90"E, 470 m, 27 June 2019, 1 ♀, at light, O. Sivilov & B. Zlatkov leg.

X. stebbingi originated from Central and South Asia and has recently been introduced in the Mediterranean region (Gahan 1906, Sama 2002). In Europe, by the end of the 20th century the species was found in Italy, Switzerland, France and Greece (Sama 2002). In the present century *X. stebbingi* was reported in Slovenia, Croatia (Breljih *et al.* 2006), Spain (Recalde & San Martín 2015) and Albania (Kovács 2015). The known localities of the species in Northern Greece (Sidirokastro and Himmaros) are only 15-20 km from the Bulgarian border (Dascălu *et al.* 2012), with the closer Sidirokastro being about 40 km from the species locality in Bulgaria. So, the species most probably has come to Bulgaria as a result of natural dispersal from Greece without assistance of human activity. Usually after its establishment in a new territory this species continues to expand its range (e.g.

Cocquempot *et al.* 2012, del Peral *et al.* 2017). Therefore, new records in Bulgaria are quite possible. In Europe, *X. stebbingi* is polyphagous on deciduous trees (Sama 2002). Negative effect of *X. stebbingi* on the trees has been reported by Braud *et al.* (2002). Assessment of the impact of the species on forest habitats in Bulgaria is desirable.

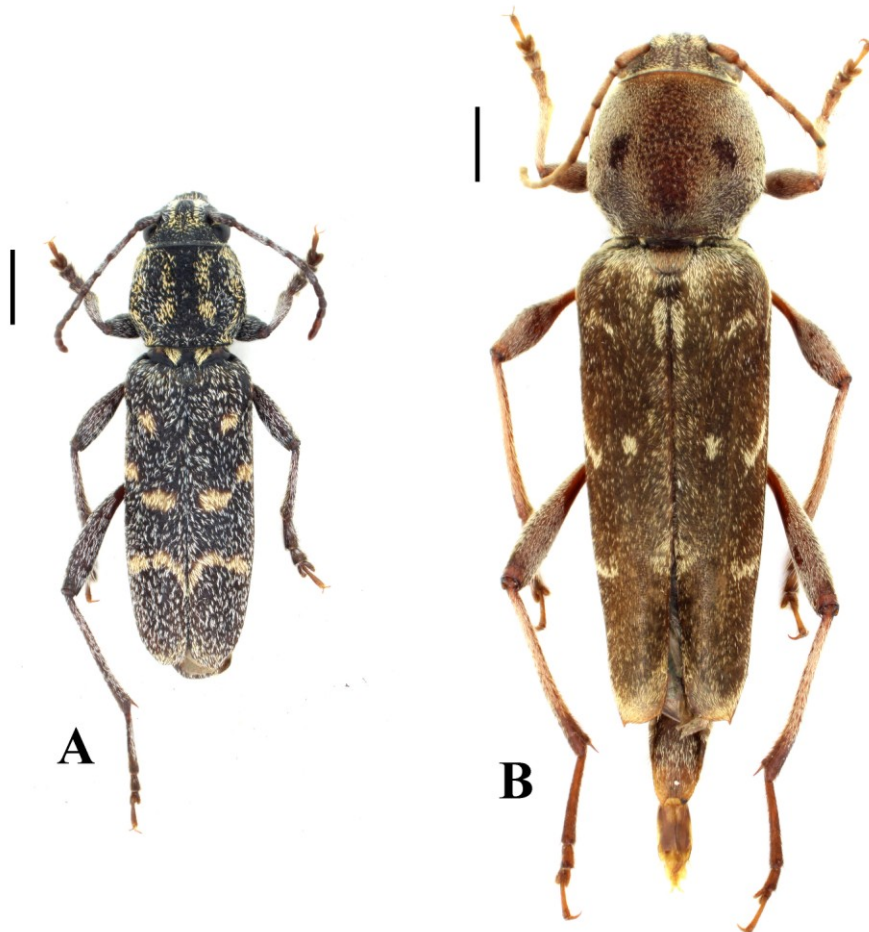


Fig. 2. *X. pantherinus* (A) and *X. stebbingi* (B), collected in Bulgaria. Scale bars: 1 mm.

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