

## The first record of *Trichoferus campestris* (Faldermann, 1835) (Coleoptera: Cerambycidae) in Latvia

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The velvet longhorned beetle *Trichoferus campestris* (Faldermann, 1835) is recorded for the first time from Latvia. It was collected in Daugavpils. *T. campestris* is widely polyphagous, wood-boring beetle, colonizing several arboreal species in both agricultural and forest environments. Moreover timber and solid wood items can be equally attractive to this pest.

Key words: *Trichoferus campestris*, invasive species, distribution, new record, Daugavpils.

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### INTRODUCTION

*Trichoferus campestris* (Faldermann) is a wood-boring longhorn beetle. The genus *Trichoferus* Wollaston, 1854 belongs to the subfamily Cerambycinae and includes 28 species in the Palaearctic Region, 11 of them in Europe (Danilevski et al. 2010).

The introduction of *T. campestris* most probably due to the increased transport of timber and wood-derived products via international trade, as is the case of most of the other alien cerambycid species already established in Europe (Cocquemot & Lindelöw 2010). Climate changes also may cause *T. campestris* distribution in Europe.

*T. campestris* is included in quarantine list of Morocco and Canada, in A1 list of Turkey and A2 list of USA (EPPO, categorization). A1 pests are 'exotic' to the region. Their potential in EPPO countries is relatively uncertain, since there is absolutely no experience of it, so the measures recommended to EPPO members are relatively strong. On the other hand, A2 pests are known

in the region, and there is shared experience of what they can do. There is also experience of measures taken against them (EPPO, 2003).

### MATERIAL AND METHODS

A single specimen, male, has been accidentally captured in the evening flight in Daugavpils, Latvia (55°52'57,2"N, 26°34'13,1"E, 16.VII.2020). Considering that there are no any ports, customs or airports, where this species usually is found in Europe, shows that specimen was freely living nearby, likely in forest-like graveyard. The examined specimen is deposited in DUBC (Daugavpils University Beetle Collection, Daugavpils, Latvia).

Climatic conditions on the day the beetle was caught. Time ~18: 00, clear sky, air temperature 21°, wind speed 20 km/h, north wind direction, relative air humidity 53%, air pressure 760 mmHg. The species composition of trees in nearby graveyard is mainly as follows: *Pinus sylvestris*, *Acer platanoides*, *Tilia cordata*, *Betula pendula*,

*Thuja occidentalis*, *Prunus padus*, *Populus tremula*, *Fraxinus excelsior*.

## DISTRIBUTION

*T. campestris* is widely distributed in Central and Eastern Asia (East Siberia and Far East (Russia), Iran, Japan, Kyrgyzstan, Kazakhstan, Mongolia, Korea, Tadjikistan, Turkmenistan, Uzbekistan), South-East part of Europe (Armenia, central and south-western provinces of Russia, Moldova, Romania, Ukraine) and Oriental Region (Danilevski et al. 2010; Grebenikov et al. 2010). In last years this species has widely spread in many European countries: Czech Republic, France, Germany, European part of Russia, Hungary, Lithuania, Moldova, Poland, Romania, Slovakia, Slovenia, Sweden (Dascălu et al. 2013; Dedyukhin 2005; Egorov 2001; EPPO 2017;

Ferenca et al. 2016; Hegyessy & Kutasi 2010; Kavčič 2018; Kovács 2018; Kruszelnicki 2010; Kurzawa 2019; Nikitsky & Mamontov 2008; Ruchin 2008; Sabol 2009; Serafim & Maican 2004). It is spread in USA and Canada also (Ray et al., 2019; Grebennikov et al., 2010).

## BIOLOGY AND HOST PLANTS

The larva of *T. campestris* develops in woody plants in both agricultural and forest environments. The imago (Fig. 1) is usually active during the night, flying regularly from the end of June to the beginning of August when females lay eggs into the bark of tree trunks and large-diameter branches. Healthy or stressed plants are usually colonized but any wood material, though very dehydrated, can be equally attractive (Pennacchio, 2016).

The habitat where the specimen has been captured is the rural graveyard or garden graveyard (Fig. 2). It is a style of burial ground, that uses landscaping in a park-like setting. This old graveyards are characterized by large, biologically old trees, even in the size of large trees. In some places, some rare, planted plant species uncharacteristic of Latvia's natural (indigenous) flora.

*T. campestris* is widely polyphagous species. It may colonize several woody genera: *Acer*, *Alnus*, *Aralia*, *Betula*, *Broussonetia*, *Camellia*, *Carpinus*, *Chamaecyparis*, *Cornus*, *Diospyros*, *Euonymus*, *Fagus*, *Fraginus*, *Gleditsia*, *Ilex*, *Juglans*, *Larix*, *Malus*, *Morus*, *Picea*, *Pinus*, *Populus*, *Pyrus*, *Quercus*, *Rhus*, *Robinia*, *Salix*, *Sorbus*, *Syzygium*, *Tilia*, *Ulmus*, *Vitis*, *Wisteria*, *Zanthoxylum*, *Zelkova*, *Ziziphus* (EWBBB, 2014).

## RESULTS AND DISCUSSION

Considering the active spread of this species around the world and its possible pest status, it is advisable to begin in the near future a study and monitoring of the spread and behavior of



Fig. 1. Habitus of *Trichoferus campestris* (Faldermann, 1835)

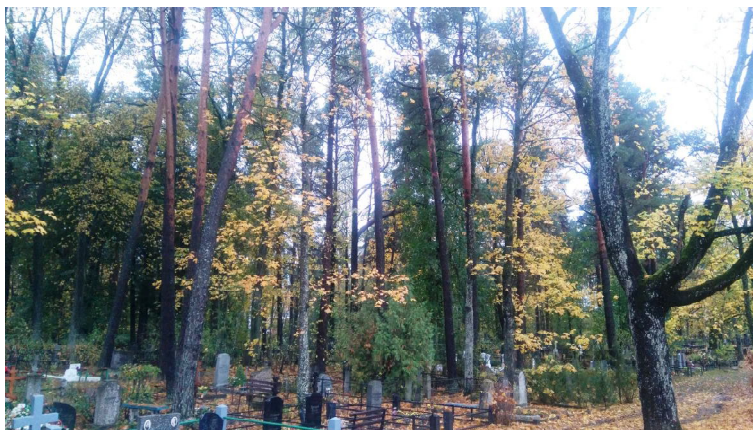


Fig. 2. Daugavpils graveyard. The habitat of *T. campestris*. (Photo have been taken in 12.10.2020)

the species on the territory of Latvia, as well as neighboring countries, for example Estonia and Lithuania.

The active monitoring of areas at risk of pest introduction, represents a key element of the alert system designed to quickly counter the accidental introduction and spreading of invasive insects in the Latvian territory.

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