

First record of the ambrosia beetle, *Xylosandrus germanus* (Blandford, 1894) (Coleoptera: Curculionidae, Scolytinae) in Slovakia

Ambrosia beetle *Xylosandrus germanus* (Blandford, 1894) (Coleoptera: Curculionidae, Scolytinae) is native species in eastern Asia (Japan, China, Korea). In 1932 was *X. germanus* first detected in New York and become established in the northeastern, southern, midwestern and upper northwestern USA. In Europe was first detected in Germany in 1951 and then spread to many western and central European countries (France, Switzerland in 1987, Belgium in 1995, Austria in 2000, Italy in 2000). In 2001 has colonized large stands of *Fagus sylvatica* in Belgium. In Hungary was first time found in June 2005 and in Czech Republic was first detected in May 2007.

We have data from our experiment established in the west Slovakia from 2010 to 2012 (Forest District Prievidza, locality Duchonka, 48°40'S, 18°05'V). We set the Lindgren funnel traps baited with ethanol UHR (Ultra High Release) gelled lures (weight approx. 120 g.) in oak stands (average age 60-80 years). Several studies confirm that ethanol based lures are very attractive for ambrosia beetles, including *X. germanus*. In 2010 we caught 19 imagoes of *X. germanus*, 40 imagoes in 2011 and 77 imagoes in 2012 (total 136 imagoes). The results indicate that increase of its occurrence in our three years study is probably not random. According to known literature and studies we suppose that the first *X. germanus* found in Slovakia was in 2010 in our experiment, although we think that this species was present in our forests several years before our detection.

The main differences between male and female beetles are typical as usual for all Xyleborini. The flying female is 2,0-2,3mm, while the flightless male is spheroid and only 1,0-1,8 mm in large. That means that all caught imagoes were females. The samples of *X. germanus* are stored at Forest Protection Service in Banská Štiavnica.

This species is extremely polyphagous. Its host range includes more than 200 plant species in 52 families, and although deciduous broadleaf trees and shrubs are preferred, some conifers are also attacked. The host range in the introduced areas (USA, Europe) includes many plant species: *Quercus*, *Fagus*, *Acer*, *Alnus*, *Betula*, *Buxus*, *Carpinus*, *Corylus*, *Juglans*, *Robinia*, *Ulmus*, *Picea*, *Pinus*, *Abies* etc.

In USA *X. germanus* belongs to the one of the most economically important exotic ambrosia beetle pests, mainly in nurseries. It is considered as a very dangerous species due to attacks not only physiologically-stressed trees but also on healthy trees. We are concerned that *X. germanus* have potential to become a serious pest in central European region.

Acknowledgements

This work was supported by Canadian Food Inspection Agency (2010, 2011) and by the Slovak Research and Development Agency under the contract No. APVV-0045-10 (2012).

JURAJ GALKO
Národné lesnícke centrum
Lesnícky výskumný ústav Zvolen
Stredisko lesníckej ochrany služby
Lesnícka 11
969 01 Banská Štiavnica
galko@nlcsk.org