

alebo Carpivia a CarpathCC projekty zaoberajúce sa vplyvom klimatickej zmeny na lesné ekosystémy (www.carpivia.eu), či projekt ARANGE o horských lesoch Európy, kde karpatskú štúdiu reprezentuje VDO Kozie chrby (www.arange-project.eu).

Karpatský dohovor vytvára rámec pre spoluprácu a medzisektorovú politickú koordináciu. Je platformou pre spoločné stratégie udržateľného rozvoja a pre dialóg medzi všetkými zainteresovanými aktérmi počnúc miestnymi komunitami, rozličnými mimovládnyimi organizáciami a vedeckými inštitúciami, až po správu na regionálnej alebo národnej úrovni, Európske inštitúcie a Organizáciu spojených národov. Jeho silu a dopady na karpatský región ukáže budúcnosť.

Podakovanie

Tento článok vznikol vďaka podpore v rámci operačného programu Výskum a vývoj pre projekt: Dobudovanie centra excelentnosti: Adaptívne lesné ekosystémy, ITMS: 26220120049, spolufinancovaný zo zdrojov Európskeho fondu regionálneho rozvoja.

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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 a native species in the eastern Asia (Japan, China, Korea). In 1932, it was detected for the first time in New York and it has been established in the northeastern, southern, midwestern and upper northwestern USA. In Europe it was firstly detected in Germany in 1951 and then has spread to many western and central European countries (France, Switzerland in 1987, Belgium in 1995, Austria in 2000, Italy in 2000). In 2001, large stands of *Fagus sylvatica* have colonized in Belgium. It was found for the first time in Hungary in June 2005 and in Czech Republic in May 2007.

We have analyzed data from our experiment established in the west of 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* in Slovakia was found 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 has 2.0–2.3 mm, while the flightless male is spheroid and only 1.0–1.8 mm in large. That

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

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