



A GLOBAL PERSPECTIVE ON THE ECOLOGY AND MANAGEMENT OF BARK AND WOOD BORING INSECTS  
**BARILOCHE | PATAGONIA | ARGENTINA**  
**1-4 September 2015**



Grupo de Ecología de  
Poblaciones de Insectos  
INTA BARILOCHE



UNIDAD PARA EL CAMBIO RURAL

IUFRO 07.03.05 – 07.03.12 Joint Meeting

September 1<sup>st</sup> – 4<sup>th</sup>, 2015 - Bariloche, Argentina



## Always towards East: the walnut twig beetle, *Pityophthorus juglandis* (Coleoptera: Curculionidae, Scolytinae), reached also Europe!

Faccoli, M.<sup>1</sup>; Montecchio, L.<sup>2</sup>; Rassati, D.<sup>1</sup>

<sup>1</sup>Department of Agronomy, Food, Natural Resources, Animals and Environment (DAFNAE), University of Padua, Italy; <sup>2</sup>Department of Land, Environment, Agriculture and Forestry (TeSAF), University of Padua, Italy

**Abstract.** In September 2013, the Walnut Twig Beetle (WTB) *Pityophthorus juglandis*, a bark beetle species native to Mexico and South-Western USA, was recorded for the first time in Europe in North-eastern Italy, both on black (*J. nigra*) and English (*J. regia*) walnuts. The WTBs collected in Italy vectored the fungus *Geosmithia morbida* (Ascomycota: Hypocreales), an extremely aggressive pathogen inducing the Thousand Cankers Disease on walnut. An intensive survey of the main walnut plantations occurring in NE Italy was carried out in spring-summer 2014 by tree sampling and pheromone traps to investigate WTB distribution and biology. Adult beetles were trapped from mid-May to late October. Full larval development took about 8 weeks, with generally two overlapping generations per year. Winter was spent usually as adult under the bark of host trees. The WTB was found in the 56% of the monitored walnut plantations. The infested sites were spread over 4 different non-contiguous administrative provinces belonging to two regions of North Italy. The most distant infested plantations were about 130 km apart along a west-east gradient, and about 70 km along a north-south gradient. All the monitored sites occurring within a radius of about 30 km around the first recorded infestation were affected by WTB.

**Key words:** WTB, TCD, Juglans, Europe, Biological Invasion