DAFM Plant Pest Factsheet

Anoplophora glabripennis
Asian longhorned beetle

EU Priority Pest!

Fig 1: Adult *Anoplophora glabripennis*

Pest Characteristics

- **Pest:** *Anoplophora glabripennis*
- **Common name:** Asian longhorned beetle (ALB)
- **Hosts:** *Anoplophora glabripennis* is *a* polyphagous longhorn beetle affecting broadleaved tree genera such as *Acer*, *Betula*, *Populus*, *Salix* and *Ulmus.* No conifer hosts have been recorded. In regions where *A. glabripennis* has been introduced (USA, Canada and Europe) *Acer* spp. has been the most affected host.
- **Invasive Risk:** *Anoplophora glabripennis* has been detected in several European countries, including an outbreak in Kent, England in 2012 that was confirmed as eradicated in 2019. Current outbreaks (breeding populations) in France (2003), Germany (2004) and Italy (2007) are all undergoing eradication measures to remove the pest.
- **Entry Pathways:** Wood packaging material, wood or wooden products from susceptible host plants. The main entry pathway into the EU is regarded as wood packaging material associated with imports of stone or tiles from Asia.
- **Impact:** *Anoplophora glabripennis* can attack healthy trees. In Europe and in Ireland, *A. glabripennis* represents a threat especially in urban landscapes with costly eradication measures likely. *Anoplophora glabripennis* is listed in EU legislation as one of 20 “priority pests” that present the most serious economic, environmental and social EU threats.
- **Symptoms:** Some key symptoms of *A. glabripennis* are found in the upper truck / main branches, which contrasts with *Anoplophora chinensis* (Fig 2).

Fig 2: (a) Oviposition slits together with exit holes (b) close up of exit holes (c) funnel-shaped oviposition slit

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Anoplophora glabripennis lifecycle

- **Lifecycle:** a) Adult beetles emerge b) start maturation feeding on tree leaves and twigs c) after mating in late summer, eggs are laid one by one under the bark, eggs hatch 2–3 weeks after oviposition (d) dependent on climatic and feeding conditions, larvae develop over a 1–3 year period (e) they create upward tunnels f) the larvae pupate in chambers
- **Adaptability:** The major hosts of *A. glabripennis* are grown widely in Ireland. Establishment is likely in Ireland, however population development will likely be limited by sub-optimal climatic conditions, such as our cool summers, as seen in the UK outbreak.
- **Dispersal:** *Anoplophora glabripennis* are capable flyers, in the absence of nearby hosts, it has been assessed that a maximum annual dispersal is in the region of 150m.
- **Distribution:** *Anoplophora glabripennis* is endemic to China and currently present in Lebanon, Korea, USA. In the EU, several demarcated areas are in place in France, Italy and Germany**.** *Anoplophora glabripennis* is absent in Ireland (Fig 3).
- **If suspected:** DAFM conducts annual surveys to substantiate Irelands pest free status for *A. glabripennis*. If you find a suspected specimen please submit images to DAFM at: plantpestreport@agriculture.gov.ie

Photo credits: Lifecycle (d) from Melody Keena, USDA Forest Service, Bugwood.org. All remaining images used in Figures 1, 2 and lifecycle were obtained from the EPPO *A. glabripennis* images repository: https://gd.eppo.int/taxon/ANOLGL/photos

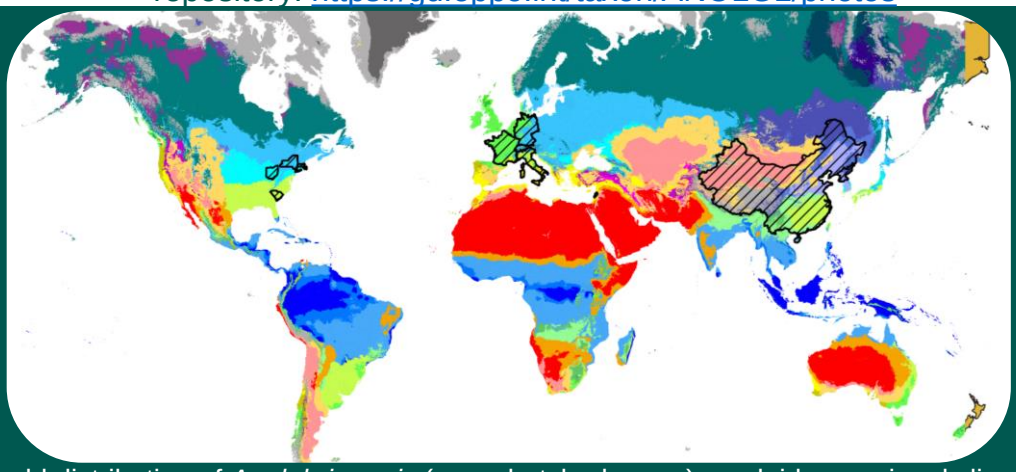

Fig 3: Known world distribution of *A. glabripennis* (cross hatched areas) overlaid on regional climate classifications

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