

DAFM Plant Pest Factsheet

Anoplophora chinensis Citrus longhorned beetle

EU
Priority
Pest!

Fig 1: Adult *Anoplophora chinensis*

Pest Characteristics

- **Pest:** *Anoplophora chinensis*
- **Common name:** Citrus longhorned beetle (CLB)
- **Hosts:** *Anoplophora chinensis* is a polyphagous longhorn beetle. *Acer* spp. are typically the most affected in Europe, followed by *Betula* spp. and *Corylus* spp. In Asia, *A. chinensis* is a significant pest in citrus orchards.
- **Invasive Risk:** Native to Asia, *A. chinensis* has been intercepted in many countries in Europe and North America and is confirmed to have established in Europe. Currently, it is present and under official control in Italy (2000), Croatia (2007) and France (2003).
- **Entry Pathways:** Plants for planting, wood packaging material, wood or wooden products from susceptible host plants. The main entry pathway for *A. chinensis* into the EU is regarded as plants for planting.
- **Impact:** *Anoplophora chinensis* can bore into the wood of healthy trees. In Europe and in Ireland, *A. chinensis* represents a threat especially in urban landscapes with costly eradication measures likely. *Anoplophora chinensis* is listed in EU legislation as one of 20 “priority pests” that present the most serious economic, environmental and social threats to the EU.
- **Symptoms:** In contrast to *Anoplophora glabripennis*, exit holes and oviposition of *A. chinensis* are on lower parts of the tree. The eggs are laid close to the base of the trunk or on roots emerging above ground. Additionally, the larval behavior of *A. chinensis* results in downwards tunnels which often migrate into the roots or below ground level.



Fig 2: (a) & (b) exit holes on the lower trunk and roots, (c) & (d) ovipositing females chew a T-shaped slit



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- **Lifecycle:** a) Young adult beetles emerge b) begin maturation feeding on tree leaves/twigs c) after mating, females oviposit single eggs in the bark close to the ground d) larvae begin feeding below the bark and migrate into the sapwood and hardwood (e) larvae tunnel downwards, feeding can force frass out around the base of trees, another indication of infestation (f) the larvae pupate in chambers.
- **Adaptability:** The major hosts of *A. chinensis* are widely grown in Ireland. In the beetle's native range and in southern Europe a 1–2 year life cycle is observed. In temperate regions such as Ireland, a longer life cycle of 2-3 years is expected.
- **Dispersal:** Most adults remain in the vicinity of their tree of emergence, in the absence of nearby hosts, it has been assessed that a maximum annual dispersal is in the region of 190m.
- **Distribution:** *Anoplophora chinensis* is native to Asia, occurring primarily in China, Japan and the Korean peninsula. The pest has also been reported from Turkey. Currently in the EU, *A. chinensis* occurs in Italy, Croatia and France. *Anoplophora chinensis* is absent from Ireland (Fig 3).
- **If suspected:** DAFM Inspectors conduct annual surveys to substantiate Ireland's pest free status for *A. chinensis*. If you find a suspected specimen please submit images to DAFM at: plantpestreport@agriculture.gov.ie

Photo credits: All images used in Figures 1, 2 and lifecycle were obtained from the EPPO *A. chinensis* images repository: <https://gd.eppo.int/taxon/ANOLCN/photos>

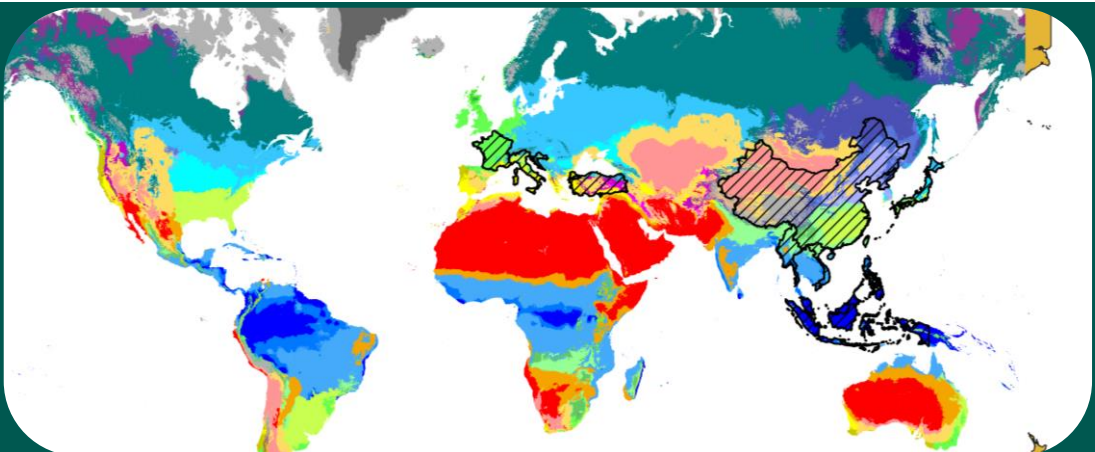


Fig 3: Known world distribution of *A. chinensis* (cross hatched areas) overlaid on regional climate classifications



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