

Asian Long-horned Beetle

Background

The Asian long-horned beetle (ALHB) (*Anoplophora glabripennis*) is native to China, Korea and Japan. This insect attacks maple, poplar, birch, willow, elm, ash and horse chestnut trees. ALHB primarily attacks trunks and branches of healthy or weakened hardwood trees.

ALHB has been found in the Toronto and Vaughan areas within Ontario. The presence of these insects is problematic because ALHB has no known natural predators within Canada.

Identification

The ALHB is identified as an insect with six legs and a large, shiny, black body (35 mm long and 12 mm wide maximum size) with up to 20 white dots. The adult has two long antennae composed of 11 segments. Each segment is black with a pale white ring at the base. Canada's indigenous white-spotted sawyer (*Monochamus scutellatus*) is often mistaken for ALHB.

Other ways to identify this pest are through signs and symptoms that host trees may have. Emerging adult beetles chew their way out of the tree, leaving large round holes (9-11 mm) in the branches and trunks of trees. Oval wounds can be found on the tree where females have chewed through the bark to lay a single egg. Such wounds could produce dripping sap.

Coarse sawdust may be found at the base of trees and at connection of branches to the trunk, resulting from the larvae's feeding on the tree. These are a good indication that a tree has been attacked by ALHB.

Problem

In recent years, ALHB has been intercepted on import shipments of cargo from Asia. This pest has been associated with raw wood in such items as pallets, spools and loose wood segments.

The ALHB has not been found in Canadian forests; nevertheless, it poses a considerable risk to our hardwood species if introduced. Canada's temperate climate is particularly suitable to the establishment of this insect.

Control

The eradication of ALHB is underway in the Toronto and Vaughan areas. All infested trees have been removed, along with all susceptible trees in a 400-metre radius. The area is now regulated to prevent the spread of ALHB.

Restrictions have been placed on the movement of nursery stock, leaves, lumber, and wood chips from certain deciduous trees identified as possible hosts. These restrictions are necessary to prevent the spread of the ALHB.

Consequences from the spread of exotic forest pests are increasingly recognized as a global issue. Progressively, a global strategy has addressed the exotic-pest problem that has evolved. The International Plant Protection Convention (Food and Agricultural Organization of the United Nations) has begun the process of harmonizing standards to treat ALHB to minimize and control the movement of these exotic pests.

Peter de Vries, Class of 2007