

EMERGING PEST AND DISEASE THREATS: EMERALD ASH BORER (*Agrilus planipennis*) ON ASH TREES (*Fraxinus* spp.)

The Emerald Ash Borer (EAB) is a wood-boring beetle native to East Asia, which is currently causing significant damage to ash trees (*Fraxinus* spp.) in the USA and Canada, with an estimated 100 million tree deaths being attributed to this insect pest. This has resulted in serious economic damage, and there is real concern for the survival of several ash species and their associated biodiversity. The beetle has been found in Russia and more recently in Ukraine leading to serious concerns that it could spread rapidly to the rest of Europe. The International Plant Sentinel Network is working with botanic gardens in Eastern Europe to monitor their *Fraxinus* collections for EAB.

Emerald Ash Borer:



Adult beetle on a leaf in the USA (length 10-14 mm). The iridescent appearance, very large eyes and short antennae are characteristic of many Buprestid beetles, often referred to as 'jewel beetles'.



Mature larva of emerald ash borer feeding on the cambium of an infested tree. Mature larvae are 26-32 mm long.



Exit hole from which an adult EAB beetle has emerged; note the characteristic 'D' shape (3-4 mm wide).

Emerald Ash Borer on *Fraxinus*:



Dieback and crown thinning on a *Fraxinus* sp. Typically occurs from the top down.



Epicormic sprouting. This is a general indicator of tree stress.



S-shaped galleries underneath the bark full of frass are characteristic of the beetle.

REPORT ANY SUSPECTED SIGHTINGS TO _____ DATE _____