# afbi

AGRI-FOOD & BIOSCIENCES INSTITUTE

# **Plant Health Factsheet** Ash sawfly *Tomostethus nigritus* (Fabricius)

## BACKGROUND

On 8th June 2016, severe defoliation of common ash trees (*Fraxinus excelsior* L.) was reported at a suburban housing estate in south Belfast. In addition, a considerable number of larvae were seen descending the tree to the soil beneath. There were identified as ash sawfly *Tomostethus nigritus* (Fabricius).

## **GEOGRAPHICAL DISTRIBUTION**

Ash sawflies are a Euro-Siberian species distributed throughout Europe, but considered to cause damage in eastern rather than western Europe. However, severe outbreaks of ash sawfly over a five-year period on ornamental trees have been reported in Oslo and in Great Britain, in England and Wales. More recently, in suburban ash trees in Aberdeen, Scotland.

#### **HOST PLANTS**

Although only common ash (*Fraxinus excelsior* L.) was attacked in this instance; palatability tests indicate that larvae show no preference among several individual ash species and are guided by foliage availability.





## DESCRIPTION

Adult: Adult flying sawflies usually observed mid-April/May at the same time as first leaves emerging on ash trees. This can last for approx 3 weeks.

**Egg**: Eggs are deposited in slits cut into leaf tissue.

Larva and pupae: Larvae are olive green and caterpillar like, 1-2 cm long.

Sawfly larva can usually be distinguished from butterfly caterpillars by its greater number of prolegs-usually at least six pairs.



## BIOLOGY

Flying adults *T. nigritus* are active between mid-April / early May, often alighting on leaf buds as they open and laying eggs. These hatch into caterpillar like larvae which are vigorous feeders on leaves, eating entire leaves apart from the mid-rib. Mature larvae drop from the ash trees, sometimes in great numbers, spin a light green pupa case, which subsequently darkens to black and over-winters in the soil, emerging the following spring as adult flies.

#### DAMAGE

Despite complete defoliation by larval feeding in spring, new leaves develop during summer and tree mortality does not occur. However continual defoliation over successive years may have an impact on tree vigour.

## CONTROL

Studies in Croatia suggest that environmental and biotic factors such as autumn and spring floods and the absence of specific parasitoids may affect the occurrence of these outbreaks. Even if trees are completely defoliated tree mortality does not usually follow and trees recover, developing new leaves over the summer. Generally the species persists at very low levels, kept in check by parasitoids and environmental conditions.



## **FOLLOWING THE SAWFLY**

- AFBI entomologists are currently tracking the distribution of this new species in Northern Ireland.
- At the end of May / beginning of June, fully-fed larvae will leave the tree to pupate in the soil.
- If you see masses of green caterpillars moving down tree trunks, please take a photo and email to pest.man@afbini.gov.uk with an estimate of the location.
- Google Maps will give latitude, longitude coordinates from your phone press and hold on the map screen at your location to drop a pin, map coordinates are displayed in the information bar at the top of the screen.