Plant Science into Practice

INNOVATIVE MANAGEMENT OF FOREST BUG ON APPLE

Forest bug is one of a number of pests that have become more prevalent in UK apple crops since the withdrawal of broad-spectrum insecticide products. Although harmless on other crops, on apple and pear, overwintering forest bug nymphs (Figure 1) feed on developing fruitlets in the spring giving rise to brown hard lesions in the flesh along with pitting and distortion of the fruit (Figure 2).

The nymphs are camouflaged on tree bark, so are very difficult to detect by crop scouts and failure to control them can give rise to fruit losses of between 10-50%.

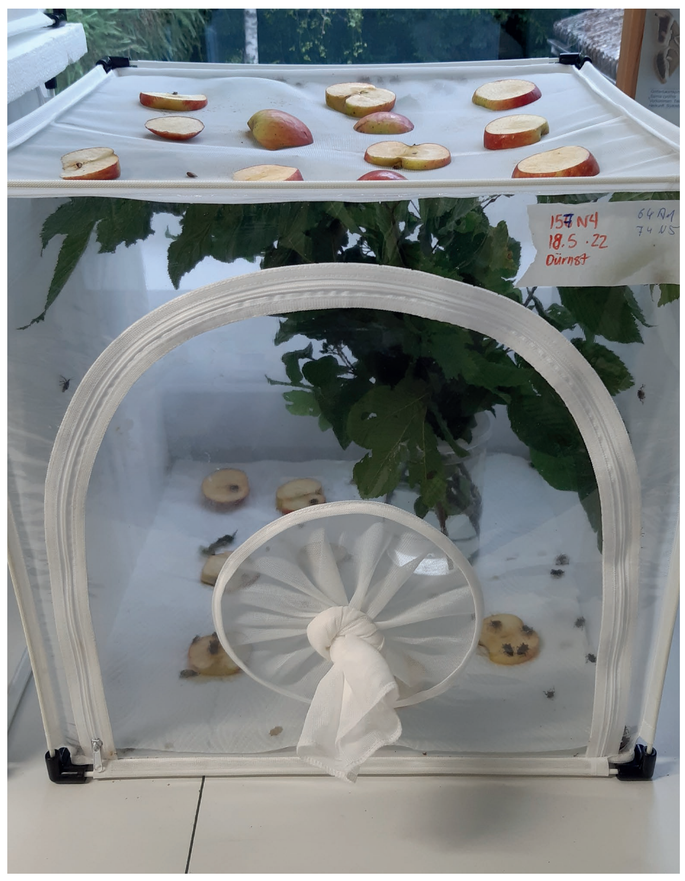
NIAB has developed a system to rear the forest bug in the laboratory (Figure 3) and has been collecting chemical components of the bug's sex pheromone. The University of Greenwich is analysing their composition with the intention of synthesising them for use as a chemical lure in monitoring traps. When fully developed, growers will employ them to identify if and when the pest is present, allowing targeted control methods at the optimum time.

Figure 1. 2nd instar nymphs are camouflaged on tree bark

Photo: Jonathan Michaelson

Figure 2. Forest bug damage to Gala apples

Figure 3. Methods to rear forest bug in the laboratory have been developed



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