Exotic threats of Onions: *Eumerus strigatus* – Onion bulb fly, lesser bulb fly

**What is it?**
The onion bulb fly, *Eumerus strigatus*, is a major pest of onions and garlic, however they can be hosted on a range of species such as, cabbage, hyacinth, gladiolus, iris, daffodil, lily, parsnip, potato, bluebell, and tulip.

Damage is caused by the feeding of larvae in and around the bulb, causing decomposition and the wilting of leaves, often leading to death. Plants that are already stressed or have infections/rot are particularly vulnerable.

It is reported as causing up to 25-30% losses of onion over a five year period in the former USSR and a 10-15% yield loss of late-maturing onion varieties in Romania. Infestation often follows damage by other agents such as fungi, nematodes, slugs and other insects.

**What do I look for?**
Adults: 5 to 9 mm long dark blue insects that have a metallic bronze sheen. They have three pairs of greyish white crescents on the abdomen and yellowish hairs at the tip. The thorax has 2 lengthwise pale stripes.

Eggs: very small (0.7 by 0.2 mm), slender, and somewhat pointed on one end. They are usually laid in small clusters.

Larvae: range in size from 0.7 to 10 mm, and are white to grayish yellow depending on the quality of the host bulb. The larvae are wrinkled and covered with minute spines. The breathing tube is brick red or brown.

During winter the larvae are present in the bulbs feeding. In spring, the larvae migrate toward the soil surface and pupate, from which
the first generation of flies emerge. These flies live about 3 weeks, giving birth to a second generation emerging in midsummer. Depending on conditions a small third generation emerges in late summer.

Where is it found?

_E. strigatus_ is widely distributed in Europe and North America including Canada, China, France, Japan, New Zealand, Romania, Sweden, Taiwan, United Kingdom, USA, and the former USSR.

Reporting

Growers may report suspected exotic pests to the Exotic Plant Pest Hotline (1800 084 881) or can directly contact their relevant state agriculture or primary industries department.

To minimise the risk of disease or pest spread, samples should not be moved until they have been checked by an expert.

This fact sheet is part of the National Onion Industry Biosecurity Plan. For more information about the Biosecurity Plan, please contact Plant Health Australia.