

FORESTLEARNING | YEAR 12 AGRICULTURE: PLANT PEST AND DISEASES | STUDENT WORKSHEET 2 ANSWERS: PEST

Case Study Common name: European gypsy moth.

Scientific name: Lymantria dispar dispar.

<u>Type of pest/disease:</u> Pest – insect.

Hosts: 650 species of plants including forest, orchard and ornamental trees. Eucalyptus and pines included.

Present in Australia? No.

Distribution:

Europe and North America.

"In 2013-2014 plantation forestry production was valued at \$1.4 billion. The forest, wood and paper products sector is Australia's 8th largest manufacturing industry" Plant Health Australia ¹

Effect on the host plant: (signs and symptoms)

- Holes in leaves associated with instar larva. As larva growth the entire leaf is consumed.
- Repeated defoliations can cause tree death.
- Death of tree will occur if infestation is associated with another stress event.

Description/information on organism

- Flightless.
- Female is large and wavy dark coloured bands across forewings.
- Males are smaller and brown with darker brown patterns on wings.
- Egg masses 100-1000 eggs on vehicles, cargo containers.

Contingency plan/control measures

(Physical, chemical, biological, other.)

Information from Section 5 of document (mainly 5.3)

- Physical: restricted movement of traffic from infected areas
- Chemical I: hygiene practices (disinfectants etc).
- Physical: destruction of infected material.
- Physical: surveillance.
- Chemical: broad spectrum insecticides via aircraft.
- Chemical: application of Bt insecticides.
- Biological: Bt bacteria, also under investigation are Oencyrtus kuvanae, polyhedrosis virus, parasitoids
- Physical: silvicultural practices are nonviable.