## Japanese beetle

### What is the Japanese beetle?

The Japanese beetle (Popillia japonica) is a destructive pest with a wide host range of over 300 plant species including small fruits, tree fruits, shade trees, vegetables, field crops, ornamentals and turfgrasses. Significantly impacted host species include blackberry, raspberry, blueberry, grapevine, stone fruit, lime, corn and soybean.

Adult beetles feed on flowers, fruit and foliage causing extensive damage. Larvae, commonly known as white grubs, feed on the roots of many field crops, ornamentals and vegetables.

#### What does it look like?

Japanese beetles are oval shaped measuring 8 to 11 mm in length and 5 to 7 mm in width. They are metallic green in colour with bronze or copperybrown wing covers that do not completely cover the abdomen. Below the wing covers, on each side of the abdomen are five patches of white hair with one additional pair on the last abdominal segment.

Larvae appear as C-shaped translucent and creamy white grubs measuring less than 25 mm at maturity. The head is yellowish-brown with strong dark-coloured mandibles and the thoracic body segments each contain a pair of segmented legs.

#### What can it be confused with?

The Japanese beetle could be confused with green metallic-coloured beetles found commonly in Australia. However the six tufts of white hairs on each side of the Japanese beetle's abdomen distinguish it from all other similar looking beetles.

Larvae could be confused with scarab beetle larvae, also known as white curl grubs or cockchafers. However the V-shaped arrangement of spines on the last body segment of the Japanese beetle distinguishes this grub from all others.



Adult Japanese beetle



Adult Japanese beetles feeding on red raspberry fruit



Japanese beetle larva







Feeding damage on Rubus caused by adult Japanese beetles



Adult Japanese beetle skeletonising blueberry leaf



Adult Japanese beetle skeletonising European linden leaf

#### What should I look for?

Leaf defoliation is the most common sign of Japanese beetle infestation. Adult beetles generally feed from the upper leaf surface, chewing through the tissue between the veins and leaving a lace-like skeleton. Beetles tend to aggregate on foliage, flowers or fruit and often work their way from the upper and outermost parts of the plant, downward. Fruit also shows external feeding damage. Larval feeding damages roots reducing vitality and yield and sometimes leading to plant death.

#### How does it spread?

Local spread is primarily the result of adults flying short distances (1-3km) to feed. Adult beetles can also be transported as 'hitchhikers' on plant material, produce, machinery and packaging while larvae are easily transported in the soil associated with nursery stock.

#### Where is it now?

The Japanese beetle is native to Japan and is currently present in the USA, Canada, Portugal and Russia.

# How can I protect my farm from Japanese beetle?

Check your farm frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common caneberry pests so you can tell if you see something different.

If you see anything unusual, call the Exotic Plant Pest Hotline

EXOTIC PLANT PEST HOTLINE 1800 084 881

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