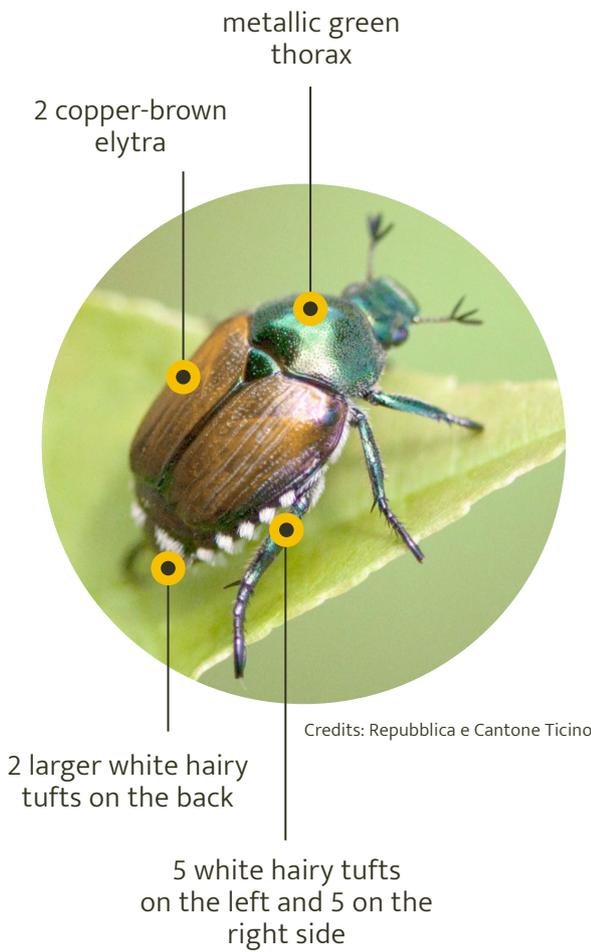


Fight the Japanese Beetle (*Popillia japonica*)

Popillia japonica is classified in Europe as a quarantine pest (A2 Quarantine pest (Annex II B)) that must be controlled and reported to the National plant services. It is a small and highly polyphagous beetle native to Japan. Adults are particularly voracious, feeding on the foliage, flowers and fruits of more than 400 host plants and can cause considerable damage. The larvae live in the soil and feed on the roots, especially of grasses.

RECOGNIZE

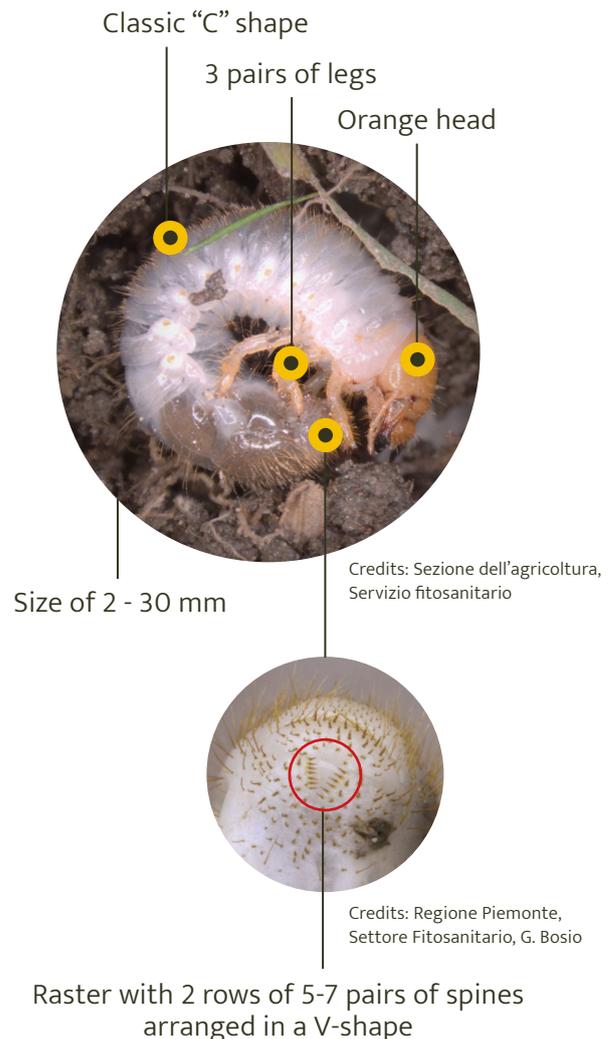
a. Adult *Popillia japonica*



Size of 8 - 12 mm
(small beetle)

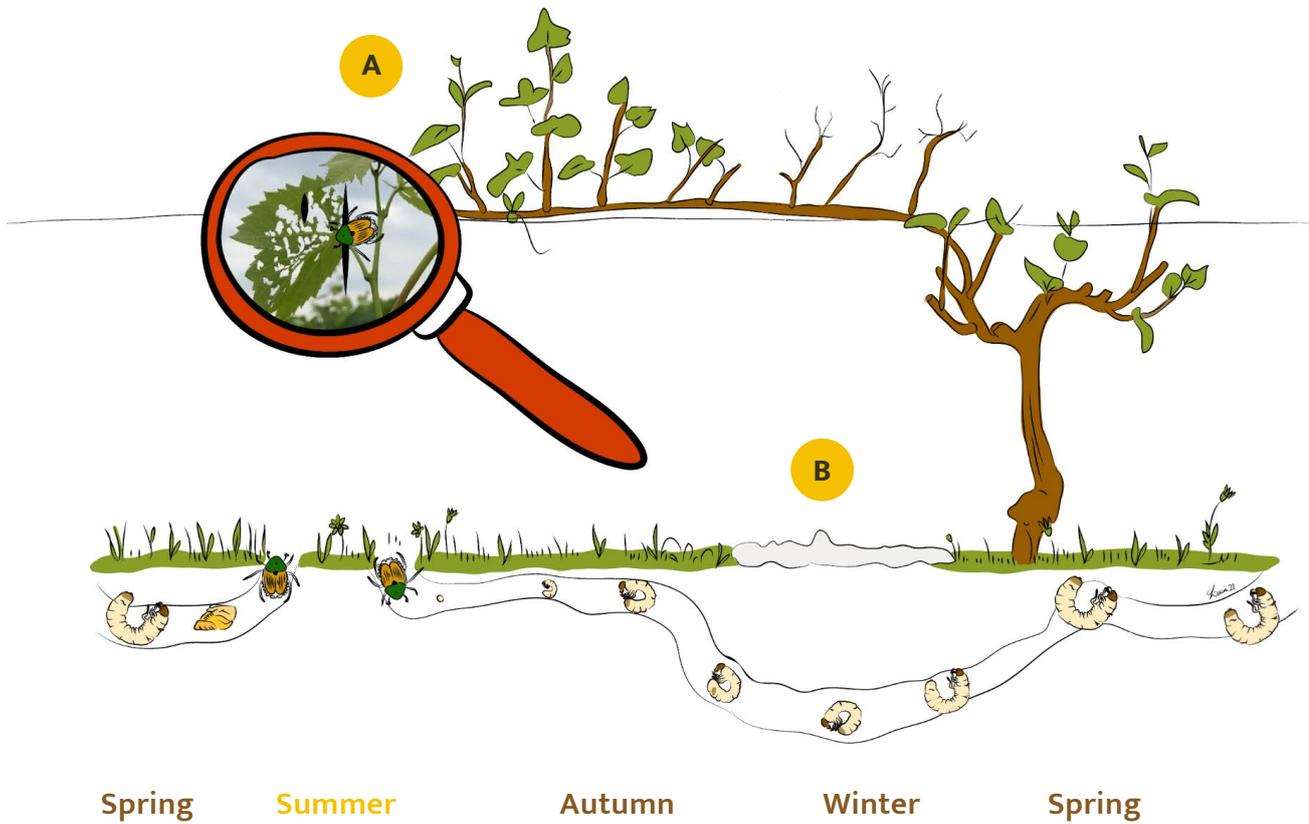
b. Larvae *Popillia japonica*

The larva of *Popillia japonica* is very similar to that of other beetles. Differentiation is possible only with the aid of a magnifying glass to see the raster at the end of the abdomen.



Information on how to report your sightings in a Citizen Science App can be found on the last page!

BIOLOGY



Credits: Sezione dell'agricoltura, Servizio fitosanitario

A Damages caused by adults

Adults of Japanese beetle are present during **summer** and can damage vegetation by feeding on more than 400 plants (roses, hazel, vines, pear, peach, strawberries, ...) causing defoliation or eating flowers and fruits.

B Damages caused by larvae

Larvae are present in the soil from **autumn to spring**, living close to the roots and up to a depth of around 30 cm. They feed on the roots and cause damage to the lawn, distinguishable by yellowing of the turf.



Credits: Sezione dell'agricoltura, Servizio fitosanitario



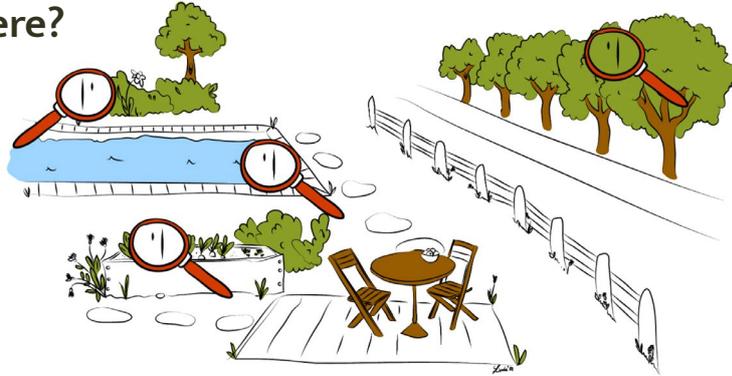
Credits: Sezione dell'agricoltura, Servizio fitosanitario

CHECK FOR PRESENCE OF THE BEETLE

Who should check and where?

1 Everyone

- ✦ the garden
- ✦ the swimming pool filter
- ✦ the vegetable garden
- ✦ the public green



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2 People involved in the production and distribution of fruit and vegetables, gardeners, and greenkeepers

- ✦ gardens and plants
- ✦ the culture
- ✦ the soil
- ✦ the harvest
- ✦ the machinery or material used: checking work clothing and tools
- ✦ inspect food during quality control
- ✦ inspect food during the packaging
- ✦ inspect food during export of goods to points of sale



3 People travelling, before leaving or returning

- ✦ car
- ✦ clothes
- ✦ luggage





AID TO THE FIGHT

What should you do?



● In case of suspicious finding

- ✘ Capture the insect and photograph it
- ✘ Keep it in a closed jar
- ✘ Contact the competent Plant health service* as soon as possible, so experts are immediately informed.
- ✘ Report your observation in the **IPM Popillia Citizen Science App** (see page 6).

● How to deal with Japanese beetles in your garden

- ✘ Collect individuals by hand, preferably during the early morning hours (before the sun comes up) when the insects are not active yet;
- ✘ A jar or a bucket can facilitate the harvesting, taking advantage of the insects' tendency to drop when in danger. To prevent the beetles from escaping, add water to the container and close it with a lid;
- ✘ Dispose the dead insects, ensuring that they no longer pose a risk of spreading (freezing is recommended, while the transport of live individuals is prohibited).

● For everyone in an infested area*

- ✘ **Limit automatic watering** during July-August, reducing the number of favorable spots for oviposition;
- ✘ **Do not transport vegetal material** from an infested to an unaffected zone from June 1st until September 30th;
- ✘ **Do not transport soil** from an infested to an unaffected zone. The soil, used for constructions, new gardens, etc., can contain eggs or larvae of Japanese beetle;
- ✘ **Do not transport plants in pots** from an infested to an unaffected zone. The soil can contain eggs or larvae of Japanese beetle. Removing soil can be a solution;
- ✘ **Avoid oviposition in plant nursery pots**, from June 1st until September 30th: **cover the soil** in the pots, or around plants in the field, with insect-proof covering (e.g. coconut fiber, sand, etc.). Otherwise, place them on sealed surfaces and keep them weed-free.

What not to do?



For everyone

- ✘ Use **insecticides** when not recommended by the Plant health service.
- ✘ Use **attractive traps** when not recommended by the Plant health service.

*Check the infested areas of your country on the website of your local authorities (e.g. plant health inspection service, phytosanitary service, etc.).

E.g. Phytosanitary service of Canton Ticino, Switzerland: www.ti.ch/coleottero-giapponese

POSSIBLE CONFUSIONS

1



Popillia japonica

Japanese beetle,
8-12 mm

2



Phyllopertha horticola

The garden chafer, 8-10 mm,
presents several hairs on
the abdomen that do not
form tufts

3



Anomala spp.

Anomala vitis, 14-18 mm,
and *Anomala dubia*, 11-15
mm, are completely green
to blackish brown

4



Melolontha melolontha

The Cockchafer, 25-30 mm, it
does not present white tufts

5



Mimela junii

This shining leaf chafer,
13-16 mm, has goldish green
elytra and several hairs
that do not form tufts. It is
more oval shaped than the
Japanese beetle

6



Amphimallon spp.

The Summer Chafer
(*Amphimallon solstitiale*),
14-20 mm, and the European
chafer (*Amphimallon majale*),
11-14 mm; they don't present
white tufts, they have brown
elytra and dark pronotum



HOW TO REPORT YOUR OBSERVATIONS

1 Contacting Plant Health Services

Check the infested areas of your country on the website of your local authorities (e.g. plant health inspection service, phytosanitary service, etc.).

E.g. Phytosanitary service of Canton Ticino, Switzerland: www.ti.ch/coleottero-giapponese

2 Report your sightings in the App IPM Popillia!



Download the IPM Popillia App and report your observations!

What is an observation?

In the App, you can quickly report the beetle you spotted, when and where you saw it, and upload a photo. Your report will be sent immediately to experts, helping them understand the spread of the Japanese Beetle and take action. Thank you!

Download Android



www.popillia.eu/android

Download iOS



www.popillia.eu/ios

