

## **JAPANESE BEETLES**

In our region most injury usually occurs during the last two weeks of July through the first week in August. Injured Fruit is usually infected during the last two weeks before picking.

The lifecycle of the Japanese Beetles and many other beetles includes a grub phase and 3 quick molts. During this larval phase the grubs feed on dead organic matter and roots. The female beetles lay their eggs in your lawn but the beetles are only able to be controlled during the larval stages. There are some organic steps you can take to prevent the grubs from growing into more beetles next year.

You can use **Beneficial nematodes (Bt)** - they are microscopic worms that usually come packed five to 50 million in little sponges. You water them into a wet lawn on a warm evening and they work their way down below the soil line to prey on grubs. They are not harmful to humans or pets so you can walk on the lawn immediately unless the label cautions otherwise.

Japanese beetle grubs **feed actively during two periods: late April-early June and late Aug-early Oct and do best when the soil temperature is at least 68 degrees.**



You can release the nematodes in Spring or Fall or both seasons if you need to control a really severe grub problem. They won't harm good soil dwellers like earthworms.

**Milky spore disease** is one of the oldest organic remedies and you can find it for sale at most large garden centers. It can be applied in addition to the Bt once every summer. If used for three years in a row it should build up enough disease spores in your turf to prevent grubs for a decade or

two. Don't get discouraged early as it doesn't have much effect the first couple of years, **AND it only works on Japanese beetle grubs.**

Another effective control is to simply **avoid watering your lawn in the late summer egg-laying season;** the beetle eggs will die if the turf is dry. Don't chase starlings as these so-called 'pest' birds feed on the grubs in your lawn and even the adult beetles! Another great natural enemy is the **Spring Tiphia wasp;** the female goes down into the soil and lays her eggs right on the pests killing a large percentage of the grubs in a much better way than applying dangerous chemical insecticides!

**Plant forsythia, peonies, and firethorn** to attract these great, natural, beetle-killers. Also, don't kill what looks like **winged carpenter ants** visiting those plants in the Spring; those are the wasps!

Please remember to follow label directions and use only the recommended amounts. Good Luck and don't forget the beetle life-cycle to minimize the damage in the following years.

**I DONT RECOMMEND USEING THE FOLLOWING NON ORGANIC METHODS - BE AWARE THAT ALL OF THESE "non-organic" PESTICIDES ARE NON-SELECTIVE AND WILL ALSO KILL BENEFICIAL INSECTS like BEES & EVEN EARTHWORMS.**

For Japanese Beetle control on APPLE and PEAR trees use sprays containing DIAZINON or IMIDAN or SEVIN or a GENERAL PURPOSE MIXTURE of malathion, methoxychlor and captan. This general purpose mixture may not be as effective for some pests as other individual chemicals that are recommended.

Altho Sevin is recommended it may be likely to cause a mite increase following application. Neem is an organic pesticide that has also been effective against Japanese Beetles.

If I could highlight this next paragraph to insure your read it and follow the directions I would... **PLEASE**

**Read the pesticide label carefully and use the chemicals in accordance with label cautions, warning and directions.**

**Trade and brand names are used only for the purpose of information, and the University of Illinois Extension Service does not guarantee nor warrant the standard of the product, nor does it imply approval of the product to the exclusion of others which may also be suitable. The University Extension Service assumes no responsibility in the use of hazardous chemicals. Please follow label directions and use caution.**

As a Master Gardener regulations do not permit me to recommend a place for you to find the beneficial nematodes so google "Bt japanese beetles" and look for the best price.

Good Luck and Good Growing!