

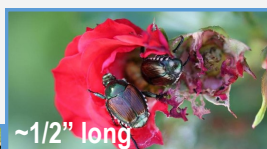
# Japanese Beetle: An Invasive Pest in Washington

Japanese beetle was recently found in Washington. WSDA is asking for help in identification and eradication of this destructive pest. You can help by reporting any Japanese beetles to WSDA and treating beetles (if found) to keep populations low. Reporting can occur online at [agr.wa.gov/beetles](http://agr.wa.gov/beetles), by emailing [PestProgram@agr.wa.gov](mailto:PestProgram@agr.wa.gov), or calling 1-800-443-6684.

Use pheromone traps to detect adult beetles



2 white patches



copper green

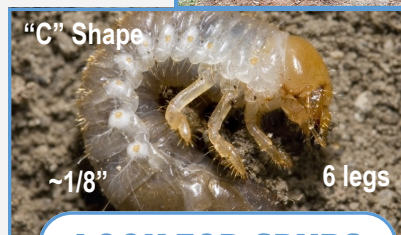


LOOK FOR ADULTS



Dig under brown patches in your lawn to find grubs.

Grubs eat roots



LOOK FOR GRUBS

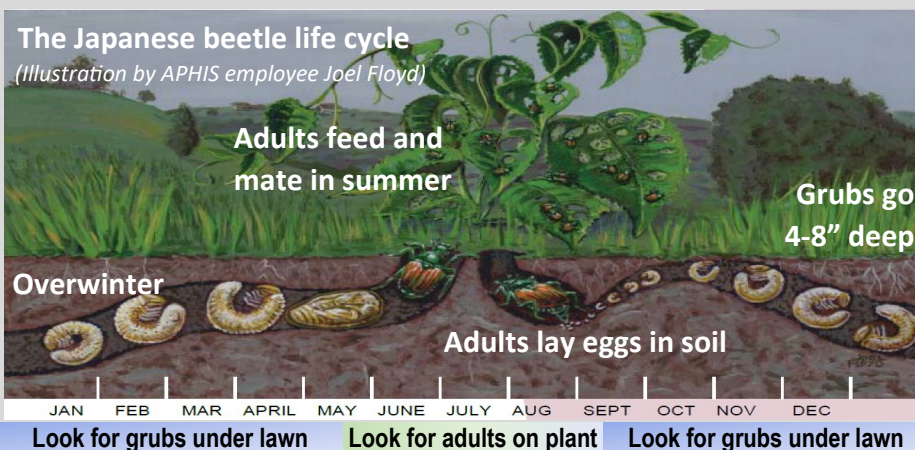
If you find a beetle or a grub, report to WSDA. Then...

treat adult beetles directly, treat grubs in the lawn. (see below)

Photos: Lawn: Kevin Frank, MSU Bugwood.org (Rose: Whitney Cranshaw; Adult, Larvae, Leaf: David Cappaert)

## The Japanese beetle life cycle

(Illustration by APHIS employee Joel Floyd)



## USE APPROPRIATE PESTICIDES

May to mid-July:

Treat lawn with 'Preventative' (**green table**)

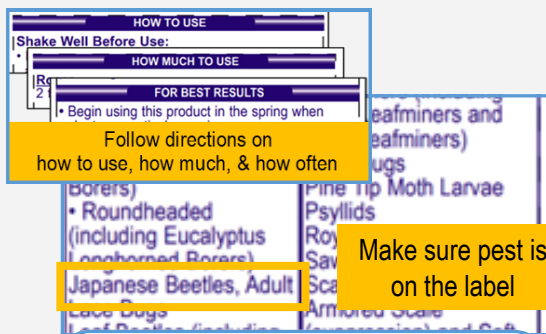
Other months:

Treat lawn with 'Curative' (**blue table**)

All summer:

Kill adults (**red table**) or put insect into a bucket of soapy water

Match 'Active Ingredient' in table with the one on the product you are using



USE PESTICIDE CORRECTLY



Do not apply when bees are present



Safer for bees



Do not apply when butterflies are present



Organic

Apply to control **ADULT** beetles.



**Examples:** All-in-one Rose & Flower Concentrate; Vegetable & Garden Insect Spray; 3-in-1 Insect, Disease, and Mite Control

**Active Ingredient:** thiamethoxam, imidacloprid, pyrethrins, cyfluthrin, tau-fluvalinate, zeta-cypermethrin, permethrin, spinosad, azadirachtin



**Example:** BeetleJus **Active Ingredient:** *Bacillus thuringiensis* ssp. *Galleriae* Reapply frequently according to label.

**PREVENTATIVE pesticides for GRUBS** need to be applied *before* adult beetles lay eggs in **July & August**. Kills eggs & helps control next year's grub population. Labels often say 'Season Long Control'. Many dry products must be watered-in with 1/2 inch of water.



**Examples:** GrubEx

**Active Ingredient:** chlorantraniliprole



**Examples:** Insect Killer Soil & Turf; 12 month Tree & Shrub Protect & Feed **Active Ingredient:** imidacloprid, clothianidin, gamma-cyhalothrin. Mow lawn before applying to avoid flowering weeds.

**CURATIVE pesticides kill GRUBS** on contact and are a good choice to apply for large grubs present from **September to May**. Labels often say 'Quick' or '24-hour control'. Many dry products must be watered-in with 1/2 inch of water.



**Examples:** Quick Kill Lawn and Landscape Insect Killer; Lawn Insect Granules; **Active Ingredient:** trichlorfon, zeta-cypermethrin, carbaryl. Bifenthrin, permethrin, cyfluthrin only control adult beetles; these products should be combined with other active ingredients that control the grub. Mow lawn before applying to avoid flowering weeds.



**Examples:** Grubhalt **Active Ingredient:** *Bacillus thuringiensis* ssp. *Galleriae* \*\*Apply mid-July to mid-August