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Pest Alert: Japanese Beetles are Active in Howard County Home Horticulture



Japanese beetle adults are beginning to emerge, so it is time to get your frustration level in check and decide on your approach. The numbers collected will steadily increase through June then slowly decrease through July. You should be scouting now when peak numbers will result in damage to many different tree, ornamental, fruit, and even field crops. Adult Japanese beetles typically feed on roses and Linden trees at first then damage the foliage and fruit of over 400 flower, shrub, and tree species. This past year I even saw them on oaks, which are typically not on the list of susceptible host plants.

The Japanese beetle is an invasive insect, recently establishing population growth. It will continue to disperse throughout the state. Beneficial biological pathogens and agents will eventually slow these expanding populations, resulting in annual population fluctuations at levels below peak populations experienced in earlier years.

Japanese beetle adults are approximately ½-inch in length, metallic green in color with bronze or copper colored wings. A diagnostic characteristic is the presence of ten white tufts of hair or bristles located around the edge of the shell (five running down each side and two located at the very back end). Without magnification, these structures are seen as white dots. Adult beetles typically begin emerging from the soil in late May or early June, reach peak numbers in June into early July and then diminish during late July into August. Each beetle female typically lays 40 to 60 eggs in groups of 1 to 8 into the soil. Larvae emerge in about 2 weeks and feed on plant roots and decaying material before overwintering in the soil as 3rd instars (worm or grub stage). The following spring they finish development, pupate and emerge as adults and the cycle begins again.

Feeding damage is often observed as a lace-like pattern of host plant foliage. Beetles often gather in high numbers on host plants. Several tree species, roses, and mature fruit are favored hosts of this pest but recently I have seen them on landscape plants like hostas.

Reference:

Japanese Beetles in the Urban Landscape, M.F. Potter, D.A. Potter, and L.H. Townsend. University of Kentucky Cooperative Extension Service – College of Agriculture, EntFact 451.

Table 1. Plants Favored by Japanese Beetles.

Scientific name	Common name
<i>Acer palmatum</i>	Japanese maple
<i>Acer platanoides</i>	Norway maple
<i>Aesculus hippocastanum</i>	Horsechestnut
<i>Althaea rosea</i>	Hollyhock
<i>Betula populifolia</i>	Gray birch
<i>Castanea dentata</i>	American chestnut
<i>Hibiscus syriacus</i>	Rose-of-Sharon, Shrub Althea
<i>Juglans nigra</i>	Black walnut
<i>Malus species</i>	Flowering crabapple, apple
<i>Platanus acerifolia</i>	London planetree
<i>Populus nigra italica</i>	Lombardy poplar
<i>Prunus species</i>	Cherry, black cherry, plum, peach, etc.
<i>Rosa species</i>	Roses
<i>Sassafras albidum</i>	Sassafras
<i>Sorbus americana</i>	American mountain ash
<i>Tilia americana</i>	American linden
<i>Ulmus americana</i>	American elm
<i>Ulmus procera</i>	English elm

Several over-the-counter and commercial insecticides are labeled for adult and larval (white grub) Japanese beetles. Products containing pyrethroids such as cyfluthrin (Bayer Advanced Lawn & Garden Multi-Insect Killer), acelepryn (Acelepryn), bifenthrin (Talstar One, Onyx), clothianodin (Arena), deltamethrin (Deltagard), imidacloprid (Merit), lambda-cyhalothrin (Scimitar, Spectracide Triazicide), permethrin (Spectracide Bug Stop Multi-Purpose Insect Control), and thiamethoxam (Meridian) offer good control for professionals and homeowners. Carbaryl (Sevin) is also effective for both adults and grubs. Pyrethroid products will provide 2 to 3 weeks protection, while carbaryl provides only 1 to 2 weeks protection. For those wanting an organic approach, Neem products like Azatrol or Neem-Away will provide 3 to 4 days deterrence of feeding. Sequential applications of all products are needed under extended periods of activity.

Most recently, the retail stores have provided Japanese beetle traps for sale. A common mistake is to place those traps near your plants that you want to protect. The traps have a pheromone attractant and therefore, you will want to place the traps away from your plants. Also, recognize that the traps fill quickly and need to be monitored. Disposal is sometimes an odoriferous process.

Always follow label directions and note any precautions for bees. On food crops, follow the recommended pre-harvest interval before harvest begins.

Todd Lorenz,
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