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JAPANESE BEETLES ARE ON INCREASE

The Japanese beetle is probably the most devastating pest of urban landscape plants in the eastern United States and now we are seeing damage to trees in and around Wilber and Crete. Residents have had to deal with them for quite a few years now. Japanese beetles were first found in this country in 1916, after being accidentally introduced into New Jersey. Until that time, this insect was known to occur only in Japan where it is not a major pest.

The beetles like to lay eggs in large areas of turf and pasture grass for developing grubs, the adult beetles have hundreds of species of plants on which they like to feed, and no effective natural enemies. The beetles have expanded its geographic range and will be coming to all of Saline County soon.

I first confirmed damage to soybeans in July of 2011 on the south side of Crete, the first report of this kind on row crops in Nebraska. Japanese beetles are a common pest of corn and soybeans in the eastern Corn Belt, but we now deal with them every year in Saline County. Japanese beetles were reported previously in 1994 on turf in Crete at the Country Club.

Adult Japanese beetles are 7/16-inch long metallic green beetles with copper-brown wing covers. A row of white tufts (spots) of hair project from under the wing covers on each side of the body. Adults emerge from the ground and begin feeding on plants in June. Activity is most intense over a 4 to 6 week period beginning in late June, after which the beetles gradually die off. Individual beetles live about 30 to 45 days.

Japanese beetles feed on about 300 species of plants, devouring leaves, flowers, and overripe or wounded fruit. They usually feed in groups, starting at the top of a plant and working downward. A single beetle does not eat much; it is group feeding by many beetles that results in severe damage. They are very frustrating to grape owners. Many trees including Linden trees can be a magnet for breeding populations. For more information go to:
<https://entomology.ca.uky.edu/ef451>

Adults feed on the upper surface of foliage, chewing out tissue between the veins. This gives the leaf a lacelike or skeletonized appearance. Trees that have been severely injured appear to have been scorched by fire. Japanese beetles may completely consume rose petals and leaves with delicate veins. Odors emitted from beetle-damaged leaves seem to be an important factor in the aggregation of beetles on particular food plants. Adult Japanese beetles are highly mobile and can infest new areas from several miles away. Usually, however, they make only short flights as they move about to feed or lay eggs.

Many insecticides are labeled for use against adult Japanese beetles. Examples include pyrethroid products such as cyfluthrin (Tempo, Bayer Advanced Lawn & Garden Multi-Insect Killer), bifenthrin (TalstarOne, Onyx), deltamethrin (Deltagard), lambda cyhalothrin (Scimitar, Spectracide Triazicide), esfenvalerate (Ortho Bug-B-Gon Garden & Landscape Insect Killer) and permethrin (Spectracide Bug Stop Multi-Purpose Insect Control Concentrate and other brands). Carbaryl (Sevin and other brand names) too is effective. The pyrethroid products generally provide 2-3 weeks protection of plant foliage while carbaryl affords 1-2 weeks protection. For those seeking a botanical alternative, Neem products such as Azatrol or Neem-Away (Gardens Alive), or Pyola (pyrethrins in canola oil) provide about 3-4 days deterrence of Japanese beetle feeding. Insecticidal soap, extracts of garlic, hot pepper, or orange peels, and companion planting, however, are generally ineffective.



For corn and soybean thresholds go to: <http://cropwatch.unl.edu/2017/japanese-beetles-soybean>
One thing to keep in mind for food grade corn with an open husk type variety, I have had a Crete farmer indicate he failed the black light test at the Mill and he now has to be more aggressive controlling the beetles as the current literature only talks about spray thresholds with defoliation and silk clipping but does not talk about issues with kernels on the tip of the ear.

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