

July 1, 2016

JAPANESE BEETLES AND GRASSHOPPER CONTROL

Saline County had a first in a contest that we didn't want to be first in and it was in 2011. That's when I received a call from an operator in a soybean field on the south edge of Crete of beetles eating his crop and they were voracious feeders. It was an outbreak of Japanese beetles and people in the town of Crete had been dealing with them even before 2011. The article that describe Japanese beetles and a picture of them can be found at: <http://goo.gl/bgVFra>

This year they were found in a vineyard north of Wilber and this past week in a corn field three miles west of the Smithfield plant. The Japanese beetles were mainly on the border of the field. Spraying for it would not be warranted in the entire field unless the situation changed. Japanese beetles (*Popillia japonica* Newman) can contribute to defoliation in soybeans, along with a complex of other insects, such as bean leaf beetles, grasshoppers, and several caterpillar species. In corn, they will scrape off the green surface tissue on leaves before silks emerge, but prefer feeding on silks once they are available. This may interfere with pollination if abundant enough to severely clip silks before pollination. More information on Japanese beetles can be found at: <http://cropwatch.unl.edu/2016/nebraska-crop-reports-2016>

Grasshoppers: With all the rain in May and a very dry June it has been an abundant grasshopper hatch this year. They are worse in some areas compared to others so scout your fields and acreage. While a few species of hoppers winter as adults or partially grown nymphs, most species hatched as eggs in June.

Young hopper nymphs remain for some time in "staging areas" such as pastures, fence rows, roadside ditches, and alfalfa before entering planted crop land and nearby lawns and gardens. It is important to eliminate small grasshoppers in these areas before they become half to full grown when they become difficult to control. In pasture areas and along roadsides, there are numerous products labeled including carbaryl (Sevin) and malathion that can be used. In cropland fields often border treatments are enough versus treating an entire field.

Our grasshopper guidelines for crops are at: <http://extensionpublications.unl.edu/assets/pdf/g1627.pdf> Moderate pressure is defined as 8-14 hoppers in a square yard in the field or 20-40 on the borders. Pressure at these levels probably warrants treatment. Abundant is defined as 15 or more per square yard in the field or 41 or more on the borders. Scouting information is crucial this time of year when hoppers are not as big. One consideration, if hoppers are getting bad in a garden, is Sevin bait. Carbaryl (Sevin) is the only product that is formulated as a bait for grasshopper control. The insecticide is impregnated onto wheat bran flakes or into small pellets. This dry formulation can be useful in and around the garden, especially if there are not recurring infestations from surrounding areas. The bait is easy to apply by hand and can be spread without directly contacting the plants, avoiding residues. Bait should be applied to the soil surface or areas of minimal surface residue or canopy so the grasshoppers can easily find it. It needs to be re-applied after rain or heavy dew as it will not persist under these conditions.



Leaving border areas unmowed will delay grasshopper movement into the yard and garden. Tall grass provides food and shelter for the grasshoppers. People that plant trap crops of attractive plants (e.g. zinnias or some other lush flower or vegetation) can use these areas to control grasshoppers. As always, read and follow all directions and precautions on an insecticide label.

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