As we have been in several corn and soybean fields over the last week we have started to notice the population of Japanese beetles beginning to rise as the adults begin to fly and feed. While the population out in the field is not currently at a threshold requiring treatment, it is still a potential problem to be aware of as these beetles can clip silks in corn and lead to heavy defoliation in soybeans. Please see the Pioneer Agronomy Crop Focus below with more in depth information on treatment thresholds and as always contact a member of our team if you have any question about these pests and their impact on your operation.



Japanese Beetle

Pest Facts

- Latin name is Popillia japonica
- · Native to Japan; found in United States in 1916
- Most damage is from adult feeding; however, the larval grub also can feed on roots.
- Late-planted fields are at greater risk
- Japanese beetles are often found in field edges or areas of delayed growth
- Over 300 hosts: corn, soybean, omamentals, fruit trees, grapes, weeds
- One generation per year



Distribution

 Well established east of the Mississippi River, the Japanese beetle is also present in most other corn and soybean growing states



Key Characteristics

 Half inch adults are shiny metallic green with bronze wing covers, with six white hair tufts on each side of their abdomen

Related/Similar Species

- 1. Masked Chafer light color
- 2. Green June Beetle twice the size, no white tufts
- 3. False Japanese Beetle/Sand Chafer dull, no white tufts









Pest Injury Symptoms / Impact on Crop

- · Clipped corn silks may reduce pollination and yield
- Skeletonized or lacy leaf patterns between veins are symptoms of either com or soybean feeding
- Leaf feeding is typically insignificant in com
- Leaf feeding may be more significant in soybeans, causing defoliation prior to pod fill









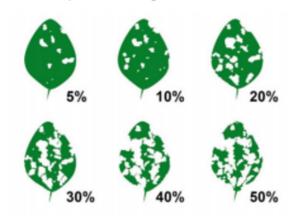


Management Considerations

- Favorable conditions
 - Adults prefer lighter soil for egg laying
 - First entry into an area is usually near transportation, such as railroads or major highways
- There are no significant natural enemies in the U.S.
- IPM Practices
 - No transgenic or native gene resistance is currently available for either soybeans or corn
 - Trapping is NOT recommended as it has a tendency to attract the beetles
 - Scouting should begin in com in July and August and switch to soybeans during August
 - Use percent pollination and presence of uncut silks as a guide when deciding treatment of corn. Leaf feeding is rarely significant in corn.
 - Use percent defoliation and amount of pod fill remaining to help decide economics of insecticide treatment for soybeans

Economic Thresholds

- · Treatment thresholds for com insecticides:
- Silks clipped to within ½ inch of the ear tip
- · Less than 50% of plants pollinated
- · Beetles are present and feeding



- · Economic thresholds for soybeans:
- Up to V7 = 40 to 50% defoliation
- · Flowering, pod development, pod fill = 15 to 20% defoliation
- Pod fill to harvest = greater than 25%

Annual Life Cycle

JUNE



Grubs feed on roots briefly before pupating in June

to August



JULY

Adults feed on com and soybean foliage



AUGUST

Larvae develop on the roots in the soil and overwinter ¼ grown deep in the soil

Mating and egg laying takes place from July

SEPT/OCT

