

Japanese Beetle

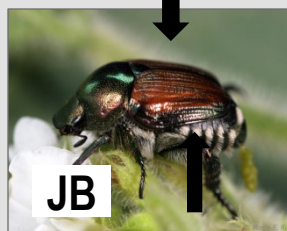
Pest Facts

- 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, ornamentals, fruit trees, grapes, weeds
- One generation per year



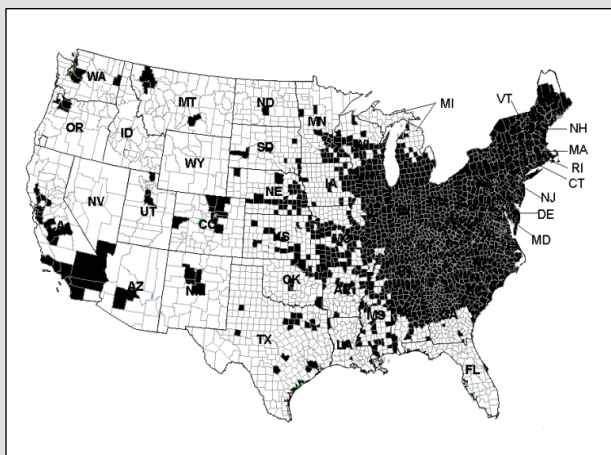
Related/Confused Species

- 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



Distribution

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

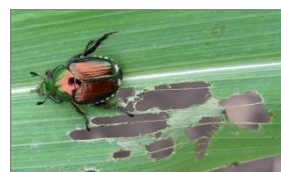


Key Characteristics

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

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 corn or soybean feeding
- Leaf feeding is typically insignificant in corn
- Leaf feeding may be more significant in soybeans, causing defoliation prior to pod fill

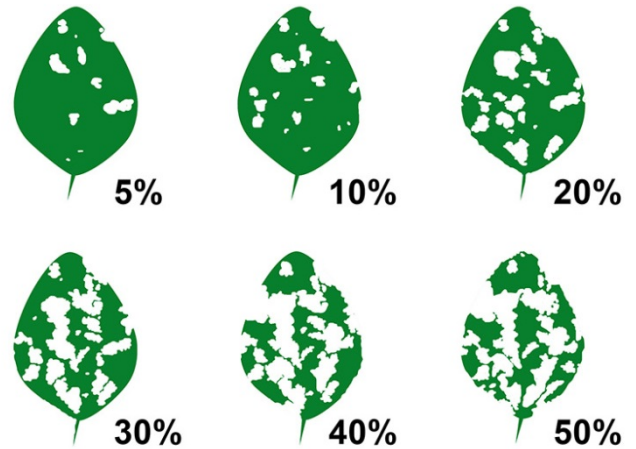


Management Considerations

- 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 corn 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

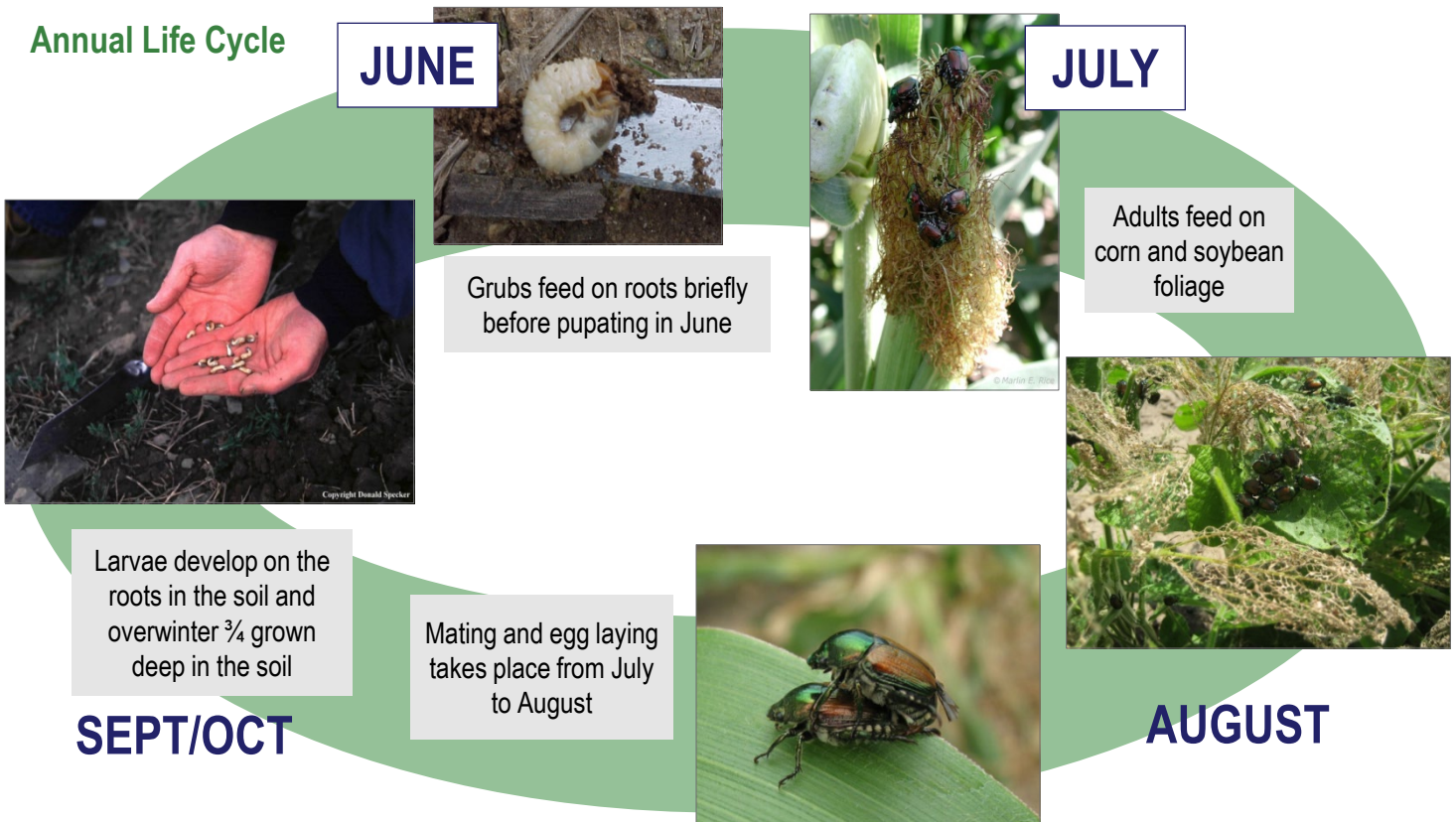
Economic Thresholds

- Treatment thresholds for corn 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



The foregoing is provided for informational use only. Please contact your Pioneer sales professional for information and suggestions specific to your operation. Product performance is variable and depends on many factors such as moisture and heat stress, soil type, management practices and environmental stress as well as disease and pest pressures. Individual results may vary.