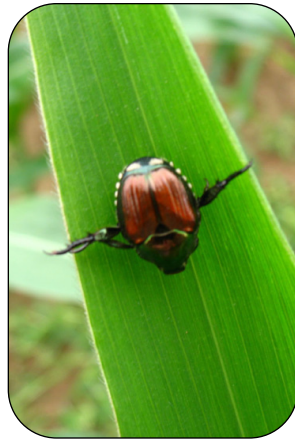


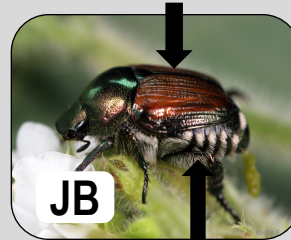
Pest Facts

- 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 (See Crop Focus on White Grubs)
- 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



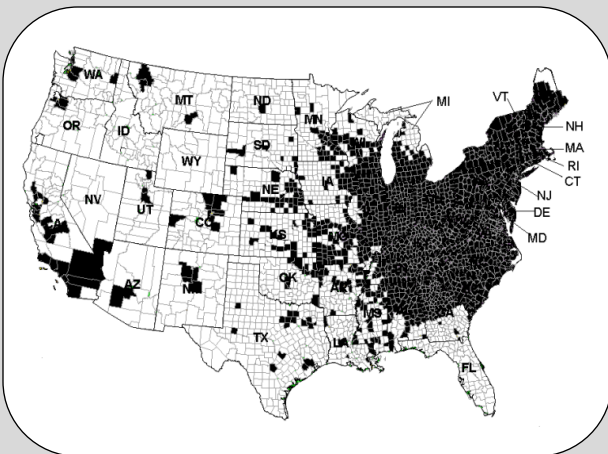
Related/Confused Species

- 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



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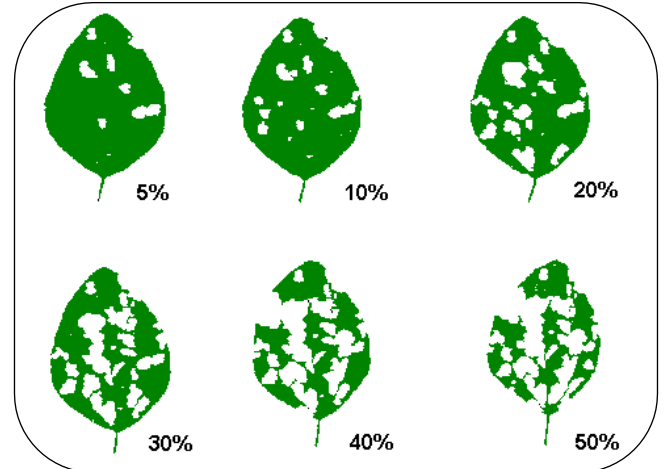
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Management Considerations

- 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

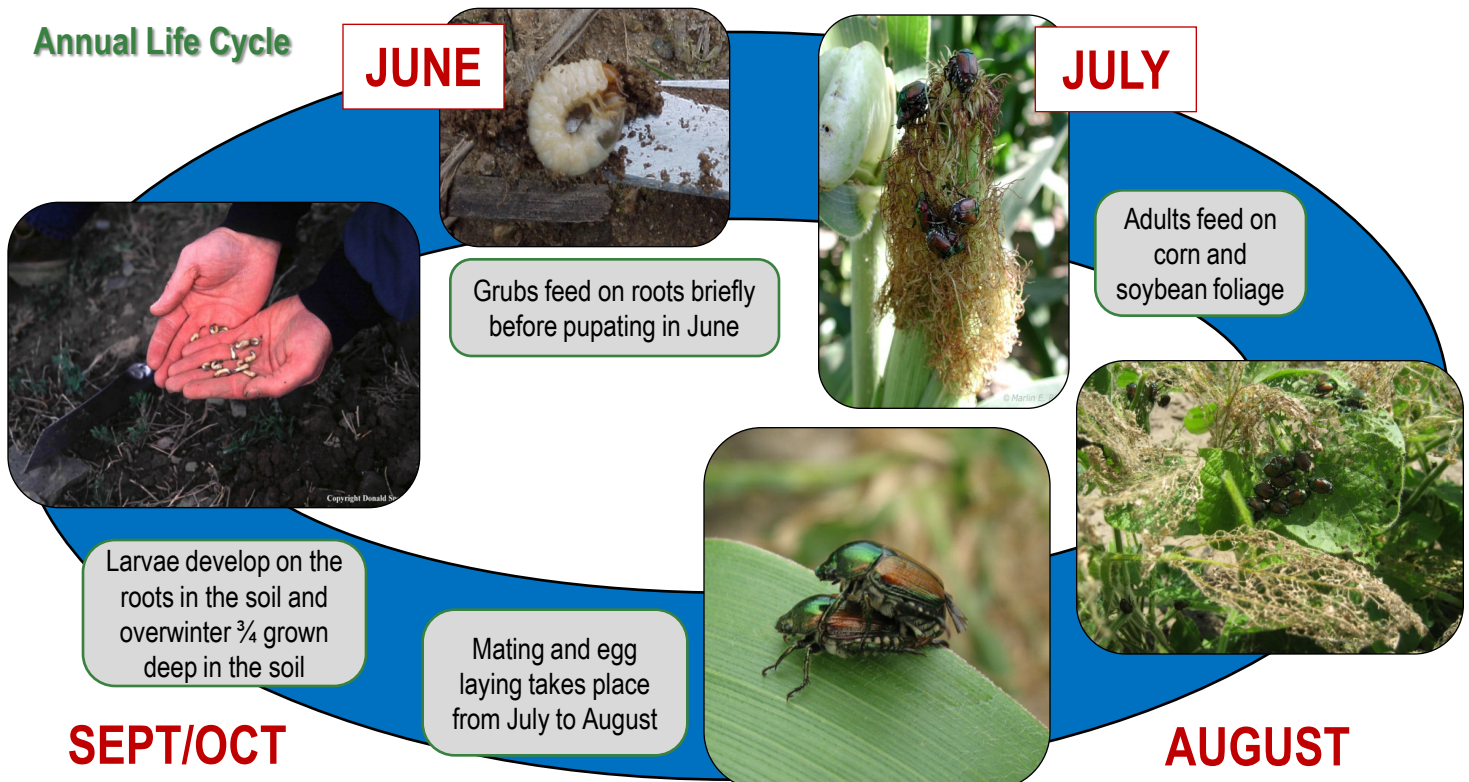
Economic Thresholds

- 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



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