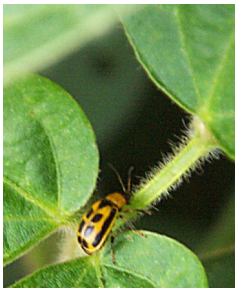
Bean Leaf Beetle

CROP BULLETIN

Chuck Bremer, Former Agronomy Information Manager

PEST FACTS AND IMPACT ON CROP

- Latin name is *Ceratoma trifurcata*
- Although the larvae feed on soybean roots, most damage occurs from adult feeding on foliage or pods
- Found east of the Rocky Mountains, wherever soybeans are grown
- No significant natural enemies are known
- Hosts: alfalfa, clover, green beans, wild legumes such as tick trefoil
- Generations per year
  - 3 – Southeast United States
  - 2 – Iowa and Illinois
  - 1 to 2 – Wisconsin
  - 1 – Canada
- Adults overwinter in woodlots and fence rows
- Quickly killed if exposed to temps below 14° F
- Adults may feed on alfalfa in spring before soybeans emerge



Crop Symptoms

- Impact from larvae is unknown, but thought to be insignificant
- Leaf feeding from adults causes little impact unless defoliation exceeds 25%
- Pod feeding results in greatest damage and affects both quality and yield
- Adults also transmit bean pod mottle virus, which:
  - Reduces soybean yield
  - Reduces soybean quality
  - Causes green stem and delays harvest

CROP SYMPTOM PICTURES

PEST ID

Adult:

- Bean leaf beetle adults are 1/5 inch long
- Color is typically dark yellow, but may be orange or red
- Wing covers often with four “rectangular” marks, but may have two or no marks
- Best identifying mark—black triangle behind pronotum (neck region)

Larvae:

- Found in soil near roots and resemble corn rootworm larvae
- Body color is white and head color is dark brown/black
- Often found feeding in nodule

Bean leaf beetle adults

MANAGEMENT CONSIDERATIONS

Resistance

- Neither native nor transgenic resistance are currently available for bean leaf beetle

Beneficial Insects (Natural Enemies)

- Very little impact documented
- Not a recognized deterrent to beetle populations

Planting

- If the field has a history of bean leaf beetle injury or bean pod mottle/green stem, consider planting slightly later after most bean leaf beetle adults have moved away from the area

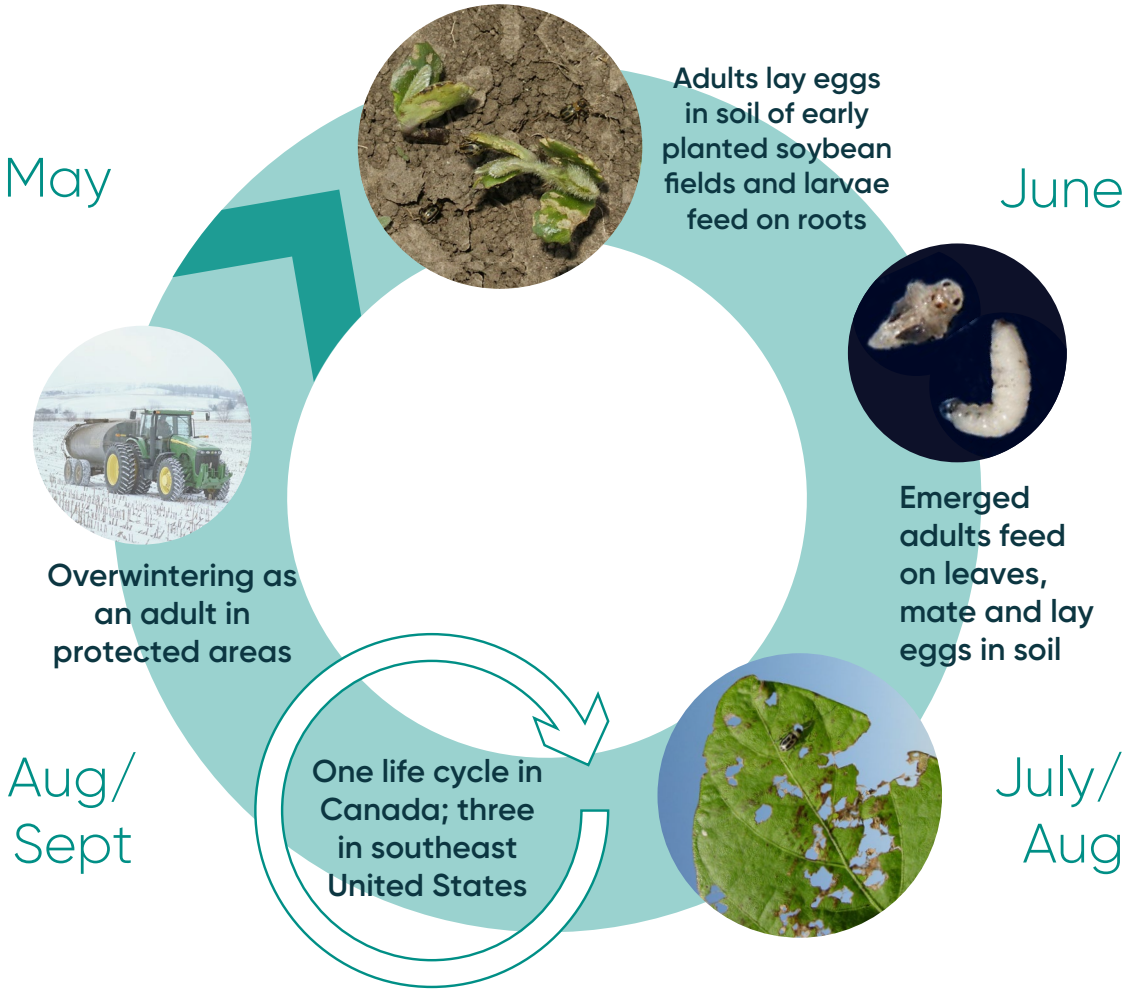
SCOUTING PRACTICES

Early Pod Fill Stages: R1-R3

- If defoliation approaches 20 to 25% and large numbers of BLB adults are present, consider insecticide application, especially if beetles exceed 20 per 20 sweeps of a sweep net
- Decision should be based on increasing or decreasing beetle numbers, costs of control and grain price of soybeans

Late Pod Fill Stages: R5-R7

- If pod injury is above 10% and beetles exceed 3 per sweep, consider insecticide application, especially if other pod feeding insects (grasshoppers) are present
- Value of control will depend on continuing injury and pod maturity



The foregoing is provided for informational use only. Please contact your 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. CF150511 (210226)