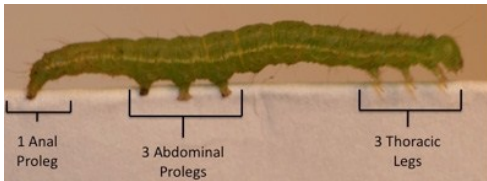


July 13, 2011

Clover Worms

We have seen increased numbers of clover worms in our soybeans in the last year. These worms start from moths that come up from southern states each year. The larvae appear pale green with one or two white stripes along their side. There are three pairs of abdominal prolegs. The adult of a clover worm is a black or gray in color moth with an obvious snout-like mouth.



This is a picture of clover worm larvae.

Scouting for clover worms:

- Walk into the field 100 feet from the edge of the field
- Place a 1 foot white cloth on the ground between two rows
- Bend the plants over the cloth and shake them vigorously
- Count the number of larvae on the cloth
- Repeat the procedure four times in a 20 acre area

Economic threshold: if beans are \$12/bushel and the treatment cost \$6, the threshold would be 3.6 clover worms / foot of row.

Another way would be to determine how much defoliation has taken place on the soybeans plant if there is more than 30% defoliation then it would also pay. Talk to your Central Valley Agronomist to determine what treatment is right for you.



This is what 30% defoliation looks like.

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July 13, 2011

Soybean Bean Leaf Beetles

Bean leaf beetle numbers have been increasing in Minnesota in recent years. This trend can be attributed to milder winters, which increase overwinter survival rates. Typically, the bean leaf beetle overwinters and has up to two generations. Overwintering beetles emerge early and feed on the unifoliolate, but this feeding will rarely reach economic thresholds.

The first generation will normally emerge late spring into early summer, and primarily feed on young leaves. This generation should be treated if defoliation is greater than 35% of the leaf surface. The second generation will emerge in late summer, typically during pod-set. Economic threshold for this generation is if defoliation exceeds 25%. The adults from the second generation will also feed on developing pods. Feeding on developing pods can hinder bean development, and allow disease to enter the plant. Economic threshold for pod-feeding beetles is when pod damage is greater than 10%. Scouting is the key to managing bean leaf beetle infestation.

Central Valley offers a number of methods to control bean leaf beetle infestation. Our agronomists will scout your bean fields periodically, in order to identify the first signs of the beetles. If bean leaf beetles are found within a given geography, adjacent fields will be closely watched. Also, if the infestation reaches threshold levels an insecticide can be used to control the insect. For more information or any questions you may have on bean leaf beetles, please contact your Central Valley Agronomist.

