Colorado Potato Beetles (Leptinotarsa decemlineata)







Figure 1 Eggs

Figure 2 Larvae

Figure 3 Adult

Damage

Both adults and large larvae are voracious leaf feeders. They can chew holes larger than 1/8 inch across into the leaves of susceptible plants. They often consume entire leaves beginning with young, succulent leaves. Larvae typically feed in groups and may completely defoliate plants. The larger larvae (later stages) do the most feeding damage. Heavy defoliation will severely reduce plant yields, particularly if it occurs when potatoes are flowering.

When Are They Active

Begin looking for eggs in early May on the undersides of leaves. Continue checking plants through the end of July for eggs, larvae and adults.

Susceptible Plants

The beetles prefer to feed on potato, but they will also feed on eggplant and weeds such as nightshade, groundcherry, jimsonweed, horsenettle and mullen.

Prevention Methods

Planting crops other than potato and eggplant for a year will help reduce populations. Be sure to eliminate alternate host weeds mentioned above. Consider planting potatoes earlier or later than surrounding growers. Floating row cover may be helpful in preventing initial adults from accessing young plants when they move into the area.

Treatment Methods

Regular observation and intervention is recommended every 2-3 days when activity level is highest. Smash eggs with gloved hand when discovered on the backs of leaves. Smash or hand-pick larvae and adults. Groups of larvae may be tapped off the plant into a pan of soapy water held underneath. Organic chemical control can be attempted with Bacillus thuringiensis var. tenebreonis (Btt). However, it is only effective against first and second larval stages and must be applied as an early spray against small larvae. It will only last 1-2 days and should be applied weekly for 2-3 applications. The more commonly available Bt var. kurstaki (Btk) has no effect on beetle larvae. You must use Btt as described above. For more information, see UW Extension Bulletin A3678 Colorado Potato Beetle.

Additional Information/Resources

- UW Extension Bulletin <u>A3678 Colorado Potato Beetle</u>
- Dane County UW Extension Horticulture Hotline 608-224-3721 (M-F, 9 am-12 noon, April 15 October 31) or horticulture@countyofdane.com