

Homegrown Horticulture

TIPS FOR SUCCESS IN YOUR OWN BACKYARD

Colorado Potato Beetle

Colorado Potato Beetles (CPB) are one of the most common pests of potatoes in many parts of the world. I can remember being sent out into the family garden by my dad with a couple of rocks and an empty tin can, with the instructions to collect, crush, and destroy any of the stages (adults, larvae, and eggs) that my siblings and I could find on and under the plant leaves. I'm not entirely sure how effective it was, but it was memorable.

The adult beetles are distinctive, in that they are somewhat rounded, about a 1/4 to 1/3 inch long, with black stripes running along the length of their backs, over a pale yellowing colour. The beetles overwinter in the soil and emerge in late May to early June, around the typical time when potato plants start to emerge. They find host plants, feed for a few days, and then start to mate. The females lay clusters of 30 yellow to orange-coloured eggs on the undersides of the leaves for a couple of months. Larvae are humpbacked, have black heads, and are reddish orange to salmon-coloured with 2 rows of black spots along the sides of their bodies. The larvae go through several developmental stages (essentially getting bigger and more advanced). Eventually, they drop to the soil to pupate, to then emerge as adults in a few weeks. All stages will often be on the plant at one time, but there is only one complete generation per year in our climate.

Both adults and larvae feed on the leaves and can completely defoliate the plants. The older larvae do most of the feeding damage. Feeding can affect the productivity of the plants, as the loss of leaves will set the plant back.

My folks weren't wrong in sending us kids out to crush the eggs and younger larvae, and to collect and destroy the older larvae and adults. You have to look hard for the egg clusters, but they are brightly coloured and easy to see if you flip the leaves over. Otherwise, keep your garden free of other host plants, like nightshade weeds. Plant early maturing varieties, as those will probably be more advanced and mature when the population of CPB peaks. Theoretically, you can control CPB by encouraging natural enemies, but you have little control over that, so if you have a big problem, it will take a while for the enemies to catch up to it. Using a chemical to control them is possible, but there aren't that many options. If the plant is well-established before the population develops, the plant might well handle the defoliation without too much of a hit on the yield.



Photo by: Whitney Cranshaw, Colorado State University, Bugwood.org

