

## COLORADO POTATO BEETLE

Some years, we get a lot of calls from growers and questions about a less common, but important, pest, so now's a good time to put it on your radar. If you still have veggie transplants on the bench or have gotten questions from retail customers on critters munching tomatoes and peppers bought from your greenhouse, this one's for you. Growers who primarily produce fresh market solanaceous crops will likely be familiar with this one, but if you're predominately a floriculture grower who does veggie *starts* and has ventured into large patio pot veggies, this one may be new to you. Let's chat about the Colorado potato beetle (CPB).



True to its namesake, the CPB (*Leptinotarsa decemlineata*) is a major pest of potatoes in North America, but any member of the *Solanaceae* family is in the crosshairs of this critter. For many of you growing traditional floriculture crops, this means your pepper, tomato, tomatillo and eggplant starts (or patio pots) are prime targets.

### Identification

- Adults are roughly 1/2 in. long and 3/8 in. wide with rounded backs and glossy yellow forewings that have five black stripes running lengthwise along each (10 stripes total).
- Immature larvae look slightly hump-backed, have black heads, and are reddish in color, with two rows of black spots running along each side of their bodies.
- Mature larvae look similar to immatures (black heads, black spots) but are more of a pinkish-salmon color and slightly larger.

### Life Cycle

Overwintered adults often emerge in late April (this depends on your location, as further south may emerge sooner) and feed for a short time before mating and laying eggs. Eggs are laid on the undersides of solanaceous host plant leaves in clusters of 20 to 30 or so. Eggs are generally brightly colored, often an orangish-yellow, and hatch about two weeks after they are laid.

Larvae feeding and rate of development is heavily dependent on average daily temperature, but they can fully develop in as few as about 10 days under warm temps (mid-80s F). Mature larvae then burrow into the soil to pupate and emerge again in about 10 to 14 days. In the northern US, typically only one to two of these cycles occur, but several more generations can occur in a single season the further south you go.

### **Management**

Adults overwinter along the edges of gardens and production fields on solanaceous weeds, such as common nightshade, horsenettle and “volunteer” peppers or tomatoes that have re-seeded themselves. Manage weeds and possible reservoirs on your property to reduce adult population from one season to the next.

While hand removal is time-consuming and generally undesirable, picking adults off plants when scouting and dropping them into a solution of soapy water is effective. Scraping egg masses off the undersides of leaves when scouting is also helpful.

Insecticide resistance is frequently a challenge when managing CPB, and many are resistant to active ingredients like carbaryl, imidacloprid and pyrethrins. Bioinsecticides containing *Beauveria bassiana* (like Botanigard and Mycotrol) can provide control of both adults and larvae. Azadirachtin and Spinosad are also effective at managing CPB.