

Garden Update

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Colorado Potato Beetle

From its name, it would be nice if Colorado potato beetles were only found in Colorado but unfortunately, that is not the case. The CPB, *Leptinotarsa decemlineata*, is a serious pest of potato and related crops in North America. Recently, the CPB was found at the Growing Together Nebraska garden here in Fremont, feeding on the foliage of both potatoes and eggplant. This insect has a voracious appetite, eating leaves down to almost nothing, which in turn decreases yields.

Both larvae and adults feed primarily on potato leaves, but can infest other plants in the nightshade family, like eggplant, pepper, tomato, and tomatillo. The larvae are soft-bodied, brick red to orange-red in color, and have two rows of dark spots running down each side of their bodies. Adult beetles are 3/8-inch-long ovals, striped with alternating strips of black and yellow. Adults overwinter in the soil, emerging in the spring to mate and lay eggs. The female can lay up to 350 yellow-orange eggs throughout her life, laying clusters of about 20 eggs at a time on favored food sources, extending egg laying over several weeks. Once eggs hatch, larvae initially cluster together, eventually dispersing to feed throughout the plant. At the larvae's fourth instar of maturity, they drop to the ground, burrowing into the soil where they eventually become pupae. When CPB numbers are high, egg, larvae, and adult life stages will all be present.

The easiest management technique (and least likely for beetles to develop insecticide resistance) is through hand-picking. Larvae naturally drop to the ground when potato leaves are disturbed, so place a bucket or plastic bag underneath foliage, give the plant a gentle tap, and the larvae will drop right in. Check undersides of leaves for egg masses, and then place insects and eggs in soapy water to kill them. Rotate where potato crops are planted from year to year and clean-up fallen plant debris. The CPB has developed resistance to many insecticides, including carbaryl (Sevin), permethrin, pyrethrin, and the class of insecticides known as neonicotinoids. If an insecticide is used, opt to spray when larvae are small, using products with known efficacy such as spinosad (a soil bacterium) or azadirachtin (derived from the Neem tree).

For more information on the Colorado potato beetle, follow this link: [Colorado potato beetles in home gardens | UMN Extension](#) .