

Bluestem Breezes
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Return of the Potato Beetle!

I am still smiling about the weather this weekend. It was perfect for me to be in the garden with my nose to the.....soil? That didn't seem to have the same ring as "nose to the grindstone", did it?

Nonetheless, it was a productive gardening weekend. I hope your gardens are in good shape (i.e. a productive state). We are devouring wilted lettuce salad like it's going out of style. The tomatoes are forging ahead after the frosts late last week. More of my seeded vegetables are sprouting, and well, life is just good.

I would say great, but the last three rows of the garden I and are about to head into a battle. Upon weeding my potatoes this weekend (I know, don't mention the M word. I haven't mulched yet. You know I swear by mulching my garden!), I discovered a Colorado Potato Beetle factory. Yes, factory.

If you have potato plants in your garden, keep a close eye out for this insect, its eggs, and its larvae. Here is information from K-State for overthrowing the Colorado Potato Beetle empire residing in your garden.

Hosts plants: potato, tomato, eggplant, pepper, other solanaceous plants.

Description: Colorado Potato beetle overwinters as an adult in the soil, in fencerows, or under litter in garden or fields. Adults become active in May and will start to lay eggs as soon as suitable host plants are found. Adult beetles are yellow with ten black longitudinal stripes on their rounded wing covers. They are about 3/8 inch long.

Clumps of 20 to 40 yellow-orange eggs are laid on the undersides of the leaves. Larvae hatch from the eggs in 4 to 15 days. The hump-backed larva has six legs and is about 1/8 to 1/2 inch long. It has reddish-tan to brick-red coloration with two rows of black spots on each side. Larvae and adults feed on the foliage of the host plants and can cause extensive damage if populations are high. Feeding occurring within two weeks of peak flowering on potato will have a pronounced effect on yield.

Recommendations: Hand-picking is possible on small plantings but becomes impractical for larger gardens. Two strains of *Bacillus thuringiensis* (B.t. var. *san diego* and B.t. var. *tenebrionis*) are effective on this insect. B.t. var. *san diego* is sold under the name M-One and B.t. var. *tenebrionis* is marketed as Trident. These products are safe for mammals, birds, fish, and beneficial insects. However, it is important to apply B.t. when the larvae are small (less than 1/4 inch) to get good control. Normally, this requires applications every 5 to 7 days until all the eggs have hatched. Also, thorough coverage of the host plant is vital as the larvae must ingest some of the bacterium before it will have any effect.

Colorado potato beetle has become resistant to many of our chemical insecticides. If you wish to use them, alternate between different classes of insecticides for the first and second generation larvae.

The major classes are:

Pyrethrins: Most effective at cool temperatures.

Spinosad: Examples are Fertilome Borer, Bagworm, Leafminer & Tent Caterpillar Spray

Bonide Colorado Potato Beetle Beater Concentrate

Carbamates: Example is car

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

Visit the Extension Office (215 Kansas, Courthouse, Alma; kamayer@ksu.edu; 765-3821). For Bluestem Breezes archives, check out wabaunsee.ksu.edu.