

Bluestem Breezes  
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July 11, 2016

## **Tomato Hornworms**

I spent consider time in my garden over the weekend. Despite the heat and circumstances I refer to as 'life', the garden looks great and I have definitely needed some "garden therapy" time.

Last year, I gardened with Person C secured in a stroller, longing for the day he would help me plant and then harvest the produce. This year, he was quite effective in picking up the potatoes starts I set in the soil, un-planting seedlings, and running the toy trucks through my bean rows (followed closely behind by 2 puppies).

This weekend, I thought surely he would love digging potatoes with me. This sounded like the perfect task for him! Instead, he preferred to sit in the red wagon and watch me. Really? Now, after months of running through the garden?

And, do you know, I loved every hot, sweaty, dirt-in-between-the-toes minute of it. Yes, he's a barefooted gardener; I'm blaming it on a barefooted gardening friend of ours!

Folks, gardens don't have to look perfect. We aren't all meant to be expert gardeners. Gardens are an awesome way to spend time with those you love. They provide healthy food for your family and friends. I love experimenting with new varieties, new planting schemes, and new trellises. My garden never looks perfect. It feels there is always something I am behind on: planting, weeding, mulching, weeding, insect control, weeding. You get the idea. But, it's ok. Gardens are always a work in progress!

Speaking of a work in progress. Tomatoes! Keep an eye out for those large, green hornworms. They have big appetites! Here are a few details from K-State Specialist Ward Upham:

Hornworms are the largest larval insect commonly seen in the garden. Though usually seen on tomato, they can also attack eggplant, pepper, and potato.

The larval stage of this insect is a 3 ½- to 4-inch long pale green caterpillar with five pair of prolegs and a horn on the last segment. The two most common hornworms are the tobacco hornworm (seven diagonal white stripes and, most commonly, a red horn) and the tomato hornworm (v-shaped markings with a horn that is often blue or black).

The adult of the tobacco hornworm is the Carolina sphinx moth. The five-spotted hawk moth is the adult of the tomato hornworm. Both moths are stout-bodied, grayish-colored insects with a wing spread of 4 to 5 inches.

The larva is the damaging stage and feeds on the leaves and stems of the tomato plant, leaving behind dark green or black droppings. Though initially quite small with a body about the same size as its horn, these insects pass through four or five larval stages to reach full size in about a

month. The coloration of this larva causes it to blend in with its surroundings and is often difficult to see despite its large size. It eventually will burrow into the soil to pupate. There are two generations a year.

This insect is parasitized by a number of insects. One of the most common is a small braconid wasp. Larva that hatch from wasp eggs laid on the hornworm feed on the inside of the hornworm until the wasp is ready to pupate. The cocoons appear as white projections protruding from the hornworm's body. If such projections are seen, leave the infected hornworms in the garden. The wasps will kill the hornworms when they emerge from the cocoons and will seek out other hornworms to parasitize.

Handpicking is an effective control in small gardens. Bt (Dipel, Thuricide), spinosad (Conserve; Borer, Bagworm, Leafminer & Tent Caterpillar Spray; Colorado Potato Beetle Beater Conc; Captain Jack's Dead Bug Brew, Monterey Garden Insect Spray), cyfluthrin (Bayer Vegetable & Garden Insect Spray) and other insecticides may also be used to control hornworms.

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For additional information, visit the Extension Office (215 Kansas, Courthouse, Alma; [kamayer@ksu.edu](mailto:kamayer@ksu.edu); 765-3821). For Bluestem Breezes archives, check out [wabaunsee.ksu.edu](http://wabaunsee.ksu.edu).