



### Spotlight on Pests: Tomato Pinworms

The weather in Western Pennsylvania this year has been unconventional, from a balmy winter to an extremely hot summer with a bone-dry spell in the middle. And we've been experiencing the impacts on our production farms and gardens. We've been harvesting some crops earlier than usual; they matured quickly due to excessive heat, others came late or failed due to the lack of water at the time the plants needed it the most. But the most extreme change we have noticed this year is the abundance of new pests. We're seeing damage and insects that we don't recognize, and they're taking a toll on many crops.

What is most troubling about these new insect pests is that many of them are common much farther south than Pittsburgh, PA! Several new pests in our gardens are familiar to gardeners in states like Kentucky, North Carolina, and Georgia. The coming years will make it more clear whether these southern pests will become common here, or if this year's influx is just an odd outlier.

Have you been noticing a new kind of damage on your tomato plants this year? Tan spots on some leaves – which eventually dry and turn completely brown? Young leaves that brown at the tips? Crumbly black dirt and white webbing at the tops of the fruits? We've been noticing this signature damage on tomatoes at a variety of our sites. It took us a few weeks to identify the culprit, not a feared blight or disease, but a sneaky little tomato pinworm. Read on for the details!

The **tomato pinworm** is a very small, destructive pest. The pinworm is the larval stage of a tiny grey moth, usually 6mm long, with a 9-12mm wingspan. The worm ranges in size from less than one mm upon hatching, to around 6 mm. It is yellow or grey with red or purplish bands on each segment.

Pinworms damage tomato foliage, the stems, and the fruit of the tomato. They mine the tomato leaves, meaning that they eat within the leaf, leaving a tan papery shell. The mines can look like squiggly lines but often are more round or "blotchy." This damage can look like blight, but the lesions are tan instead of black, and only on the leaves, not the stem. (Pinworms often eat tomato stems but the damage appears as small tan marks, not as large blotches.) Eventually, whole leaves can succumb to this damage, turning brown and shriveling.

Pinworms derive their name from the tunneling holes that they make on tomato fruits. This damage can be hard to see, as it often occurs beneath the calyx – the green "cap" on top of the tomato, where it

attaches to the plant. The worms leave dark brown frass, which is often evident near the calyx. Sometimes the worms will attack other areas of the tomato fruit. Luckily, pinworms don't burrow very far into the tomato, so often damaged tomatoes from a home garden can still be used. The worms and tunnels pose no threat; just cut away the damaged area and eat the rest of the tomato!

Organic control is difficult. The best plan is to completely remove and destroy infected plants at the end of the season, to keep pinworms from overwintering in the soil. With any luck, this year Pittsburgh will experience typical regional weather, and these pesky critters will fail to survive the low temperatures!

For more information on the tomato pinworm, check out this site at the [University of California, Davis](#).