What's new?

Squash Vine Borer Moths Active
by Dr. Ric Bessin, Extension Entomologist, University of Kentucky

Squash vine borer moths are active and preventive sprays may be needed in some squash and pumpkin fields. Squash vine borer is a day-flying clear wing moth (however, this species does not have clear wings, it is a paper wasp mimic) that will deposit eggs on the stems of some cucurbit crops in late June and July. Once the eggs hatch and after the larvae tunnel into the stems of the plants, insecticides provide no control. For that reason, insecticides need to be in place before the eggs begin to hatch. Many growers are using soil applied neonicotinoid insecticides at planting in cucurbit crops to control cucumber beetles and squash bugs, however, these treatments have mostly run out, so producers will need to resume scouting for cucumber beetles and squash bugs again.

Hot Dry Weather and Arthropod/Insecticide Performance
by Dr. Lee Townsend, Extension Entomologist, University of Kentucky

Higher than normal temperatures can affect insecticide performance and target pest behavior, things to keep in mind when treatments are necessary. Unfortunately, the relationships vary, so it is hard to make blanket statements. Forewarned is forearmed so it does allow follow-up and evaluation to catch potential problems in time to take other steps. Arthropods are cold-blooded, their body temperature is usually close to the air temperature in their environment. As their temperature increases so does the rate of their biological processes, metabolism, digestion, etc. Within normal ranges, these rates double with every 10 °C temperature increase. This can result in an increase in insecticide toxicity as temperature increases. In general, the toxicity of organophosphate (Orthene, Malathion, etc.) and carbamate (Sevin) insecticides follows this pattern while the opposite can be true for pyre-throid insecticides. Their effect on insects can decrease with higher temperatures. This is not always the case but it is something to watch. During sustained periods of temperatures above the mid-80s, it may be better to use OP or carbamate insecticides or to wait for temperatures to moderate before making an application. In addition, low humidity and high temperatures may cause small spray droplets to evaporate before the land on their target. This can be avoided by spraying during cooler periods of the day or changing nozzles to get larger droplets. Finally, hot weather may cause insects or mites to move down the plant to find shade and higher humidity. This can increase control problems, especially when using contact insecticides, because the pests are more protected by plant foliage. Since responses vary with pest species, check plants 3 to 5 days after treatment to assess control effectiveness. This can keep you from being surprised if control was less than you expected.

Both of these stories were taken from the June 25, 2007 edition of the ‘Kentucky Pest News’, visit the website: www.uky.edu/Ag/kpn/kpnhome.htm or to subscribe to the email version of KPN, email listserv@lsv.uky.edu.
**On the Farm: Cover Crops**

Cover cropping can be a valuable strategy in your vegetable production system. Not only can cover crops reduce your costs and increase your profits, but they can also slow erosion, improve soil properties, retain moisture, enhance nutrient availability, and help with pest control. While there is no single cover crop formula that applies to every farm situation, there are cover crops and cover crop mixtures that can benefit every farm. One way that cover crops can be a benefit is by saving you money through reduced fertilizer costs. Legume cover crops, such as red clover, convert nitrogen from the atmosphere into N in the soil the plants can use. If you plant a vegetable crop after a leguminous cover crop, those vegetables will take up 30-60% of the N that the legume produced. Therefore, you can reduce the amount of N that you would normally apply. For example, Austrian winter peas, hairy vetch and Nitro alfalfa planted in the Pacific Northwest provided 80-100% of a subsequent potato crop’s required nitrogen. This year, especially, we can all appreciate the value of moisture conservation. Cover crops enhance soil moisture retention in several ways. Killed cover crop residues reduce evaporation and improve water infiltration. Cover crops that are lightly incorporated into the soil augment soil organic matter and trap surface water. Grass-type cover crops, like rye, wheat and sorghum-Sudan grass, are most effective in covering the soil surface, and also are excellent for weed control and loosening topsoil. Many growers spend a lot of time and money for pest control. Cover crops can reduce pest populations. Sunn hemp is said to be an ‘up-and-coming’ cover crop choice. It is a fast growing, tropical legume that can grow in the time between the harvest of a summer crop and planting of a fall cash or cover crop. Besides its abundant production of dry matter (5,000 lbs/A) and nitrogen (120 lbs/A) in 9-12 weeks, research suggests that sunn hemp is resistant or suppressive to root-knot and reniform nematodes. We successfully used sunn hemp as a cover crop for watermelon in Puerto Rico for its nematode suppressing and N producing capabilities. While we cannot list all of the cover crops and their benefits in this article, Marianne Sar- rantinoio provides tips for selecting a cover crop in Managing Cover Crops Profitably:


2. **Identify when to use the cover crop** (Sketch out your crop timeline and discover where you have gaps in which a cover crop might fit.)

3. **Survey your resources** (How will you seed it? How will you kill it? Do you have time? What’s your contingency plan if it doesn’t establish or die? Do you have the equipment you need to manage it?)

This article provides a brief introduction to the idea of using cover crops. Managing Cover Crops Profitably can walk you through choosing and utilizing a cover crop that is right for your situation—from planting rates and times, as well as advantages and disadvantages of each crop. This book can be downloaded or purchased from the Sustainable Agriculture Research and Education (SARE) website at: www.sare.org/publications/handbooks.htm.

**Weather Report**

More of the same for the coming week. Chances of scattered showers, but hot and dry guaranteed. In Knoxville, highs will remain near 90 with lows in the mid-60’s to low 70’s. On the Plateau, they might get a shower today, with the rain clearing out the rest of the week and high’s in the mid-80’s and low’s in the 60’s. Nashville might also receive a storm today, and then dry out, with highs in the low 90’s and lows around 70. In Jackson, there’s a 40% chance of showers for the next 3 days. It will be steamy with highs in the low 90’s and lows in low 70’s. Right now, it looks like the weather will be nice for the Summer Celebration in Jack- son on July 12th. The feature this year is ‘Climbing to New Heights’ with annual vines. UT experts will be on hand covering all topics from weed control to bees to wildlife management and organic growing. For a look at the full schedule, visit: www.agriculture.utk.edu/pdffiles/2007fielddays/ Summerscelweb.pdf
Question of the Week

This week’s ‘Question of the Week’ and the answer come from Karla Kean, Montgomery Co. Horticulture Extension Agent. Thanks, Karla!

Q: Due to storms that came through the Clarksville area on Tuesday (6/26/07) my sweet corn, which was at full tassel and forming the cobs, fell over because of all the gusty winds. What can I do? Stand it back up? Replant?

A: I have had some luck in the past with standing fallen corn back up; however, if the stalks are broken, the plants are not going to make it. Harvest the stalks and save them for fall decorations. You can try mounding some soil up around the base of the corn for support throughout the rest of the season or using twine to create a trellis-type support.

For future reference, plant the corn seeds 2-4 in. deep. When the seed germinates, the epicotyl only moves up and not down, therefore, the depth planted is the depth the roots will obtain.

Corn can be re-planted at this time of the year; however, select varieties which mature earlier rather than standard, full-season corn varieties. Assuming we will have our first frost around the first week of October, varieties should be selected that mature in < 90 days.

'Early Sunglow', 'Bodacious', and 'Ambrosia' would be good varieties to try.

As with all late vegetable plantings, water will be crucial.

Crop Report

This week I visited Polk Co. and the growers that operate the Delano Community Farm Market. Within the community, the growers have their niches as to not compete with one another.

Mr. Norman Martins and his family run a well-diversified vegetable farm. The key to their success is not only the number of crops that they produce, but also the number of varieties they produce. He says that his specialty is peppers. The visual appeal of red, green, orange, and purple peppers not only helps to attract customers, but also ensures that with many varieties their season will continue after the earliest varieties are done. Also, with his ‘on-farm’ variety trial, he sees what grows well in their area, and what grows well under wet conditions or dry conditions.

It is like an added crop insurance policy.

He grows the standards too, but once customers see some of their other spectacular varieties, I have a feeling that many people can’t resist them and go home with more than they planned!

Two of the unique pepper varieties that he grows are ‘Tequila’ a bell-type with a stunning, purple blush, available from SeedWay, and ‘Fooled You’, which looks and tastes like a jalapeño without the heat.

Right now, the market has a bountiful supply of sweet corn, as well as tomatoes, peppers, beans, watermelons, cantaloupes, eggplants, and squash, with more varieties and colors than I have space to mention. I encourage you to take a trip to the market and experience it for yourself.
Upcoming Events

TN Agricultural Enhancement Program– Producer Diversification Cost Share Program
Applications accepted: July 2 - August 31 (postmarked)
Additional details at www.state.tn.us/agriculture/enhancement/growth.html.

Sunbelt Ag Expo Field Day, July 10, 2007, Moultrie, GA
For more information visit www.sunbeltexpo.com or call 229.985.1968.

Summer Celebration, July 12, 2007, West Tennessee Research and Education Center, Jackson, TN
For more information, visit http://agriculture.tennessee.edu/news/FieldDays/.

National Association of County Agriculture Agents Annual Meeting/Professional Improvement Conference, July 15-19, 2007, Grand Rapids, MI
For details, visit www.naccaa2007.msu.edu.

Small Business Development Workshop, July 17, 2007, Agricultural Information Technology Center on TSU main campus, Nashville, TN
Pre-registration is required by July 13, 2007 to get number of attendees as well as a number for lunch. Please call Ms. Linda Buchanan at 615-963-1827 to reserve your seat and lunch.

AgTechnology Field Day, July 19, 2007, Agricenter International, Memphis, TN
For more information, contact John Bradley at jbradley@agricenter.org or 901.757.7754.

Building and Sustaining Effective Community Food Projects- A Training Facilitated by Southern SAWG, July 25-26, 2007, Nashville, TN
For more information, contact Keith Richards at keith@ssawg.org or 479-587-0888.

2007 Annual Small Farm Expo/Small farmer Recognition Program, August 2, 2007, TSU Research and Demonstration Farm, Ashland City, TN
For more information and registration, contact Hilda Gooch at 615.963.5530 or agooch@tnstate.edu.

Steak and Potatoes Field Day, August 7, 2007, Plateau Research and Education Center, Crossville, TN
For more information, visit www.agriculture.utk.edu/news/FieldDays/.

Potato Association of America 91st Annual Meeting, August 12-16, 2007, Idaho Falls, ID
For details visit www.conferences.uidaho.edu/PAA.

NC State University Asparagus Twilight Meeting, August 16, 2007, Roxboro, NC
Learn about growing and marketing asparagus, including site and soil considerations, fertility requirements, insect, disease, weed control, harvesting, marketing, and cost of growing. For more information, contact Carl Cantaluppi at carl_cantaluppi@ncsu.edu or call 919.603.1350.

Sunbelt Ag Expo- 30th Anniversary Show, October 16-18, 2007, Moultrie, GA
For more information visit www.sunbeltexpo.com or call 229.985.1968.

International Irrigation Show, December 9-11, 2007, San Diego, CA
For details, call 703.536.7080 or visit http://www.irrigation.org.

Tennessee Fruit and Vegetable Association Convention, December 9-11, 2007, Nashville Airport Marriott, Nashville, TN

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences and resource development. University of Tennessee Institute of Agriculture, United States Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.