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Vegetable & Fruit Headline News

The University of Maryland Extension Agriculture and Natural Resources Profitability Impact Team proudly presents this bi-weekly publication for the commercial vegetable and fruit industry.

Issue #9 July 22, 2010

Casual Observations from Southern Maryland

By Ben Beale
Extension Educator & CED, Agriculture
St. Mary's County

- ✓ Showers starting on July 9th brought some critically needed relief to crops. Rain has been isolated and intermittent with some areas receiving less than ½ inch and others over 4 inches.
- ✓ Rains have replenished irrigation water sources.
- ✓ Harvest of main season crops continues.
- ✓ Pest/disease pressure includes spider mites in tomato, eggplant and cucurbit crops, buckeye rot on tomato, and leaf scorch/burn on most crops.

Unusual Stink Bug Pest Found in Organic Vegetable Fields

Jerry Brust, IPM vegetable Specialist, UME

A few weeks ago some growers contacted me about a very small bug that was all over their organic fields of various vegetables. It took me awhile to find out what it was as it seemed recognizable, but did not fit any real pest I was familiar with. On one farm the nymphs were all over every vegetable and were feeding most heavily on eggplant—actually killed many plants. This small bug was the Twice stabbed stink bug, *Cosmopepla lintneriana* also known as the Wee Harlequin Bug or Two-spotted stink bug (fig. 1). It is a very small (5-7 mm) bug (fig. 2). The body is black with a red band crossing the width of the insect's shoulders (pronotum) and a short red stripe along the midline. These markings are sometimes orange or yellow. The pointed back of the bug (scutellum) has two red spots near the tip of this triangular body part (fig. 1). The tips of the wings are clear or white when overlapped. The nymphs have a remarkably similar color pattern as the adults, but lack wings. It can be found throughout much of North America. It has a very wide host range that includes mostly weed species such as thistles, mints, goldenrods, ragweeds, pigweeds as well as vegetable crops such as crucifers, brassicas, tomatoes, eggplants etc. The bugs feed by sucking sap from the plant. Females lay eggs in clusters on host plants and guard them. Adults overwinter under leaf litter in the field or woods.

The odd thing was that there were literally hundreds of the nymphs crawling over everything in the one vegetable field. They even appeared under row cover in some areas of the field. The best I can figure is that the adults laid eggs on the weeds next to the tilled part of the field and when this area was tilled later in the season the eggs survived and were able to hatch and the nymphs suddenly appeared out of the ground. Organic controls did a poor job of controlling even the smaller nymphs. This bug has been an occasional nuisance in vegetable fields, why it is so prominent this year is unknown.

Fig. 1 Twice-stabbed stink bug adult

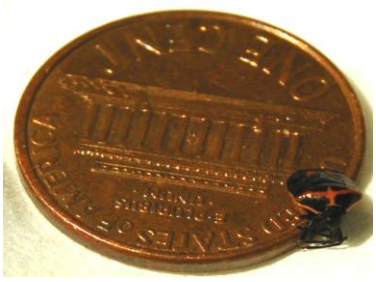


Fig 2 Twice-stabbed stink bug adult on penny

Vegetable Crop Insect Update

Joanne Whalen, Extension IPM Specialist;
jwhalen@udel.edu

July 16, 2010

Lima Beans

We are starting to see an increase in stinkbug and plant bug populations. As soon as pin pods are present, be sure to watch carefully for plant bug and stinkbug adults and nymphs. As a general guideline, treatment should be considered if you find 15 adults and/or nymphs per 50 sweeps. With the recent increase in trap catches, you should also be sure to sample for corn earworm larvae as soon as pin pods are present. A treatment will be needed if you find one corn earworm larvae per 6 ft of row

Melons

Continue to scout all melons for aphids, cucumber beetles, and spider mites. We are starting to see an increase in aphid populations in a few fields so watch fields carefully and apply treatments before populations explode. We continue to find fields with beet armyworms and cabbage loopers feeding on the rinds of watermelons. Since beet armyworm (BAW) is difficult to control, be sure to select a material that is labeled for this insect on melons such as Avaunt, Coragen, Intrepid, Radiant, or Synapse. The pyrethroids will not provide effective BAW control. Be sure to check all labels for days between last application and harvest.

Peppers

As soon as the first flowers can be found, be sure to consider a corn borer treatment. Depending on local corn borer trap catches, sprays should be applied on a 7 to 10-day schedule once pepper fruit is ¼ – ½ inch in diameter. Be sure to check local moth catches in your area by calling the Crop Pest Hotline (instate: 800-345-7544; out of state: 302-831-8851) or visiting our website at: **http://ag.udel.edu/extension/IPM/traps/latestblt.html**. You will also need to consider a treatment for pepper maggot. Be sure to watch carefully for beet armyworm larvae since they can quickly defoliate plants. In addition, be sure to use a material that provides beet armyworm control – the pyrethroids will not control this insect.

Snap Beans

As corn borer and corn earworm populations start to increase, you will need to consider treatments for both insect pests. Sprays are needed at the bud and pin stages on processing beans for corn borer control. As earworm trap catches increase, an earworm spray may also be needed at the pin stage. You will need to check our website for the most recent trap catches to help decide on the spray interval between the pin stage and harvest for processing snap beans at: **http://ag.udel.edu/extension/IPM/traps/latestblt.html** and **http://ag.udel.edu/extension/IPM/thresh/snapbeanecbthresh.html**. Once pins are present on fresh market snap beans, a 7 to 10-day schedule should be maintained for corn borer and corn earworm control.

Sweet Corn

Be sure to sample all fields from the whorl through pre-tassel stage for corn borers, corn earworms and fall armyworm. We are starting to see an increase in whorl infestations of fall armyworm. A treatment should be considered when 12-15% of the plants are infested. Since fall armyworm feeds deep in the whorls, sprays should be directed into the whorls and multiple applications are often needed to achieve control. The first silk sprays will be needed for corn earworm as soon as ear shanks are visible. Be sure to check both blacklight and pheromone trap catches for silk spray schedules since the spray schedules can quickly change. Trap catches are generally updated on Tuesday and Friday mornings at: **http://ag.udel.edu/extension/IPM/traps/latestblt.html** and **http://ag.udel.edu/extension/IPM/thresh/silkspraythresh.html**. You can also call the Crop Pest Hotline in state at: 800-345-7544; out of state at: 302-831-8851).

Buckeye Rot on Tomato

Bob Mulrooney, Extension Plant Pathologist;
bobmul@udel.edu

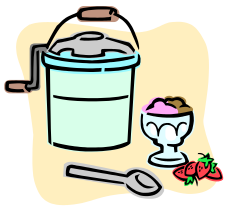
Be on the lookout for **buckeye rot** when we get wet weather and wet soils. This is more a problem on tomatoes grown on flat culture because the fungus is soil borne. Staked tomatoes generally are not affected unless soil splashes onto the fruit. Symptoms of Buckeye Rot on green fruit include brownish-tan lesions that have a **definitive concentric appearance**. As lesions form the fruit will begin to soften up, this is quite different than Late blight which will cause a dark brownish/ black lesion with the fruit remaining somewhat firm. Unlike Late blight, Buckeye rot won't attack the foliage. For more information on control please see the 2010 Delaware Commercial Vegetable Production Recommendations.

Buckeye rot on tomato fruit

Cucurbit Downy Mildew Update

Bob Mulrooney, Extension Plant Pathologist;
bobmul@udel.edu

July 16, 2010
Wednesday's rain was a high risk event for cucurbit downy mildew in the region. Be sure downy mildew fungicides are being employed for disease control at this time. There have been no new reports of downy mildew in DE, MD, NJ or PA. That will probably change if this weather pattern continues. Keep current on disease progress by visiting **http://cdm.ipmpipe.org/**.



Crops Twilight
Barbecue & Ice Cream Social
CMREC Upper Marlboro Farm
August 5, 2010

You are invited to attend **a Field Crops Research Twilight, Barbecue and Ice Cream Social at the Central Maryland Research & Education Center, Upper Marlboro Farm on Thursday, August 5, 2010 from 4:30 pm to 9 pm.** A barbecue dinner will be served at 4:30 pm followed by homemade ice cream prior to the evening tour!

The research farm is located at **2005 Largo Road, Upper Marlboro, Maryland.** The University of Maryland conducts equal access programs.

University of Maryland Extension Educators and Specialists will showcase their field crop, vegetable and fruit research plots. The twilight tour highlights will include:

Specialty vegetable & cut flower production; Strip-till and no-till vegetable production systems; Vegetable integrated pest management and reduced risk control methods; Field crops research updates; Fruit research update for apples, peaches, peentos, blueberries and beach plums; and a vineyard research update for wine grapes.

Barbecue Begins at 4:30 pm

Ice Cream Served at 5:15 pm

Crops Twilight at 6:00 pm

This event is free. However, a reserved meal ticket is required.

If you need special assistance to participate, please contact the Anne Arundel County Extension office at 410-222-6759 by August 3, 2010.

For full meeting details, and registration information contact any of the Southern Maryland Extension offices. For more information contact David Myers at the Anne Arundel County Extension office at 410-222-6759.

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Submit Articles to:
Editor,
R. David Myers, Extension Educator
Agriculture and Natural Resources
7320 Ritchie Highway, Suite 210
Glen Burnie, MD 21061
410 222-6759
myersrd@umd.edu

Article submission deadlines for 2010: March 17 & 31; April 14; May 5 & 19; June 2 & 16; July 7 & 21; August 4 & 18; September 1 & 15.