ATTENTION:
Visit our 'Web Page' for the Blueberry Bulletin at...
www.rce.rutgers.edu/pubs/blueberrybulletin

AT A GLANCE...
BLUEBERRY TWILIGHT MEETINGS

THURSDAY, APRIL 23, 2015 @ 5:30PM
VARIETY FARMS
548 PLEASANT MILLS RD.
HAMMONTON, NJ 08037

THURSDAY, MAY 21, 2015 @ 5:30PM
ATLANTIC BLUEBERRY COMPANY
7201 WEYMOUTH RD., HAMMONTON, NJ
FOR DIRECTIONS, CALL 609-561-8600

Culture
Dr. Gary C. Pavlis, Ph.D.
Atlantic County Agricultural Agent

As we begin the new season I hope you had a great winter. This is the first edition of The Blueberry Bulletin. The 2015 Commercial Blueberry Pest Control Recommendations for New Jersey may be picked up at any extension office or downloaded from the Rutgers NJAES web site at http://njaes.rutgers.edu/pubs/
Also, 'AT A GLANCE...' will continue, and is a summary of each week's information. I hope it is something you can and will use.

If you have a problem during the season, please call me.

Any comments, suggestions, constructive criticism about The Blueberry Bulletin newsletter would be greatly appreciated. Also if you have any specific problems which you feel should be addressed, please let me know.

Help me to serve you better. Here's hoping for all a very successful 2015.

Sincerely,

Gary C. Pavlis, Ph.D.
Atlantic County Agricultural Agent
Editor - Blueberry Bulletin
GP/slp
Insects
Dr. Cesar Rodriguez-Saona, Extension Specialist in Blueberry Entomology, Rutgers University; Dean Polk, IPM Agent, Rutgers Cooperative Extension; Amy Raudenbush, Fruit IPM Program Associate, Rutgers Cooperative Extension

Cranberry Weevil
Our scouting for the cranberry weevil (CBW) began the first week of April, and we had our first catch on April 7th at locations in both Burlington and Atlantic counties. While most sample sites do not have CBW adult activity at the moment, with the warm weather moving in they will become more active over the next couple of weeks. Currently, 13.6% of the sites were positive for CBW presence, and 4% had CBW adults above threshold levels.

Cranberry weevil adults are an early season pest that is known to overwinter in the wooded areas or unmanaged blueberry fields. As the weather warms up they move to the edge rows of blueberry fields. This behavior allows growers to do an edge spray to reduce CBW adult populations before the weevils move into the center of the fields. Adults are a reddish brown color with white bands on the wings and a long snout (Figure 1). Feeding occurs directly on the blueberry bud (Figure 2), which is then used to lay an egg in. Larvae then continue to feed on the flower buds.

To monitor for CBW adults we use a beating tray held under the bush and hit the bush so that the adults fall on to the tray. At least 10 plants are sampled at each site. The threshold level for CBW adults is 5 per bush. The treatment level can also be defined as an injury level when CBW feeding exceeds 20% of blossom clusters injured, or at least 1 injury or puncture per 5 buds or clusters as the bud stage advances. Avaunt, Imidan, or the pyrethroids – Asana, Brigade, Hero, and Mustang Max are recommended for CBW control. However, try to reserve insecticides effective against spotted wing drosophila for later in the season. This means saving Imidan and the pyrethroids for later and using Avaunt early.
Diseases

By Peter V. Oudemans, Ph.D.
Professor and Extension Specialist
Plant Pathology

Duke and Bluecrop will start budbreak (T3) as early as April 15. The rapid warming trend we are seeing this week may accelerate development by 3-4 days. T3 will be the time to make Phomopsis applications. Also, you should consider scouting for Mummy Berry cups. The Forsythia’s are opening and this is our normal indicator that it is time to look for mummy development.

A. Early T3. (B) Phomopsis symptoms on developing bud (C) Mummy cups.

| Registered fungicides effective for Phomopsis Twig Blight and Mummy Berry |
|---------------------------------|-----------------|----------|--------|--------|--------|
| Trade Name                     | EPA Reg. #      | Rate/acre| REI (hrs) | PHI (days) | Max # Apps |
| INDAR 2F                       | 62719-416       | 6.0      | 12       | 30      | 4       |
| QUASH                          | 59639-147       | 2.5 oz   | 12       | 7       | 3       |

Fungicides registered for Mummy Berry and NOT Phomopsis

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<tr>
<th>AMTIDE PROPICONAZOLE</th>
<th>83851-10</th>
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<td>PROPI-STAR EC</td>
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<td>SHAR-SHIELD PPZ</td>
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IPM and Pollinators: Coordinated Action

Government sponsors are coordinating the actions of researchers, educators, beekeepers, and growers in the field in ways that could help reverse pollinator decline. For the winter of 2013-14, 23 percent of American managed honey bee colonies died, a figure notably lower than the eight-year average loss of almost 30 percent. Beekeepers used to lose only 10 percent of colonies.

The Northeastern IPM Center recently convened a panel asking how IPM can help stakeholders protect pollinators. The session streamed live in the fall of 2014; a recording is available on the web (see “Resources.”)

Multiple causes at work

Some conclusions of the panel: Many factors could be causing harm to bees. Monoculture crop efficiency is good for increased yield, but reduces weeds and the diversity of forage plants that could enrich the diets of bees. It will be important to plant more diverse landscapes, reduce dependence on prophylactic seed treatment, and increase the use of IPM. For example, growers can spray in the evening and avoid treatment of fields when plants are in bloom. Consumers may need to get used to cosmetically imperfect produce.

More than neonicotinoids

Pyrethroids and fungicides are part of the picture, not only neonicotinoids. Neonicotinoids may be safer for water, since they are not water soluble, but they do get into plants and into nectar. Some neonicotinoids could be safer for agricultural workers, since they are applied to the ground rather than sprayed in the air where they can drift. Researchers are asking how long neonicotinoids persist in the environment.

IPM supporters need to take a broad role in shaping the solution. One option would be to combine multiple IPM techniques under one label, like a dolphin-safe tuna label for IPM.

Ahead of the curve

The Northeastern IPM Center, through the USDA National Institute of Food and Agriculture’s Regional IPM Grants, sponsored pollinator research and outreach as early as 2003, well in advance of widely distributed news reports about bee die-off in 2006. Between 2003 and 2008, the Center sponsored $350,000 in projects on pollinators. Between 2008 and 2014, it distributed $1.2 million for 23 projects.

Cathy Neal and Amy Papineau of the University of New Hampshire Cooperative Extension are coordinating a newly formed multi-state Northern New England Pollinator Habitat Working Group that will identify emerging issues in conservation, maintenance, and enhancement of pollinator habitat across northern New England. The project is funded by the Northeastern IPM Center’s Partnership Grant program.

Partners in action

Regional partners are also taking action to increase our knowledge and outreach about pollinators. For example, the Southern IPM Center recently established a pollinator protection working group. The Western IPM Center funded a project in New Mexico that tested more than 100 species of mostly native plants for their ability to attract pollinators and other beneficial insects. The North Central IPM Center is an active supporter of pollinator health initiatives, and is the lead in collaborating with USDA and EPA on the current pollinator health activities. The Center funded one project that found that beekeepers should be wary of feeding bees high fructose corn syrup or sucrose, as these sugar substitutes are not nutritionally equivalent to honey. Honey contains compounds which could help bees metabolize and detoxify proteins that could be suspect in pollinator decline.

According to the Northeastern IPM Center’s panel, multiple factors appear to be causing pollinator decline. But one IPM strategy—applying science—is helping us piece together the pollinator puzzle.
Plastic Pesticide Container Recycling Dates

The NJ Dept. of Ag, Helena Chemical, Allied Recycling, and the Cumberland County Solid Waste Complex are offering dates for free plastic pesticide container recycling disposal. These are offered to agricultural, professional and commercial applicators holding a NJDEP Pesticide Applicators License. State, county and municipal government agencies may also participate. Dates and locations are listed below.

Questions? Contact:
Roberta C. Lang
New Jersey Department of Agriculture
Division of Agricultural and Natural Resources
Phone: 609.292.2242
Fax: 609.633.7229

<table>
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<tr>
<th>2015 Dates</th>
<th>Locations</th>
<th>Times</th>
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| Apr 9     | **Atlantic County**
          | Helena Chemical,
          | 66 Route 206 (North of Route 30/206 intersection),
          | Hammonton, NJ  | 9AM – 12PM |
| May 1     |           |       |
| Jun 5     |           |       |
| Jul 9     |           |       |
| Aug 7     |           |       |
| Sep 4     |           |       |
| Oct 2     |           |       |
| Mon-Sat*  | **Burlington County**
          | Allied Recycling, Inc.,
          | *during normal business operation days/hours
          | call 609-267-8923
          | 2658 Route 206,
          | Mount Holly, NJ  |       |
| May 15    |           |       |
| Jun 19    |           |       |
| Jul 17    |           |       |
| Aug 21    |           |       |
| Sep 18    |           |       |
| Oct 16    |           |       |
| Nov 20    |           |       |
| Mon-Fri 3/2015 through 11/2015 | **Monmouth County**
          | Rutgers Fruit Research Center,
          | 283 Route 539,
          | Cream Ridge, NJ  | 9AM – 3PM |
| Apr 10    |           |       |
| May 8     |           |       |
| Jun 12    |           |       |
| Jul 10    |           |       |
| Salem County | **Cumberland County**
                | Cumberland County Solid Waste Complex,
                | 169 Jesse Bridge Rd. (Route 55 Exit 29),
                | Deerfield Twp., NJ
                | *(Open trucks or trailers must be tarped before entering Complex)*  | 9AM – 12PM |
| Nov 20    |           |       |
Do not drop off containers unless it is during these scheduled collections. Contact Roberta Lang at the NJ Dept. of Ag at (609) 292-2242 for details.

**Plastic Pesticide Container Processing Steps & Size Limits**

- Containers must have originally held an EPA registered pesticide;
- Containers must be either triple rinsed or pressure rinsed and drained and be free of residue (other than stains);
- The booklet must be removed (do not have to remove glued paper labels or the plastic sleeves);
- A foil seal must be removed;
- Only non-refillable containers will be accepted; drill a ¼” inch hole, or with a utility knife make a slit in the bottom of the containers so they will not hold liquids;
- Only containers embossed with HDPE or the recycling #2 will be accepted;
- Up to 55-gallons in capacity will be accepted. 5-gallon pails must be cut in half; 30-gallon containers into at least 4 pieces; and 55-gallon drums into at least 6 pieces. This can be accomplished using a sawzall, chainsaw, circular saw, or reciprocating saw. It is not necessary to cut containers less than 5-gallons.

**Items Not Accepted and Returned to the Recipient**

- Containers with dried formulation on the container, pour spout or the spout threads;
- Containers with liquid residue;
- Containers where the insides are caked with dried residue;
- Mini-bulk, saddle tanks and nurse tanks, which can be made of fiberglass;
- Containers with lids; or
- Containers that held any type of petroleum oil product or antifreeze.

**Non-Waxy Cardboard Collection**

*Helena Chemical in Woodstown will also be accepting, at no charge, non-waxy cardboard since their products are sold to the end users in cardboard boxes. Cardboard will be accepted every Friday during the months of April through October 2014 from 1 PM to 3 PM, and during the scheduled collections. Clean non-waxy cardboard must be broken down and flattened.*

**Save money with Nursery Pot and other Rigid Plastic Recycling Policy**

*If you generate other clean non-petroleum containing plastic (crates, buckets, pails, nursery pots, cell packs or trays), the Cumberland County Solid Waste Complex ONLY will continue to accept them for free on days when we conduct pesticide container recycling. Please shake out the dirt and make sure the plant material is removed. You can commingle the nursery pots, cell packs and trays with your pesticide containers. If you come any other time with the waste horticultural materials, the Solid Waste Complex will charge you the full rate landfill tipping fee. Cumberland will also accept pails and 55-gallon drums not cut up. Thank you for your cooperation.*