Announcement #1 2008

Anthracnose Crown Rot in Strawberry Plug Plants

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Plasticulture strawberry growers in Maryland should be aware that North Carolina and Virginia growers have reported an unusual number of problems this season with anthracnose crown rot in plug plants. The infected plants were apparently shipped by nurseries in NC and VA. The varieties affected are ‘Chandler’, ‘Camarosa’, and ‘Festival’.

The pathogen responsible for the outbreak is Colletotrichum gloeosporioides (glee-o-spor-ee-OY-dees), one of three species of Colletotrichum that can cause crown rot on strawberry. The key symptom is a general wilting of the plant, followed by plant collapse. This collapse may occur quickly in warm weather or over several weeks under cooler conditions. When an infected crown is cut open lengthwise, the inside surfaces will be reddish-brown and firm, or show reddish-brown streaks (see photo).

Anthracnose crown rot is a latent infection that progresses under warm, moist conditions. Most cases in NC and VA appeared during establishment, before covers were applied. It is possible, however, that additional infections could have developed under the covers during warm periods in the late fall and winter. We did have some plant losses reported in Maryland last fall, but they appeared to be due to a combination of plugs in poor condition and hot, dry weather during establishment. The Plant Diagnostic Clinic did not find any pathogens in strawberry plant samples submitted to them.
As a precaution, Maryland plasticulture growers may want to check the health of their plants by looking under the covers on a mild day. If you find wilted or collapsed plants:

- Remove the entire plant, including roots, from the bed. Wrap plants in dry newspaper and put them in sealed plastic bags in the refrigerator. Those who are curious may cut open a crown to see whether it displays the symptoms of crown rot, but keep at least one plant intact for the Plant Clinic. Crowns discolor once they are cut and cannot be used for diagnostic purposes.

- Call your county Extension office promptly to arrange for the plants to be sent to the Plant Diagnostic Clinic in College Park for diagnostic testing. **It is very important to have plants tested to determine the cause of death before beginning any preventive treatment in the field.** Do not rely on the visual appearance of the crown alone, as organisms other than *C. gloeosporioides* can cause similar symptoms.

If your plant samples are found to be infected with *C. gloeosporioides*, you may wish to apply a single early fungicidal spray to prevent the spread of infection when covers are removed in the spring and active plant growth resumes. Research in Florida has shown that a tank mix of Topsin-M (thiophanate-methyl) at 1 lb/ac and captan at 2 lb of active ingredient/ac (for example, 4 lb/ac of Captan 50WP or 2.5 lb/ac of Captan 80WDG) can reduce the spread and severity of anthracnose crown rot caused by *C. gloeosporioides*. This fungicidal spray may not be effective against other *Colletotrichum* species or other pathogens.

For more information, contact: Anne DeMarsay

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**Good Agricultural Practices (GAPS) for the Production and Handling of Fresh Produce**

March 19, 2008

A one-day program for commercial producers to learn about techniques and practices that can help minimize produce contamination.

**Background...**

Over the past few years we have heard through media announcements about major outbreaks of illnesses that have been attributed to contaminated fresh produce. Whether domestically produced or imported, four key events have brought focus and concern for the microbial food safety of fresh fruits, vegetables, nuts and other edible horticultural foods:

1. Recent reoccurring outbreaks linked to consumption of domestic and imported products.
2. Positive detection of human pathogens from random survey sampling of both imported and domestically produced produce.
3. Recent reports from several researchers documenting the difficulty of cleaning and disinfecting produce surfaces.
4. Recent reports from several researchers documenting the potential for internalization of pathogens during postharvest handling.

**About the Program...**

The goal of every produce farmer is to grow and sell wholesome products. And because of occasional disease outbreaks, agricultural producers of all sizes will soon be increasingly challenged with establishing and documenting methods of microbial risk reduction and prevention. Buyers for retail chains increasingly are requiring producers to establish and document a GAP program and often require third party auditing to verify compliance.
This overview program will provide a brief outline of the fundamental components of microbial food safety that should be part of any comprehensive management plan for growers, specialty crop producers, harvest operators, distribution and wholesale handlers, direct marketers, and fresh cut processors. Topics will include the discussion of key points and the guiding principles of food safety for fresh produce and auditable methods of documenting compliance with a food safety program. Growers will also learn how to develop a food safety plan and conduct a self-audit. These are precursors that should be in place before requesting a third-party audit for GAPs certification.

Program Specifics...

Date: March 19, 2008

Location: Friendly Farm Restaurant
(17434 Foreston Road; Upperco, MD 21155)
phone: 410-239-7400

Who should attend: Commercial fruit and produce growers who sell through wholesale and direct marketing outlets

Cost: $20.00 per person with advanced registration. The cost includes program materials, refreshments and lunch. The Maryland Vegetable Growers Association and University of Maryland Cooperative Extension are program sponsors.

Program Schedule and Topics:

8:15 to 8:45 Registration and Refreshments

9:00 to Noon Minimizing Contamination in Field Production (GAPs) with Dr. Chris Walsh, University of MD College of Agriculture

Noon to 1:00 Lunch

1:00 to 4:30 Minimizing Contamination in Post-Harvest Handling and Distribution (GAPs) with Dr. Chris Walsh

4:30 to 4:45 Program Discussion and Wrap-Up

Registration: Register by March 14th by sending a Check made out to “BCEAC” (for $20/ person registering) to University of MD Extension; 1840 York Rd. Timonium, MD 21093. For questions you can contact David Martin at 410-666-1022.

If you need special assistance to participate in this program, please contact David Martin at 410-666-1022 by March 5, 2008.
The following CENTRA recertification sessions will be live via the internet directly from the University of Maryland. CENTRA is a student interactive system that will document your attendance. To participate in a live CENTRA session a high speed cable or satellite internet connection is required. **You may also attend the session live at the Anne Arundel County Extension Office, 7320 Ritchie Highway, Suite 210, Glen Burnie, MD.**

- **New ON-LINE PRIVATE PESTICIDE RECERTIFICATION TRAINING, Thursday, March 20, 2008 from 6:00 to 8:00 pm.** The session will focus on field crop and pasture pesticide related topics. Private Pesticide Applicator Recertification credit will be awarded for full 2-hour session participation. Registration by March 17 is required in order to receive CENTRA login password information.

- **New ON-LINE NUTRIENT MANAGEMENT VOUCHER RECERTIFICATION TRAINING, Thursday, March 27, 2008 from 6:00 to 8:00 pm.** The session will focus on field crop and pasture fertility and production related topics. Nutrient Management Voucher Recertification credit will be awarded for full 2-hour session participation. Registration by March 24 is required in order to receive CENTRA login password information.

To register for either of these on-line events or to attend in person, please contact the Anne Arundel County Extension Office at 410-222-6759 or 301-970-8250, extension 6759.
Registrations are still available for the Southern Maryland Landscape Maintenance Seminar and Commercial Pesticide Recertification. Call 301-934-5403; 301-753-8195 for more information.

Southern Maryland
Landscape Maintenance Seminar and Commercial Pesticide Recertification
Wednesday, March 5, 2008
8:30 a.m. - 3:30 p.m.
Holiday Inn, Waldorf, Maryland

PROGRAM SCHEDULE

8:30 a.m. Registration

9:00 a.m. Managing Right-of-Ways
Scott Franzak, Forester
SMECO

9:45 a.m. Landscape Chemical Update
Brian Clarke, Extension Educator
Prince George's County

10:30 a.m. BREAK

10:45 a.m. Living with the Emerald Ash Borer
Pamela B. King, Extension Agent
Charles County

11:30 a.m. Aquatics
Jacqueline Takacs, Regional Marine Science Agent
University Of Maryland Cooperative Extension

12:15 p.m. LUNCH

1:00 p.m. Selecting Turfgrass Varieties and Cultivars for Southern Maryland
Dr. J. Kevin Mathias
Institute of Applied Agriculture

1:45 p.m. Calendar Of Landscape Pests
Robert Stewart, Extension Agent, Retired

2:30 p.m. Pesticide Regulation Update
Ed Crow
Pesticide Regulation Section, Maryland Department of Agriculture

3:15 p.m. Complete and Sign Pesticide Applicator Recertification Forms

3:30 p.m. Adjourn
Help Your Extension Agent – Still Accepting Responses!

Please help your extension educator! Take the time to complete the enclosed 2008 Extension Program Assessment. This program assessment will be useful in documenting past and current program successes and weaknesses. This information will be used for future program improvement. Your input is vital to this process for the development of meaningful Extension programs that educate and solve problems. Please mail the completed from to the Anne Arundel County Extension Office or Fax to 410-222-6747. This form will also be available for online completion at:  
http://annearundel.umd.edu/Agriculture.cfm

Check Out Our Updated County Website

Visit us in Cyberspace!!!
Christie Germuth is our website designer. Christie has recently updated our website, and we hope that you find the additions helpful.

Anne Arundel County Extension website:
http://annearundel.umd.edu/

The current and past agricultural newsletter additions are available for viewing or copy at:
http://annearundel.umd.edu/AGNR/agnews.cfm

An agricultural bulletin page is also available for viewing or copy under our hot topics section at:
http://annearundel.umd.edu/AGNR/agnews.cfm

New on the website 2008: Anne Arundel County Agricultural Program Teaching Modules - Streaming Video:
http://annearundel.umd.edu/Agriculture.cfm

Also relive the history of Extension and University of Maryland College of Agriculture Land Grant Mission by viewing the 150 Years Anniversary PowerPoint:
http://annearundel.umd.edu/files/University%20of%20Maryland%20150%20Year%20Anniversary.pps

Thanks for Partnering

Thanks for partnering with the Maryland Cooperative Extension, and supporting our programs. I also hope you enjoy this newsletter. If you are no longer interested in receiving this newsletter, please call or write the office for the removal of your name from the mailer.

R. David Myers, Extension Educator
Agriculture and Natural Resources
Anne Arundel & Prince George’s Counties