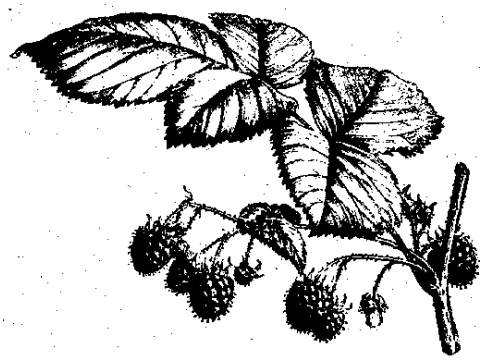
RUTGERS COOPERATIVE EXTENSION AT THE NEW JERSEY AGRICULTURAL EXPERIMENT STATION

PLANT & PEST ADVISORY

FRUIT EDITION $1.50 JULY 18, 2000



INSIDE

Phytophthora Root Rot of Raspberry, Part II

Michael A. Ellis, Ohio State University, Columbus, Ohio.
Source: Ohio State University Extension Fact Sheet HYG-3207-98

Continued from Part I in last week's issue.

Control – There is no one simple "cure" for this disease. However, there are a number of different practices or methods that growers can use to avoid or minimize losses. Because no single method is completely effective by itself, the best strategy is to develop an integrated disease management program, where as many control practices as possible are used within an integrated approach.

These methods should be considered and used:

Exclusion – Avoid introducing the Phytophthora fungi if you are planting into an uninfected site, especially one that has not previously contained fruit crops. Circumstantial evidence suggests that symptomless nursery plants may be an important means of initially introducing this pathogen into a grower's field. Fortunately, it is now possible to buy many different raspberry cultivars that have been propagated through tissue culture techniques in a laboratory and greenhouse, without ever coming into contact with field soil. Such plants pose little risk of introducing Phytophthora fungi into the field. To minimize your risk of setting out contaminated plants, use only those that come directly from the laboratory or greenhouse and have not been grown out in nursery fields before sale.

Drainage – Any practice that will prevent water from collecting around plants will reduce the incidence and severity of Phytophthora root rot. This includes both good planting-site selection and site modification when necessary. Included in site modification are the placement of tile drains and growing plants on raised beds. Using a raised-bed planting system can provide substantial control of Phytophthora root rot of raspberry.

Resistance – One of the best techniques for controlling any disease is the planting of resistant varieties and the avoidance of highly susceptible varieties. Phytophthora root rot is most serious on red raspberries and some of the hybrids. The black raspberry varieties 'Cumberland' and 'Munger' are reported to be susceptible.

SEE PHYTOPHTHORA ON RASPBERRY ON PAGE 2

PHYTOPHTHORA ON RASPBERRY FROM PAGE 1

The cultivars 'Bristol', Dundee', and 'Jewel' appear to be moderately to highly resistant.

Among red raspberry cultivars, none are immune to the disease, but cultivars do differ greatly in their level of susceptibility. Among varieties grown in the Midwest and Northeast, 'Titan' and 'Hilton' are extremely susceptible, with 'Festival', 'Heritage', Reveille', and 'Taylor' moderately to highly susceptible. 'Newburgh' is somewhat resistant, and 'Latham', 'Boyne', 'Killarney', and 'Nordic' are considered to be fairly resistant.

Fungicide – Phytophthora root rot of raspberry can be partially controlled with the soil-applied fungicide Ridomil Gold. Although Ridomil is effective for control of Phytophthora root rot, it should be remembered that it is merely an additional disease-management tool. It will give you the best results only when the other disease management practices that have been discussed are also followed.

NOTE: Rutgers Cooperative Extension 2000 NJ Bramble Pest Control Recommendations 1 & 2 on Fact Sheets 251-252 are available from County Extension Offices

Submitted by Jerome L. Frecon, Agricultural Agent. ❑

Calendar of Events

September 6, 2000, 6:00 P.M. - Fruit Variety Meeting and Showcase, Gloucester County Office of Government Services Auditorium, 1200 North Delsea Drive, Clayton, NJ. Contact Jerry Frecon at 856-307-6450.

Wilthin for Thinning Peach Blossoms: Test Results 2000

Bob Belding, Ph.D., Pomology and Gail Lokaj, Soil and Plants Technician

Peach blossom thinning with Wilthin appears to be an economic way to reduce hand-thinning costs and increase fruit size. Fruit size increase is the result of thinning unwanted fruit from the tree and reducing competition for energy during the cell division phase of fruit growth. More and more growers have experimented with Wilthin, and the feedback that I have received has been positive. Every grower that I've asked has responded that they would use Wilthin again next year.

Five test plots of Wilthin compared to unsprayed control trees were set out in 2000. Rates for this test were always 4 quarts of Wilthin with a pint of Regulaid per acre applied at 50 to 95 percent of full bloom. Wilthin is labeled for application rates of 3 to 7 quarts per acre and I have heard of growers using 5 quarts per acre with favorable results. Research plots were located on one Cumberland county farm and on two Gloucester county farms. Varieties included Easternglo, Sentry, Ernie's Choice, and Cresthaven. The greatest fruit set reduction with Wilthin was 59% compared to control trees. *The average reduction in fruit set was 24% across all the tested trees.*

Fruit diameter measurements were recorded 8 weeks after bloom to determine if Wilthin had an effect at this stage. Consistently there was a slight, although not always statistically significant increase in average diameter as a result of Wilthin. Differences ranged from fruit size increases of 0.6% to 5.3%. *The average increase in fruit size as of June 1 was 3.3%.*

Many factors affect the response of trees to chemical thinners including tree health, stage of bloom at application, and weather conditions. Careful record keeping is essential for a successful thinning program and don't forget to include your packout results. ❑

PPV National Survey Information for Week Ending, July 13, 2000 for NJ

Robert Balaam, Director, Division of Plant Industry, New Jersey Department of Agriculture

Field Sampling:

Sampling conducted by: NJ Department of Agriculture

0	Acres of propagative orchards surveyed.	0	Samples taken
130	Acres of commercial orchards surveyed.	811	Samples taken
0	Mother trees sampled.	0	Samples taken
0	Nursery properties surveyed.	0	Samples taken
0	Other (list): Coop. Ext. Variety Eval. Blocks	0	Samples taken

Laboratory Analysis:

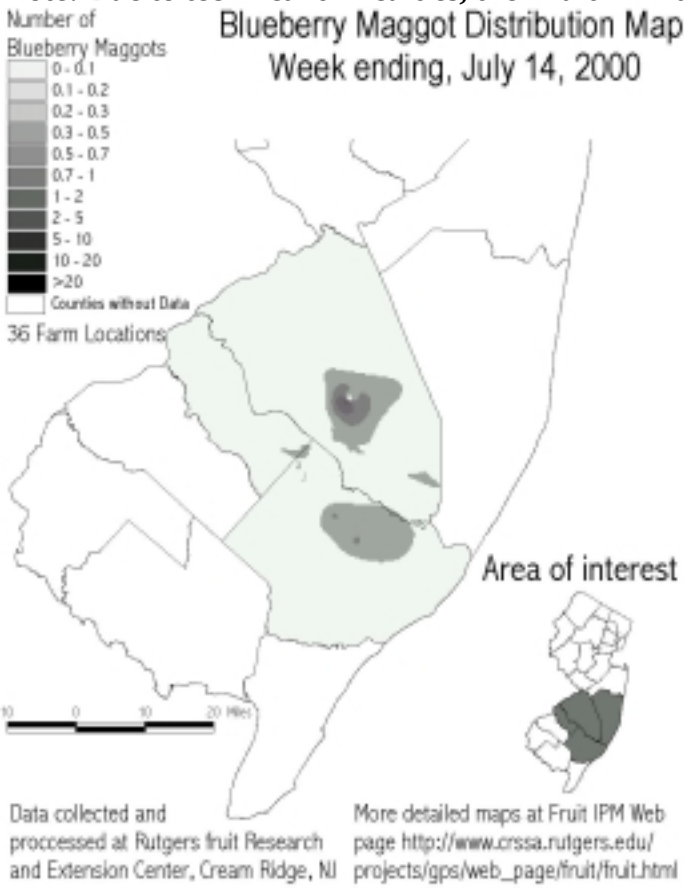
Analysis conducted by: NJ Department of Agriculture

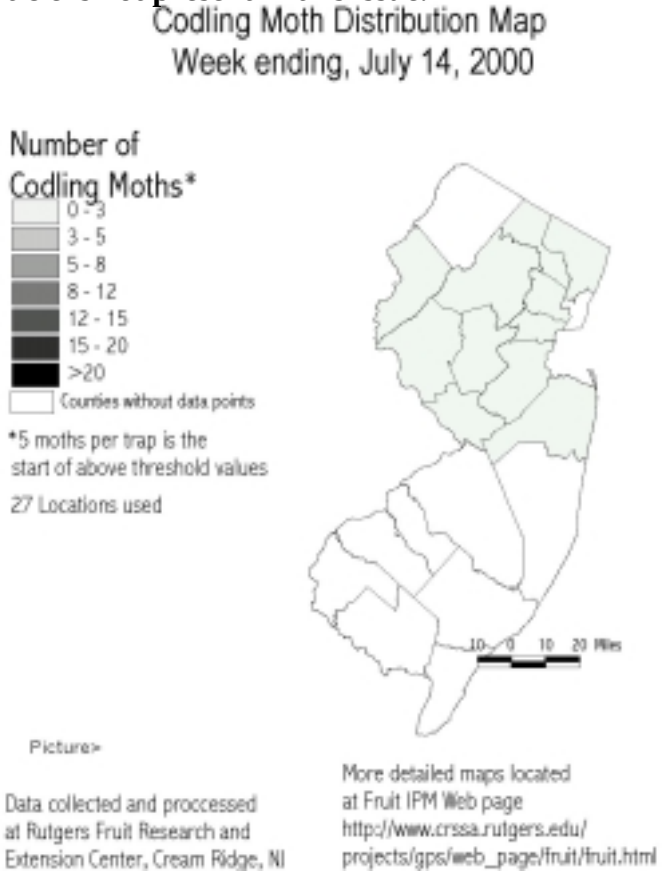
1188	Samples analyzed	1188	Negative Samples	0

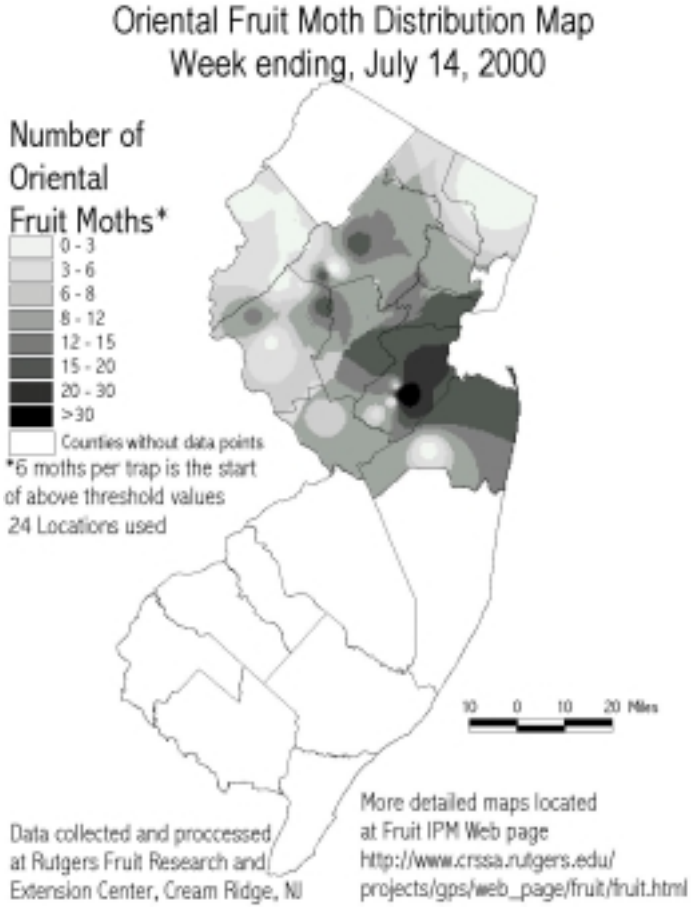
This report covers activities from July 7, 2000 through July 13, 2000.

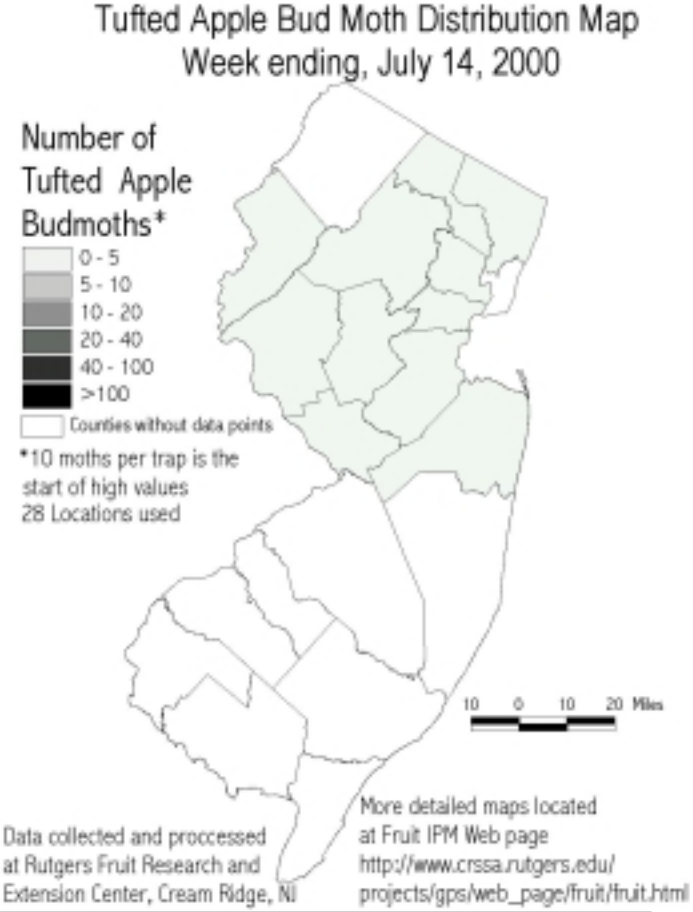
Submitted by Jerome L. Frecon, Agricultural Agent ❑

Note: Due to technical difficulties, the Fruit IPM article is not present in this issue.









USDA Constituent Alert: Protecting Farms and Forestland

The U.S. Department of Agriculture's Policy Advisory Committee on Farmland Protection is hosting a listening forum on *Wednesday, August 9, 2000 from 9:00 a.m. to 12:00 p.m. at the Frelinghuysen Arboretum in Morristown, NJ.* The Committee is soliciting policy feedback and anecdotal information on what works and what doesn't from a community's perspective in working with federal tools designed to maintain land as farm and forestland. The input received from these forums will be synthesized into a report that USDA will issue on this subject later this year.

Public comment is being sought on the following questions:

1. What are the economic, environmental and social benefits of farms and forested lands for communities, especially those in rapidly growing regions;
2. What are the challenges that communities and individuals face in trying to maintain farms and forested lands, especially in rapidly growing areas;
3. What prospects exist to capitalize on market opportunities (e.g. direct marketing and agri-tourism) to encourage maintenance of farmland and forestland; and
4. What role could the federal government play to better support farmers and forest operators in taking advantage of these opportunities?

The forum is open and free to the public. However, those wishing to make extended comments should pre-register by contacting Ms. Mary Lou Flores at (202) 720-4525. Those who wish to submit written statements can do so by submitting 25 copies of their statements on or before August 7, 2000. Please send them to Ms. Stacie Kornegay, Natural Resources Conservation Service, P.O. Box 2890, Washington, DC 20013, Room 6013. The written form of the oral statements must not exceed 5 pages in 12-point pitch. Oral presentations should be no more than three minutes each in duration. For more information regarding the forum, contact Irene Lieberman at (732) 246-1171 x 124. ❑

The Garden State Agricultural Re-Engineering Initiative Program

The Garden State Agricultural Re-Engineering Initiative is a voluntary educational program sponsored by Rutgers Cooperative Extension in cooperation with the New Jersey Farm Bureau and the New Jersey Department of Agriculture. Its aim is to meet the ever-increasing needs of the state's agricultural producers and their families for financial risk management education and, in so doing, increase the number of successful viable farms in New Jersey.

In order to survive in today's rapidly changing agribusiness environment, the program enable you to:

1. Conduct in-depth financial analysis of your farming operations
2. Take a deliberate and knowledgeable approach to risk management
3. Establish and maintain periodic contact with outside expertise

The following is what the program offers:

- Use of Finpack, the most comprehensive agricultural financial planning and analysis software available
- Crisis-intervention strategies for financially distressed farms
- Small-group workshops and/or one-on-one consultations
- Evaluations of agronomic management practices
- Unlimited access to computers
- Flexibility to meet your individual needs
- Complete confidentiality

For more information on the program, contact:

David Lee, Agricultural Agent
Rutgers Cooperative Extension of Salem County
51 Cheney Rd., Suite 1
Woodstown, NJ 08098
Phone: 856-769-0090
Fax: 856-769-1439

Plant Diagnostic Laboratory & Nematode Detection Service

The Plant Diagnostic Laboratory is a diagnostic service available to the residents of the State of New Jersey. The mission of the Plant Diagnostic Laboratory is to cooperate with Rutgers Cooperative Extension (RCE) personnel to provide the residents of New Jersey with accurate and timely diagnoses of plant problems. There is a fee for this service (see sidebox).

The laboratory was established in 1991 on the Cook College campus of Rutgers, The State University of New Jersey. The lab began accepting samples in July of 1991 and is now fully operational.

The Plant Diagnostic Laboratory is staffed with two full-time diagnosticians who are trained in all aspects of plant health. Seasonal employees and students assist in the lab. The Plant Diagnostic Laboratory staff works in close cooperation with Rutgers Cooperative Extension specialists, county faculty, and other university personnel, to provide accurate diagnosis and up-to-date recommendations.

How to Submit Samples

1. Sample submission forms can be obtained from your local county Rutgers Cooperative Extension office. They can also be downloaded from the Rutgers Cooperative Extension website at: http://www.rce.rutgers.edu/plantdiagnosticlab/index.html. Forms are also available on RCE's 24-hour fax back service, FaxInfoLine at 732-932-6767 (documents 3605, 3602, 3603, 3604 and 3606 respectively, as listed below). There are five distinct forms:
   - ◆ Plant Identification Submission Form (22 KB PDF).
   - ◆ Golf and Landscape Turf Submission Form (23 KB PDF).
   - ◆ Landscape, Home Grounds, and Garden Submission Form (21 KB PDF).
   - ◆ Commercial Growers Submission Form (22 KB PDF).
   - ◆ Insect and Tick Identification Submission Form (27 KB PDF).
2. Completely fill out the sample submission form.
3. Collect the appropriate samples, then carefully follow all of the directions.
4. Properly package the sample, submission form, and payment.
5. Mail the sample to the address on the form.
6. The laboratory will respond with the diagnosis by mail in a timely manner. ❑

Diagnostic Lab Fee Schedule

All In-State Samples (except fine turf)	$20
In-State Fine Turf	$50
All Out-of-State Samples	$75
Other Services Negotiable	

Grant Opportunity Available for Northeast Producers

A regional grants program is offering funding to Northeast growers interested in testing innovative production and marketing strategies, and sharing what they learn with other producers.

Applications are now available for the Northeast Region USDA-Sustainable Agriculture Research and Education (SARE) Program's 2001 Farmer/Grower Grants competition. Applications are due December 4, 2000. Growers can obtain application forms from NOFA-NJ or from Rutgers Snyder Research Farm at 908-730-9419. Applications can also be obtained on the web at www.uvm.edu/~nesare/grants, or by e-mail at nesare@zoo.uvm.edu. "This program provides an excellent opportunity for producers who want to try something a little different," says Northeast SARE Program Manager Jim Gardiner. "It helps farmers evaluate new practices and approaches, and other producers benefit by learning from grant recipients' experiences."

The goal is to help farmers shift to production and marketing practices that are profitable, environmentally sound, and beneficial to the community. Proposals can address a broad range of agricultural and farm forestry production and marketing issues.

Grant funds can be used to rent equipment, buy materials, pay for project-related services like soil testing and technical advisors, and to compensate farmers for the time they spend on the project.

The Farmer Grant Program is not intended to provide startup funds for beginning farmers, nor to support capital improvements on individual farms.

The program is very competitive. Last year, there was sufficient funding for only half the applications received. The average grant was $4,351, although the program has awarded grants as large as $12,000 and as small as $300.

To be eligible for Northeast SARE funding, an applicant must be a commercial producer.

Funding decisions will be made in Feb. 2001, and funds will be available in April for the 2001 crop production season.

This year will be the ninth year that Northeast SARE has offered producer grants. Since 1993, Northeast SARE has awarded over 350 producer grants. ❑

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PLANT & PEST ADVISORY

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