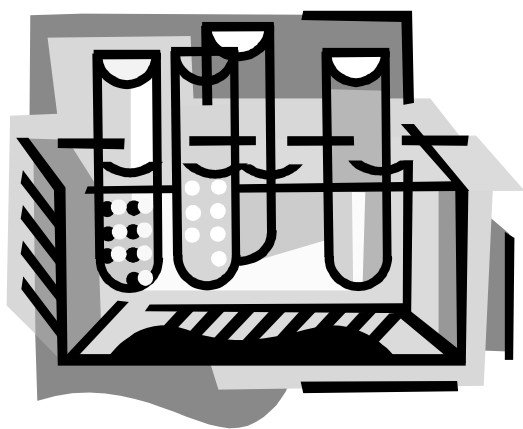


PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

JUNE 10, 2003



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How Rutgers Soil Testing Laboratory Determines Lime Requirement

Joseph R. Heckman, Ph.D., Specialist in Soil Fertility

(Refer to the glossary in the box on page 2 for definitions to unfamiliar terminology.)

When the soil pH indicates that the soil needs to be limed to raise the pH to the desired level for the crop to be grown, the next step is to determine the lime application rate. A soil pH measurement alone does not provide enough information to determine a soil's lime requirement. For example, a sandy loam soil with a pH of 5.0 may need 3600 lbs/acre of CCE to raise the pH to 6.5, while a silt loam soil with a pH of 5.0 may need 8100 lbs/acre of CCE to raise the pH to 6.5 (the same level). This is because soil texture affects the buffering capacity of a soil; that is, finer textured soils have more reserve acidity that must be neutralized to raise soil pH. The reserve acidity tends to contribute to the change in active acidity that is measured as soil pH. The Rutgers Soil Testing Lab previously determined the soil textural class by feel as one of the factors that influences the lime requirement. The lime requirement recommendation was then determined by referring to soil pH and soil texture in look-up tables. Recently this practice has been changed to a more objective, quantitative chemical test for reserve acidity. This new soil test procedure is referred to as the Adams-Evans lime requirement index or buffer pH. Using this method, the lime requirement can be more precisely calculated according to complex equations involving soil pH, buffer pH, and target pH. Look-up tables then can be created for the convenience of users. Table 1 is the look-up table for a target pH of 6.5.

This new way of determining lime requirement improves the accuracy of lime recommendations and the efficiency of the soil test lab. Most other university and commercial soil test labs also determine the lime requirement by measuring the buffer pH and soil pH. However, be aware that not all soil test labs use the same buffer pH method. For example, both Rutgers and the University of Delaware soil test labs use the Adams-Evans buffer method, but the Pennsylvania State University lab uses the SMP buffer method. The Adams-Evans buffer pH method is used by the Rutgers Soil Testing Lab because it is designed for use on Atlantic coastal plain soils. Adams-Evans lime requirement index values usually fall into the range 7.0 - 8.0. A greater value (near 8.0) represents poorly buffered (very sandy) samples while values nearer to 7.0 are

SEE SOIL PH ON PAGE 2

SOIL pH FROM PAGE 1

highly buffered (fine texture or high organic matter). Rutgers soil test reports indicate soil pH and lime requirement index but also provide the calculated lime recommendation to the nearest 100 pounds per acre (for formal reports).

Example

The lime requirement of a soil can be calculated from the Adams-Evans lime requirement index and the water pH (Table 1). For example, a soil with an Adams-Evans lime requirement index of 7.50 and a water pH of 5.4 would require 2.0 tons CCE/acre to increase the pH to 6.5. Look-up tables are also available for other target soil pH levels.

Table 1. Commercial production liming table for crops with a target pH 6.5 for a soil depth of 8"- CCE rate in tons/acre.

Soil	Adams-Evans lime requirement index																			
pH	7.95	7.90	7.85	7.80	7.75	7.70	7.65	7.60	7.55	7.50	7.45	7.40	7.35	7.30	7.25	7.20	7.15	7.10	7.05	7.00
6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
6.3	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
6.2	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5
6.1	0.0	0.0	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0
6.0	0.0	0.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.5
5.9	0.2	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.5	2.5	2.5
5.8	0.2	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.5	2.5	2.5	2.5	3.0
5.7	0.2	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.5	2.5	2.5	3.0	3.0	3.0
5.6	0.2	0.5	0.5	0.5	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.5	2.5	2.5	3.0	3.0	3.0	3.5
5.5	0.2	0.5	0.5	0.5	1.0	1.0	1.5	1.5	1.5	1.5	2.0	2.0	2.5	2.5	2.5	3.0	3.0	3.0	3.5	3.5
5.4	0.2	0.5	0.5	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.5	2.5	2.5	3.0	3.0	3.0	3.5	3.5	4.0
5.3	0.2	0.5	0.5	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.5	2.5	3.0	3.0	3.0	3.5	3.5	4.0	4.0
5.2	0.2	0.5	0.5	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.5	3.0	3.0	3.5	3.5	3.5	4.0	4.0
5.1	0.2	0.5	0.5	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.5	2.5	3.0	3.0	3.0	3.5	3.5	4.0	4.0	4.5
5.0	0.2	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.5	2.5	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5
4.9	0.2	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	3.0	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5
4.8	0.2	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	5.0
4.7	0.2	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	5.0
4.6	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	5.0	5.0
4.5	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	5.0	5.0

Glossary for Soil Testing Terminology

Active acidity - Acidity in soil solution which is measured as soil pH.

Adams-Evans buffer method - A method for determining the lime requirement of a soil. It was designed for use with soils that are coarse-textured, with low cation exchange capacities and organic matter contents, and thus low lime requirements (<2 T/A). The Adams-Evans buffer is most appropriate for mid-Atlantic and coastal plain states.

Buffer pH - Also called lime requirement index, buffer pH is a chemical measure of the reserve acidity in a soil. This measurement, along with the soil pH, is used to determine the recommended rate of lime (CCE) to apply to the soil.

Buffering capacity - The ability of the soil to resist change in pH. It depends on reserve acidity (and therefore soil texture and organic matter).

CCE - calcium carbonate equivalent - An expression of the acid-neutralizing capacity of a carbonate rock relative to that for pure calcium carbonate. It is expressed as a weight percentage of calcium carbonate. Pure calcium carbonate is

used as the standard with a neutralizing value of 100%. The actual CCE of most limestones will vary from this percentage due to impurities in the rock.

Reserve acidity - Acidity held in association with exchangeable aluminum, clay, and organic matter that can be released into the soil solution.

SMP buffer method - Shoemaker-McLean-Pratt buffer method - A method for determining the lime requirement of a soil. It was designed for use with soils that have large lime requirements and significant reserves of exchangeable aluminum. The SMP buffer is more commonly used in states in the northern section of the northeastern region. It has been shown in several studies to be inaccurate in poorly buffered, sandy soils; in soils with organic matter contents greater than 10%; or in soils with a predominance of kaolinite and aluminum and iron oxides in their clay fractions.

Soil pH - A measure of the relative acidity and alkalinity in the soil solution. A soil pH measurement, however, does not take into account the reserve acidity of the soil particles.

Soil texture - The relative proportions of sand, silt, and clay in a soil.

Acknowledgment: Appreciation is expressed to Dr. Stephanie Murphy, Director of Rutgers Soil Testing Laboratory, for reviewing this articling and providing helpful comments.

Cluster and Shoot Blight

Alice Wise, Viticulturalist, Long Island Horticultural Research & Extension Center, Cornell Cooperative Extension

Reprinted from Long Island Fruit & Vegetable Update, No. 12 – May 30, 2003, Cornell Cooperative Extension.

Most vineyards are showing symptoms of a blight of shoots and clusters. While this is rare, it is not surprising given the extreme weather that we've been having. Chances are we are looking at an early season **Botrytis blight**.

On shoots, a sunken brown area develops, starting either at the base of the shoot or around a node. In some cases, the shoot tip has browned and has wilted. The stem of the cluster (the part between the cluster and the shoot) and/or the rachis (the actual stem of the cluster) may be desiccated as well.

A number of varieties appear to be affected on several farms; Cabernet Franc is faring the worst followed by Chardonnay. Merlot seems less susceptible but symptoms can be found. Incidence and severity varies from farm to farm. Reasons for this are still being pondered.

One astute vineyard manager wondered if the incidence of blight in Cab Franc was related to its earliness and to the fact that we had a light frost maybe the second weekend in May. There are a number of vineyards seeing frost injury in low spots. It is conceivable that the frost killed a few cells here and there but did not kill tissue outright. Under this scenario, Botrytis, being an opportunistic fungus that attacks senescing tissue, had both a highly susceptible target and the right weather conditions.

After examining several vineyards, tan/gray fuzzy sporulation was finally seen in several locations, confirming the presence of Botrytis cinerea. There is a slight possibility that another fungus called Sclerotinia is involved. Sclerotinia is often accompanied by a white mycelium or strands of white fungus, evident if viewed up close. We did not see any mycelium but perhaps a trained eye is required. Samples have been overnighted to Wayne Wilcox for positive ID. Further comments will be posted on the vineyard manager list serve.

What to do, especially given the potentially wet forecast for the next week? The hands down best control for either Botrytis or Sclerotinia is sunny dry weather. In lieu of that, the strobilurins have some activity against Botrytis. Sovran and Flint are rated with two pluses, Abound has one plus. If we are dealing with Sclerotinia, any materials with action against Botrytis may also help with that as the two fungi are related. Captan may help slightly (rated as one plus), mancozeb perhaps. Vineyards with infections should probably plan on a bloom Botrytis spray. Also, canopy management to eliminate areas of shoot crowding (and hence slower drying after a rain) will also help.

Submitted by Jerome L. Frecon, Agricultural Agent. □

Blackberry Psyllids

Daniel Gilrein, Entomologist, Long Island Horticultural Research & Extension Center, Cornell Cooperative Extension

Reprinted from Long Island Fruit & Vegetable Update, No. 12 – May 30, 2003, Cornell Cooperative Extension.

Blackberry Psyllids were observed in thornless and thorny blackberries this week. These tiny insects resemble brownish leafhoppers and cause the terminal stems and foliage to twist and stunt dramatically. Only the slightest distortion was observed so far. Adults overwinter in conifers or possibly other protected sites, migrating to blackberries in spring. Affected terminals with psyllids can be pruned off and destroyed as soon as observed. There are no specific labeled insecticides for this pest, although other insecticides labeled for blackberries used for other pests should provide incidental control. **Orange rust** was also observed in one planting. Plants should be immediately removed (including all roots); Nova can be applied from budbreak up to harvest (see label for restrictions).

Submitted by Jerome L. Frecon, Agricultural Agent. □

IPM FROM PAGE 4

One location had 34 moths per trap, another with 70 moths per trap and accompanied by some infested fruit clusters.

✓ **Aphids:** Aphid populations have increased again this week. Aphid populations increased from being found in 45% of samples to being found in 68% of samples. Our benchmark of 'over 10% of terminals infested', went from 9% to 18% 2 weeks ago, to 34% this past week. Therefore, about 1/3 of sample sites show bushes with over 10% of terminals infested with aphid colonies.

✓ **Thrips:** Thrips numbers have been very low, but thrips are being found in about 33% of beating tray samples. The average level being seen is about 2 thrips per 100 fruit clusters.

✓ **Botrytis Fruit Rot:** Botrytis is present in most fields, or about 56% of samples taken. The disease involves no flower parts, but full size pollinated fruit. The average level seen is about .5% of fruit infected. No further spread should occur this season.

SEE INSECT TRAP CAPTURES PAGE 5

Fruit IPM

Dean Polk, Fruit IPM Agent

Peach

✓ **Oriental Fruit Moth (OFM):** We are in between 1st and 2nd generation OFM flights. All treatments for the first generation should have been applied statewide, as we start to look for the first few moths from the second generation flight. Trap counts should start to increase this week, but treatments for the second generation will not be due until we reach a degree day accumulation of 1100–1200, and again at 1450-1500 DD. In southern counties the first of two second flight treatments should be due around 6/23 to 6/25, and 7/5-8 in northern counties.

✓ **Tarnished Plant Bug (TPB) and Other Catfacing Insects:** Injury in most orchards ranges from .5 to 2% injury. Some locations report injury as high as 4%. However, we are seeing bleeding and gumming around injured pits. Fruit with this type of injury will appear similar to a catfaced injured fruit, but be accompanied by a 'longitudinal depression' or 'crease' near the end of the fruit. Cutting this fruit will reveal a clear gumming between the pit and the skin. Gumming will often exit from the depressed area on the fruit. Since this is not catfacing, no amount of extra insecticide will 'cure' the problem.

✓ **Plum Curculio (PC):** Some PC injury is being found, but totals at less than 1% in most areas. We should have accumulated 340DD₅₀ in southern counties by 6/10. If insecticides are applied within 10 to 14 days after 340DD₅₀ is reached, then no additional applications should be needed.

✓ **Green Peach Aphids (GPA):** Winged forms are visible as adults start to leave the peach trees. Some locations still have populations as high as 6 colonies per tree. At this point, populations should only be treated if colonies exceed 5-6 colonies per tree. Populations should decrease further by next week.

✓ **San Jose Scale (SJS):** Crawlers should start to emerge any day now. However, we have not been able to find any live scales in the commercial orchard blocks being monitored. Treatments for the crawler stage are only suggested in orchards with a known scale population. San Jose Scale crawlers have just emerged at RAREC in Upper Deerfield. Treatments for problem orchards in southern counties are due this week.

✓ **Bacterial Spot:** Heavy rains this past Saturday may have given us a good bacterial spot infection. Even though we are approaching mid June, growers should still be using Mycoshield or coppers for bacterial spot control. Use caution when using coppers. We have seen considerable leaf drop where either the wrong kind or excessive rates were used.

✓ **Tufted Apple Budmoth (TABM):** The first alternate middle sprays will be due in southern counties on 6/9-10 or around 6/12-13 (full cover sprays) with standard insecticides. Standard insecticides would include carbamates and pyrethroids. OP insecticides cannot be relied upon for TABM control in problem areas. If TABM has never been a concern in your orchard, then you don't have to bother changing materials from what you normally use. If using Intrepid, then plan on a treatment around 6/13-15 (full cover – southern counties). In central counties the first alt. mid. spray (standard insecticides) will be due around 6/15, or 6/17 (full cover). If using Intrepid, then plan on a treatment around 6/18-20.

Apple

✓ **Codling Moth (CM):** The first treatments should have already been applied in southern counties. Treatments are due in central counties by 6/10, and in northern counties by around 6/14. A second (full cover) treatment will be due 10 to 14 days later, or 2 additional alternate middle sprays 6-7 days apart.

✓ **Green and Spirea Aphids (GAA, SA):** Aphids are being found on about 75% of terminals in southern counties, but at very low levels in northern counties. Even in southern counties, colonies remain small, and honeydew is not present on the fruit. We suggest that growers still hold off on insecticide applications for the GAA/SA complex.

✓ **European Apple Sawfly:** One block was seen where fruit was infested with sawfly larvae. This probably arose from a very late petal fall spray, or the petal fall insecticide being washed off just after application. Larvae will bore inside the fruit and cause fruit drop. There are no treatments that can be used at this point.

✓ **Apple Scab:** Several orchards report primary scab infections, with the disease being quite severe in some locations, especially in northern counties. If infections are present, the best options include back to back applications of a high rate of Flint or Sovran (full cover), or a high rate of an SI. The Flint/Sovran option has shown to be the best so far. Two applications will likely give up to a month of suppression, and then have to be re-checked at that time.

Blueberry

✓ **Redbanded Leafroller and Other Leps.:** Leafroller activity remains low. We have seen 17% of our beating tray samples come up positive for larvae, but .3 larvae per 100 clusters is the highest level seen. Of all direct plant samples taken, leafroller type injury is present in 21% of samples at low levels.

✓ **Cranberry Fruitworm (CBFW):** This is the first week that we have found trap numbers similar to numbers seen during previous seasons. While trap captures seem to be drawn out this season, we have seen larvae in infested fruit. Infested fruit sightings also coincide with very recent counts of higher moth numbers in the traps.

SEE IPM ON PAGE 3

Cool, Cloudy Weather Affects Thinning and Fruit Set

Win Cowgill, Agricultural Agent

As growers continue to fight the cool, cloudy weather and excessive rainfall, below are some observations I have made. We are getting a few days of sun here before rain returns.

Cherry- some sweet cherry blocks have a light fruit set. Most sweet cherry cultivars need to be cross-pollinated with another cultivar that is in the same pollination class. This requires planning before establishing the orchard so that pollination can occur. Some of the newer cultivars out of British Columbia are self-fruitful, which allows for planting solid blocks like we do with peaches. But the fact remains sweet cherries need adequate pollination, meaning enough honeybees hives and activity to do the job.

For both apples and cherries, two hives per acre are a minimum, especially when the weather is less than optimum for pollination. This is especially true with the decline of our wild honeybee population due to the Verona mite.

Apple- apple fruit set in Northern New Jersey is good overall, but some but some varieties are a little shy. Some of it is due to the extensive cloudy weather we had during pollination and the 3-4 four weeks of cloudy weather following. Cool weather affects pollination. Both

from reduced bee activity and because the actual pollen tube grows slower. Extensive shading experiments by Drs. Ross Beyers and Rich Marini, VPI, have shown that shading can cause fruit drop by itself and can enhance the thinning effect and cause more fruit to drop. I have seen two blocks of Fuji that did not set heavy and self thinned. This is highly unusual for Fuji, it is usually one of our hardest to thin. A block of Jersey Reds in Warren County also required no thinning, again unusual for this New Jersey variety.

I have observed some cultivars that have been over-thinned this year due to the cloudy weather (shading). Ross Beyers also indicated that some Virginia growers have overthinned as well due to the cloudy weather.

Fruit development is at least two weeks behind in North Jersey. Apples and peaches have just sat there until the last few days when they began to size. This cool weather has made it more difficult to determine if adequate thinning occurred. It is taking longer between application of thinners and the time it takes to determine whether the thinner is working. The only way to know for sure if the thinner is working is if the fruit stops sizing or growing. If the fruit stops growing it usual means it is coming off. This year it has taken 7-12 days to make this observation, due to the slow growing conditions. This is longer than normal.

Growers can tag limbs by cultivar and come back to observe the same fruit on a regular basis to see if it is sizing or not. Fruit that continues to grow will probably remain on the tree at this point. □

CONTINUED FROM PAGE 3

Insect Trap Captures

Tree Fruit - Southern Counties

Week Ending	LPTB	PTB	OFM	TABM-PAM	CM	DWB	OFM-A	STLM	TABM
5/9			56				129	137	
5/16			33	8			60	181	10
5/23	44		17	10	2		20	55	5
5/30	20		4	30	1		8	23	8
6/6	35		4	32	2		12	13	16

Northern Counties

Week Ending	LPTB	PTB	OFM	TABM-PAM	CM	DWB	OFM-A	STLM	TABM
5/23			6.3	4.1	4.6			59.3	10.6
5/30			8.3	2.6	3.7			75.0	3.2
6/6			8.2	6.4	5.6			7.0	6.0

Blueberry - Atlantic County

Week Ending	CBFW	RBLR	OBLR	SNLH	OB	BBM
5/9		83.6				
5/16	0.2	21.2				
5/23	0.05	4.0				
5/30	0.18	0.3				
6/6	0.08	1.0				

Burlington County

Week Ending	CBFW	RBLR	OBLR	SNLH	OB	BBM
5/9		11.4				
5/16	0	6.4				
5/23	0.05	1.8				
5/30	0.2	0.3				
6/6	2.6	0.3				

Calendar of Events

June 26, 2003 – Twilight Fruit Research Meeting – 5 p.m. Rutgers Agricultural Research and Extension Center (RAREC), 121 Northville Road, Bridgeton, NJ. Contact: Jerome L. Frecon 856-307-6450 ext 1.

July 8, 2003 - Twilight Farm Tour of Organic Methods for Blueberry and Bramble Production - 4:30 p.m., Emery's Berry Patch, New Egypt, NJ. Contact: Terry at RCE of Monmouth County at 732-431-7260.

September 3, 2003 – Fruit Variety Showcase, Gloucester County. Contact: Jerome L. Frecon 856-307-6450 ext. 1.

Blueberry and Bramble Fest

Rutgers Cooperative Extension, Northeast Organic Farming Association – NJ (NOFA-NJ) and Natural Resources Conservation Service (NRCS) cordially invite you to attend a “Twilight Farm Tour of Organic Methods for Blueberry and Bramble Production” on **Tuesday, July 8, 2003 from 4:30 PM to 9:30** at Emery’s Berry Patch in New Egypt, NJ. Our farm hosts are John and Susan Marchese who own and operate Emery’s. The informative evening starts with a free barbecue and ends with scrumptious desserts served at Emery’s storefront. The field tour will include discussions and demonstrations of traditional and emerging organic practices presented by researchers and growers. The schedule for the Fest is as follows:



- 4:30 Welcome - Emery’s Owners - John & Susan Marchese - BBQ Dinner
- 5:00 Program Introduction - Bill Sciarappa - RCE Agricultural Agent
- 5:15 Organic Philosophy - Karen Anderson, NOFA-NJ
- 5:40 Organic Certification & Organic Pesticide Process – Erich Bremer, NOFA-NJ
- Field Tour
- 6:00 Soil Building, Fertility and Crop Establishment, Gary Pavlis – RCE Agricultural Agent
- 6:25 Blueberry IPM Insect & Disease Scouting, Dean Polk, RCE Fruit IPM Agent
- 6:50 Weed Control and Cover Crop Demonstration – SARE, John Marchese
- 7:15 Mulching Demonstration & Organic Pesticides – Bill Sciarappa
- 7:45 Blueberry Production Tips – Rutgers Research Team: Nick Vorsa, Shridar Polavarapu, Peter Oudemans, Marucci Center for Blueberry & Cranberry Research & Extension
- 8:30 Bramble Production Tips, Mark Ciotoli - The Berry Farm
- 8:55 Emery’s Storefront - Desserts & Refreshments - Suzanne Marchese
- 9:00 Marketing Organic Small Fruit - Maureen Scaramella, Food Innovation Research & Extension Center
- 9:30 Good Night

DEP Certification Credits will be provided: 1A - 4 units, PP2 - 4 units.

To register, request a flyer with map, or for further questions, please call Terry at RCE of Monmouth County at 732-431-7260. We really need you to RSVP in order to have the proper amount of food and materials.

Emery’s is located on 346 Long Swamp Road (off Route 539), New Egypt, NJ. Look for the Emery’s sign on Long Swamp Rd. For door-to-door directions go to the Emery’s web site at www.netpie.com. The flyer can be found on our county website www.visitmonmouth.com/07050coopext Click on presentations and flyers. □

Tree Fruit Research Meeting Scheduled for June 26

The annual tree fruit research meeting conducted by Rutgers Cooperative Extension of the New Jersey Agricultural Experiment Station will be held on Thursday, June 26, 2003 at the Rutgers Agricultural Research and Extension Center (RAREC) in Upper Deerfield Township in Cumberland County. A riding tour with discussion of tree fruit research at the center will begin at 5:00 p.m. and end with picnic supper at the RAREC pavilion.

One of the highlights of this year's meeting will be a demonstration of new sprayer technology. Dr Ted Cottrell of the ARS-USDA Fruit Research Laboratory in Byron, Georgia will be on hand to demonstrate a Durand Wayland Sprayer built for directed applications of borer sprays. Dr Cottrell is a Research Entomologist working on Pecans and Peaches at the station in the heart of peach country in Georgia.

The RAREC has developed into one of the leading peach research stations in the eastern United States. The focus of the guided tour of demonstration blocks will be on peach research. Entomologists Dr. Peter Shearer and

Dr. Atanas Attanasov will discuss a wide variety of research projects on fruit insect management and science during the tour. Dr Norman Lalancette, Specialist in tree fruit pathology and official host of the meeting, will discuss his research on bacterial spot and rusty spot of peaches.

The center is also an IR-4 Northeast Regional Center, which houses the IR-4 State liaison. Erin Hitchner of the IR-4 team at RAREC will discuss some of their most recent projects on tree fruit and small fruit.

Dr. Robert Belding, Specialist on Pomology, will demonstrate some of his research on chemical thinning and discuss rootstock selections for peaches. Dr. Bradley Majek, Specialist in Weed Science will discuss weed control on vines and other perennial weeds in peaches and apples.

New Jersey Pesticide applicator units will be given to all in attendance for the full tour. A picnic supper of ribs and chicken will be served, courtesy of Dr. Lalancette after the tour. Pre-registration from all attendees is required by calling Jerry Frecon of RCE at 856 307-6450 Ext 1 or by sending and E-mail to gloucester@aesop.rutgers.edu. Complete details on the program with directions to RAREC are available at <http://gloucester.rce.rutgers.edu>. □

Plum Pox Survey 2003

Carl P. Schulze Jr., Director, Division of Plant Industry, New Jersey Department of Agriculture

Weekly Sampling Results, Week Ending – June 6, 2003, STATE: New Jersey

Date Sampling Began	Date Sampling Completed	Lab Doing the Analysis	Cumulative Total of Field Samples Collected*	Cumulative Total of Lab Samples Processed*	Sampling Results
5/21/03		NJDA	2,332	3,720 ¹	all negative
			2,518	5,300 ²	all negative
			4,850	9,020	

¹ = 1 quadrant field sample contains 2 lab samples per USDA sampling protocol - national survey.

² = 1 quadrant field sample contains 4 lab samples per USDA sampling protocol - high intensity survey.

To date, a total of 128 blocks of commercial fruit trees have been sampled.

Submitted by Jerome L. Frecon, Agricultural Agent. □

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