

PLANT & PEST ADVISORY

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Direct Marketing for Distant Markets: A Case for Competitive Advantages

Jhilson Ortiz Sr., Program Coordinator – Agriculture Marketing

For as long as I remember, many people in the agriculture sector have considered direct marketing of their products as a viable alternative to receive more money for their products. Unfortunately, many of us forget that not everyone is prepared for this business venture, especially when the consumers to be reached are located far away from the production site.

Going through the pages of a Marketing & Business guide for Farmers Markets, I have discovered one of the reasons we are ill prepared: *The lack of information about the real challenges when distributing and selling our products.* The opinion that calls my attention the most is the following assumption: “As U.S. food production became increasingly industrialized and specialized, farmers’ markets were replaced by brokers and supermarkets.”

The writer forgets to clearly acknowledge that this change was the result of population expansion across America and the growing distance between farms and the end consumer. Certainly, these same conditions opened new opportunities for business ventures specializing in transport and distribution of food products.

A farmer will get a higher value for his product with direct sale, but sales and distribution costs will eat away part or all of these profits. How much? That depends upon the product qualities, the cost of transportation, and other economic/geographic factors.

So, please calculate your distribution and transportation costs in the long term (not just the harvest season) before deciding to launch your long distance direct marketing plan, and never forget that customer service, convenience and price are key factors for successful sales when approaching either clients or consumers. □

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Deer Fencing Available - Deadline May 31 (2nd Notice)

New Jersey Secretary of Agriculture Charles M. Kuperus announced that a Deer Fencing program will be run cooperatively by the New Jersey Department of Agriculture (NJDA) and Rutgers Cooperative Research and Extension.

The cost-share program will provide fencing material, plus up to 30 percent of the line posts at no cost to qualified farmers who were not awarded fencing in the 2004/2005 program.



White-tailed deer feeding damage on melon, Springdale Farms, Cherry Hill, NJ. Photo by Jack Rabin

"The deer fencing program is part of our effort to partner with the agricultural community to ensure the viability of New Jersey's farms," said Secretary Kuperus. "The fencing is an effective tool in keeping deer from damaging crops and allows farmers to benefit from higher yields."

This is the second year of the Department's deer fencing program. In 2005, fence, accompanying wire and posts were distributed to 100 farmers throughout the state.

A Rutgers Cooperative Research and Extension survey of farmers who participated in previous deer fencing programs indicated that almost 70 percent of wildlife crop loss is attributable to deer. The New Jersey Agricultural Experiment Station estimates the economic loss to farmers to be between \$5 million and \$10 million annually.

To participate in the program, farmers must meet these eligibility criteria:

- Farmers who were awarded fencing and materials in the 2004/2005 program are not eligible to participate
- Be a New Jersey farmer having documented proof of a minimum of \$40,000 in sales of agricultural commodities produced by the applicant on a New Jersey farm or;
- Be a New Jersey certified organic farmer having documented proof of a minimum of \$20,000 in sales of agricultural commodities produced by the applicant on a New Jersey farm

SEE DEER FENCING ON PAGE 5

Nutrition Management for Brambles

Warren Stiles, Ph.D., Professor Emeritus,
Cornell University

Presented at Twilight Fruit Meeting on May 17, 2006.

Preplant Site Preparation

- a. Soil Test To Determine Needs.
- b. Year before planting.
 - Lime to 6.5-7.0
 - Nitrogen apply 40 lbs N per acre *if plowing down a cover crop.*
 - Potassium apply 0-0-22-11 (Sulfate of potash-magnesia) as needed.
 - Boron – apply as needed according to soil test results and soil type requirements.
- c. Year of planting.

Nitrogen apply equivalent of 35-40 lbs of N after plants leaf out.
- d. Established plantings.
 - Nitrogen - One-two year old plants 40 to 60 lbs per acre in March
Three years and older 60-70 lbs N per acre in March plus 30-40 lbs in mid-May
Ammonium nitrate (34-0-0) is preferred source.
 - Potassium - Apply 400 lbs 0-0-22-11 per acre in late fall, adjust rate according to soil test and/or leaf analysis. Potassium nitrate can be used to supply part of the potassium, but rate is limited by the nitrogen requirement. Brambles are sensitive to chloride in 0-0-60 muriate of potash.
 - Boron - Apply 1 to 3 lbs actual B per acre according to soil test recommendations in fall.
 - Apply a prebloom spray of Solubor (1 lb / 100 gallons /acre), an additional spray may be needed if soil test/leaf analysis shows need.
 - Zinc - Apply a chelated zinc product in a prebloom spray according to product label directions. Additional post-bloom sprays may be needed if zinc deficiency is evident.

Editors Note: Additional information on Bramble fertilizations is on page 121 of the Middle Atlantic Berry Guide for Commercial Growers.

Submitted and edited by Jerome L. Frecon, Agricultural Agent. □

Strip Apple Leaders Now

Win Cowgill, Agricultural Agent and Jon Clements, Specialist in Pomology, UMass

'Stripping' is a young tree training procedure used to isolate and protect the 'central-leader' of an apple tree. The three to four buds directly below heading cut on newly planted apple trees developing vigorous upright shoots are the ones we are looking at. Choose the single most vigorous upright shoot to remain as the leader, and then strip (with a downward pull) or pinch out the few (usually 2 or 3) competing shoots directly below the leader shoot you want to save/maintain. These should be removed as soon as possible to focus the growth into the central-leader and prevent a multi-leader tree from developing. Hand pruners may be used. These competing shoots are easiest to identify and remove when 3-4" long. For pictures of the 'stripping' technique, visit the UMass Fruit Advisor, <http://www.umass.edu/fruitadvisor>. Next week: using clothespins to form desirable branch crotch angles. □

Use Clothespins for Good Crotch Angles

Jon Clements, Ph.D., Fruit Specialist, UMass, and Win Cowgill, Agricultural Agent

After 'stripping' – which was described in last week's publication – the use of clothespins to develop wide (90 degree) and strong branch angles is the next most important young apple tree training technique you can accomplish. NOW is the ideal time to attach clothespins, when young shoots are 3-6 inches long and flexible.

Clip spring-type clothespins to the tree trunk to force acute branch angles into a more perpendicular, (90 degree) angle from the trunk. See the pictures. Take care not to tear or rip the shoots from the trunk when affixing the clothespins. Clothespin all shoots with narrow crotch angles that may form permanent scaffold branches – usually 4-8 clothespins per tree are required. This is assuming you have already stripped (removed) the top 3-4 shoots -competing with the leader as we described in last week's newsletter. After a few weeks, and when the 90-degree branch angle is established, the clothespins may be removed and reattached out onto the shoot tip to help hold it down and keep it growing in a more horizontal position. See our web page at <http://www.umass.edu/fruitadvisor/clements/clothespinrecycle.html>.

Take the time to train young trees with clothespins and you will be rewarded with wide scaffold branch crotch angles that will withstand a heavy fruit load for the life of the orchard. □

Pinch Apple Shoots to Control Growth

Jon Clements, Specialist in Pomology, UMass and Win Cowgill, Agricultural Agent

'Pinching' shoots is a young tree training technique used on mostly first-, and second-leaf apple trees to promote fruiting and manage growth in the top of the trees of vertical-axis, slender-spindle, or super-spindle orchards. Rapidly growing shoots that are six to eight inches long, that are in the top one-fourth of the tree, and that originate from the leader, are candidates for pinching. Pinch-back the shoot two inches using your thumb and finger(s) or pruners. See the pictures to the right. To view a short web video of the technique, go to the UMass Fruit Advisor, <http://www.umass.edu/fruitadvisor/>.

Pinching will do two things: weaken the growth of the developing shoot so it is not as likely to compete with the leader, and promote the development of a fruit bud in the vicinity of the pinch if done now into early July. This technique will keep the tree from becoming top-heavy tree, which will eventually mandate a less desirable dormant pruning cut.



Fruit IPM

Dean Polk, Fruit IPM Agent and David Schmitt and Eugene Rizio, Program Associates, Tree Fruit IPM

Peach

✓ **Oriental Fruit Moth (OFM):** The first generation flight has “bottomed out” in southern counties. The northern county flight should bottom out within the next 7-10 days. The 900 DD mating disruption target will occur on or about June 3rd. Growers should have in the orchard by this date hand-placed ties or sprayable pheromone.

✓ **Plum Curculio (PC):** PC is still actively causing fruit injury, but should be tapering off soon. Growers should continue to include effective materials.

✓ **Catfacing Damage, Stinkbugs and Tarnished Plant Bugs:** If using Imidan for catfacing insect control, do not cut the rate. You may have to use the full 3 lb/Ac, especially if orchard blocks have wooded borders or weedy groundcover. Other materials that can be used around fruit thinning activities include the pyrethroids – Asana, Ambush, Pounce and Warrior. Lannate can also be used but is not the best control for catfacing insects. Lannate and pyrethroid materials increase risk for mite flare ups. With current weather patterns, catfacing pressure is likely to be high. Increased activity was seen in weedy groundcovers this past week.

✓ **Tufted Apple Budmoth (TABM):** Tufted Apple Budmoth (TABM): Treatments for TABM should be focused where TABM is a known problem. This includes most areas of the state Mercer County and south. Degree day (DD) timed treatments are outlined for either alternate middle (AM) applications where 4 sprays are needed per generation, full cover every middle (EM) applications where 2 sprays are needed per generation, or with the insect growth regulator (IGR), Intrepid, which should be applied full cover with 2 sprays per generation.

Timings for TABM control are in the following table, updated since last week.

Scouting Calendar

The following table is intended as an aid for orchard scouting. It should *not* be used to time pesticide applications. Median dates for pest events and crop phenology are displayed. These dates are compiled from observations made over the past 5-10 years in Gloucester County. Events in northern New Jersey should occur 7-10 days later.

Pest Event or Growth Stage	Approximate Date	2005 Observed Date
TABM Biofix	5/4 +/-10 days	May 6
CM Biofix	5/4 +/- 6 days	April 30
GAA colonies	5/5 +/-17 days	May 5
1ST WALH	5/6 +/-22 days	May 12
Blossom Blight Symptoms	5/8 +/-10 days	May 5
375 DD OFM	5/10 +/- 8 days	May 4
Rusty Spot	5/12 +/-10 days	May 15
OFM Flagging	5/13 +/- 2 days	May 19
first bacteria leaf	5/15 +/-21 days	May 23
CM 1st gen 150 DD target	5/19 +/- 3 days	May 15
WPS Crawlers	5/26 +/-11 days	Not yet observed
CM 1st gen 250 DD target	5/28 +/- 7 days	May 22
2nd Pear Psylla hatch	6/1 +/- 0 days	Not yet observed

County Area	Spray Type		
	AM	EM	Intrepid-EM
Southern	1 st 6/1-2, 2 nd 6/7-8	1 st 6/3-5	1 st 6/2-8
Central	1 st 5/29-5/31, 2 nd 6/5-7	1 st 6/4-5	1 st 5/31-6/5
Northern	About 6/6-6/8	About 6/10-12	About 6/10-14

Apple

✓ **Codling Moth (CM):** The first catch or biofix points have been reached in all areas of the state. Timing for the first of 2 sprays for the 1st generation is set at 250DD₅₀ and again at 550DD for standard insecticides OPs, carbamates and pyrethroids, and the newer chemistries Assail and Calypso. The timings for the IGR's Intrepid and Esteem are at 150DD and again at 450DD. The following chart outlines these times for southern, central and northern counties. Growers should try to time sprays the best way possible and not cut insecticide rates. The 2nd complete spray timing for CM generally coincides with timings for TABM. Materials used for TABM should also be very effective for CM.

County Area	Application and Insecticide Type	
	Standard Insecticides	IGR's
Southern	1 st past 2 nd 6/7	1 st past; 2 nd 6/2
Central	1 st past 2 nd 6/8	1 st past; 2 nd 6/2
Northern	1 st past 2 nd 6/8	1 st past; 2 nd 6/2

✓ **Tufted Apple Budmoth (TABM):** See peach section.

✓ **Aphids: Spirea and Apple (green) Aphids:** Populations continue to build. Growers using Assail or Calypso for codling moth control will also control aphids.

✓ **Apple Scab and Other Diseases:** Scab is present in very few orchards statewide at present. Summer diseases, including black rot and white rot are the key diseases to control at present. Combinations with Topsin and Captan have been the most economical, and give broad spectrum control. Sovran is also effective on the rots as well as sooty blotch and fly speck. Use higher rates of Sovran where scab is present.

SEE INSECT TRAP COUNTS ON PAGE 5

INSECT TRAP COUNTS FROM PAGE 4

Note: this week only the Southern County Tree Fruit Trap Counts are available

Insect Trap Counts

Tree Fruit Trap Counts – Southern Counties

Week Ending	STLM	TABM-A	CM	AM	OFM-A	DWB	OFM-P	TABM-P	LPTB	PTB
5/6/06	29	0	12		7		18	0	28	
5/13/06	41	0	6		24		13	4	57	
5/20/06	26	4	13		8		7	8	98	1
5/27/06	11	15	6		3		3	17	80	2

Tree Fruit Trap Counts – Northern Counties

Week Ending	STLM	TABM-A	CM	AM	OFM-A	DWB	OFM-P	TABM-P	LPTB	PTB
5/6	580	1.8	1				36.7	2		
5/13	10	1.9	1				8.25	3.3		

Blueberry Trap Counts – Atlantic County

Week Ending	CBFW	RBLR	OBLR	SNLH	OB	BBM
5/6		30				
5/13	6.4	10				
5/20	6.8	2.4	0			

Blueberry Trap Counts – Burlington County

Week Ending	CBFW	RBLR	OBLR	SNLH	OB	BBM
5/6		22				
5/13	19.8	4				
5/20	37.0	0.6	0			

Key: CBFW = Cranberry Fruitworm, RBLR = Redbanded Leafroller, OBLR = Obliquebanded Leafroller, SNLH = Sharpnosed Leafhopper, OB = Oriental Beetle, BBM = Blueberry Maggot

DEER FENCING FROM PAGE 2

- Be the owner of the land or have documented proof of renting preserved farmland or farmland that is enrolled in an Eight-Year Farmland Preservation Program
- Complete a mandatory deer fence installation workshop sponsored by the NJDA and Rutgers Cooperative Research and Extension

Farmers who receive fencing and materials will be required to use the material solely for the purpose of keeping deer off their land and are prohibited from using the fence to contain equine, livestock, poultry, or other animals. Any unused fence will have to be returned to NJDA and cannot be sold.

Applications for deer fencing will be available to farmers through the New Jersey Department of Agriculture, Soil Conservation Districts and Rutgers Research and Extension offices. Applications must be postmarked by May 31, 2006. Farmers also can call (609) 292-5532 for more information or go to the NJDA website www.state.nj.us/agriculture and click on the Grants, Financial Assistance and Services page. □

PESTICIDE CREDITS AND DIRECTIONS FROM PAGE 6

NJ PESTICIDE APPLICATOR CATEGORY 10=2 units, 1A = 3, PP2 =3, AND CORE UNITS = 1 will be provided at the conclusion of the meeting.

Directions: Engine One Vineyard is southeast of Bridgeton at the intersection of Shoemaker Road and South East Avenue. Take Route 49 east out of Bridgeton and then go right or south on Burlington Road to Shoemaker. Turn right and you will go right by Engine 1. Go to the following link on the Internet to get a good view:

<http://maps.google.com/maps?oi=map&q=Shoemaker+Rd+%26+S+East+Ave,+Bridgeton,+NJ+08302>

For further information call RCRE of Gloucester County at 856-307-6450, ext. 1. □

Calendar of Events

May 31, 2006 - 6:00 p.m. - Twilight Wine Grape Meeting, Halpern's Engine One Vineyard, Bridgeton, N.J. Contact Jerry Frecon at RCRE of Gloucester County at 856 307-6450 Ext 1 or go to: <http://gloucester.rcrc.rutgers.edu>.

June 28, 2006 - 5:00 p.m. - Twilight Fruit Research Meeting, Tour and Picnic, Rutgers Agricultural Research and Extension Center, Northville Rd., Bridgeton, N.J. Contact Jerry Frecon at RCRE of Gloucester County at 856 307-6450 Ext 1.

July 27-30, 2006 - New Jersey Peach Festival, 4-H Fairgrounds Rt. 77 South of Mullica Hill, N.J. Contact Jerry Frecon at RCRE of Gloucester County at 856 307-6450 Ext. 1 or go to: <http://gloucester.rcrc.rutgers.edu/fairfest>.

August 3, 2006, 10:00 a.m. - 7:00 p.m. - Agricultural Innovations Day, Rutgers Agricultural Research and Extension Center, Northville Rd, Bridgeton, N.J. Contact Bill Nicholson at RAREC at 856 455-3100.

Wine Grape Twilight Meeting at Halperns Engine 1 Vineyard

Jerome L. Frecon, Agricultural Agent

A twilight meeting for wine grape growers will be held on Wednesday evening May 31, 2006 at Halperns Engine 1 Vineyard, Shoemaker Road and S. East Avenue east of Bridgeton. Mike and Robin Halpern have been growing grapes for about 7 years and are looking forward to sharing their experiences. They currently have 6.5 acres of Chardonnay, Cabernet Franc, Cabernet Sauvignon, and Merlot from 4 to 7 years of age. Located in a colder section of South Jersey, their experiences with low temperatures will be of interest. A walking tour of the vineyard with pertinent highlights by specialists and agents with Rutgers Cooperative Research and Extension will define the meeting. Mr. Mark Chien of Penn State University Cooperative Extension will also be on hand to discuss canopy management and how growers like Mike and Robin might improve their relationships with winery and other purchasers of grapes.


Agenda

- 6:00 P.M. Welcome and Remarks by Mike Halpern and Jerry Frecon, Agricultural Agent Rutgers Cooperative Research & Extension of Gloucester County.
- 6:15 P.M. Timely Canopy Management by Mark Chien, Wine Grape Agent, Penn State University Cooperative Extension
- 6:35 P.M. Grape Insect Management Recommendations by Dr. Peter Shearer, Specialist in Fruit Entomology, Rutgers Cooperative Research & Extension.
- 6:55 P.M. Vegetative Management on Weeds in Wine Grape Plantings by Dr. Brad Majek, Specialist in Weed Science, Rutgers Cooperative Research & Extension.
- 7:15 P.M. Winery Grower Relations by Mark Chien
- 7:30 P.M. Disease Management and Fungicide Use on Wine Grapes by Dr Peter Oudemans, Associate Professor in Plant Pathology, New Jersey Agricultural Experiment Station, Marrucci Center for Blueberry and Cranberry Research
- 7:50 P.M. Timely and Proper Grape Nutrition by Dr. Gary Pavlis, Agricultural Agent, Rutgers Cooperative Research & Extension of Atlantic County
- 8:10 P. M. Review and Update of Pesticide Record Keeping by Dr. George Hamilton, Specialist in Pest Management, Rutgers Cooperative Research and Extension.
- 8:35 P.M. Wine Grape Research Plans by Dr. Dan Ward, Specialist in Pomology, Rutgers Cooperative Research and Extension
- 8:45. Adjourn

SEE PESTICIDE CREDITS AND DIRECTIONS ON PAGE 5

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