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November-2010 VOL. 15, ISSUE 11

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Attachments:

Sustaining Farming on the Urban Fringe

Report on Biomass Energy for NJ Farmers

NOVEMBER 22 IS THE DEADLINE FOR FRUIT CROP INSURANCE IN NEW JERSEY

NJ producers who grow apples, peaches, blueberries, and cranberries who are interested in crop insurance must contact a crop insurance agent before November 22, 2010. Additionally, current policy holders have until November 22 to make any changes to existing policies. Producers who grow other fruit crops are encouraged to contact the Farm Service Agency about the Noninsured Crop Disaster Assistance Program (NAP), in which a wider variety of fruit crops have a November 20 deadline. They can also ask a crop insurance agent about requesting a written agreement, which provides coverage on crops that are insurable elsewhere but not in the producer's county, such as grapes. A last option to insure fruit is an insurance product called Adjusted Gross Revenue, which insures whole-farm revenue instead of individual crops.

Crop insurance is an important risk management tool and also a producer's gateway to federal crop disaster payments. In order to be eligible for SURE, the new federal crop disaster assistance program, producers must carry crop insurance or NAP on each crop on the farm. The higher levels of coverage the producer purchases, the higher his/her SURE guarantee will be.

Crop insurance protects from most natural disasters, including hail, wind, frost, drought, excess precipitation, and in some cases disease, insects, and wildlife. Yield guarantees are calculated from a producer's historical yield, and payments are issued if the actual yield is significantly less than guaranteed yield.

For those who signed up for crop insurance on their fall crops, acreage reports are due on November 15, 2010!

For more information or a list of New Jersey crop insurance agents, contact the Garden State Crop Insurance Education Team at 1-800-308-2449 or visit http://salem.rutgers.edu/cropinsurance.

Atlantic Coast Agricultural Convention and Trade Show

January 11-13 Taj Mahal Atlantic City, New Jersey

The January meeting information will be out shortly from the Vegetable Growers Association of New Jersey. The program is in the final stages and will be sent to everyone. For those who want to check out the program on line go to www.njveggies.org where it will be posted. There is a membership form on the website which also serves as your payment for the convention.

Check out the October issue of Cultivating Cumberland to review the sessions planned for the meeting. We have tried to put together a program that addresses issue across the agricultural sector in New Jersey. Each year we struggle to put a program together that has topics of interest. What we need are ideas! Is there someone you would like to hear or topics of interest/concern?

Sometimes I wonder if growers even care if there is a convention. Make your voice heard: Tell us your opinion about the convention by contacting your local Directors to the Vegetable Growers Association. Each county has two directors which are appointed by the County Agricultural Board. If you do not know who they are, ask the president of your local board. The Convention will not improve unless members voice their opinions to the directors.

ABCs of Postharvest Handling of Fresh Produce

Lee Young, Penn State Cooperative Extension in Washington County The Vegetable & Small Fruit Gazette, October 2010, Volume 14, No. 10

Produce a Clean, Mature Product: Quality cannot be improved after harvest; it can only be maintained. Nothing done during postharvest stages can improve that quality. So it makes sense to start with the highest quality crop possible at harvest. This means selecting the right varieties, controlling pests during the growing season, managing water and nutrients, and harvesting at the optimal time.

Handle with Tender Loving Care: If produce is injured during harvest, grading or packaging, damage may not be seen until it reaches the retail or consumer levels. Postharvest rots are more prevalent in injured produce. Mechanically damaged fruits and vegetables also lose water more rapidly. Whether you are harvesting and handling cabbages or corn, berries or beans, "treat 'em like eggs!"

Remove the Field Heat: Postharvest cooling lowers the respiration rate of the product, slows water loss, inhibits the growth of molds and bacteria that can cause decay, and reduces the production of the ripening agent ethylene. Cooling methods include room-cooling, forced-air cooling, hydro-cooling and icing.

Sanitize for Food Safety: Using chlorine or other sanitizing agents in wash water and hydro-cooling water helps protect against post-harvest diseases and also helps protect consumers from food-borne illnesses caused by pathogens such as *E. coli* 157:H7, salmonella, chryptosporidium, hepatitis, and cyclospora.

Package Properly: Any packaging should be designed to prevent physical damage to produce and be easy to handle. Depending on the produce item, packaging can aid in retaining water while still allowing gas exchange.

Know Your Produce: Various types of fruits and vegetables have different postharvest needs. Tomatoes, summer squashes, cucumbers and eggplants are very sensitive to chilling injury, and should not be held at the same temperatures as leafy greens and berries. Some items such as onions, garlic and sweet potatoes must be properly cured before storage. Become familiar with the optimum storage temperatures and curing needs of each produce item.

Information Sources:

Wilson, L.G., M.D. Boyette, and E.A. Estes. 1995. "Postharvest Handling and Cooling of Fresh Fruits, Vegetables, and Flowers for Small Farms." NC State University. http://www.ces.ncsu.edu/depts/hort/hil/hil-802.html

Boyette, M.D., L.G. Wilson, E.A. Estes. 1989. "Introduction to Proper Postharvest Cooling and Handling Methods." NC State University. http://www.bae.ncsu.edu/programs/extension/publicat/postharv/ag-414-1/index.html

 $Bachmann, J. \ and \ R. \ Earles. \ 2000. \ "Postharvest \ Handling \ of \ Fruits \ and \ Vegetables". \ ATTRA, \ \underline{http://attra.ncat.org/attra-pub/postharvest.html}$

University of California at Davis Postharvest Technology Research and Information Center, http://postharvest.ucdavis.edu/

North Carolina State University Department of Biological and Agricultural Engineering, Postharvest Processing, http://www.bae.ncsu.edu/programs/extension/posthary/

Effect of Transplant Age on Yield

Elsa Sánchez, Penn State Horticulture
The Vegetable & Small Fruit Gazette, October 2010, Volume 14, No. 10

This past summer at a field day a grower asked me whether it is OK to use transplants that are older than recommended when planting is delayed because fields are too wet. Good question. And, this exact situation has happened to us at the research farm numerous times. What I usually do is make sure the larger transplants get enough water to establish, but what does the literature say? This is what I've found out about how transplant age affects yield of bell peppers, tomatoes and summer squash.

Bell Peppers

In one study (Weston, 1988) transplants were 30, 40, 50 or 60 days old (about 4.3 to 8.5 weeks old) when field planted. At the end of the growing season no statistical differences were found for yield, regardless of the age of the transplant; however, the 60-day-old transplants (about 8.5 weeks old) produced larger early yields that the other transplants.

In another study (McCraw and Greig, 1986) 11- and 8-week-old transplants of 4 cultivars were field planted. The 11-week-old transplants were 12 inches tall with open flowers and small fruit while the 8-week-old transplants were 6 inches tall without flowers or fruit. Flowers and fruit on the 11-week-old transplants were either left on the plant or pinched off. The 8-week-old plants were left alone or the growing tip was pinched off to stimulate growth.

In the first year of the 2 year study, yield was not affected by any of the treatments. In the second year, the 11-week-old transplants on which flowers and fruit had been pinched off produced the highest early yield, but yields from the 8-week-old transplants with the growing tip pinched produced the greatest number of large fruit. The conclusion was that while cultivar played a role, 11-week-old transplants generally produce more, but smaller fruit than 8-week-old transplants, regardless of whether pinching was used.

Tomatoes

A very nice review of tomato transplant age was published by Charles Vavrina and our very own Mike Orzolek (1993). They looked at over 60 years of research on tomato transplant age in their article.

They determined that overall yield really depends on cultivar, environment and the management techniques used. Because of that, transplants of 2 to 13 weeks old can produce similar yields. As far early yields, they were larger with older transplants.

Even though a 2-week-old transplant generally ends up producing comparable season long yields to a 13-week-old transplant, removing a young transplant from its cell can be difficult because the root system is not extensive enough to hold the container soil which is a problem. On the other hand, it costs more to produce an older transplant and older transplants have a higher possibility of exposure to disease and/or insect problems in the greenhouse.

Conclusions were to use a transplant in the 4- to 7-week-old range so that removing the transplant from its cell is not difficult and transplant production costs are not too high. Also, hold onto any extra transplants. They can be used to replace any in the field that have died and their age should not greatly affect yield.

Summer squash

In a study on summer squash (NeSmith, 1993) 2 cultivars of 10- to 30-day-old transplants (about 1.4 to 4.3 weeks old) were field planted. Some differences between cultivar were observed. In general the age of the transplants affected growth and establishment; however, total yields were not different based on transplant age. Early yield was also not affected by transplant age.

The researcher also mentioned the difficulty of removing young transplants from cells. A 21-day-old transplant was recommended because in the event that it could not be planted right away, it could keep for at least about 10 more days without compromising yields.

Overall for these crops

Some themes are evident from these studies:

- 1. Different cultivars respond differently to transplant age.
- 2. Environmental conditions and management practices play a large role in how the plant performs.
- 3. Yields can be comparable over a wide range of transplant ages.
- 4. Young transplants can be difficult to remove from cell packs.
- 5. Older transplants cost more to produce than younger transplants.
- 6. For bell peppers and tomatoes, older transplants result in earlier yields than young ones.

Suggestions for transplant age reflect what is found in the literature. They are generally mid-ranges accounting for the difficulty of removing young transplants from cells and minimizing production costs for producing older transplants. One suggestion is to aim for the lower end of the range. That way, in the event that it is not possible to transplant when planned, plants can still be field planted for several days without yield being affected. The suggested age ranges of transplants for ideal growth are 8-10 weeks for bell pepper, 6-8 weeks for tomato and 2-3 weeks for squash.

Literature cited

McCraw, B.D. and J.K. Greig. 1986. Effect of transplant age and pruning procedure on yield and fruit-set of bell pepper. HortScience 21:430-431.

NeSmith, D.S. 1993. Transplant age influences summer squash growth and yield. HortScience 28:618-620.

Vavrina, C.S. and M.D. Orzolek. 1993. Tomato transplant age: A review. HortTechnology 3:313-316.

Weston, L.A. 1988. Effect of flat cell size, transplant age, and production site on growth and yield of pepper transplants. HortScience 23:709-711.

Open House Reminder

What: Retirement Open House Honoring Helen Elewell

When: Sunday, December 19th, 3:00-6:00 p.m.

Where: Cooperative Extension of Cumberland County

291 Morton Avenue, Millville

Light refreshments will be served from 3:00-6:00 p.m. at the Cumberland County Extension Office on 291 Morton Ave., Millville. Helen will be on hand to reminisce about the last 41 years. Join us as we wish Helen the best in her new venture!

Any questions, please contact Tammy at the Extension Office 451-2800 x1.

New Publications on Organic Agriculture

From the September 2010 eOrganic Newsletter (http://eorganic.info/)
The Vegetable & Small Fruit Gazette, October 2010, Volume 14, No. 10

USDA Publishes New National Organic Program Guide

The first edition of the U.S. Department of Agriculture's handbook for the organic sector was published on Sept. 2, 2010. Prepared by the National Organic Program (NOP), the handbook provides guidance about national organic regulations for those who own, manage, or certify organic operations. It is intended to serve as a resource for the organic sector to help participants comply with federal regulations. It is available online at www.ams.usda.gov/NOPProgramHandbook. Printed copies can be made available upon request to the Standards Division, National Organic Program, 1400 Independence Ave., SW., Room 2646-S, Ag Stop 0268, Washington, D.C. 20250-0268; telephone: (202) 720-3252; fax: (202) 205-7808.

The handbook provides guidance on the allowance of green waste and approval of liquid fertilizers in organic production systems; certification of organic yeast; processed animal manures in organic crop production; reassessed inert ingredients; and the calculation of dry matter intake to verify compliance with the NOP's pasture requirements. It also includes instructions concerning organic certification, such as recordkeeping, steps to certification, and organic certificates; accreditation procedures, such as how to apply to become an accredited certifying agent; international procedures, such as how USDA determines equivalence of foreign organic standards to those of the NOP; compliance and enforcement measures, such as how to handle complaints; and appeals procedures for certified operations or accredited certification agents.

The handbook explains the difference between NOP regulations and guidance/instruction documents and outlines their purpose, legal effect, and the process by which the NOP authorizes, reviews, revises and disseminates them to the public.

New Publication Summarizes Health and Environmental Benefits of Organic Food Production

eOrganic certification group leader Jim Riddle and Bud Markart of the University of Minnesota recently released a 6-page publication entitled What is Organic Food and Why Should I Care? which explains USDA National Organic Program requirements in simplified terms. It also presents footnoted summaries of scientific studies about the health and environmental benefits of organic food and farming. The full publication is available at: http://swroc.cfans.umn.edu/organic/whatisorganicfood.pdf.

NEW JERSEY AGRIBUSINESS ASSOCIATION

2010 Annual Edward A. Platz Memorial Scholarship

2 Awards of \$1,500.00 each are to be awarded at the New Jersey Agribusiness Association Annual Meeting to be held December 2nd. Recipients are encouraged to receive award in person at the meeting to be held in Burlington County, however, this is not a considering factor for the award

Eligibility: The candidate must be enrolled at and in the academic rank of **sophomore, junior or senior** at any accredited 4 year college or university in the United States when receiving the scholarship. The candidate must be a New Jersey resident majoring in an agricultural subject area (ie. Plant Science, Animal Science, Agronomy, Entomology, etc.) or related field. The candidate must also intend to pursue a career in production agriculture.

Procedures and Deadlines: The applicant must complete and submit the following:

- 1) Application form below
- 2) An official copy of transcripts from all colleges attended
- 3) One letter of recommendation (academic or non-academic)
- 4) A 1-2 page essay (typed) stating current goals for education and career

All of the information must be received by Friday, November 19, 2010. Letters of recommendation are to be sent by person writing the recommendation directly to the Scholarship Chairman. Do not send letters of recommendation with the application, transcripts, and essay.

APPLICATION:

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Name:			Academic year (circle):	Sophomore	Junior	Senior
Mjor:		Add	dress:			
Town:	State: Zi	p:Teleph	one(home):	(school):		
High School Attended	:	Town:S		Sta	te:	
Colleges Attended:						
Anticipated Academ	ic Expenses for Curre	nt Year:				
Tuition:	_Room/Board:	Books:	Other:			
Essay describing cu	rrent goals for educat	ion and career (at	tach on separate piece of	paper).		
Mail application, transcripts, and essay to: Richard Grant, Scholarship Chairman New Jersey Agribusiness Association P.O. Box 94, Richwood, NJ 08074						

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NRCS Extends Sign-up Period for Conservation Stewardship Program

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Applications Will Be Accepted Through January 7, 2011

Natural Resources Conservation Service (NRCS) announced the ranking period cut-off date for producer applications in NRCS's Conservation Stewardship Program (CSP) has been extended to January 7, 2011.

"We're extending the deadline for applications to CSP to provide agricultural and forestry producers more time to complete their applications," said New Jersey State Conservationist Tom Drewes. "We also hope the extension will permit even more producers to participate in this program."

CSP is offered in all 50 states, District of Columbia, and the Pacific and Caribbean areas through continuous sign-ups with announced cut-off dates for ranking periods. The program provides many conservation benefits including improvement of water and soil quality, wildlife habitat enhancement and adoption of conservation activities that address the effects of climate change.

All producers are encouraged to apply for CSP. The program, authorized in the 2008 Farm Bill, offers payments to producers who maintain a high level of conservation on their land and who agree to adopt higher levels of stewardship. Eligible lands include cropland, pastureland, and non-industrial forestland. New Jersey currently has contracts with nine producers covering 2,468 acres, the result of applications submitted in 2010.

A CSP self-screening checklist is available to help producers determine if CSP is suitable for their operation. The checklist highlights basic information about CSP eligibility requirements, contract obligations and potential payments. It is available from local NRCS at 1318 S. Main Rd., Vineland, 856-205-1225 or online at: http://www.nrcs.usda.gov/programs/new_csp/csp.html

Recycling Drip Tape

Karen Kritz, NJ Department of Ag

New Jersey farmers are reminded that they can recycle their drip irrigation tape (no mulch film) at the Cumberland County Solid Waste Complex. The Cumberland County Solid Waste Complex will accept source separated drip irrigation tape charging farmers a fee of \$30 per ton. The vehicles used to transport the drip tape to be recycled are not required to be licensed by DEP so long as the material is transported directly to the Cumberland County Solid Waste Complex, 169 Jesse Bridge Road (Located off Route 55, Exit 29 - Sherman Avenue-Route 552) Deerfield, New Jersey. Prior to delivery of the drip tape, all growers must call the Cumberland County Improvement Authority to establish an account with the Authority. Growers using a licensed solid waste hauler must inform the Authority prior to delivery in an effort to maintain proper billing and documentation. Mulch film can not be recycled at this time and the Solid Waste Complex will accept the mulch film and assess the appropriate landfill tipping fee (there is no reduced fee). With questions on drip irrigation tape recycling, contact Dennis DeMatte, Jr. (856) 825-3700 or visit www.ccia-net.com/driptape.html

GREAT INFORMATION FOR EVERY LANDSCAPER AND NURSERYMAN AT SOUTH JERSEY CONFERENCE

"Great information for every Nursery and Landscape Professional" accurately describes the South Jersey Landscape Conference and Nursery Meeting on November 30, 2010. This year's conference will again be held at Masso's Crystal Manor in Glassboro, NJ. A well balanced, all-day program with new ideas for everyone in the plant business is on the agenda.

NJ Secretary of Agriculture, Douglas Fisher, will kick off the program at 9:05 a.m. with an update on activities of the NJDA pertinent to the ornamental plant business. A panel discussion by key members of the nursery, garden center and landscape business will focus on current market trends. The group led by Suzanne Van Sciver will feature nurserymen Ed Overdevest; garden center operator, garden writer Lorraine Keifer; and landscaper Doug Kale. Dominic Mondi from NJNLA will discuss major state and federal regulations and legislation. Marcus VanderVliet of MV Consulting will focus on advising growers and landscapers on "Struggling with Your Cash Flow in Hard Economic Times". Pat Hastings at Rutgers NJAES will share the latest information on Pesticide Safety Regulations in the morning session for both groups.

The afternoon will be broken into two concurrent sessions. One session for the landscapers will kick off with Sal Mangiafico of Rutgers NJAES discussing Stormwater Problems and Management followed by Jeff Charlesworth of Quercus Studio discussing the elements of good landscape design. Dr. Ann Gould will share the latest information on plant air pollution and other environmental problems. A panel discussion of success and failures of snow removal will be moderated by Dominic Mondi with panelists Peter Haran, Jeff Shrock, and Darren Rafferty.

The afternoon nursery session will focus on new problems and solutions in nursery insect management with Dr. Jim Lashomb of Rutgers NJAES. "New Products and Plant Lines" will be presented Gary Neinhaus, Spring Meadow Nursery, Inc. Mr. Ed Kiley from The Perennial Farms will discuss Creative Marketing Programs for Nursery Stock. Laura Gladney from Rutgers Risk Management Education Program will close the nursery session with an update on nursery crop insurance.

At the conclusion of each session, New Jersey Pesticide Applicator Units for Category and CORE will be given where applicable. Certified Nursery and Landscape Professional Credits will be given as well.

Pre-registration is required. Registration forms and the complete program are available at http://gloucester.njaes.rutgers.edu or by calling Jerry Frecon at 856 307-6450 Ext 1 or Dominic Mondi at NJNLA at 800-314-4836.

Calendar of Important Events

Indicates the newly added event since last calendar

NOVEMBER

November 8-10

Southeast Strawberry Expo, Wyndham Hotel, Virginia Beach, Virginia. For more information and to register contact the North Carolina Strawberry Association 919-542-4037, email: info@ncstrawberry.com or visit: www.ncstrawberry.com

November 9-11

New York Produce Show and Conference, Hilton New York, New York. For more information and to register visit: www.nyproduceshow.com/

Cellulosic Supply Chains Short Course, Penn State Hotel and Conference Center, State College, PA. For more information and/or to register, visit: http://www.bioenergy.psu.edu/shortcourses/supplyChain.asp. Additional questions contact Daniel Ciolkosz at 814-863-3484 or email: dec109@psu.edu

November 14-17

Western Growers 85th Annual Convention, The Grand Wailea, Maui, Hawaii. For more information and to register, visit: www.westerngrowers.org

November 15-16

New Jersey Farm Bureau's Annual Convention, Westin Forrestal Village, Princeton, NJ. For more info contact the Farm Bureau at 609-393-7163, email: mail@njfb.org or visit: www.njfb.org

November 17

PMA Food Safety Symposia, Philadelphia, PA. For more information visit: www.pmafoodsafety.com

Forest Stewardship: Vernal Pools-What Are They and Why are they Important in the Woodlot? Rutgers Cooperative Ext. Hunterdon County, 6 Gauntt Pl., Flemington, NJ, 7:00 p.m. For info call 908-788-1339. Pre-registration is required by November 16th.

November 17-18

2010 Pacific NW Veg, Association Conf. & Trade Show, Three Rivers Con. Center, Kennewick, Wash. For info contact Sheri Nolan, PNVA, 509-585-5460; fax 509-585-2671 or visit: www.pnva.org

Biomass Combined Heat and Power Short Course, Four Points Sheraton Hotel and Conference Center, Greensburg, PA. For more information and/or to register contact Daniel Ciolkosz 814-863-3484 or email: dec109@psu.edu, or visit: http://www.bioenergy.psu.edu/shortcourses/chpNov2010.asp

November 29-December 1

25th Annual Southeast Vegetable & Fruit Expo, Embassy Suites, Kingston Planatation Resort, Myrtle Beach, S.C. For information call Cathy Price, 919-334-0099 or email: cathyprice09@yahoo.com

December 2010

December 1-4

National Onion Association Annual Convention, Hilton Long Beach Hotel, Long Beach, California. For information contact NOA, 970-353-5895; fax 970-353-5897 or visit: www.onions-usa.org

December 2

Snow and Ice Removal, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick; 8:30-3:30, \$195 by 11/18; \$225 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

December 5-7

Irrigation Show 2010, Phoenix Convention Center, Phoenix. For information contact the Irrigation Association by email: info@irrigationshow.org or visit: www.irrigationshow.org

December 6-8

Washington State Horticultural Association Annual Meeting, Yakima Convention Center, Yakima, Wash. For more information and to register visit: www.wahort.org

December 6 and 13

Soil and Plant Relationships, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, 9:00-3:30; \$395 by 11/22; \$445 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

December 7-9

Turfgrass Expo, Trump Taj Mahal Casino/Resort, Atlantic City, NJ. For info contact Cece Peabody 973-812-6467 or email: execdirector@njturfgrass.org or Anne Diglio 732-932-9400 x339 or email: diglio@aesop.rutgers.edu

December 7-9

Great Lakes Fruit, Vegetable & Farm Market EXPO, DeVos Place Convention Center, Grand Rapids, Mich. For more information visit: www.glexpo.com

December 8-10

2010 National Allium Research Conference, John Ascuaga Nugget Hotel and Casino, Sparks-Reno, Nev. For information contact 775-721-5599; fax 775-463-5588 or email: wchounet@srsupply.us

December 10

Hazardous Tree Identification, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30; \$245 by 11/26; \$275 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

December 13-14

Repair and Maintenance of Golf Course Irrigation Systems, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ, 9:00-3:30; \$495 by 11/29; \$545 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

☼ December 14

Water Management and Drainage, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, 9:00-4:00; \$195 by 11/30; \$225 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

December 16

Basics of Turfgrass Management, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, 9:00-3:30. \$195 by 12/2; \$225 after. Approved Pesticide Credits: Cat. 3B & PP2-5 credits. For information call 732-932-9271 or email: ocpe@njaes.rutgers.edu

☼ December 16-17

Large Tree Climbing and Rigging, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, 9:00-3:30; \$395 by 12/2; \$445 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

December 17

Turfgrass Establishment, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, 9:00-3:45; \$195 by 12/3; \$225 after. Approved Pesticide Credits: Cat. 3B and PP2-7 credits. For information call 732-932-9271 or email: ocpe@njaes.rutgers.edu

January 2011

January 2-4

Wisconsin Fresh Fruit & Vegetable Conference, Wisconsin Dells, Wisconsin. For information contact the Wisconsin Fresh Market Vegetable Growers Association 920-478-3852 or email: info@wisconsinfreshproduce.org

January 3-4

Kentucky Fruit and Vegetable Conference, Embassy Suites Hotel, Lexington, KY. For information contact John Strang 859-257-5685 or email: jstrang@uky.edu

January 5-7

Illinois Specialty Crops, Agritourism & Organic Conference, Crowne Plaza, Springfield, Ill. For information call Diane Handley 309-557-2107; email: handley@ilfb.org or visit: www.specialtygrowers.org

January 5-7

Potato Expo 2011, Rio All-Suite Hotel, Las Vegas, Nevada. For more information or to register visit: www.potato-expo.com

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anuary 6-9

Southeast Regional Fruit & Vegetable Conference, International Trade and Convention Center, Savannah, Ga. For information contact the Georgia Fruit and Vegetable Growers Association 877-994-3842 or visit: www.gfvga.org

January 7-9

NPC 2011 Annual Meeting, Rio All-Suite Hotel, 3700 W. Flamingo Rd., Las Vegas, Nevada. For more information contact Hollee Alexander 202-682-9456 or email: hollee@nationalpotatocouncil.org

Landscape Plants: Identification, Selection and Application, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 8:30-12:00; \$795 by 12/21; \$845 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

January 7, 14, 21, 28, February 4, 11, 18 and 25

Landscape Design I: The Basics, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 1:00-4:30; \$695 by 12/21; \$745 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

January 8-10

AgConnect Expo, Georgia World Congress Center, Atlanta. For more information and to register visit: www.agconnect.com

Organic Turfgrass Management, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-4:00; \$195 by 12/27; \$225 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

January 11

Pest Management of Ornamental Landscape Plants, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30; \$195 by 12/28; \$225 after. Approved Pesticide credits: 2 Core, 8 in Cat. 2, 3A, 6B, 8C and PP2. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

January 11-13

Atlantic Coast Agricultural Convention & Trade Show, Trump Taj Mahal, Atlantic City, NJ. For information contact Rocco D. DiGerolamo, Jr. 856-797-1686 or visit: www.njveggies.org

January 12-13

Landscape Lighting, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30 (Day 1); 9:00-12:00 (Day 2); \$395 by 12/21; \$445 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

January 13

Managing Diseases of Ornamental Landscape Plants, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ 9:00-4:00; \$195 by 12/30; \$225 after. Approved Pesticide Credits: 10 credits in Cat. 2, 3A, 6B, 8C and PP2.

January 17-19

Ohio Produce Growers & Marketers Association Congress, Kalahari Resort and Convention Center, Sandusky, Ohio. For information contact Michelle Gaston 614-487-1117 or email: mgaston@ofa.org

January 18-20

Indiana Horticultural Congress, Wyndham West, Indianapolis. For information contact Tammy Goodale 765-494-1296 or email: tgoodale@purdue.edu

January 18-20

Integrated Pest Management (IPM), NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ, 9:00-4:00; \$395 by 1/4; \$445 after or \$195 (single day January 18th); Approved Pesticide Credits: 3-Core; 8 in Cat. 2, 3A, 6B, 8C and PP2. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

January 20-21

Upper Midwest Regional Fruit & Vegetable Growers Conference, St. Cloud Civic Center, St Cloud, Minn. For information contact Marilyn Johnson, 763-434-0400 or email: mfvga@msn.com

January 21

Pesticide Safety for the Landscape Contractor, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 8:30-3:45; \$195 by 1/7; \$225 after. Approved Pesticide credits: 8 Core. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu.

January 25-26

Ontario Processing Vegetable Industry Conference, Hilton Hotel & London Convention Centre, London, Ontario. For more information call 519-681-1875, email: opvg@opvg.org or visit: www.opvg.org

☼ January 25-26

Overcoming Tough Sites: Plant and Design Solutions, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:00 (Day 1); 9:00-12:00 (Day2); \$195 by 1/11; \$225 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

January 25-27

Empire State Fruit & Vegetable Expo, Oncenter Convention Center, Syracuse, N.Y. For information contact Jeff and Lindy Kubecka 315-687-5734 or email: nysvga@twcny.rr.com

January 25-27

Washington-Oregon Potato Conference, Three Rivers Convention Center, 7016 W. Grandridge Blvd., Kennewick, Washington. For more information email: info@potatoconference.com or visit: www.potatoconference.com

Park Management and Liability Issues, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30; \$195 by 1/12; \$225 after. For info call 732-932-9271 or email: ocpe@njaes.rtugers.edu

January 27, Feb. 3, 17 and 24

Irrigation Systems: Design and Installation, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ, 9:00-4:00; \$695 by 1/13; \$745 after. For info call 7320-932-9271 or email: ocpe@njaes.rutgers.edu

January 28-29

lowa Fruit & Vegetable Growers & Marketers Conference, Des Moines, Iowa. For information contact Dal Grooms 515-669-7177 or email: Dal.Grooms@gmail.com

January 29-30

NOFA-NJ 21st Annual Winter Conference, Regenerative & Resilient Food Systems: Sowing New Seeds, Princeton University, Princeton, NJ. For information contact Joanna Dillon 908-371-1111.

Growing Ornamental Plants, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30; \$195 by 1/17; \$225 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

February 2011

February 1

Managing Insect Pests of Ornamental Landscape Plants, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30; \$195 by 1/18; \$225 after. Approved Pesticide Credits: 10 in Cat. 2, 3A, 6B, 8C and PP2. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

February 1-3

Mid-Atlantic Fruit & Vegetable Convention, Hershey Lodge and Convention Center, Hershey, Pa. For information visit: www.mafvc.org

February 1-3

National Council of Agricultural Employers 47th Annual Meeting, Hotel Monaco, Washington DC. For information call 202-728-0300 or email: Matt@NCAEOnline.org

February 2

Pesticide Calibration, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-1:00; \$195 by 1/19; \$225 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

February 3

Pest Management of Landscape Turf, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ, 9:00-3:30; \$195 by 1/20; \$225 after. Approved Pesticide credits: 11 in Cat. 3B and PP2. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

February 4-10

NAFDMA's 26th Annual Convention, Baltimore and Philadelphia. For information contact the North American Farmers' Direct Marketing Association 888-884-9270 or visit: www.nafdma.com

Beds & Borders Seminar, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30; \$345 by 1/25; \$395 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

February 8-10

World Ag Expo, Tulare, California. For more information visit: www.worldagexpo.com.

February 8-11

North American Strawberry Symposium, Doubletree Hotel, Tampa Westshore, Tampa, Fla. For information contact Kevin Schooley, North American Strawberry Growers Association by email: info@nasga.org or visit: www.nasga.org

February 14

Managing Turfgrass Insects, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30; \$195 by 1/31; \$225 after. Approved Pesticide credits: 10 in Cat. 3B, 6B, 8C and PP2. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

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Outdoor Entertainment Spaces: Kitchens, Firepits and More, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30; \$245 by 1/31; \$275 after. Optional **free** hands-on training day on March 11, 2011. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

February 24-26

MOSES Organic Farming Conference, La Crosse, Wis. For information call 715-778-5775 or visit: www.mosesorganic.org

Sustainable Landscape Design, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30; \$195 by 2/14; \$225 after. Approved Pesticide credits: 3 in Cat. 3A, 6B, 8C and PP2. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

March 2011

Fence Selection, Installation & Maintenance, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30; \$245 by 2/15; \$275 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

March 6-8

California Small Farm Conference, San Jose, Calif. For information visit: www.californiafarmconference.com

☼ March 7

Introduction to Pruning Techniques, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-12:00; \$195 by 2/21; \$225 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

March 11-12

United States Potato Board Annual Meeting, The Broadmoor Hotel, Colorado Springs, Colorado. For more information contact Robin Vest by email: rvest@uspotatoes.com

☼ March 17

Advanced Pruning Techniques, NJAES Cont. Ed., 102 Ryders Lane, New Brunswick, NJ; 9:00-3:30; \$245 by 3/3; \$275 after. For info call 732-932-9271 or email: ocpe@njaes.rutgers.edu

REGULARLY SCHEDULED MEETINGS

✓ Indicates meeting will be held at RCE of Cumberland County

Pesticide Certification Exam Schedule—Cumberland County 291 Morton Avenue Millville, NJ 08332 (Between Rosenhayn & Carmel)

2010

Nov 17 Dec 15

2011(tentative)

Jan 5 Feb 16 Mar 2

Apr 13 May 4 Jun 2

Sep 21 Oct 28 Nov 9

Dec 14

To Register call 609-984-6614

For directions call 856-451-2800

Cumberland County Agriculture
Development Board
291 Morton Avenue
Millville, NJ 08332
(Between Rosenhayn & Carmel)

2010 Nov 10 Dec 8

Meetings start at 7 p.m.
Call DeAnn at 856-453-2211

Of Agriculture
291 Morton Avenue
Millville, NJ 08332

(Between Rosenhayn & Carmel)

7 pm meetings

	<u>2010</u>	
Nov 18		Dec 16
	<u>2011</u>	
Jan 20	Feb 17	Mar 17
Apr 21	May 19	Sep 15
Oct 20	Nov 17	Dec 15

For info email Jim Laning, Vice-President jklaning@verizon.net

Cumberland County Improvement Authority (CCIA) Pesticide Container Recycling

Cumberland County Solid Waste Complex

169 Jesse's Bridge Rd. (located off Route 55 Exit 29)

Deerfield Township, New Jersey

November 19 - FINAL COLLECTION FOR 2010

2011 collection schedule published when available

9:00 a.m. to 12 Noon

Sincerely,

James R. Johnson Agricultural Agent

Nursery Management Commercial

Internet: jjohnson@njaes.rutgers.edu

Wesley L. Kline, Ph.D. Agricultural Agent

Vegetable & Herb Production

Weeley L. Kline

Internet: wkline@njaes.rutgers.edu

Pesticide User Responsibility: Use pesticides safely and follow instructions on labels. The user is responsible for the proper use of pesticides, residues on crops, storage and disposal, as well as damages caused by drift.

Use of Trade Names: Trade names are used in this publication with the understanding that no discrimination is intended and no endorsement is implied. In some instances the compound may be sold under different trade names, which may vary as to label.

Missing an article, a date or a whole newsletter?

Check out past issues of "Cultivating Cumberland" by visiting http://Cumberland.njaes.rutgers.edu/ and keep up with all the past and up-to-date news!

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Monthly Highlights from Rutgers New Jersey Agricultural Experiment Station

October 2010

Excess Farm Indebtedness is Not a Sustainable Practice

Jack Rabin, Associate Director for Farm Services, Rutgers NJAES

When farms fail, causes usually include financial resources—indebtedness—as well as natural resources farms depend on, like soil. Farm financial resources and natural resources are intimately linked. Both contribute and are required to sustain healthy farms. Excess debt and resource degradation are both implicated in farming failures. Since high indebtedness is the leading cause of failures in our country's historical experiences with agricultural sustainability, let's explore some issues related to debt.

First, recognize farming costs and prices are biased

Market prices of urban fringe farming resources are distorted. On one hand, we know farms provide local food, open space, beauty, ground water recharge, freedom from sprawl, and wildlife habitat. But, these public benefits are never included in the prices we pay when purchasing farm products, or selling farmland. Likewise, policies often ignore and distort economic externalities; hidden long-term costs of farming resource degradation (e.g., sprawl, large lot development, soil erosion, over-grazing, or ground water depletion). We don't factor these either into market prices we pay for farm products. In this manner, all farming resource failures are economic, or rather bad economics. In managing resources for the long-term, a farmer I recently spoke with remarked, "Farmers should not depreciate their soil biological capital, or financial capital."

Farming endeavors don't mix well with high leverage

Debt-to-Equity ratio is a quick measure of financial leverage risk, helping assess a farm's long-term



viability. Farms use owner equity plus borrowing.

Debt-to-equity ratio is simply total farm liabilities divided by farm owners' equity (measured differently than for public companies). Borrowing has multiple benefits when farming returns on debt far exceed costs. Moderate debt enables farmers to use their farming resources efficiently.

What lesson does sustainable farming history teach us about debt?

Table 1 (on page 2) reveals leverage risk changes dramatically with modest changes in debt. Over the long-term, farms with debt exceeding 60-65% of capital-leverage of 1.8:1 or above—are less viable. They are not resilient facing the five resource risks buffeting farms: Production, Economic/Financial, Markets, Human, and Legal. Yes, human management and a predictable legal framework, like property rights, are essential farming resources too. An astute

Continued on page 2



Cooperating Agencias. Pauge 2. The Salae Dimensity of New Jersey, U.S. Debatimen, of Agriculture, and County Doe do of Chesen field objects. Cooperative Extension is until of the Sulgent New Jersey Agricultural Exposition. Nation, it among all propertiestly program problems open.

farmer said, "If you can write a check for it, you don't have a problem. You can't express a sustainable farming vision from an empty checkbook." Leverage ratios guide us in lessons about sustainable farming, about life, and even the fate of nations.

Interestingly, farms are far less viable with leverage non-farm wage earners feel comfortable living with. As shown in Table 1, if you purchased a family home (or farm or farmland) with a 20% down payment and 80% mortgage, you begin with 4:1 leverage. What happens if you pay off just 5% of debts—to 75%? Leverage declines from 4:1 to 3:1, a big move. If your family or farm reduces debts another 15%—from 75% to 60%—you cut leverage in half, at 1.5:1. Conversely, if you began with 10% equity instead of 20%—seemingly not a great difference—you farm with double the leverage risk of 9:1. If you bought a house with 5% down, you began ownership leveraged 19:1!

Table 1. Wide changes in debt-to-equity leverage ratio, in response to small percent changes in farm indebtedness, are a measure of sustainability risk.

% Borrowed debt	% Equity (down payment)	Debt-to-Equity Leverage Ratio	May be found in:
110+ 100 97	-10+ 0 3	Incalculable 32:1	Wall Street & investment banking? Little equity 'skin in the game.' Leverage may work here, not farming!
95	5	19:1	Beginning homeowner or consumer? Hopefully not a beginning farmer.
90	10	9:1	
80	20	4:1	
75	25	3:1	Beginning, part-time, or established farms? Main street enterprises?
65	35	1.8:1	
60	40	1.5:1	
50	50	1:1	
25	75	.33:1	Farms & enterprises on a durable path;
10	90	.11:1	withstanding uncertain risks?
0	100	0	Eschewing <i>all</i> debt not necessarily
U	100		most resource efficient

How many risks can a farm withstand at one time?

A well-managed and financed farm is able to withstand adversity from one, maybe two, risks at once. When two or more risks bear on a farm, only the lowest indebted remain viable. It is unstable stewardship to saddle farms, buffeted by volatile short-term biological and resource uncertainties, with long-term, 'time certain,' financial liabilities. Excessive leverage prevents farms from adapting to changing farming technologies or markets. Like any enterprise, leverage subjects a farm to rising interest payments during periods of rising rates. But, farms are additionally subjected to unpredictable natural events like hail or flood, drought or frost, unpredictable declines in prices from surpluses, sudden loss of markets, and other failures. While leverage is beneficial in predictable enterprises, it is a key association with unsustainable farms.

Implications for starting your commercial urban fringe farm & leasing

An observation from successful low debt-to-equity farms is that a sound path to starting farming includes training yourself for a higher earning non-farming profession, which does not depend on heavily borrowed capital to enter. The future farmer saves a 'grubstake' to begin farming, with equity. Beginning farmer and rancher intern experiences, 'how to farm,' remains an avocation until farming investments begin.

Continued on page 3



Another observation is that due to extraordinarily high urban fringe farmland prices, the future must include policies 'taking farmland equity off the table' as a barrier to entry for a younger new generation of farmers. Farmland sale prices have two components; the farming value plus the speculative value for alternative uses. On the urban fringe, the speculative value of farmland far exceeds the farming value. The next generations of urban fringe farmers, and farmland owners, must design alternative leasing arrangements so beginning farmers can start on rented farmland, with longer-term 10-20 year incentive leases. These leases must not overly proscribe management practices and leave flexibility and freedom for wildlife damage control, constructed investments, and associated needs.



Don't farm-away your urban fringe land equity

Urban fringe farmers experienced decades of rising land values. Some increased their borrowing. Those who did not also raise their sales per acre, marketing efficiency, and repayment ability became known as 'equity farmers.' Their farmland assets, appreciating faster than the farm was losing money, masked underlying problems...for a while. These farms' become threatened when future land use policy changes like down-zoning or regulatory takings reduce their equity value. Indebted urban fringe farms, caught on high value farmland with changing land use policies, hopefully must earn sufficient net farm income. Their exit strategy of selling the farmland for alternative uses is removed without public compensation. Intergenerational transfer of farms is also weakened by excess debt.



Our work benefiting farming sustainability and quality of life in New Jersey depends on gifts from people sharing our Rutgers NJAES vision for a vibrant, healthy, profitable urban fringe farming community. We invite you to join us. Please contact Jack Rabin at 732-932-5000 ext. 610 or rabin@njaes.rutgers.edu.





Report on Biomass Energy for New Jersey Farmers November 18, 2010 8:30am – 1:30pm

Coffee and Danish......8:30 – 8:55 Welcome and Introduction......8:55 – 9:00 Peter Furey, Executive Director, New Jersey Farm Bureau Biomass Energy Research at NJAES......9:00 – 10:25 Dave Specca, Assistant Director for Bioenergy Technologies and Controlled Environment Ag Bill Hlubik, NJAES - Middlesex County Dr. Stacy Bonos, Rutgers, Department of Plant Biology and Pathology Dr. Zane Helsel, Rutgers, NJAES; Extension Specialist in Agricultural Energy Comments from the Honorable Sen. Bob Smith (invited) Experiences with Biomass Dan Arnett, Manager, Ernst Biomass LLC (switchgrass seed producer and grower) **Invited guest from PA-USDA on "Fuels to Schools and Beyond" Program** Jim Laine, Laine Farms Financial Incentives for Biomass Energy......11:45 – 12:00

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NJAES and NJFB Present:



Report on Biomass Energy for NJ Farmers

Date: Thursday, November 18, 2010

Location: Rutgers EcoComplex - Columbus, NJ

Time: 8:30am - 1:30pm

Hear Rutgers research and Extension personnel showcase their current thinking about the potential for biomass crops in New Jersey. While solar and wind renewable energy have received much acclaim, biomass energy may be within the reach of more farmers. Come out and listen to a concentrated presentation on the prospects of how biomass energy might work for you. Stay after the program to meet with the speakers and participating vendors.

Topics include:

- ✓ Report on recent findings for biomass energy on farms
 - ✓ Challenges facing biomass energy on farms
 - ✓ Private sector advances in biomass energy
 - ✓ Experiences with biomass on farms in NJ and PA
 - ✓ Existing and potential funding sources for biomass

Register by contacting New Jersey Farm Bureau: 609-393-7163

Registration required; seating may be limited in the event of a sell-out

Coffee/Danish served at 8:30; lunch provided after the program at noon

(See other side)