



Vermont Vegetable and Berry News – May 6, 2014
compiled by Vern Grubinger, University of Vermont Extension
(802) 257-7967 ext. 303, vernon.grubinger@uvm.edu
www.uvm.edu/vtvegandberry

VEGETABLES AND BERRY FARMS ARE BOOMING IN VERMONT

The 2012 U.S. Census of Agriculture numbers are out and they show strong growth for Vermont's vegetable and berry industry. The number of vegetable farms went from 413 in 2002, to 494 in 2007 to 789 in 2012. Sales from these farms went from 10 to 13 to 21 million dollars over that period. In 2012 there were 475 farms selling \$3.2 million of berries. The number of farms growing blueberries went from 114 in 2002 to 213 in 2007 to 330 in 2012. For strawberries the number of farms increased from 90 to 122 to 145 over ten years. For raspberries the number of farms increased from 80 to 142 to 228 over ten years. There were 263 farms selling \$4.9 million of greenhouse tomatoes in 2012, up from 98 farms selling \$2.9 million in 2007. You can find the Vermont data here:

www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1_Chapter_1_State_Level/Vermont/

Finally, but not from the Census, the number of Vermont Vegetable and Berry Growers Association member farms went from 113 in 2002 to 131 in 2007 to 274 in 2012. As of today there are 289 members. If you haven't joined yet, the fee is \$30 per farm per year; print and mail this form: www.uvm.edu/vtvegandberry/VV&BGA/VVBGA_membership_form.pdf.

VERMONT VEGETABLE AND BERRY WEB SITE GETS A MAKEOVER

The web site has moved into the modern age, with a new format that is now 'mobile-app' friendly so you can view it in your cell phone while driving the tractor (please don't!) In addition it just looks better, and it includes the correct University of Vermont and Extension logos. Special thanks to Deb Heleba for working her web magic to make this happen. I may have messed some links up when uploading new files so if you see any problems please let me know.

www.uvm.edu/vtvegandberry

PRODUCE SAFETY VIDEOS AND GAPS ASSISTANCE

Couldn't make one of the UVM Extension produce safety workshops this spring? Check out some videos that provide basic background on produce safety, Good Agricultural Practices, and ways to reduce the risk of microbial contamination on produce. Harvest New England: Food Handling Safety (filmed on New England farms) discusses the reasons for increased outbreaks associated with fresh produce and the principles and practices to reduce the risk of microbial contamination on fresh produce). GAPs certification and audit process (NC State Extension) takes you on a mock audit. These and other videos are linked on the UVM Center for Sustainable Agriculture's produce safety resources page; scroll down to 'videos':

www.uvm.edu/sustainableagriculture/?Page=whatwedo/producesafety/gapresources.html

If you are interested in developing a produce safety plan for your farm or are interested in getting GAPs certified for the first time, contact Ginger Nickerson at gnickers@uvm.edu, 802-505-8189. Many more resources are available at: www.uvm.edu/sustainableagriculture - click on On-Farm Produce Safety.

MUMMY BERRY MANAGEMENT IN BLUEBERRIES (adapted from UMass Extension)

Now is the time to prepare to manage this disease, which can lead to major losses if ignored. The first symptom is browning along the major leaf veins on newly emerging leaves which then wilt and bend into a crook. Light gray spores develop at the leaf base, and they move by wind, rain and insects to infect flowers and fruit. Infected green berries appear healthy but cutting them open reveals a white fungal growth inside. When infected berries start to ripen, they appear pinkish tan and slightly ridged and feel rubbery. They become faded, shrivel up, and fall to the ground. After the fruit skin has weathered off, the berries look like tiny black pumpkins. The fungus overwinters in these 'mummies' on the ground. In early spring, trumpet-shaped mushroom cups produced on the mummies eject windborne spore that infect young shoots, starting the cycle over. Scout fields beginning at budbreak for symptomatic tissue, which often shows up at the time forsythia blooms.

Management includes pruning bushes to open the canopy to air movement and spray penetration. Cultivate beneath plants in fall and again in early spring to disrupt overwintering inoculum. Apply a 3-4" layer of mulch material over the soil surface in early spring before mushroom cups emerge to create a physical barrier to spore release. Fungicides can be applied between budbreak and tight cluster if scouting and weather monitoring indicate risk of infection. Actinovate AG and Serenade Max are OMRI approved for organic growers. For a list of conventional materials and their efficacy, as well as a chart showing weather conditions that create the highest risk of infection, see this Michigan State extension article:

http://msue.anr.msu.edu/news/managing_mummy_berry_shoot_strike_infections

SEEDCORN MAGGOT (adapted from Univ. of Minnesota)

Seed corn maggot may attack many vegetable crops including beans, corn, turnips, peas, cabbage, and cucurbits. They cause the most damage to emerging seedlings in the spring, especially if germination is retarded due to wet, cold conditions. The adult flies are attracted to rotting organic matter and freshly plowed fields where manure or a cover crop has been incorporated. Plowing as early as possible, seeding and applying floating row cover immediately can reduce damage. Conservation tillage seems to result in lower maggot populations because the organic matter stays on the surface of the soil rather than being incorporated into the soil. Maggot populations are generally higher after a legume is incorporated into the soil than a grass cover crop. Handle seeds carefully to avoid cracking the seed coat; a cracked seed coat provides entry points for maggots and fungus. Delaying planting until the soil warms and dries; sow seeds in shallow well-prepared seedbeds to enhance quick germination, making the seeds less susceptible to infestation.

DRIP IRRIGATION WORKSHOPS – May 22 in NH and June 3 in VT

These workshops will be led by Trevor Hardy of Brookdale Fruit Farm; he has advised many growers on the design and installation of drip irrigation systems. He will cover the basics of drip irrigation components, layout, operation and maintenance. The first event is in cooperation with UNH Extension on May 22, from 4:30-8:00 at Brookdale Fruit Farm in Hollis NH, see: http://extension.unh.edu/events/index.cfm?e=app.event&event_id=37173

The second event is in cooperation with UVM Extension on June 3 from 4-7 pm at Walker Farm, Dummerston VT. Details forthcoming.

FREE TEST KITS FROM VEGETABLE WASH WATER PROJECT

During the 2012 and 2013 growing seasons Lynn Blevins and Vern Grubinger of UVM Extension evaluated the effectiveness of several leafy green wash systems at reducing E. coli in wash water. Testing was done on 4 farms in Vermont. Results show that multiple rinses and/or the use of an organically-approved sanitizer greatly reduce the amount of E. coli in the wash water. See: www.uvm.edu/vtvegandberry/Pubs/WashWaterFactSheet2012-13.pdf and we also made a video: <http://www.youtube.com/watch?v=gNmimUPoFCE>

For the 2014 growing season we have funding from USDA Risk Management Education to help Vermont growers make changes to their wash systems and to evaluate the quality of their wash water. Participating growers will be provided with advice and sent several free water test kits so

they can compare vegetable wash water from a single rinse to multiple rinses and/or sanitized rinses. If you are interested, please fill out this survey. It asks about current practices and what kind of changes you're considering <https://www.surveymonkey.com/s/washwater>.

Don't forget to include your contact information so that we can call or email you to help determine the best sampling plan for your system. Please respond by May 12 at the latest.