

Vermont Vegetable and Berry News – May 7, 2008
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www.uvm.edu/vtvegandberry

TWILIGHT MEETING AT FOOTE BROOK FARM, May 20th, 4-7 pm

Tony Lehouillier has been growing organic vegetables for 13 years at his family farm, located on Route 15, one mile west of the town of Johnson. He currently produces 40 acres of mixed vegetables on 70 acres of land in rotation with cover crops. Some of his main crops are peppers, potatoes, pumpkins, squash, and kale. There are also several greenhouses for production of transplants and greenhouse tomatoes.

A nutrient management plan has been developed for the farm as part of an NRCS EQIP program that Tony is enrolled in. Karen Hills at UVM has helped develop spread sheets to help with nutrient management planning and these will be discussed, as well as the use of organic fertilizers, weed control equipment, and pest control on the farm. Questions? Call Vern Grubinger 802-257-7967 x13 or vernon.grubinger@uvm.edu

ON-FARM BIODIESEL WORKSHOP, June 3

State Line Farm, Shaftsbury VT. Pre-Registration is required.

9:00-Noon: Hands-On Instruction: Make Your Own Biodiesel (limited space).

1:00-4:00 pm: Tour the On-Farm Biodiesel Facility and a Mobile Processor.

As farmers look for ways to cope with high energy costs, some are making their own biodiesel from vegetable oil. Come learn about how to do this, the issues involved, and see two different biodiesel processing systems in operation.

In the morning, Matt Rudolf and Tim Angert from Piedmont Biofuels in N. Carolina will lead a hands-on workshop where participants work in small groups to make their own fuel. Bench-top fuel quality testing and washing contaminants out of the fuel will be demonstrated. The Piedmont Biofuels mobile processor will be processing a batch throughout the day, and participants will be able to observe the production process.

In the afternoon, participants will rotate through four stations: 1) the on-farm biodiesel facility at State Line Farm where John Williamson makes 300-gallon batches of fuel using oil pressed from sunflower and canola grown on the farm; 2) Piedmont's mobile biodiesel processor, a combined heat and power biodiesel production system with continuous flow capability; 3) oil seed crops and their production practices, led by Heather Darby of UVM Extension; and 4) oil seed presses and their operation, led by farmers John Derick and Roger Rainville; two different presses will be on hand. Finally, there will be a group discussion of the economics, safety, and quality issues of on-farm biodiesel production, led by Matt Rudolf.

Registration for the morning session costs \$15 and is limited to 36 people. Mail your contact info with a check to 'UVM Extension' 11 University Way, Brattleboro VT. 05301, so it arrives no later than May 30. The afternoon session is free but please register by calling Vern Grubinger at 802-257-7967 x13 or email: vernon.grubinger@uvm.edu.

ZONE-TILLAGE AT CECARELLI FARM, NORTHFORD CT, June 5, 6-8 pm

Sponsored by the UConn Cooperative Extension System and Northeast SARE

Zone tillage is a promising reduced tillage option for vegetable growers. Travel to the wilds of Connecticut, just 90 minutes south of Vermont, to hear Nelson Cecarelli describe his transition to zone-till. He grows 100 acres of mixed vegetables; after seeing severe soil erosion he adopted strip tillage plus subsoiling in his corn and winter squash. This produces a slightly-raised, narrow seedbed (5-8" wide), that warms faster than conventional fields, but still protects the soil between rows with a surface residue. When combined with use of winter cover crops, the system replaces organic matter lost through years of conventional tillage and improves soil structure.

Nelson made fewer trips across his fields using deep zone-tillage, saved on fuel, and had his best yields ever. He had better plant stands than in bare-ground fields, had clean winter squash and pumpkins, and started to break up the plow pan, reducing risk of diseases like Phytophthora. Nelson and others will describe their experiences with deep zone tillage and demonstrate the system. An equipment dealer will be on hand to describe the hardware.

Directions: Go south on I-91 to Wallingford and take the E. Center Street Exit (for Rt. 150). At the top of the ramp, take a left onto E. Center St. and cross back over the highway. Go 0.6 miles and turn right onto Northford Rd. Go 2.2 miles to the stop sign at Rt 17. Go right on Rt. 17 for 0.2 miles and take your first right onto Old Post Rd. The farm is ½ mile up on the right. Questions? Jude Boucher, jude.boucher@uconn.edu, (860)875-3331.

SIGN UP FOR ON-FARM NEMATODE SURVEY

Bao Yong, a graduate student in the UVM Dept. of Plant and Soil Science at UVM, will be conducting a state-wide survey of plant-parasitic nematodes on lettuce, tomato and snap bean. These three crops, as well as many others, are susceptible to damage by lesion and/or root-knot nematode. However, no state survey on their occurrence or damage threshold has been conducted previously in Vermont. Bao would like to sample field(s) across the state, at the beginning and the end of this growing season. He will come take the samples, and also ask you a few questions about cropping history and pest management. In return, he will send you results of the nematode bioassay of your soil, a root health assessment, and measurements of aggregate stability and active carbon in your soil. If you are willing to participate, contact Bao Yong before May 18 at: ybao@uvm.edu, or 802-656-0690.

ORDER SUPPLIES FOR SWEET CORN PEST MANAGEMENT

Now's the time to order the materials you'll need to monitor sweet corn insects in the coming season. Thanks to the folks at UMass Extension Vegetable Program, you can easily order all the supplies you'll need for the 2008 season to monitor insect flights and caterpillar activity on your own farm. Simply request the 'New England sweet corn scouting kit' from Great Lakes IPM. Soon to be included in the kit is a free 'Sweet Corn Insect Field Management Guide' along with a record keeping book.

Visit www.greatlakesipm.com or call (800) 235-0285 to order the New England sweet corn scouting kit, which contains: 2 traps for European corn borer, 2 traps for corn earworm, 1 trap for fall armyworm, and enough lures for one growing season (16 weeks for ECB, 10 weeks for CEW and FAW). The kit price is \$265. Store the lures in your freezer until use; if kept in the freezer, lures will stay fresh for many years. The brands of traps and lures provided have proven reliable in the New England, and the action thresholds listed in the insect management guide are based on using these trap and lure combinations. Questions: Amanda Brown, UMass Extension (413)577-3976.

BIOLOGICAL CONTROL OF SPIDER MITES IN GREENHOUSES

(Leanne Pundt, Univ. of Connecticut Extension)

Spider mites may be introduced into your greenhouses on incoming plant material, or they may move from weeds onto your crops. If hot spots of mite activity are detected early by regular scouting, biological control may be an option. A fast acting predatory mite that is commercially available is *Phytoseiulus persimilis*. This predatory mite only feeds upon spider mites, and will disperse or starve with no prey. The adult *P. persimilis* is bright red in color, pear shaped, long-legged and slightly larger and more active than spider mites. It is best released when mite populations are first noticed, in hot spots of mite activity. Relative humidity should be greater than 75% and temperatures above 68F for some hours of the day. (At low relative humidity (less than 60%), eggs shrivel and do not hatch.) Spider mite colonies should be reduced in two to three weeks.

The spider mite predator *Neoseiulus californicus* is slower acting than *P. persimilis*, but can survive longer in the absence of prey. It is useful for keeping low spider mite populations under control. In situations where high temperature or relative humidity variations can occur, *N. californicus* may be an option. *N. californicus* is active at temperatures between 46°F to 95°F, 40-80% relative humidity. At low pest densities, it declines less than *P. persimilis*, for *N. californicus* can survive on other mites, thrips, molds and nectar. *N. californicus* can also be introduced preventively and is compatible with *P. persimilis*. Some suppliers offer a mix of different species of predatory mites. Two suppliers in the Northeast are: IPM Labs www.ipmlabs.com (315)497-2063 and Green Methods <http://greenmethods.com/> (603)942-8925.