

## **Vermont Vegetable and Berry News – February 16, 2010**

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<http://www.uvm.edu/vtvegandberry>

### **JOIN THE VERMONT VEGETABLE AND BERRY GROWERS ASSOCIATION**

For 2010, a new \$20 membership level gets you onto the Association's really useful listserv, where plants, machinery, supplies are sought and sold between farmers. Questions can also be asked on the listserve and they get answered by other farmers – from where to get farm insurance, to finding workers, to dealing with food safety. There is no spam, and the traffic level won't tire out your delete button. You get on the listserv with the \$50 membership, too, which also gets you a free book, vegetable and fruit grower magazines, meeting discounts and Agriview, the Agency of Agriculture newsletter. Out of state and commercial members are welcome. Mail your check with contact info to: Doug Johnstone, VVBGA Secretary, P.O. Box 701, Springfield VT 05156. Preferably include this form: <http://www.uvm.edu/vtvegandberry/VV&BGA/Application.html>

### **TAKE THE VERMONT LATE BLIGHT SURVEY**

Ann Hazelrigg wants to know – did you have Late Blight in 2009? On tomato and/or potato, and if you sprayed, how well did it work. Help us plan for the coming season by taking this very short on-line survey: <http://www.surveymonkey.com/s/MY5PKCH>

### **ON FARM ENERGY CONFERENCE MARCH 15-16 MANCHESTER NH**

Join us for an energy conference focused on farm appropriate technologies! This year's conference has been expanded to include 2 concurrent sessions throughout each day. Session one will focus on oilseed and on-farm fuel production with a special emphasis on agronomy and equipment. The second session will focus on energy conservation and renewable energy options for greenhouses. Presenters include many farmers with experience plus related researchers and extension. The keynote speaker Dr. Mike Morris, leader of the farm energy team at the ATTRA National Sustainable Agriculture Information Service will cover farm energy audits and farm appropriate renewable options. This event will be held at the Radisson Hotel in Manchester NH. There will be two concurrent tracks; one focused on greenhouse efficiency and renewable energy applications, and the other on oilseed crops and biodiesel. Greenhouse topics to be covered include: overview of renewable energy for heating greenhouses at Old Athens Farm; greenhouse efficiency at River Berry Farm, waste vegetable oil for heat at Laughing Stock Farm and Simple Gifts Farm, outdoor wood boilers at Cider Hill Farm, geothermal for greenhouse heat, shell corn for heat at Atlas Farm and Rivendale Farm, compost for heat and CO2 in greenhouses, sourcing and handling wood for heat, solar energy systems, and more. Registration is \$25 for one day or \$50 for both, including lunch. Mail to: UVM Extension, 278 S. Main St., St. Albans VT. For full the program brochure and registration information call Heather Darby at 802-525-6501 or see: <http://www.uvm.edu/vtvegandberry/meetings/FarmEnergyConf3-10.html>.

## **CROP INSURANCE FOR DIVERSIFIED FARMS**

By Pam Smith, UVM Extension Crop Insurance Coordinator

The sales closing date for the AGR-Lite crop insurance policies and changes to existing policies is March 15, 2010. This is whole-farm insurance that offers protection against a loss in farm income due to falling prices or unavoidable natural disasters. It is based on a farmer's individual revenue history of crops, animals, and animal products. AGR-Lite may be especially appealing to small, diversified, specialty farms, including greenhouse production and maple syrup. Other previously non insured crops, livestock, and animal products such as milk, wool and honey are insurable, as are organic and direct market products. Record keeping is simple as only one policy is needed to cover the entire farm. Policy costs are heavily subsidized by the USDA. Eligibility requirements include filing a farm report at the beginning of each insurance year detailing intended crops, acreages, and expected yields. In addition, average gross income is established by using a farmer's most recent, continuous 5 year farm tax records, Schedule F 1040, or equivalent forms. You only have to provide copies of your tax forms in the event that you file a claim for a loss. To find an agent near you that sells crop insurance, go to: <http://www3.rma.usda.gov/apps/agents/> and select crop insurance, then your state. (I found 41 agents in Vermont – editor.)

## **FARMERS WANTED TO INTERVIEW ABOUT SAFETY ISSUES**

(Matt Myers, UVM Extension Farm Safety)

I am seeking vegetable and hay farmers to interview in preparation for a farm safety campaign we will be launching in September. I need to hear your thoughts and experiences regarding safety issues on the farm so that the campaign can better meet the needs of farmers. I can meet you at your home or a local meeting place for an hour; a \$25.00 stipend is available. Please call 866-2600-5603 or email [matthew.myers@uvm.edu](mailto:matthew.myers@uvm.edu) to set up a time and place that works for you. Thanks!

## **EXPAND YOUR FALL MARKET WITH UNUSUAL BERRY CROPS**

By Steven McKay and Cathy Heidenreich, Cornell University

There are several specialty small fruit crops that may be added to commercial berry operations in order to expand the fall berry market. These include Aronia, and elderberries, hardy kiwifruit, primocane-fruited blackberries, dayneutral strawberries, and cranberries. Commercial production of these crops is beginning to catch on in NY and you may want to consider adding one or more of these to your small fruit repertoire. They are also an excellent compliment to other fall crops such as apples, pumpkins, squash, and other fall ornamentals. For more information on commercial production of these and other small fruit crops visit: <http://www.fruit.cornell.edu/berry.html>.

Aronia (black chokeberry) is a member of the Rosaceae family, and the cultivars used for fruit production are from the species *Aronia melanocarpa*. 'Viking' and 'Nero' are cultivars that are commonly available in North America; cultivars are self-fertile. Aronia is adaptable to a wide variety of neutral to slightly acid soils. Less fertile soils are desirable to keep plants smaller in size. It is suggested that plants be placed 0.8-1.0 meters apart and mulched with plastic to prevent weed growth. Plastic can be removed after two to three years as plants sucker and fill in the hedgerow. At five to seven years, selective pruning is done to remove the oldest, thickest branches, and keep the center open.

Frost protection is not necessary since plants bloom so late, mid May in New York. Aphids on shoot tips, and leaf-eating beetles are possible pests, but plants are so vigorous that pest damage does not have much of a negative effect. Fire blight is a potential problem, but has not been reported as such. Aronia is mechanically harvested between August and September. Five to ten tons per hectare can be expected in about five years, once plants have matured. Some yield can be expected in the first years, but plants often have weak branches that fall over in the ground.

Elderberry is a member of the family Caprifoliaceae with 13 species native to North America. Commercially, we are interested in *Sambucus nigra* L. ssp. *canadensis* (North American, formerly classified as a separate species), and *Sambucus nigra* L. which is native to Europe. The fruit clusters (cymes) of the *S. nigra* cultivars are larger than those of *S. n. canadensis*. In addition, some of the *S. nigra* cultivars have superior growth habits. Elderberries are only partially self-fruitful, and planting of two or more varieties within 60 feet of one another is beneficial. It is assumed that any pair of cultivars will function as mutual pollenizers. Elderberry prefers a sandy to heavy loam soil with a pH of 5.5-6.5. It is recommended that plants be set out at 0.75 to 1.0 meter spacing, and that every other plant be removed after three to four years. This will improve chances of getting an economic return faster. The 'Samdal' and 'Samyl' cultivars have a nice growth habit where they throw canes from the base every year in good numbers. Six to eight canes are maintained per plant to fruit the following year.

Elderberry flowering takes place in mid June in New York. In the fall after fruiting, the spent canes are removed, and a rotation is maintained. This way, canes are never left for more than a year, and plants are maintained as a five to seven foot bush. Aphids, leaf wrinkling mites, birds, cane borers, mildew, and botrytis blossom blight can be pest problems. Tomato ringspot virus has been a problem in the past with *S. n. canadensis* cultivars, but is less of a problem with *S. nigra*. Elderberry is picked by hand in the US, although mechanical harvesting is a possibility. Twenty tons per acre are produced in Denmark, while four to twelve tons per acre are recorded in New York. The *S. nigra* cultivars are higher yielding, especially when grown as hedge-rowed bushes. Fruits are picked as whole cymes and frozen until ready to use. A premium is paid for stem-less frozen berries. Harvest takes place from August through September. Flowers can also be harvested around June 15 and sold fresh, or processed.

Hardy kiwifruit is another small fruit delicacy ripening in fall (*Actinidia arguta* or *A. kolmitka*). These emerald green, grape sized fruit are not hairy like their Kiwi cousins and may be eaten whole, skin and all. Hardy to zones 3 and 4, they are a sweet and flavorful addition to a fall fruit or cheese plate. Grape growers may find these vine crops an easy addition to their operations as they are best grown on a trellis system. Both male and female vines must be planted together at a ratio of approximately 1 male for every 10 female plants. Hardy kiwifruit are not for the impatient berry grower as they do not produce fruit until years 4 to 6. Once hardy kiwifruit begin fruiting however, they more than compensate for their delay in maturity. Recorded yields indicate a single plant may produce up to 300 lbs of fruit annually. Hardy kiwifruit maintained in cold storage remains in good condition for 2 to 3 months, further extending the marketing window for these luscious, bite-size beauties. With no significant pest problems, they are also well-suited to organic production.

Day neutral strawberry production is an excellent way of extending your strawberry harvest through midsummer into early fall. These berries are uniquely different from their traditional June-bearing cousins as they are insensitive to day-length, flowering and fruiting continuously when temperatures are moderate (June through October).

Day neutrals are typically planted at a density of 20,000 plants/A. They may be grown in annual or perennial production systems. Annual production is perhaps best accomplished on raised beds with plastic mulch. Another annual production system used by some growers is a hydrostacker system. Perennial production may also be done on plastic or in more traditional matted row systems. Perennial plantings are typically fruited for only 2 seasons as pest management problems build up rapidly over time. In both systems, flowers are typically removed for the first 6 weeks after planting; runners are removed as they appear for best production. Suggested varieties include 'Seascape', 'Albion', 'Tribute', and 'Tristar'. Consumer education is needed whether day-neutral production is to be a u-pick operation or they are to be sold retail; consumers do not traditionally expect to pick NYS strawberries after July 4th. Day neutrals enjoy excellent success when grower harvested and sold through farm stands, farmers' markets, grocery chains, restaurants, etc.

Cranberries are another unique berry crop for extending your fall harvest. Soil pH for cranberries should range between 4.0 and 5.0; sulfur should be added to make the adjustment. A planting machine and a weighted roller are used to set unrooted cranberry cuttings at a density of between 1 and 1.5 tons of cuttings to the acre. These cuttings root easily if properly watered; each stem produces up to 200 uprights per square foot. New plantings need to grow three years before they will bear harvestable fruit; full production should be reached in year four. Once established, an acre of well managed cranberries will produce fruit indefinitely, yielding approximately 20,000 lb berries annually.

Overhead irrigation is essential both for good growth and frost protection. Pest management concerns are relatively low; pests of concern to date in NY include black-headed fireworms and weeds. Cranberry acreage in NY is now at approximately 260 acres and includes both bog and upland production. Bog cranberry production is currently centered in Franklin County (60 acres). Heavy clay soils there naturally impede the vertical movement of water, forming an impermeable base layer for the bog, allowing it to be flooded for harvest and for winter protection. Once a site is leveled, 6 to 8 inches of sand are placed on top of the clay base layer, providing sufficient drainage for proper aeration, root development and prevention of Phytophthora root rot. Bog cranberries may be hand harvested for fresh fruit; bogs are flooded for mechanical harvest for processing (frozen fruit for juices, other value-added products). Upland cranberries grow best in areas of the state where snow cover provides consistent winter protection for plants. Current upland production (200 acres) centers in Oswego County, NY. Upland cranberries may be hand-harvested (with rakes) for fresh fruit or machine (dry) harvested and shipped to commercial processors for "sweet and dried" (craisins).

Primocane-fruiting blackberries, unlike florican-fruiting blackberries, bear fruit on canes produced during the current growing season. Newly released primocane varieties include 'Prime Jim' and 'Prime Jan'. Select sites that have good internal water drainage along with an ample supply of high-quality irrigation water. Well drained sandy loam soils with a pH of 6.0 to 6.5 are ideal. When starting from tissue culture plants (2 ft in-row spacing, 10 ft between row spacing) do not expect a commercial primocane crop the planting year. Allow plants to grow un-trained and un-manipulated during the planting year using a simple 2-wire trellis system (wire spacing 1 ft, 5.5 ft) to reduce wind breakage and bending over of vigorous canes. Weed management may be done using pre-emergent herbicides and/or mechanical methods. Row width should be maintained at 18' using cultivation. Soil moisture should be maintained weekly through drip irrigation. Recent research indicates primocane blackberry berry weight may be increased 33% when primocanes are double tipped (soft-tipped at 20" then subsequent laterals soft-tipped at 20" in length).

The same research indicated high tunnel production also increased yield as well as offering a method of season extension (3 weeks) and winter protection for primocane-fruiting blackberries. Double-tipping and protected production (tunnel) gave the most favorable response in growth, time of harvest, and yield overall.