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SHORTS:

Operating Loans for the 2014 Crop Season are Available Now - FSA would like to encourage producers to file loan applications now for operating loans for the 2014 crop season. Eligible applicants may obtain direct loans for up to a maximum indebtedness of $300,000 and a direct operating Microloan for up to a maximum indebtedness of $35,000. Maximum indebtedness for a guaranteed loan is $1,355,000. Annual operating loans are generally repaid within 12 months or when the commodities produced are sold. In general, loan funds may be used for normal operating expenses – other types of loans are also various purposes. Please contact your local FSA office to discuss your credit needs and obtain a loan application or obtain your loan application package on line at this link. The current interest rate on our direct operating loans is 2.125%. If your farm operation is prepared for the 2014 season, please assist us in passing the word along to your friends and neighbors who may need FSA assistance. Questions? Please contact your local FSA office.

Massachusetts Farm to School Project – Since 2004 has sought to increase access to healthy, locally grown food in schools and other institutions for the good of our children, our farms and our communities. We offer trainings and assistance to farms, food distributors, and food service operations at schools, colleges, and other institutions that are interested in establishing sustainable purchasing relationships. For more information please see more at: http://www.massfarmtoschool.org.

New England Vegetable & Fruit Conference – 2013: Earlybird registration expires on Nov. 30th. Go to www.newenglandvfc.org to check out the program and register.
NY Grower Testing Alfalfa Beetle-Busting Biocontrol to Protect Strawberry Crop
Kara Lynn Dunn, Northern NY Ag Development Program Publicist

October 18, 2013. Peru, NY. A low-cost, easy-to-implement on-farm solution for controlling a highly destructive alfalfa pest is now expected to pay off for New York strawberry growers.

The Northern New York Agricultural Development Program (NNYADP) has granted funds to Cornell University entomologist Elson Shields to evaluate the use of alfalfa snout beetle-controlling nematodes to manage two strawberry crop pests.

Strawberry root weevils and black vine weevils attack a wide array of plants from woody ornamentals in the urban landscape to commercial berry crops, including raspberries and blackberries; and strawberries.

“Strawberry root weevil and black vine weevil are very closely related to alfalfa snout beetle, and, like alfalfa snout beetle, these weevils are difficult to control with conventional pesticides, but they are very susceptible to attack by the biocontrol nematodes,” Shields says.

Shields developed a protocol for using native New York nematodes to control alfalfa snout beetle, which had become the single most limiting factor for alfalfa growers in nine New York counties. Similarly, the two weevils are causing economic havoc for strawberry growers.

In the fall of 2013, with assistance from the Shields’ research and extension team, Rulfs Orchards applied biocontrol nematodes to most of a 12-acre strawberry field at the Peru, NY farm business. The untreated areas will serve as a control for evaluating the true effectiveness of the nematode treatment.

Shields estimates weevil damage at the farm was causing $20,000 to $30,000 worth of economic loss due to the loss of fruit and plants and the cost of reestablishing the strawberry planting.

Robert Rulfs says, “Strawberry root weevil and black vine weevil larvae feed on the strawberry plant roots, killing the plants, and they have been causing large scale crop losses. This Northern New York Agricultural Development Program project is addressing a big problem for our farm business.”

To apply the nematodes, a crop sprayer already on the Rulfs’ farm was used, with only a nozzle change, removal of all screens and filters, and a good cleaning of the equipment to reduce any pesticide residue required.

The early September application allowed six to eight weeks for the nematodes to attack the weevil larvae that are active in the strawberry root zone until the soil temperature cools as winter approaches.
In October, the researchers will collect soil samples to be analyzed at the Shields Lab at the Cornell University campus in Ithaca, NY, to confirm the presence of the nematodes. The soil sampling will be repeated in May 2014 to confirm the successful overwintering of the nematodes that will become active to continue their attack on the remaining weevil larvae as the soil warms and to document the nematodes’ impact on the weevil populations. The goal of the treatment protocol is to prevent any further strawberry plant root damage by the weevil larvae that persist through the Northern New York winter.

The nematodes applied to the Rulfs’ strawberry field are two native New York strains of nematode; each strain occupies the soil at different depths. Since the nematodes used are native to the region, they persist after application for many years. Northern New York farmers are reporting the long-term recovery of the alfalfa crops so valuable to the dairy industry and as a cash crop.

The NNYADP-funded project work in the Northern New York strawberry crops has implications for the berry industry elsewhere. Shields says, “Strawberry root weevil and black vine weevil are found nationwide because they impact the potted plant nursery industry and shipments across the U.S.”

Shields expects the 2014 data from the strawberry trial will be significant on the success side. If the data bears him out, his research team is ready to extend the treatment protocol to growers across New York and in the Northeast. Updates will be posted on the NNYADP website at www.nnyagdev.org. The Alfalfa Snout Beetle Control Manual developed by the Shields’ team for use by alfalfa growers is already posted on the NNYADP home page.


Winter Mulch for Strawberries
Sonia Schloemann, UMass Extension

An important fall job in commercial strawberry production is mulching. Strawberries are commonly grown in cold climates, such as the northern US and Canada, but the strawberry plant itself is actually quite vulnerable to cold injury. Research has shown that, without mulch, strawberry crowns can suffer damage at temperatures below 12°F and unprotected strawberry plants can suffer desiccation damage from drying winter winds. A protective mulch can protect strawberries from cold by providing insulation, and from desiccation by providing a barrier against drying winds. Mulches will also protect plants from injury caused by soil heaving, which results from freezing/thawing cycles during the winter. So, a key to consistent quality strawberry production in cold climates is in protecting the plants through mulching. 

Photo: Black Vine Weevil pupa (Otiorhynchus sulcatus) Jim Baker, North Carolina State University, Bugwood.org.

Photo: Left to right: Cornell Cooperative Extension Horticultural Specialist Laura McDermott, Cornell University Entomologist Elson Shields, and Cornell University Research Support Specialist Tony Testa prepare nematodes for application on strawberry fields at Rulfs Orchard. Photo: Amy Ivy, CCE Clinton County
from severe temperatures or temperature swings through
the practice of mulching.

Production systems can also affect the need for mulching. Plants on raised beds, for example, are more vulnerable to cold and desiccation injury than plants in level plantings, especially in locations that are exposed to strong winter winds. Annual production systems, such as fall planted plasticulture, may utilize less hardy or disease susceptible cultivars. As we will see, mulching practices must adapt to these new systems.

**When should the strawberry grower plan to apply mulch?** Research suggests that a good timing guide is to apply mulch after three consecutive days with a soil temperature of 40°F or below. This soil temperature usually occurs after multiple frosts, and when the plants have slowed growth in response to cooler temperatures. It is best to apply mulch before the soil freezes solid. In New England mulches are applied in late November.

**What is a good mulch material?** The traditional mulching material for strawberries in New England is straw. Straws from wheat, rice, oats, or Sudan grass work well. Straws coarser than Sudan grass are not recommended. Straw should be clean, free from weed seed, and contains a minimum of grain seed. Strawberry growers can produce their own straw, often cutting the straw before the grain seed is viable. Store straw for mulching in a dry area. Occasionally, grain seedlings can become a weed problem the following spring; an application of sethoxydim will give good control.

**How much mulch should be applied?** A traditional, level matted row planting will require 2.5 to 3 tons of straw per acre for a 2 to 3 inch deep mulch, or about 300 small bales of average weight. Raised bed plantings and sites with strong wind may require twice this amount for adequate coverage.

**How is the mulch applied?** Smaller plantings may be mulched by hand by shaking out the bales of straw over the row. Larger plantings often use bale choppers to break up the straw bales and distribute the straw over the bed. Choppers are available for both small bales and large round bales.

**How and when is the much removed?** In the spring, when plants begin to show growth under the winter mulch (new green tissue), the mulch should be raked off the rows to allow sunlight to penetrate and reach the foliage. Delaying removal will delay plant growth and flowering and may reduce yield. Mulch can be raked off by hand with ordinary yard rakes in smaller plantings. In larger plantings, various mechanical tools are available ranging from modified hay rakes and tedders to equipment specifically designed for the purpose.
Floating row covers as mulch. These covers are composed of a plastic such as polypropylene, spun-bonded into a fabric that is permeable to light, air, and water. Research and growers' experiences demonstrate that these covers are useful for winter protection of strawberry plantings. While floating row covers are available in several weights, only the heavier weights are recommended for winter protection. At present a widely available weight recommended for winter strawberry protection is 1.25 oz/yd^2 (42 g/m^2). A variety of fabric widths are available, with common widths ranging from 15 feet to 60 feet. This material currently costs about 4 cents per square foot. With proper care, this heavier fabric should last 3-4 seasons. Floating row covers are widely used to protect annual plasticulture plantings.

Row covers are best applied on still days. Be sure to line up sufficient labor to place the row cover. If possible, use wider widths for more efficient application. The row cover edges must be anchored, as must areas where two covers overlap. A variety of methods are used to anchor the edges. Edges may be anchored with posts, rocks, or tube sand. The edges may also be covered with soil.

Once the mulch is in place, the job is not done for the winter. Monitor the planting frequently. If straw has blown off areas, replace at once. Watch the edges of row covers, and adjust anchors if needed. Repair any rips or holes as soon as possible.

Any reference to equipment or product brand names does not constitute endorsement over like products or equipment.

RASPBERRIES/BLACKBERRIES

Disease Snapshot – Phytophthora Root Rot of Raspberry

Kerik Cox, Cornell University

**Disease Name:** Phytophthora root rot of raspberry

**Cause:** *Phytophthora* spp.

**When to watch for it:** Spring to fall

**First line of defense:** Site preparation to avoid standing water and promote soil drainage.

**Summary:** Phytophthora root rot decline in raspberries will begin in the spring as the soil warms and plants begin to put out new growth. Unlike winter injury, which primarily affects the floricanes, both the floricanes and primocanes of plants infected with Phytophthora will become stunted, wilted, and chlorotic due to impaired root function. Below ground, Phytophthora will have destroyed many of the fine/feeder roots, and will eventually colonize the larger primary roots and crown. If one excavates a dying plant and scrapes away the epidermis from the crown and primary roots, they may find that infected roots are a deep chocolate brown, and uninfected roots are healthy and white. Once the infection has progressed to the point where the plant has died, other saprobic fungi will rapidly colonize the dead tissues, confounding diagnosis. Phytophthora is an aquatic organism, and the best means of managing it are avoiding planting in low-lying fields, selecting well-drained sites, and planting on raised beds. Pesticides such as mefenoxam and phosphorous acid-based products can help manage the disease when used in conjunction with the aforementioned cultural practices. *(Source: New York Berry News, Vol. 10, no. 9, Nov. 2011)*
I have heard the question many times, when is the best time to prune blueberries – fall, winter or spring? To answer that question let’s take a look at what is going on with the plant at these different times. I am not saying let’s take a look at your work schedule because as a commercial grower taking care of your plants when it is best for them is the key to optimum production and profits.

Fall, after harvest is completed or other farm activities have wound down may be convenient for you but this is the time of year the plant is making carbohydrates (as I write this we have not had a hard freeze and leaves are still functioning on the bushes) and sending them to the roots and crown for winter storage. Carbohydrates are needed next season to kick start plant growth. Without an adequate amount of stored carbohydrates plant growth may be reduced over the long term. This may also set your bushes up for winter injury if/when we have a real winter.

Winter, after the first of the year, is a good time to see fruit buds and to assess crop load. This is especially important where detail pruning is needed. However, injury to canes from the cold and winds cannot be assessed at that time because the winter season has not been concluded.

Late winter – early spring is the ideal time to prune blueberries. It is easy to see the flower buds, assess any winter injury and adjust pruning practices to compensate. Carbohydrates are stored and ready for the new season. Winter is over and chances of additional weather related injury are minimal. (Other than 2012 when we jumped from fall to spring and sustained some bud damage from frosts.)

A few pruning reminders:

1. Prune annually to constantly renew fruiting canes. As canes age, berry production and size drops. Maintaining a six to seven year age range in canes in a single bush is important for continuous production.

2. Remove the oldest 2-3 canes. It is fairly easy to tell which ones they are – they age like we do – bark begins to peel off, canes are greyer in color, oldest canes are the fatter ones.

3. Prune out canes to the GROUND. New canes will arise from the crown. Allowing new
shoots to be produced on old canes is not renewing the cane. It is still an old cane.

4. Remove dead, scale covered and diseased canes.

5. Select 2-3 of the newest canes and remove the rest of this year’s new canes. Varieties differ in the number of canes they produce each year. You may only have a single new cane or you may have 10-12 to choose from.

6. Keep the center of the bush fairly open to increase sunlight penetration for increased flower bud formation, increased berry size and to reduce potential disease and insect problems.

7. Detail pruning consists of the removal of dead or injured wood at the tips of canes and the removal of thin twiggy crowded growth on canes. Thin twiggy growth will produce small berries at best while sapping energy from the bush. However, with annual cane renewal pruning, detail pruning will be minimal.

Annual balanced pruning is key to continuously producing large high quality berries.

(Source: UConn Crop Talk, Vol. 9, No. 3. Oct. 2013)

GRAPE

Notes on Composting Grape Pomace
Fritz Westover, formerly from Virginia Tech

Wine producers in the state of Virginia have shown increasing interest in producing compost from wine grape pomace, which can then be applied to vineyard soils as a nutrient rich soil conditioner. The notes below have been compiled to provide a quick reference guide for farm wineries initiating small or large scale composting operations.

- pomace is high in N>K>Ca [N-P-K-Ca= 2.0-0.5-2.0-2.0]
- pomace is about 8% seeds, 10% stems, 25% skins, 57% pulp
- in general 1 ton of harvested grapes produces 100lbs of stems and 160 to 240 lbs of pomace (more simply, 3 tons grapes is about equal to 1 ton of total pomace)
- returns ½ to 1/3 of nutrients and OM removed from crop
- 1:1 ratio, pomace:manure bedding (straw + manure) provides 2/3 to 100% annual nutrient needs of vineyard
- pomace alone composts’ slowly – low pH (3.5 to 3.8)
- compost microbes prefer a pH of 6.2 to become active (pH >6 desired)
- lime or other feedstocks must be added to the pomace in order to increase pH
- pomace has C:N ratio appropriate for composting (1:17 to 1:30)
- feedstock added to pomace should also have C:N ratio appropriate for composting (1:20 to 1:30)
- high lignin in seeds (17 to 35%) limits decomposition in unturned piles
- wet piles (>60% moisture) may continue to ferment, produce acetic acid = poor quality (check for off odors in pile or other clues of anaerobic activity)
- 1-5 tons per acre annually is considered maintenance application
- frequent turning of pile (2x’s or more/week) reduces N & OM
- turning pile only once every 2 weeks retains more N & OM
- pile temperature of 130-140°F for 1 to 2 weeks is necessary to kill weed seeds and pathogens
- pile temperature of 110-140°F is typical after the initial 1 to 2 weeks
- minimum of 3 turns of a pile is also required to kill seeds and pathogens
- keep pile temperature under 160°F to reduce risk of combustion and loss of beneficial organisms
- composting is a 6 to 10 month process, dependent upon turning frequency, moisture, and temperature of piles or windrows

(Source: Virginia Extension Grape Resources; 2007)
Protecting Irrigation Equipment from Winter Damage
Lyndon Kelley, Michigan State University Extension

Irrigation risers from underground lines often cost $200-$300. Z pipes, pivot elbows and center pipe can cost the farm more than $600 each and all are common irrigation freeze damage repairs. Often next year’s irrigation startup problems are winter damage that can be prevented. Time spent now will prevent damage and lead to a better start on next year’s irrigation season. Inspection of the system now allows you to make improvements and repairs in the less costly off-season and get irrigation problems out of the way for spring planting season when everyone is busy. Steel pipes up in the air may freeze solid days before we think of freezing weather on the ground.

**Park pivots in a safe location** - When choosing a location to park the system for the winter, consider the three most common potential sources of winter damage: Wire theft is less likely in a visible but inaccessible area of the field; Wind damage is less likely if pivot points into or away from the wind direction rather than perpendicular to wind direction; and squirrels and other rodent damage to span wire is rare when pivots are a few hundred feet from the tree line.

**Get rid of the brush and branches near equipment** - Squirrel and chipmunk damage to span-wire and gasket can be minimize by removing limbs near equipment parked for the winter preventing animals jumping between trees and the structure. Trimming trees and removing brush near control panels and disconnect boxes reduces the chance of rodent damage. Removing woodchucks from the vicinity of pivot and pumping plant pads or electrical box can also help prevent damage.

**Drain pivots and solid set systems** - Most of the currently designed pivots have automatic frost drains that drain the main overhead pipe. Solid set systems may have automatic drains but you should always inspect that water has been eliminated from the pump to the furthest ends of the system. Plugged automatic frost drains can lead to major repairs if not caught in a fall inspection. Rock traps need to be cleaned and drained, some designs may accumulate water condensing in the pipe over the winter leading to freeze cracks in rock traps that are emptied and put back in place. To avoid this issue many producers install a piece of hardware cloth held in place by the lock ring to allow condensate to leave the system. Pivot supply lines, end gun supply and hydro control hoses are often installed to allow drainage but the hose may sag and trap water which can lead to damage. Remember to cap all large openings into the system to prevent bird nesting.

**Lower water levels in underground piping systems** - Few underground piping systems require complete draining to protect from freezing in most of Michigan and Indiana. Lowering the water within the system so that the water is two to three feet below soil surface will prevent freeze damage in most situations. Water can be pushed out of the system by compressed air pumps available from most irrigation dealers or may be pumped from the underground pipe system using a common fertilizer style transfer pump. As a Michigan State University Extension and Purdue Extension irrigation educator, I have found an easy way to do this is by using a gas powered transfer pump at the lowest access point in the underground piping system. A one and one forth inch tube slid down inside a riser or two inch access in the manifold where air relief is, can be piped to the intake of the pump.

**Drain travelers and big guns** - Travelers and stationary big guns often have portions of their system that hold water. Drain and roll-up hoses, unhook and drain ends couplers and drain water drive piston and motors/impeller drive systems that may be damaged by freezing.

**Trickle and drip lines and tape** - Trickle and drip lines and tape are designed to be self-draining but manifolds and supply systems need attention to make sure no water pockets remain to freeze. Winter rodent damage can turn usable drip tape and trickle line into junk rapidly. Lines that are to be moved for next year are best stored in the barn. Lines over wintering in the field stand less rodent damage if not covered by plastic, plant material or mulch.

**Pump down or drain underground pipe lines** - Most underground pipe lines are buried deep enough to prevent freeze damage but they often require pumping or draining enough water from them to empty the upper portion of Z-
Drain the pumping plant - Drain pumps and manifolds to the lowest point they can hold water. Replace brass drain plugs if damaged. Good designed pumping installations will be easy to drain without striping drain plug threads or the need for air purging. Inspect gauges, supply and control wires for needed repairs. Service the engine with attention to engine oil, bearing and seal lubrication. Check the cooling system for adequate anti-freeze level and concentration. Drain the fuel tank to reduce water accumulation in fuel tank and potential theft.

Inspect and lock down electrical power supplies - Inspect each electrical box in the system from power supply to the last pivot or disconnect on system line for damage and holes that may be accessible for rodents. Sealing small holes helps keep rodent damage to a minimum. Both snakes and mice have even been known to crawl into electrical boxes and control panels through small hole or underground conduit with unprotected ends resulting in electrical fire and damage. Locking down electrical power supplies helps prevent vandals from turning wells and pivots on midwinter and minimizes potential electrical system damage. Now is an excellent time to inspect grounding, system test resistance and make repairs.

Create a winter work list for each system - While it is fresh in your memory list the improvements and repairs needed for each system. As you are inspecting and winterizing your system, add any other areas needing attention to the list of repairs needed. Assign the repair to someone whether it is your people or the local irrigation dealer repair crew, the sooner it gets into the plan the better and more efficient it can be. (Source: Michigan Fruit Crop Team News. Nov. 15, 2013)

Management Considerations for Sites where Monitoring has Revealed High Vole Populations
Rob Crassweller, Penn State

In the Mid-Atlantic region we have two major types of voles—pine (Microtus pinetorum) and meadow (Mictrotus pennsylvanicsus). The pine vole is smaller, usually 4 to 6 inches long, while the meadow vole is 5½ to 7½ inches in length. Their habitat is slightly different: meadow voles tend to spend their time above ground building surface runways in long grass, while the pine voles tend to burrow down in subterranean runs. Voles are active both day and night and do not have a hibernation period.

Damage by the two species is slightly different. Pine voles feed on roots below the surface (see photo) while meadow voles tend to feed around the base of the tree above the surface.

Do not confuse meadow vole damage with that caused by rabbits. Rabbit damage will extend up the trunk and typically shows more gnawing injury. An interesting note for orchards located in more northern areas where snow may persist for several weeks: you may see damage up into the tree when meadow voles can run across the snow surface.

Monitoring Vole Activity - The first step in any vole control program is to monitor the orchard to determine the extent of the population present. Monitoring consists of providing some “sheltered” locations in the orchard such as arched roofing shingles, tires cut in half, “PVC T-tubes”, used aluminum soda cans or anything that can provide temporary shelter for the voles. Monitoring stations are best concentrated close to where orchard blocks adjoin woods or open fields but should also be scattered throughout large blocks. The apple index method is the most common method of monitoring. First place the “shelters” in the orchard, preferably where you may see or suspect vole runs. Make a grid map of the locations of the stations. Leave them in place for 3 to 5 days before baiting them. To bait them cut 0.5 inch square chunks of
apples and place them under the shelter. Be sure to map the orchard as to the locations of the bait stations. Wait 24 hours and return to the bait stations and examine the apples for evidence of chewing on the apple or its absence. Marking the grid map you created with a + or – will give you a visual representation of the spread of the voles. Wherever there is a concentration of the vole population will be the area that you need to concentrate control measures.

Another method of determining the population is to set traps and monitor them. (Note: trapping is not an efficient control method in large orchards). For meadow voles, place the traps in runways, flush with the ground and perpendicular to the runway. Place the trigger end in the runway. For pine voles, locate a tunnel and place the trap within the tunnel and perpendicular to it. Put a cover such as a bent roofing shingle or box over the traps. This helps protect most non-target animals and makes the voles more likely to enter the site.

**Cultural Management** - Cultural controls can be utilized to reduce populations and potential damage. The first line of defense is to mow the orchard row middles closely to reduce potential cover for the voles. A closely mown sod will expose the voles to attacks by predatory birds such as hawks and owls. Providing good nesting places for predatory birds can also help control the population. However, if you go this route, you probably should not be using poison baiting techniques.

Tree guards are another effective means to prevent damage to the trees. Wire mesh, perforated wire guards, and plastic wraps placed around the base of the tree can be effective deterrents to meadow vole damage. However, for the tree guards to be effective for pine voles they need to be buried several inches below the surface.

Habitat modification should also be a primary mechanism to control potential damage. Voles can live in dense populations in ditch banks, rights-of-way and water ways. Closely mowing adjacent fields and burning down weeds will help prevent voles from commuting between those areas and the orchard.

Repellents on a small scale may serve to reduce damage. Materials that contain thiram or capsaicin are available that can be applied directly to the trunks of trees. Protection is relatively short term. Due to changing chemical regulations, before applying a material containing thiram make sure it is labeled for use in fruit trees.

**Indirect Chemical Management** - As mention above in the cultural management section, voles dislike being exposed to predators and will tend to stay in tall vegetation. A vegetation free herbicide strip underneath the trees can help to reduce potential damage of meadow voles. This species will tend to shy away from feeding on trees where they are exposed to view and attack by predators. Fall application of herbicides will only help in your weed management program for next spring but also help reduce vole damage.

**Chemical Management** - The application of toxic baits is probably the quickest and most effective method of reducing troublesome populations. These baits are applied in the fall after harvest preferably before the ground freezes and may need a re-application in the spring if monitoring shows a resurgence of the populations. Used in conjunction with habitat modification and cultural controls, rodenticides are an important part of vole control. Two types of rodenticides are often used—one to provide a quick reduction in numbers (high toxicity and fast acting, a single-dose toxicant) and the other to provide protection throughout the winter (one of the anticoagulant baits). ZP Rodent Bait AG is a registered single dose toxicant and Ramik Brown is an anticoagulant. Both are currently registered for use in Pennsylvania orchards. To determine if a specific rodenticide can still be used, read the label very carefully. The label will provide information on rates and applications, and list legal uses for the product. Note any restrictions placed on the product. Most rodenticides may be used only during the dormant season when trees are not bearing fruit, and most are labeled as a restricted-use pesticides and can only be purchased and used by a certified pesticide applicator. If the label does not specifically state that it is legal for use in orchards, you can contact the Department of Agriculture, Division of Agronomic Services to find out if the product is registered for use in Pennsylvania orchards. Acute rodenticides, zinc phosphide materials, are fast acting poisons usually only requiring a single feeding. In contrast, the anticoagulant materials require multiple feedings over several days. One strategy is to apply an acute rodenticide to knock down the population followed by an anticoagulant for protection through the winter. The anticoagulants are more toxic to voles than to birds and other mammals and thus pose less of a risk to non-target wildlife. Even with this fact every effort should be made to protect non-target wildlife. Zinc phosphide materials are equally toxic to all vertebrates and should be used responsibly to minimize non-target wildlife. The best use of these materials is through the use of bait stations. To minimize feeding by non-target bird species use only the pelletized formulations and not the grain based formulations. Acute rodenticides can be applied at a rate of 2 lb/A when hand placing in runways or bait stations. The broadcast rate for these materials is 10 lb/A. Never make applications to bare ground. Anti-coagulant rodenticides should be applied at a rate of 10 lb/A when hand placing and 15 to 20 lb/A for broadcast applications. Pine voles are not as active above ground, so bait should be placed directly in runways and burrow openings at two to four locations under infested trees. If runways and burrows cannot be found, roofing shingles, boards, or other objects placed on the ground at each
placement site provide voles with shelters where they may build tunnels or nests. Place bait under these shelters after they have been in place for several weeks. For pine voles, baits must be placed in the underground runways. Timing influences the success of control programs. Wet weather reduces the effectiveness of rodenticides, so apply baits when weather is likely to be fair and dry for at least 3 days. Baits are most effective when naturally occurring foods, such as green vegetation and fruit drops, are limited. Late fall is an important time to bait voles because it serves to reduce populations before the onset of winter, when vole damage is most severe and snow cover precludes rodenticide use. When winter survival is high, baits should be applied in the spring before the breeding season and before renewed growth of ground cover diminishes bait acceptance. (Source: Penn State Fruit Times, Nov. 2013)

USDA Announces Notice of Funding Availability for Value-Added Producer Grants

Grants extend production season and income opportunities for America’s Farmers

USDA Press Release

WASHINGTON, Nov. 25, 2013 – Agriculture Secretary Tom Vilsack today announced the availability of nearly $10.5 million in U.S. Department of Agriculture (USDA) grants to help agricultural producers enter into value-added activities designed to give them a competitive business edge.

"U.S. agriculture is connected to one in 12 American jobs, and value-added products from homegrown sources are one important way that agriculture generates economic growth," Vilsack said. "Supporting producers and businesses to create value-added products strengthens rural economies, helps fuel innovation, and strengthens marketing opportunities for producers – especially at the local and regional level."

The funding is being made available through the Value-Added Producer Grant program. Grants are available to help agricultural producers create new products, expand marketing opportunities, support further processing of existing products or goods, or to develop specialty and niche products. They may be used for working capital and planning activities. The maximum working capital grant is $200,000; the maximum planning grant is $75,000.

Eligible applicants include independent producers, farmer and rancher cooperatives, and agricultural producer groups. Funding priority is given to socially disadvantaged and beginning farmers or ranchers, and to small- to medium-size family farms, or farmer/rancher cooperatives.

The Value-Added Producer Grant program is one of many USDA programs that support the development of strong local and regional food systems as part of the Know Your Farmer, Know Your Food initiative. Launched in 2009, the initiative strengthens ties between agricultural producers and their local communities, helping meet growing consumer demand and creating opportunities for small business development. Initiatives like this create new income opportunities for farmers, generate wealth that will stay in rural communities, and increase access to healthy, local foods in underserved communities. All of these actions boost local economies.

Today's announcement comes as more than 1,400 communities nationwide gear up to support Small Business Saturday, a day dedicated to championing small businesses on one of the busiest shopping weekends of the year. This year's Small Business Saturday is Nov. 30.

Rural Development is encouraging applications from Tribal organizations as well as applications that support regional food hubs. Applications supporting value-added activities related to bio-based products are also encouraged.

Since 2009, the Obama Administration has provided agricultural producers with almost $80 million in Value Added Producer Grant assistance that has supported more than 600 innovative, value-added projects.

In Fiscal year 2012, for example, the Mississippi Delta Southern Rural Black Women in Agriculture Association received a $44,000 working capital grant to provide a variety of services in the Delta region. The cooperative delivered oven-bakeable sweet potato fries to local Head Start programs and schools; cut, washed and bagged greens for local restaurants; and delivered sustainably grown and heirloom sweet potatoes to local and specialty grocers regionally and nationwide. The sweet potatoes are processed at the vegetable facility at Alcorn State University, in Lorman, Miss.

The project is supplying emerging markets with locally grown produce to enhance production, marketing and distribution infrastructure among women and minority landowners in persistently poor rural communities.

Additional examples of how VAPGs assist local and regional food producers are available on the USDA Know Your Farmer, Know Your Food Compass, which is searchable by zip code and key word.
Soils, crops, pests and marketing on Massachusetts Farms. No product endorsements of products mentioned in this newsletter over like products are intended or implied. UMass Extension is an equal opportunity provider and employer, United States Department of Agriculture cooperating. Contact your local Extension Massachusetts Berry Notes is a publication of the UMass Extension Fruit Program, which provides research based information on integrated management of soils, crops, pests and marketing on Massachusetts Farms. No product endorsements of products mentioned in this newsletter over like products are intended or implied. UMass Extension is an equal opportunity provider and employer, United States Department of Agriculture cooperating. Contact your local Extension office for information on disability accommodations or the UMass Extension Director if you have complaints related to discrimination, 413-545-4800.

Secretary Vilsack said that today's announcement is another reminder of the importance of USDA programs such as the Value-Added Producer Grant program for rural America. A comprehensive new Food, Farm and Jobs Bill would further expand the rural economy, Vilsack added, saying that's just one reason why Congress must get a comprehensive Bill done as soon as possible.

President Obama's plan for rural America has brought about historic investment and resulted in stronger rural communities. Under the President's leadership, these investments in housing, community facilities, businesses and infrastructure have empowered rural America to continue leading the way – strengthening America's economy, small towns and rural communities. USDA's investments in rural communities support the rural way of life that stands as the backbone of our American values.

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**UPCOMING MEETINGS:**

**December 3, 2013** – **CT Pomological Society Annual Meeting.** 8:00AM – 4:00PM. The Gallery Restaurant, 141 New London Turnpike, Glastonbury, CT. Pesticide License recertification credits awarded. For more information see: http://ipm.uconn.edu/root/.

**December 3-6, 2013** – **North American Strawberry Grower’s Conference.** Sheraton Imperial Hotel and Convention Center, Durham, NC. For more information and to register, go to: http://www.ncstrawberry.com/docs/RegistrationBrochure.pdf.

**December 3-5, 2013** – **Introduction to Hazard Analysis of Critical Control Points (HACCP).** UMass Amherst Campus Center, Amherst, MA. This course covers the fundamentals of HACCP (Hazard Analysis Critical Control Point) taught by certified International HACCP Alliance instructors. This particular course will have an emphasis on fresh-cut produce, beverages (including juice and cider), baked goods, and dairy products. The concepts will be reinforced by breakout group activities in which participants will have the opportunity to prepare a HACCP plan. All participants will receive an International HACCP Alliance certificate issued through the University of Massachusetts upon successful completion of the course. For cost and registration information, go to: http://ag.umass.edu/events/introduction-hazard-analysis-critical-control-points-haccp.

**December 9, 2013** – **2013 Chautauqua County Small Fruit Meeting.** 1:00PM – 3:30 PM. CLEREL, 6592 West Main Rd., Portland NY. For more information see: https://chautauquacce.shutterfly.com or call 716-664-9502.


**December 17-19, 2013** – **New England Vegetable & Fruit Conference.** Radisson Hotel, 700 Elm St., Manchester NH. For the full program and registration information, go to: http://www.newenglandvfc.org.

**January 21-22, 2014** – **Michigan Wine Grape Vineyard Establishment Conference.** To be held at 3 locations; Benton Harbor - Michigan State University Research and Extension Center, Traverse City - Northwest Michigan Horticultural Research Center, Novi - Tollgate Education Farm Center. $115 Preregistration fee; No walk-in Registrations accepted. For more information go to http://events.anr.msu.edu/event.cfm?folder=winegrape14

**January 22-23, 2014** – **2014 Empire State Producers Expo Berry Sessions.** Oncenter Convention Center in Syracuse, NY. For more information see: http://nysvga.org/expo/information/.


**February 15, 2014** – **NOFA- VT Winter Conference.** Burlington VT. More info to come.

**June 18-25, 2015** – **11th International Rubus & Ribes Symposium**, in Asheville, NC, June 21-25, with preconference tour to farms and research sites June 18-20. More info to come. If you are interested in being a sponsor of this event, contact gina_fernandez@ncsu.edu.