



NEW HAMPSHIRE VEGETABLE, BERRY & TREE FRUIT NEWSLETTER

Volume 3:4

April 2007

- SARE supports farmer-driven research on New Hampshire farms
- Services to support seasonal or temporary farm workers or their children
- OP Insecticides Update – EPA final decision on phosmet, AZM
- Upcoming Events & Meetings



SARE SUPPORTS FARMER-DRIVEN RESEARCH ON NEW HAMPSHIRE FARMS

The Northeast Region SARE (Sustainable Agriculture Research and Education) program is a USDA-funded competitive grants program that aims to promote sustainable agriculture throughout the Northeast region, which includes all of the New England states plus Delaware, Maryland, New Jersey, New York, Pennsylvania, Rhode Island, West Virginia, and Washington, D.C.

Each year, SARE funds research that addresses sustainable agriculture including pest management, cultural practices, soil fertility, adding value, and increasing farm profitability. Different grant programs are available for farmers, agricultural professionals and researchers.

Farmer Grants are awarded for testing new crops and practices through on-site experiments and share the results with other farmers. Grants average about \$5,200, and are capped at \$10,000. Farmer Grant applications are due in December.

Partnership Grants are awarded for on-farm research and demonstration projects developed by agricultural professions who work directly with farmers, and are capped at \$10,000. Partnership Grant applications are due in November.

Professional Development Grants allow experienced agricultural educators to develop opportunities for extension, NRCS, and other agricultural professionals to learn about sustainable concepts and practices.

Sustainable Community Grants are awarded to organizations aiming to reconnect rural revitalization and farming.

Research and Education Grants are awarded to scientists, producers and others, generally for larger research projects. For 2008, agroecosystems research grants are also available.

This year, four New Hampshire farmers were successful in getting SARE farmer grants to test their ideas in on-farm experiments. Congratulations!

Interseeding legume and grain crops with high oil content sunflower FNE07-602, \$8,633

Dorn Cox, Lee NH

Northeast farmers have found that they can successfully grow high-oil-content sunflowers for use as animal feed and for biodiesel production, but late-season weed control is an issue, as are the long drying season required and the inability to seed a winter cover crop, which leaves the soil vulnerable. This project will explore options of interseeding small grains and legumes that will smother weeds and provide a winter cover. Outreach will be through twilight meetings, articles, and possibly, television coverage.

Finishing lambs on grain and brassicas in the Northeast: an economic study of three systems FNE07-606, \$7,501

Bill Foshier, Westmoreland NH

One of the main challenges to producing prime finished lamb in New England is the expense of the grain needed to finish them. The project manager will look at whether it is cost-effective to finish lambs by grazing them on kale or turnips as opposed to keeping them on pasture and then moving them to a gradual full feed ration of grains. Outreach will be through articles, a web site, and a field day.

Potassium nutrition for greenhouse tomatoes in the Northeast FNE07-616, \$7,238

Jock McKenzie, Milton NH

The potassium nutrition requirements of tomatoes has been thoroughly studied for hydroponic systems and field grown tomato systems, but little work has been examined potassium nutrition for ground production in greenhouses or tunnels

where leaching does not occur. This project will compare timing and quantities of potassium applications to determine the levels needed to produce high-quality fruits over a long production season while minimizing unnecessary fertilizer applications. Outreach will be through a twilight meeting, presentations, and written articles.

Organic sweet potato fertilizer trial FNE07-621, \$2,806

James Warren, Westmoreland NH

Sweet potatoes have market potential for diversified vegetable growers in the Northeast, but production recommendations for this crop have yet not been developed for the region. A search through recommendations from other parts of the country have yielded contrasting recommendations. The project manager will try to determine the appropriate level of added nitrogen needed to produce organically grown, high-quality, marketable sweet potatoes. Outreach will be through workshops and publications.

If you have an idea in sustainable agriculture that you would like to test, consider applying for SARE funds next year! Farmer grants and Extension-Grower partnership grants are typically due in the fall – November and December. For more information, contact your local county extension educator, or see <http://www.uvm.edu/~nesare/index.html>.

SERVICES TO SUPPORT SEASONAL OR TEMPORARY FARM WORKERS OR THEIR CHILDREN

The New Hampshire Migrant Education Program (NHMEP) provides free education and support services for students (ages 21 and under) that relocate in order for themselves or their parents to obtain seasonal or temporary employment in agriculture and fishing. This could include dairy, vegetable, fruit and sod farms, nurseries, lumbering operations, and food processing. The NHMEP works with these families to provide services they need which may include free books, tutoring, homework support, English as a Second Language classes, summer programs, and referrals to local resources. We offer services that are flexible and planned around the workers' schedule.

We are continually working to identify families who are eligible for our program. Children of agricultural workers and adolescents or young adults who are working independently are among the neediest and least visible of New Hampshire's population groups. Because of their mobile lifestyle and isolation, it is easy for these students to fall behind in school, with language skills, and socially.

We need your help! If you hire seasonal or temporary help or have workers that have been with you for three years or less, please contact us so that we can conduct a confidential interview and can help them or their children! Contact us at: the Department of Education (603)271-2273 or 1-800-863-9352; Barbara Patch at Walhowdon Farm/Orchard (603)448-4130 or Amy Escoto at (603)391-8720 (in Spanish or English).

Amy Escoto
Program Specialist, NH Migrant Education Program
101 Pleasant Street, Concord, NH 03301
603-271-2273 (Office), 603-391-8720 (Cell), 603-271-6195 (Fax)

EPA FINAL DECISION ON PHOSMET (IMIDAN) AND AZINPHOS-METHYL (GUTHION)

Azinphos-Methyl (AZM, trade name Guthion) and Phosmet (trade name Imidan) are organophosphate (OP) insecticides currently used on a variety of orchard fruits, berries, nuts, and other crops. In NH, phosmet is used primarily for controlling apple and blueberry maggots. AZM is not widely used by NH fruit growers, because lower risk alternatives exist. In 2001, 1261 lbs a.i. of AZM and 6610 lbs a.i. of phosmet were applied in New Hampshire.

In 2001, the EPA concluded that many uses of these materials should be phased out due to potential human health and environmental risks. The remaining uses were re-reviewed in 2006, and in June 2006, the EPA issued proposed further label changes. In the June 2006 proposal, EPA proposed that uses in Pick-Your-Own (PYO) operations be prohibited. This change could have been significant for NH fruit growers because many of our operations are PYO. After reviewing submitted comments and conducting a PYO risk assessment using exposure studies, the EPA determined that PYO may be retained for some uses. After obtaining input from farmers and other stakeholders, the EPA revised and issued its final decision document on November 16, 2006.

Below is a summary of the final decision for both materials. Follow the current label. Trade names are used for identification only; no product endorsement is implied, nor is discrimination against similar materials. The full text of the EPA final decisions are available online at:

AZM: http://www.epa.gov/oppsrrd1/op/azm/azm_remaining_uses.pdf

Phosmet: http://www.epa.gov/pesticides/op/phosmet/phosmet_decision.pdf

AZM/Guthion Final Decision, 11/16/06

All uses will be terminated in 2012. All uses have modified spray buffer zones. The following changes are effective immediately:

| | | | | |
|--|-------------|------------------|-------------|-------------------------|
| Apple | <u>2007</u> | <u>2008-2009</u> | <u>2010</u> | <u>2011-2012</u> |
| Seasonal max (lb ai/Ac) | 4.0 | 3.0 | 2.0 | 1.5 |
| No aerial applications | | | | |
| For PYO operations, PHI depends on rate: | PHI: | 44 days | Rate: | 1.01-1.5 lb a.i./acre |
| | | 39 days | | 0.61-1.0 lb a.i./acre |
| | | 33 days | | up to 0.60 lb a.i./acre |

Blueberry

Permitted only in: AL, AR, FL, GA, IN, MI, NJ, NY, and NC

Seasonal Max and PHI restrictions in those states

Cherry (sweet and tart)

| | | |
|-------------------------|------------------|------------------|
| | <u>2007-2009</u> | <u>2010-2012</u> |
| Seasonal Max (lb ai/Ac) | 1.5 | 0.75 |

No aerial applications

No use in PYO operations

Pear

| | | | |
|-------------------------|------------------|------------------|------------------|
| | <u>2007-2008</u> | <u>2009-2010</u> | <u>2011-2012</u> |
| Seasonal Max (lb ai/Ac) | 3.0 | 2.0 | 1.5 |

No aerial applications

No use in PYO operations

Phosmet (Imidan) Final Decision, 11/16/06

For all crops, buffer zone restrictions were modified (see labels for detailed language), and dormant applications are prohibited. The new changes differ for west coast and east coast growers, because of different common growing practices in the two regions. Effective June 2008, the following changes will apply for crops grown east of the Rockies:

Apple

REI 4 days, PHI 7 days, PYO no sooner than 14 days

Max rate per season 15.5 lbs a.i./acre

Blueberry

REI 24 hours, PHI 3 days, PYO no sooner than 3 days

Grape

REI 14 days, PHI (hand harvest) 14 days

PHI (machine harvest) 7 days if less than 1 lb a.i./acre applied

No PYO permitted, no aerial applications

Peach

REI 4 days, PHI 14 days, PYO no sooner than 14 days

Plum

REI 7 days, PHI 14 days, PYO no sooner than 14 days

Alternatives to Organophosphates:

Because the risks associated with phosmet are lower than those associated with AZM, phosmet is preferable to AZM. NH growers have other, non-OP, alternatives, depending on the crop and pest targeted. These include:

Pyrethroids: Esfenvalerate (Asana), fepropathrin (Dannitol), lambda-cyhalothrin (Warrior), bifenthrin (Brigade), cyfluthrin (Baythroid), and others.

Neonicotinoids: thiamethoxam (Actara), acetamiprid (Assail), thiacloprid (Calypso), imidacloprid (Provado)

Insect Growth Regulators: methoxyfenozide (Intrepid), novaluron (Rimon)

Other: spinosad (Spintor, Entrust), kaolin (Surround), indoxacarb (Avaunt), abamectin (Agrimek).

For detailed efficacy information and recommendations for managing specific pests, see the New England Small Fruit or Tree Fruit Pest Management Guides, in conjunction with specific material labels.

UPCOMING MEETINGS AND EVENTS

Thurs. Apr 26. NH Giant Pumpkin Growers Association. Demers Garden Center, Manchester, NH. 6:30-8:30pm. The meeting will feature backpack spray calibration, pesticide application safety, and pesticide application math. Contact: George Hamilton, (603) 641-6060. For more information about the NH Giant Pumpkin Growers' Association, contact Rober Demers at (603)625-8298. V, PAT.



Wed. May 16. Tree Fruit Growers' Twilight Meeting. Brookdale Fruit Farm, Hollis, NH. 5:30-8pm. Sponsored by the NH Fruit Growers Association. Topics will include pest management, orchard management techniques, and apple thinning options. Contact: George Hamilton, (603) 641-6060. TF, PAT.

Fri. June 1. The Whys and Hows of using Drip Irrigation – for Vegetable and Fruit Growers. Brookdale Fruit Farm, Hollis, NH. 5:30-8pm. Review drip irrigation options and strategies. Trevor Hardy from Brookdale will give a hands-on demonstration of setting up a drip irrigation system. Contact: George Hamilton, (603) 641-6060. AC.

Wed. June 6. Fruit and Vegetable Twilight Meeting. McKenzie's Farm, Milton, NH. Jock and Annie McKenzie grow greenhouse tomatoes, strawberries, raspberries, and apples. We will tour the farm and learn about how they produce and market their crops. UNHCE specialists will be on hand to answer questions. Contact: Geoffrey Njue, (603) 749-4445. SF, V, PAT.

Tues. July 3. Highbush Blueberry Twilight Meeting. Bartlett's Blueberry Farm, Newport, NH. On this farm, over 7 acres of highbush blueberries are netted each year for bird control. We will show the netting process and discuss cultural and pest management strategies. Contact: Seth Wilner, (603) 863-9200. SF, PAT.

Tues. July 31. Vegetable and Fruit Growers Twilight Meeting. Edgewater Farm, Plainfield, NH. Pooh and Anne Sprague operate a highly diversified farm featuring bedding plants, strawberries, blueberries, mixed field vegetables, and greenhouse tomatoes. We will tour the farm and learn about how they produce and market their crops. UNHCE specialists will be on hand to answer questions. Contact: Seth Wilner, (603) 863-9200. SF, V, PAT.

Fri-Sun. Aug 10-12. Annual Northeast Organic Farming Association (NOFA) Summer Conference. Hampshire College, Amherst, MA. See <http://www.nofamass.org/conferences/s2007/index.php> for the latest info, or call NOFA-MA at (978) 355-2853. AC, O.

Tues-Wed. Aug 14-15. Annual North American Strawberry Growers Association (NASGA) Summer Tour. Niagara Falls, Ontario and the Niagara region of New York. See <http://www.nasga.org/> for the latest info, or call NASFA at (613)258-4587. SF.

Tues-Thurs. Dec 11-13. New England Vegetable and Fruit Conference. Center of NH Radisson Hotel, Manchester, NH. Three days of fruit, vegetable, and flower information, networking, tradeshow, and much more. Visit <http://www.nevbc.org/> for the most up-to-date information. SF, TF, V, F, O, PAT.

Meeting topics: F = flower, O = certified organic, SF = small fruit, TF = tree fruit, V = vegetable, AC = all crops. PAT = pesticide applicator recertification credits available.

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