



**UMASS
EXTENSION**



Cranberry Station Newsletter

JULY 2003

UMASS CRANBERRY STATION
1 STATE BOG ROAD
P.O. Box 569
EAST WAREHAM, MA 02538
<http://www.umass.edu/cranberry>

NE-SARE announces 2004 Farmer/Grower Grant Program and Partnership Grant Program

(information gathered from the NESARE web page)

The Northeast Region of the Sustainable Agriculture Research and Education Program has announced two grant programs to support research and implementation of sustainable practices by farmers in the Northeast. The goal of the Farmer/Grower grant program is for farmers to develop, refine, and demonstrate new sustainable techniques and to explore innovative ideas with the assistance of a technical advisor. The Partnership Grant Program provides funding for sustainability projects led by an agricultural professional and carried out on commercial farms in cooperation with the farmers.

Farmer/Grower grants are of three types; of these the Grass Roots grants are most likely to be of interest to cranberry growers. **Grass roots** grants are experimental and innovative; the goal is to help you test new ideas. These are often ideas you develop as you go about the daily business of managing your farm, and should reflect the concerns and the barriers to sustainability specific to your crops or products in your area. Grass Roots grants have no set restrictions on content—you can experiment with a new crop, develop a machine or tool that does something new, try out a pest control or grazing technique, or explore adding value or a new way of marketing directly to the public. All projects must have a technical advisor such as county extension agent, NRCS staff, university research or extension specialist, private crop management consultant, or other agricultural professional. **Although the technical advisor is required, you, the farmer, should be the one actively in charge of the project.** If you prefer that your technical advisor be in charge of the grant, he or she can apply for a SARE Partnership Grant with you as a participating farmer.

The committee that reviews the Farmer/Grower grant proposals is committed to advancing sustainable agriculture. They look for proposals that address **at least one** (although two or more is better) of the following:

- ❖ the reduction of environmental and health risks in agriculture
- ❖ the prevention of agricultural pollution
- ❖ the reduction of costs and the increase of farm income
- ❖ the conservation of soil, the improvement of water quality, and the protection of natural resources
- ❖ the enhancement of employment in rural areas
- ❖ the improvement of quality of life for farmers and society

In 2003, Northeast SARE awarded about \$270,000 in Farmer/Grower grants. The average grant was **\$5,200**. The smallest was **\$1,555**. In 2003, grant awards were paid in two installments—half when the began and half when the final report was complete. They cap in 2004 on any single Farmer/Grower or Partnership grant will be **\$10,000**.

Applications are due in early December. See the SARE website at www.uvm.edu/~nesare for additional information and application materials. If you are thinking of applying for a Farmer/Grower grant or you would prefer to participate in a Partnership Grant, please contact Frank, Hilary, Marty, Justine, or Carolyn to discuss your ideas and technical advisory participation by the Cranberry Station. Cranberry growers have been successful participants in these programs in previous years. This year could be your turn!

PRE-HARVEST INTERVALS

We still have several compounds that have long PHIs. It is important to pay close attention to these PHI values, especially if you are harvesting early for white fruit.

| | |
|-----------------------------|---------|
| Orthene | 90 days |
| Lorsban | 60 days |
| Poast | 60 days |
| All chlorothalonil products | 50 days |
| Ferbam | 50 days |
| Ridomil products | 45 days |
| Roundup, Select, Weedar 64 | 30 days |
| Mancozebs and Manebs | 30 days |
| Confirm | 30 days |
| Cryolite bait | 30 days |
| Spinosid products | 21 days |
| Pyramite | 21 days |
| Guthion | 21 days |
| Imidan | 14 days |
| Intrepid | 14 days |
| Diazinon and Sevin | 7 days |
| Aliette and Abound | 3 days |

Please notify us if you have a label that states a different PHI than that listed above.

HILARY SANDLER,
EXTENSION SPECIALIST

CRANBERRY STATION STAFF PHONE EXTENSION LIST

| | |
|----------------------|-------------------------|
| OFFICE: | FARMMANAGER |
| 25 CAROLYN | 14 JEN |
| 10 DEB | |
| 12 MADELAINE | FLORICULTURE: |
| | 24 PAUL |
| NUTRITION: | PHYSIOLOGY: |
| 13 DAN | 29 JUSTINE |
| 42 KRYSTAL | 28 JUSTINE'S LAB |
| 51 JAMES | 16 MICHELLE |
| ENTOMOLOGY: | IPM/WEEDS: |
| 23 ANNE | 21 HILARY |
| 20 MARTY | 27 JOEY |
| 17 ENT GRAD STUDENTS | |
| 45 ENT LAB | PLANT PATHOLOGY: |
| | 18 FRANK |
| SEMAP: | 19 FRANK'S LAB |
| 50 or call: | 47 NORA |
| 508-295-1317x130 | 43 FRANK'S LAB |
| | 22 JANE |

INTREPID 2F INSECTICIDE LABELED for CATERPILLAR PESTS

Applications can be made by ground or aerial equipment—*there is no chemigation* allowed. Supplemental labeling permits application on cranberry (10-16 oz/A per application with 64 oz. allowable per season). Dow recommends that a spreader-sticker be added to enhance coverage and retention. Intrepid needs a 6-hour drying time and multiple applications if the plant is rapidly growing. The spray is reported to give 10-18 days activity following application.

Intrepid is the next step up from Confirm — Intrepid exhibits a higher activity level than Confirm. Intrepid works against caterpillars only; it contains the insect growth regulator, methoxyfenozide, which mimics the caterpillar's molting hormone.

This is a restricted use compound and falls under Zone II restrictions. Non-target aquatic systems must be protected from sprays—see the label for a full description of the rules. Care must be taken to stay 250 ft away from estuaries, ponds, etc. when applied by air. On the other hand, this is a reduced risk compound that has a 4 hr re-entry interval. This is a great IPM choice! with no risk to pollinators or natural enemies.

Intrepid reportedly is a good control option for **Sparganothis** fruitworm and **blackheaded fireworm**. It must be ingested to be effective. On-target timing of the spray is required—as the eggs are hatching or, if that's not possible, definitely when caterpillars are small. It's probably too late for Intrepid to be maximally effective against these insects this year—although the Sparganothis window may still be open on some bogs. Also, there is a very rare chance that a third generation of blackheaded fireworm will occur in the coming weeks. Field trials that we've done show that, under low gallonage applications (20-40 gal. per acre), Intrepid is effective against cranberry fruitworm. In the spring, Intrepid can be considered for gypsy moth, spanworms, and cutworms.

ANNE AVERILL
ENTOMOLOGY

ADMIRE 2 FLOWABLE INSECTICIDE LABELED for SOIL INSECTS

A major target for this new label in Massachusetts cranberry is **striped colaspis** larvae in the soil. *We have no efficacy data*—but suppression of striped colaspis populations is a safe guess. Admire is reported to be effective against a closely related soil insect (cranberry rootworm) in New Jersey.

Application against striped colaspis should be made ASAP — but time application to be *post bloom* and after the bees have been removed. The application needs to target the early-instar striped colaspis larvae, preferably as they are hatching. Other application timings probably will be less or not effective. Admire is highly toxic to bees exposed to direct treatment or residues.

The application should be made as a ‘**drench**’ to enhance chances that it will move into the soil; irrigation should be made for an hour prior to application and again following application, but—the application should not be made to saturated soil.

Admire can be applied via ground or chemigation—there is no aerial application provision. Two applications can be made per season, with 16-32 oz./A per application. The PHI is 30 days.

Oriental beetle (OB) grubs may also be suppressed by Admire 2F applications. *We have no efficacy data in MA cranberry*. This beetle (most commonly straw colored with black markings and 3/8 inch long) is slightly smaller than Japanese beetle (which is not a cranberry problem).

Females lay eggs in the soil, which hatch in about 3 weeks. Newly-hatched grubs are the most vulnerable stage and the best results are achieved when the compound is present just prior to egg hatch—*so an application would be made within 3 weeks or earlier of seeing the peak flight of the beetles* (Flight is throughout July, so applications should be made at the end of July through very early August). There is a long residual of Admire. Spring or fall application timings are reportedly much less effective.

Admire is widely recommended for oriental beetle management in turf, Ag, and nursery crops. The active compound is moderately water soluble, but it is unknown

if the organic material and the layer of vine and trash in the bogs will bind it up before it reaches the cranberry grubs.



We are seeing an unbelievable flight of oriental beetle adults this year—there is a pheromone trap available for OB and we were working with the chemical in the lab. As a result of residues on my skin, I was swarmed by attracted male beetles at a gas station in Middleboro. It is not unusual

to see high beetle numbers in areas infested with grubs; for example, in New Jersey blueberry, a treatment for oriental beetle is triggered only when weekly trap catches exceed 300-500 beetles per week. However, because the grubs are generalist feeders and males may disperse far in response to synthetic pheromone lures, high adult abundance does not necessarily mean your bog is infested — the adults may be coming from the uplands.

The adult stage is not a pest. When we irrigate the bogs during beetle activity in the heat of the summer, it is possible that females move onto cranberry to lay eggs; survivorship of the hatching grubs may also be enhanced on the irrigated bogs when compared to dry upland areas.

It is possible that *Hoplia equina* and cranberry root grub larvae could also be suppressed by Admire. Both beetle species fly during bloom and, thus, first instar grubs would be present soon.

If you have noticeable dead areas on your bog as well as high flight numbers of OB, call Erik (508-295-2212; ext 17) at the Cranberry Station for a soil insect survey - or dig dead spots yourself in August and bring grubs in to the Entomology Lab for identification!

ANNE AVERILL
ENTOMOLOGY

UMass Extension Mailing Signoff

Carolyn DeMoranville, Director

BOGSIDE CHAT

A discussion of cranberry production issues with the Staff of the Cranberry Station

Place: Bog Hollow Farm, 80 Wapping Road (Route 106), Kingston

Hosts: Lydia and Barry Mathias

Date: August 12, 2003

Time: Meet at 9:00 a.m., chat until 10:30 a.m.

Cranberry growers, Lydia and Barry Mathias will be hosting a bogside chat with members of the Cranberry Station Staff and all interested Massachusetts growers on August 12, 2003 at 9:00 a.m. We will be covering production issues for late season bog management, including weeds, diseases, insects, and general horticulture issues (fertilizer, floods, etc.). If you wish to participate, please meet at the Mathias bogs on Route 106 in Kingston. **One** contact hour will be given.

Directions:

From Wareham/Carver: Take Route 58N into Plympton Center. Turn right onto Main Street just after the Cemetery (Route 58 bears left – the Fire Station and Police Station are on the left). Follow Main Street out to Route 106. Take a right on 106. Follow about 2 miles; farm is on the right.

From the Cape or Plymouth: Take Rte. 3 to exit 9. Go right at end of ramp onto Rte. 3A and 53. Follow through 2 traffic lights and then follow sign for Rte. 106 (left at fork). At next traffic light (Cumberland Farms) Rte. 106 bears left. Follow one mile; farm is on left.

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