Bloom has started in most cranberry beds. If insects have been effectively managed prior to bloom, we recommend no sprays at this time. A reminder: when bees are present your only choices of insecticides are the Insect Growth Regulators –IGR- (e.g. Confirm and Intrepid) or Bt products (e.g. DiPel).

Last week we stopped our sweep net sampling. From now until August, we recommend monitoring insect populations using pheromone traps (Figure 1). Pheromone lures are commercially available for monitoring adult male spotted fireworm (SFW), Sparganothis fruitworm (SPARG), cranberry fruitworm (CBFW), and blackheaded fireworm (BHFW) (see below for a list of IPM vendors). We particularly recommend the use of pheromone traps for SPARG and BHFW. Placing pheromone traps for a particular pest is most important if your farm has a previous history of infestation. Pheromone traps are useful for knowing whether an insect is present, when it is present, and its peak flight activity. There is, however, no information available on whether trap captures correlate with amount of damage and the need for treatment. Thus, visual observations of leaf and fruit injury are also required. Traps should be checked weekly and number of moths counted. It is critical to know how to identify the different moth species before monitoring (see Figure 2). One trap should be placed every 10 acres (whenever possible).

Figure 1. Pheromone Delta Trap in a Cranberry Bog
✔ **Blackheaded fireworm (BFW)** – We should be close to peak pheromone trap catches in the Chatsworth area. Eggs will start hatching during peak bloom; thus, only insecticides listed above can be used to control BFW larvae at this time.

✔ **Sparganothis fruitworm (SPARG)** – We have started to capture adults in our pheromone traps. In general, pheromone trap catches of this insect have declined over the last five years in New Jersey. This decline can be attributed to an increased use of effective, selective, and reduced-risk insecticides, such as IGRs, and a decreased use of broad-spectrum insecticides. Reduced-risk insecticides (IGRs, Delegate, Bt) are compatible with natural enemies (predators and parasitoids). The use of these selective insecticides, besides being effective against lepidopteran pests, has helped increase natural enemy populations.

In 2011 we started working on the development of a degree-day model to better time insecticide sprays against SPARG. We are continuing this work in 2012.

Results from these studies will be presented at future grower meetings.

✔ **Spotted fireworm (SFW)** – There are two generations of SFW a year. Larvae overwinter on the bog floor and continue to develop in April-May. Adults appear in early-June. **Eggs from the first generation are laid late in June.** Larvae from this second generation will complete development and moths will emerge in early August and lay eggs. Eggs from the second generation will hatch in mid-August. These 2nd generation larvae will feed on berries and overwinter as 2nd instars.

It is important to monitor for this insect after bloom especially in weedy bogs. Growers should conduct visual observations for SFW eggs on weeds (Figure 3). They can be easily detected on the upper surfaces of weed leaves (red maple, green brier, leatherleaf, loosestrife, red root, etc) on the beds and dams. Managing weeds around and in the bog can prevent SFW infestations. If eggs are not observed, then the second-generation larvae should not be a problem.

**Figure 3. An Egg Mass of Spotted Fireworm**

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See IPM Supplies on page 3
IPM Supplies

Below is a list of where to get supplies for IPM programming. I have put together the following list for those of you who wish to purchase supplies. This is not an endorsement of any particular company. Some vendors are manufacturers, and sell direct, while others are only retailers.

**Distributors, Dealers, Manufacturers**

Phero Tech, Inc., 7272 Progress Way, Delta, B.C. Canada V4G 1E9
- 800-665-0076, [www.pherotech.com](http://www.pherotech.com)

Scentry Biologicals, Inc., 610 Central Ave., Billings, MT 59102
- 800-735-5323, [www.scentry.com](http://www.scentry.com)

Suterra, LLC., 213 Southwest Columbia St., Bend, OR 97702
- 866-326-6737, [www.suterra.com](http://www.suterra.com)

Trece, Inc., 7569 Highway 28 West, P.O. Box 129, Adair, OK 74330
- 866-785-1313, [www.trece.com](http://www.trece.com)

Great Lakes IPM, 10220 Church Rd. NE, Vestaburg, MI 48891
- 800-235-0285, [www.greatlakesipm.com](http://www.greatlakesipm.com)

IPM Tech. Inc., 4134 N. Vancouver Ave., #105, Portland, OR 97217
- 888-476-8727, [www.ipmtech.com](http://www.ipmtech.com)

Gempler's, P.O. Box 270, Mt. Horeb, WI 53572
- 800-382-8473, [www.gemplers.com](http://www.gemplers.com)

AgBio, Inc., 9915 Raleigh St., Westminster, CO 80031

ISCA Technologies, P.O. Box 5266, Riverside, CA 92517
- 951-686-5008, [www.iscatech.com](http://www.iscatech.com)
Weekly Weather Summary

Keith Arnesen, Ph.D., Agricultural Meteorologist

Temperatures averaged much above normal, averaging 69 degrees north, 71 degrees central and 71 degrees south. Extremes were 97 degrees at Seabrook on the 30th, and 47 degrees at Charlotteburg on the 4th. Weekly rainfall averaged 1.54 inches north, 1.17 inches central, and 0.68 inches south. The heaviest 24 hour total reported was 1.75 inches at Long Branch on the 1st to 2nd. Estimated soil moisture, in percent of field capacity, this past week averaged 89 percent north, 80 percent central, and 62 percent south. Four inch soil temperatures averaged 71 degrees north, 72 degrees central and 72 degrees south.

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<th>TEMPERATURE MX MN AVG DEP</th>
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WES KLINE -- GDD BASE 40 PINEY HOLLOW
LAST WEEK 224 (Ending 5/28/12)
THIS WEEK 216 (Ending 6/4/12)
TOTAL UNITS BASE 40 FOR FEBRUARY=55
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Cindy Rovins, Agricultural Communications Editor

Pesticide User Responsibility: Use pesticides safely and follow instructions on labels. The pesticide user is responsible for proper use, storage and disposal, residues on crops, and damage caused by drift. For specific labels, special local-needs label 24(c) registration, or section 18 exemption, contact RCE in your County.

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