



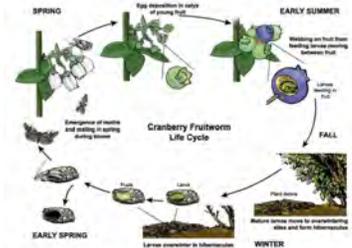
Massachusetts IPM Berry Blast 6/1/11

**IN THIS BLAST:**  
**BLUEBERRY:**  
 CRANBERRY FRUITWORM

**BLUEBERRY**

**Cranberry Fruitworm** (for more IPM information see <http://www.blueberries.msu.edu/fruitworm.html>)

Feeding can significantly lower marketable yield of the crop. Adult moths lay eggs in the calyx cup (blossom end) of green fruit. Larvae hatch, enter the fruit, consume the flesh and move to another fruit. Larvae will infest from 3-6 berries, filling them with brown frass, and webbing them together with silk. (Cranberry fruitworm frass on fruit cluster. photo credit - Rufus Isaacs, Michigan State)



Adult moths (males) can be monitored with pheromone traps. This allows growers to establish when moths begin their flight and also their relative abundance. It also allows growers to estimate when egg laying is likely to begin and time spray applications. A degree-day model being tested in Michigan indicates 80 to 100 GDD (base 50 °F) after first significant trap capture of male moths is an appropriate time to initiate the first treatment.

**This timing is approximately correct for both cherry and cranberry fruitworm species. This corresponds generally to 400 accumulated GDD from March 1st.**

**Most of Massachusetts is at or near that point. Therefore, growers with plantings that suffered significant damage last year, should be getting ready to treat for Cranberry Fruitworm.**

Another method is scouting for eggs, which provides a biofix for egg hatch timing. Scouting for eggs should start at early fruit set and when traps have caught some moths. Look for eggs (using a hand lens) on fruit that is waist to shoulder high off the ground. They tend to be laid clustered together within a few bushes.



Conventional	Organic (OMRI listed)	Cultural Practices
*Asana XL Avaunt Assail 70WP *Brigade WSB Confirm 2F *Danitol 2.4 <b>Delegate WG</b> Esteem 35WP (supplemental label) *Imidan 70W	Dipel DF Entrust Naturalyte	<ul style="list-style-type: none"> <li>• avoid planting near cranberries</li> <li>• remove and destroy infested clusters as they appear</li> </ul>

*Lannate 90 Malathion 5EC *Mustang Pyrenone Crop Spray Sevin XLR Spintor 2SC		
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*Read labels thoroughly for application rates and restrictions (REI, PHI, etc.)*

**\* Restricted Use Material**

*Where brand names for chemicals are used, it is for the reader's information. No endorsement is implied, nor is discrimination intended against products with similar ingredients. Please consult pesticide product labels for rates, application instructions and safety precautions. Users of these products assume all associated risks.*

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Sonia Schloemann <[sgs@umext.umass.edu](mailto:sgs@umext.umass.edu)>

UMass Extension Fruit Specialist

Plant, Soil, Insect Sciences

UMass Center for Agriculture