

Cranberry IPM Bulletin

Issue No. 4 June 23, 2017

Please note: The following recommendations are based on field monitoring data from cranberry fields in all regions in British Columbia. Not all recommendations listed in this newsletter are applicable to all fields. Each cranberry field has unique insects and diseases. Field monitoring is strongly recommended before making any pest management decisions.

Plant Development

We are seeing bloom in all fields. Bloom percentages are anywhere from 10%- 50% bloom.

Moth Identification

Whether you are using pheromone traps, or are just walking in your fields being able to identify moths is a good way to detect any issues. Using monitoring tools such as pheromone traps, and “moth walks” is a good way to predict larval hatch and determine when to apply controls such as pesticides or nematodes for girdler.

Fireworm

Fireworm moths are strong flyers, while doing walks for fireworm moths they may fly away. Look in areas that were previously hot spots, areas with poor sprinkler coverage or, a sprinkler that may have been blocked during a previous spray. Moths will generally be resting at the top of an upright. Fireworm moths are small, approximately 7mm in length (or about the size of a cranberry leaf) They are mottled brown in colour.



Sparganothis Fruitworm

Sparganothis moths are quite distinct. They are brightly coloured yellow/orange, with an X shaped pattern on the wings when they are resting. The wingspan is about 20mm.



Left: Sparganothis moth
Right: Fireworm moth

Cranberry Fruitworm

These moths are larger than both fireworm and sparganothis. It is unlikely to see these moths flying in the fields. However you may catch them in pheromone traps. These moths have very distinct white triangles on each wing with two dark dots.

Girdler

Out of all the moths, girdler are the easiest to see while walking in the field. If you are unsure if damaged areas in the field is girdler damage, walk through and around the damaged area during a hot afternoon. If you see larger silver moths fly up this is likely girdler damage that you are walking through. Girdler are not strong flyers, so it is likely to see them fly up and land again close by almost immediately. They are up to 12mm long and appear slender with a snout.



Photo by H. van Dokkumburg



E.S. Cropconsult

If disease symptoms in vines or berries are apparent on your farm and it is not obvious what kind of disease is present, samples can be collected and submitted to the BC Ministry of Agriculture for testing. This is ideal as not all pathogens are susceptible to all fungicides.



Photo by H. Dokkumburg



Photo by H. van Dokkumburg



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For more information...

Integrated Pest Management for Cranberries in Western Canada

<http://www.bccranberries.com/pdfs/ipm-booklet/IPM%20for%20Cranberries%20Low%20Res.pdf>

Cranberry Production Guide

<http://productionguide.agrifoodbc.ca/guides/14/section/25>

Cold Damage

Left: Cold damage to flower hooks

Middle: Early cold damage (1 month after frost event)

Right- Shoot developing out of prior cold damage

Where Pests Are At...

Fireworm	Moths are flying in most fields, some larvae are starting to hatch.
Sparganothis	Moths are flying in fields with history, larvae are present as well.
Girdler	Starting to see moths fly, plan for nematode applications in the next couple months
Scale	Emergence is complete in most areas, continue to practice biosecurity for any stragglers.
Cranberry Fruitworm	No moths caught yet, this will likely start in the next couple weeks.

Cotton ball

Watch for white conidia on the stems of cotton ball infected uprights. This is a sure sign that cotton ball is present on your farm.



Photo by H. van Dokkumburg



Photo by C. Teasdale

Twig Blight

Keep monitoring for open twig blight spores. Spore swelling was observed this past week.

Weather

Comparisons of the precipitation that has occurred so far this year is that we have had increased levels of rain this year than in previous years. In the last two weeks we have had some substantial rainfall in most growing regions.

Bi-Weekly Precipitation	
April 1- April 14	96mm
April 15- April 28	41mm
April 29- May 12	198mm
May 13- May 26	93mm
May 27- June 5	12mm
June 6 - June 19	40 mm

Weather History Based on Vancouver Airport

Cumulative Precipitation					Growing Degree Days Cumulative base temp 0				
Month	2017	2016	2015	Monthly Total	Month	2017	2016	2015	25 year average
January	0mm	0mm	0mm	99mm	January 1st	0	0	0	0
February	99mm	169mm	159mm	129mm	February 1st	83.55	153.35	181.6	127.78
March	228mm	337mm	272mm	129mm	March 1st	179.8	364	385.15	277
April	445mm	486mm	428mm	140mm	April 1st	393.2	625.85	650.45	492.23
May	676mm	562mm	484mm	102mm	May 1st	678.9	979.4	930.3	777.17
June	718mm	606mm	495mm	42mm (June 19)	June 1st	1081.6	1425.4	1388.2	1180.9

Always consult your marketing agency for information on MRLs and pesticide products for various markets before applying pesticides.

Keep in mind with flowers out in the fields even if hives have not been placed on your farm, natural pollinators are now present. Try to avoid spraying during bloom if at all possible. If not spray at night while pollinators are not active and wash off the chemical at dawn before the bees start foraging. Keep this in mind when spraying fungicides as well.

Recommendations

- Monitor for sparganothis fruitworm moths in pheromone traps as well as while walking in fields.
- Monitor pheromone traps and known fireworm hot spots for fireworm moth flight.
- Monitor for new tipworm damage. Check for cupped leaves and late instar larvae, no spray recommendations until after bloom.
- Continue to practice biosecurity while dearness scale is emerging over the next week or so.
- Monitor for red leaf spot infections particularly after fertilizer applications.
- Monitor for new cotton ball infections. Look for interveinal leaf browning, drooping uprights and conidia on the stem of drooped over uprights.
- Monitor twig blight spores for swelling and opening. If open spores are observed apply a recommended fungicide.
- Monitor for new rodent damage.
- Monitor for cranberry fruitworm moths in pheromone traps.
- Monitor for cranberry girdler moth flight. Check pheromone traps as well as conduct girdler walks by walking in suspected damage patches in the afternoon on a warm day when girdler moths prefer to fly.
- Monitor bloom percentages to time fruit rot applications.

The above recommendations are based on the BC Berries Production Guide and/or local IPM monitoring experience. Always consult your marketing agency for information on MRLs for various markets before applying pesticides.

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