

Cranberry IPM Bulletin

Issue No. 5 July 7, 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

Most fields are in full bloom this week, pinhead fruit and small green berries are being observed on most field edges depending on field variety.

Fireworm

Second generation fireworm are starting to hatch in all regions. It is a good time to do intensive visual samples in known hotspots to check for larvae hatching. Inspect uprights with the tip of a pencil to check for tents. Most larvae right now are quite small, use a hand lens to ensure larvae are present in tents that appear empty and to check the head capsule colour of larvae to confirm it is fireworm and not sparganthis fruitworm. A well timed fireworm spray is key to prevent burnout and berry damage.



Sparganthis Fruitworm

On farms with history of sparganthis fruitworm check for larvae in cranberry uprights. Watch for two uprights pulled and webbed together. Use a hand lens to check for a brown head capsule on larvae.



For farms with fireworm, sparganthis fruitworm, and cranberry fruitworm. Insecticides that are insect growth regulators are the most efficient and effective product.

Cranberry Fruitworm

Cranberry fruitworm moths are now flying. Moths lay eggs at the calyx end of pea sized fruit; larvae hatch and burrow directly into the fruit. When larvae are detected it is generally too late to get control of this pest as once inside the berry, larvae are protected from insecticides. It is recommended to spray for this pest 7-10 days after initial moth catch and again 10- 14 days later.



Girdler

Monitor moth flight by using pheromone traps and girdler walks. Walks should be conducted in the afternoon during the heat with little to no wind. Check traps and conduct walks once weekly during moth flight so a “peak” is obvious. This will be used to time nematode applications.

Keep grassy weeds down in and around fields. Grass is an alternate host for girdler and can attract and harbor girdler populations.



Twig Blight

Continue monitoring for open twig blight spores. Spores are now starting to open. Once this is observed on your farm the timing is right to start applying fungicides.

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.

Where Pests Are At...

Fireworm	Second generation larvae are starting to hatch.
Sparganothis	Moths are flying in fields with history, larvae are present as well.
Girdler	Moths are flying, peak flight is expected to occur in the next couple weeks.
Cranberry Fruitworm	Moths are flying, if this pest is present on your farm apply an insecticide 7- 10 days after initial moth catch and again 10-14 days later.
Tipworm	No recommendations until after bloom and all bee hives have been removed, due to insecticide bee toxicity.

Insects you may see...

The insect to the right is a ladybug larva, these guys are present in lots of fields but don't worry they are beneficial insects. Ladybugs feed on aphids, tipworm larva and even fireworm!



Photo by H. van Dokkumburg

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>

2017 Pesticide Chart

<http://productionguide.agrifoodbc.ca/sites/pg.localhost/files/files/2017%20Canadian%20Chart%203%20Partv2.pdf>



Photo by T. Bence

Weather

In the past two weeks most regions have had no precipitation. Growing degree days are still behind the last two years significantly, however looking at the 25 year average 2017 is only 100GDD behind.

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
June 20- July 3	0mm

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	46mm	June 1st	1081.6	1425.4	1388.2	1180.9
July	722mm	620mm	495mm	0mm	July 1st	1551.25	1908.55	1928.5	1655.22

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 and larvae.
- Monitor pheromone traps and known fireworm hot spots for second generation larvae to hatch.
- Monitor for new tipworm damage. Check for cupped leaves and late instar larvae, no spray recommendations until after bloom.
- Monitor twig blight spores for opening. If open spores are observed apply a recommended fungicide.
- Monitor for cranberry fruitworm moths in pheromone traps, once caught apply a registered insecticide 7- 10 days after initial moth catch and a second application 10- 14 days later if moths are still present.
- 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 for red leaf spot infections particularly after fertilizer applications.
- Monitor for new cotton ball infections. Look for conidia on the stem of drooped over uprights.
- Monitor for new rodent damage.

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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