

# Cranberry IPM Bulletin

Volume 3 Issue No. 3 June 10, 2019

**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

Flower hooks are present in all fields, scattered bloom is being observed with higher levels of bloom present in warm areas of fields. Crimson and Mullica fields have higher levels of bloom. Native pollinators are active in the fields this week.

**Keep in mind with flowers out in the fields even if hives have not been placed on your farm, native pollinators are now present. Try to avoid spraying during bloom if at all possible. If not spray at night while pollinators are not active.**

## FIREWORM



Fireworm adults are now emerging. The moths are small, approximately the size of a cranberry leaf, and are brown and black in colour. You may see high numbers of moths flying in areas that where larvae hotspots were observed during first generation.

Since first generation fireworm sprays have been applied it is a good time to check over sprayer nozzles and sprinklers before second generation fireworm start to hatch. Fireworm damage in second generation will directly affect yield by damaging berries as well as the bud set for next year, if the damage is severe. Monitor for sprinkler blockages while irrigating, and check that pressure is consistent.

## SPARGANTHIS FRUITWORM

Sparganthis moths are present in pheromone traps now. Moths are very distinct and slightly larger than fireworm moths; yellow in color with a brown X when at rest.



## CRANBERRY FRUITWORM

Cranberry fruitworm moths are flying. Moths are substantially larger than fireworm and sparganothis. The moth is grey and dark brown with distinct white triangles with small dots on the forewings. There can be a few look a likes so ensure proper identification.

This pest needs to be controlled at the egg/ early hatch stage because the larvae hatch and directly burrow into the fruit. Due to this control is not recommended until pea size fruit is present in the fields.



H. Van Dokkumburg

## FROST

New signs of frost damage has been observed this week mostly in the eastern regions. While it is already June, keep in mind there can still be frost on clear nights and especially in low areas. From talking with several growers it appears this frost event occurred the first week of June. Look for pink tinged cupped uprights, when opened the inside of the tip will be brown and soft. Plants are more sensitive to cold at this stage therefore you may want to raise your frost protection temperature settings.



H. Van Dokkumburg

Weather History Based on Vancouver Airport

Cumulative Precipitation				Growing Degree Days Cumulative base temp 0					
Month	2019	2018	2017	Monthly Total 2019	Month	2019	2018	2017	27 year average
January	0mm	0mm	0mm	162mm	January 1st	0	0	0	0
February	162mm	261mm	99mm	75mm	February 1st	160.8	171.05	83.55	126.57
March	216mm	357mm	228mm	34mm	March 1st	194.7	277.25	179.8	272.04
April	249mm	467mm	445mm	111mm	April 1st	386.8	465	393.2	485.95
May	391mm	602mm	676mm	30mm	May 1st	1005.4	1135.5	1001.85	1103.6
June 10th	400mm	617mm	702mm	N/A	June 1st	1117	1208	1081	1176

### Precipitation

The lack of precipitation this year is concerning. We are substantially behind 2017 and 2018.

### Degree Days

Degree days are right on track with the 27 year average.



## COTTON BALL

Early leaf infections are now present in fields with a history of this disease. Fruit infection occurs when spores are released from the infected uprights and enter the open flower during bloom. Watch for the interveinal browning, and eventually drooping uprights.

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

## FRUIT ROT

Now that bloom is present, fruit rot prevention fungicides should be timed. Things to consider when choosing a fungicide are fungal pathogens present and percentage of rot at harvest last year. If you had high fruit rot previously it would be good to rotate fungicides with different modes of action.

### 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>

## Recommendations

- Monitor fireworm, sparganthis fruitworm and cranberry fruitworm moth flight. Monitor for larvae approximately 10 days after a significant flight is observed.
- Monitor for tipworm damage. If you are seeing significant damage this early on, plan to control for this pest after bloom is over.
- Practice biosecurity during scale emergence. Use disinfectant on boots and shared equipment. Limit worker activity during scale emergence to prevent spread within the field.
- Monitor for cotton ball leaf infections.
- Plan fungicide applications for fruit rot prevention the timing is approaching depending on product used, fungus present, and number of applications.
- Monitor for new rodent damage. Set up trap stations in areas around the fields where rodents would frequent- burn piles, other plants, around buildings and shops.
- Keep frost protection detectors in fields and adjust to the changing weather accordingly, as there was a frost event last week.

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.