

# Cranberry IPM Bulletin

Volume 3 Issue No. 2 May 27, 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

Fields are steadily progressing with the warm weather. Flower hooks are present in all fields as well as scattered bloom is starting around field edges, even more so in early varieties. Its definitely time to start thinking about pollinators; native pollinators are active in many fields so be sure to make chemical choices accordingly. When fields start to get around the 10% bloom stage you may want to think about bringing in hives.

**Roughneck**



**Flower Hooks**



**Bloom**



B. A. Workmaster, J. P. Palta, and T. R. Roper. Terminology for cranberry bud development and growth.



## FIREWORM & SPARGANOTHIS FRUITWORM

Most farms have now sprayed for fireworm and sparganothis if it is present on your farm. If levels aren't high in some fields it is not always necessary to spray for first generation fireworm. It is important to do post spray checks to ensure the sprays went on as expected. With some of the newer chemistries it can be initially unclear if the spray was successful. Because the larvae need to ingest the chemical, it can take up to 10 days for control to take effect. Sick larvae may appear lethargic and slow, and coloring of the body can change to a deep yellow or dark brown.

We are seeing a very staggered hatch with fireworm this year so it is recommended to keep monitoring even after successful post spray checks, as we are seeing newly hatched larvae two weeks post spray.

## CRANBERRY TIPWORM

Tipworm damaged uprights are starting to appear this week at very low levels. This insect overwinters as pupae in the soil and adults emerge in early spring to lay eggs. Eggs are laid in the inner upright leaves. This is where the three instars of larvae feed on the leaf tissue causing the cranberry leaves to become cupped. Once this damage is observed you can usually find late instar larvae in the upright. Control is not recommended until after bloom as pesticides for this pest are extremely toxic to pollinators.



Cupped leaves- tipworm >

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>



### DEARNESS SCALE

Scale crawlers will likely start to emerge over the next couple of weeks. If scale is present on your farm it is very important to get in the habit of good biosecurity practices such as disinfecting boots and equipment as well as practicing biosecurity on other farms. Bear in mind workers travelling throughout the field herbiciding for example can spread dearness scale to other areas of your fields.

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	N/A	May 27 <sup>th</sup>	1005.4	1135.5	1001.85	1103.6

### Precipitation

Lately we have gotten some rain which is great. Levels are still substantially lower compared to other years.

### Degree Days

Degree days are progressing with all the warm weather we have had, as you can see we are still keeping up with 2017. We did have substantially more precipitation in 2017 compared to this year.

### Spores Present



### ROSE BLOOM

Rose bloom is now sporulating in most growing regions. Sporulation was quite quick this year with the wet weather in the past week. Monitor for spores regularly (white spores, greying edges) with a hand lens. When it appears most have sporulated or are close to sporulation, apply a fungicide if levels are moderate to high on your farm. Most farms don't have to control for this fungus in all fields every year as it isn't a huge concern, however keep in mind infected uprights are not producing fruit.

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

**Keep in mind with bloom in the near future to be mindful of chemical choices. Try to avoid spraying during bloom if at all possible- if not spray at night while pollinators are not active.**



## Recommendations

- Monitor for fireworm & sparganothis fruitworm. Conduct post spray checks to ensure good efficacy. Continue to monitor after post spray checks due to a staggered hatch this season.
- 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 sporulating rose bloom. Apply a fungicide for control during sporulation at your discretion.
- 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.
- Monitor weed emergence. Alter pre-emergent herbicide practices for next year based on this years weed presence.
- Keep frost protection detectors in fields and adjust to the changing weather accordingly. We did have a frost incident in June of 2017.

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.