

# Cranberry IPM Bulletin

Volume 7 Issue No. 6 July 14, 2023

**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

Fruit development and bloom are at various stages throughout the different growing regions. Many fields are in the final stages of pollination with mostly fruit set and low levels of scattered bloom present. However in some fields, bloom is completely over with large green berries present. Substantial bloom may be remaining in the older varieties or fields with cooler or dryer conditions.



## Fireworm

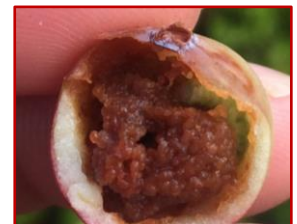
- Second generation fireworm sprays have been applied on most farms.
- Conduct post spray checks 5-7 days after sprays have been applied to check spray efficacy and ensure there were no issues.
- Monitor for fireworm berry damage and check for discoloured vines or “burnout” in patterns which may indicate broken or plugged sprinklers, pressure issues with sprinklers etc.
- If problems are detected a cleanup spray or spot treatment using a backpack sprayer may be necessary to avoid damage spreading.



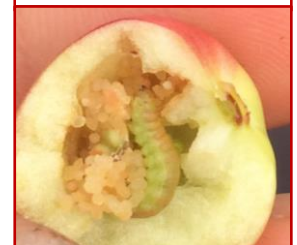
Fireworm burnout

## Cranberry Fruitworm

- Cranberry fruitworm sprays are being applied on most farms with this pest present.
- Continue to monitor moth flight, if moths are continually caught a second or third application may be necessary to protect fruit from damage. Time sprays 10- 14 days apart to protect the crop.
- Larvae infested fruits are now being observed on some farms. To distinguish fruitworm damaged berries, look for berries that hold their shape, are prematurely red, and when fruit is opened the berry will be full of frass. If there is no larva in the fruit you may see an exit hole on the side of the berry.
- Once the larvae are in the fruit it is difficult to control this pest as they are somewhat protected from insecticide.



Cranberry fruitworm



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

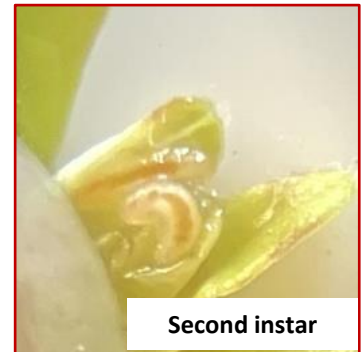
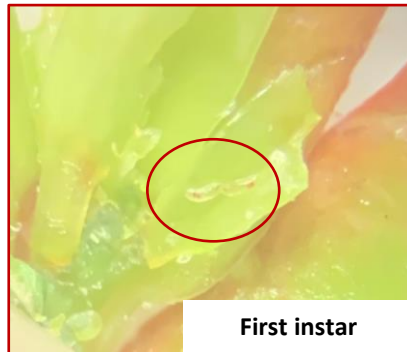
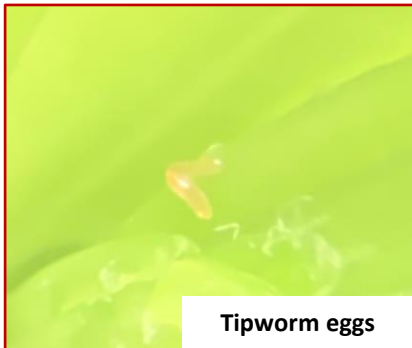
## Girdler

- Girdler flight has increased in the past two weeks. Depending on the farm, this may be peak girdler flight.
- If high numbers of moths are being observed, apply nematodes to control girdler larvae two to three weeks after peak flight occurs.
- Nematodes need substantial water to survive, so heavy irrigating is required for at least two weeks after nematodes have been applied.



## Tipworm

- Now that bloom is over on some farms tipworm insecticide sprays can be applied on farms where pollinator hives are removed.
- Monitor for larvae by using a microscope or hand lens to check the tips of uprights.
- If stages found are mostly eggs, first and second instar larvae timing is right to spray for this pest.



Cumulative Precipitation from January 1 <sup>st</sup> - July 1 <sup>st</sup> based on YVR			
<b>2023</b>	<b>369 mm</b>	<b>2016</b>	620 mm
<b>2022</b>	591 mm	<b>2015</b>	495 mm
<b>2021</b>	402 mm	<b>2014</b>	633 mm
<b>2020</b>	516 mm	<b>2013</b>	506 mm
<b>2019</b>	417 mm	<b>2012</b>	592 mm
<b>2018</b>	643 mm	<b>2011</b>	637 mm
<b>2017</b>	722 mm	<b>2010</b>	324 mm
<b>33 Year Average Precipitation 548 mm</b>			

## Precipitation

- This table is showing the last 14 years cumulative precipitation from January to July.
- 2023 is one of the driest years we've had to date being second to 2010.
- 2023 is significantly below the 33 year average by almost 200 mm.

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

## Heat Stress

- With the season being warm and dry so far it is good to keep an eye on vines for heat stress.
- Monitor moisture levels in the soil and irrigate as necessary.
- Ensure sprinklers and irrigation systems are working properly and getting good coverage.
- Keep an eye out for wilting fruits and dying vines.



## Recommendations

- **Fireworm:** Monitor for second generation fireworm. If live fireworm are found in more than 50% of samples taken throughout the field, apply a registered insecticide. Conduct post spray checks 5- 7 days post spray as well as two weeks after insecticide applications to make sure control was effective and no straggler larvae have hatched.
- **Sparganothis Fruitworm:** Monitor for sparganothis fruitworm in cranberry uprights like you would for fireworm. Note sparganothis tend to use multiple uprights in their tents and have a translucent or brown head capsule. Apply a registered insecticide if levels are of concern. Note not all insecticides for fireworm are effective against sparganothis.
- **Cranberry Fruitworm:** Monitor for cranberry fruitworm moth flight and larvae in the field. Larvae will always be found in berries as this pest does not make tents in cranberry uprights. Look for clusters of prematurely ripening fruit.
- **Girdler:** Monitor for girdler moth flight. If moth numbers are high, consider applying nematodes two – three weeks after peak moth flight to control girdler larvae.
- **Tipworm:** Monitor for tipworm larvae by using a microscope or hand lens. If tipworm is in susceptible stages; mostly eggs, 1<sup>st</sup>, and 2<sup>nd</sup> instar larvae and at 30% infestation, spray a registered insecticide for this pest. Before spraying ensure all pollinator hives are off the farm and bloom is over.
- **Cottonball:** Monitor for cottonball berry infections. If disease is detected plan to treat with fungicide next year at bud break.
- **Heat Stress:** Monitor fields for symptoms of heat stress.
- **Rodent:** Monitor for new rodent damage. Set up trap stations in areas around the fields where rodents would frequent such as burn piles, other plants, and around buildings and shops.
- **Pollinators:** Keep pollinators and beneficial insects in mind when choosing which pesticides to spray. Time applications for at night when pollinators aren't active.

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.



**BCCGA**

