



Washington State University • Long Beach
Cooperative Extension
2907 Pioneer Road
Long Beach WA 98631

CRANBERRY VINE

June 2018

MEETINGS

WSU Cranberry Field Day. Wednesday, August 1, 2018 at PCCRF. Registration 8:30 am. Presentations 9 am to 2 pm. Three pesticide credits will be given.

Washington Cranberry Commission annual meeting. Wednesday, August 1, 2018 at PCCRF. 8:30 am to 8:45 am.

MISCELLANEOUS

Pollinators: There are three new good sources of local information to heighten your critical thinking about pollinators. Two are publications from WSU: "An Introduction to Cavity-Nesting Bees in the Puget Sound Region," <http://cru.cahe.wsu.edu/CEPublications/FS293E/FS293E.pdf>, and "A Citizen Science Guide to Wild Bees and Floral Visitors in Western Washington," <http://cru.cahe.wsu.edu/CEPublications/EM110E/EM110E.pdf>. The third one is a pollination podcast from OSU: <http://blogs.oregonstate.edu/pollinationpodcast/>. This latter one has several good selections of podcasts you can listen to the next time you are pulling weeds on your beds.

Voluntary Stewardship Program (VSP): Washington growers really should consider

signing up for the VSP program with the Conservation District. If you are signed up, you are eligible for 90% cost-sharing for sponsored programs (assuming that there is adequate funding). There is a range of programs available for cost-share, including but not limited to, chemigation units, irrigation systems, and ditching and cribbing.

Pesticide applicator recertification credits: Private applicators must earn 20 WSDA-approved recertification credits every five years. You can get a maximum of 10 credits towards the official record each calendar year. As you may have heard, I will be retiring at the end of the year. Until my position is refilled, it may be a challenge to obtain recertification credits locally. This summer's field day and the next Cranberry Winter Workshop in 2019 will be your last opportunity to obtain credits within a cranberry venue. For on-line classes and other credit options, please see <https://agr.wa.gov/pestfert/licensing/recertification.aspx>. These are not too germane to cranberry production, but you will get your recertification hours.

A good read - Wisconsin Cranberry School proceedings: Wisconsin puts on a great school and the results are all contained in the proceedings. They can be downloaded at

<https://fruit.wisc.edu/wpcontent/uploads/sites/36/2018/02/Cranberry-school-Proceedings-FINAL-compressed-2018.pdf>.

Worker Protection Standards: Washington State Department of Agriculture (WSDA) will be enforcing old WPS regulations and conduct education about the new requirements during 2018. Starting in 2019 all WPS rules will be enforced. There are two sets of inspector forms they use for this process: one for the handler/worker and one for the employer. You can find them on-line at agr.wa.gov (WSDA) under worker protection. They provide a great review of what you will need to do in order to pass. There are lots of other resources on-line on the WSDA and the Pesticide Educational Resources Collaborative (PERC) websites (<http://pesticideresources.org/>) regarding exact requirements. The PERC site even has free training materials you can download.

Basically, all handlers, early entry workers and workers must be trained before doing any task in treated areas on an agriculture establishment where, within the last thirty days, a pesticide has been used or a restricted-entry interval has been in effect. Training records must include specific information. Have workers and handlers "sign in" when the training has been completed as part of the training record. The training is very comprehensive and very specific. You can't just say 'be careful'. Records of trainings may be requested upon inspection. It is important to note that in addition to the Personal Protective Equipment (PPE) you are also required to have decontamination supplies and an eye flush station.

There is a family exemption from certain provisions of the WPS regulations. However, parts of the regulation apply to everyone.

Finally, if you have any worker applying category I or II organophosphate or N-methyl-carbamate pesticides (Orthene, Diazinon, Lorsban, Sevin), the Department of Labor and Industries' Cholinesterase Monitoring Rule (<http://lni.wa.gov/Safety/Topics/AtoZ/Cholinesterase/default.asp>) requires monitoring of all agricultural employees who handle these insecticides. Record the number of hours employees spend handling these pesticides. Implement a medical monitoring program for workers who could meet or exceed the handling threshold of 30 or more hours in any consecutive 30-day period.

PEST MANAGEMENT

Pesticides

Quinstar: A great herbicide with no likelihood of crop damage. There is still time in the season for growers with non-export fruit to consider using this post-emergent herbicide for several of their problematic weeds. Quinstar MRL for the EU, however, continues to run into road blocks. If you have been waiting for the EU MRL to get rid of your yellow weed, it won't happen anytime soon.

Lorsban: While EPA has extended use of this insecticide for many years, there are concerns from some retailers about offering commodities that have been treated with Lorsban. I do not have an idea what this means for cranberries, but it would be a good idea to buy and use only what you need in a given year.

Neonicotinoids: The EU has agreed on banning neonicotinoid insecticides. Since we use them very minimally in Washington cranberries, this is not overly critical. Just be aware that any use of Admire could be problematic in the future.

Intensity and Intensity One: These two grass herbicides, which currently have a broadcast label for cranberries, will soon have a SLN for chemigation application of cranberries in Washington. Copies of those SLN's should be available on-line once they are issued. See grass control section below for more information on how to use these products.

Weed control

Weed-free Areas around your building: An herbicide called Esplanade EZ is available in 1-quart containers. It provides both post and long-term pre-emergent control. Worth a try if this has been a problem for you.

Summer Weed Control: Callisto via chemigation, or Callisto with or without Select tank mix for spot spraying are good options for many weeds. Be sure to add a surfactant for spot spraying as per label recommendation. Do your second Callisto application just when the weeds are growing out of the first treatment. Stinger after summer bud set does a reasonable job for several target weeds (Lotus, Sheep Sorrel etc.). Be advised, it will damage all exposed uprights that have not set a terminal bud, so use only where you are desperate.

Horsetail control: We have obtained long-term (>1 year) control of horsetail with summer wiping with Round-up plus a silicon surfactant. If you have escapees to manage and they are tall enough to wipe, control is not half bad.

Grass control with chemigation of clethodim: Pending the SLN issuances two Loveland clethodim herbicides (Intensity and Intensity One) can be chemigated for grass control. At this time, we have minimal data on which grass species they work best. With early season timings, we have had excellent control of sweet vernal grass and

velvet grass, moderate control of creeping bent grass, and less than impressive control of perennial fescues and reed canary grass. Annuals such as annual bluegrass and barnyard grass should be easy to control. Best control occurs when applications are made before the grass is too tall. We have not seen any evidence of crop phytotoxicity. If you have persistent grass problems, you should consider using one of these products. I am not sure about cost per acre, but as with other off-patent formulations of clethodim, I don't think it will be very much.

I would be especially excited about using this product after fruit set when you don't want to be walking or driving on beds to control late germinating grasses, like barnyard grass, or grass that you failed to control earlier. Intensity is 2 lbs ai/gallon. Use 8 oz/ac along with 1 quart of a crop oil concentrate. Intensity One is a 1 lb ai/gal. Use 16 oz/ac along with 1 quart/ac of a non-ionic surfactant. You are allowed two applications at the above rate per season. One problem that might occur with chemigation of Intensity or Intensity One, which could be a deal breaker for some growers, is the potential impact on grass dikes. We have trials out now to assess that impact. If your sprinklers don't hit your dikes, if you don't have grassed dikes, or your grass is a species resistant to clethodim, then this should not be an issue.

Disease Control

Fruit rot control: To reiterate what we have said before: fungicides should be applied during early to mid-bloom to achieve the best control against the range of pathogens that cause field and storage rot. To avoid resistance, make sure you rotate your fungicides between products with different FRAC groups and make sure your last fungicide application has a broad-spectrum activity.

Cost-saving: Fungicides are expensive. The most cost-effective fruit rot control program is one Proline during early bloom. Additional applications are suggested for fresh fruit or processed beds with bad field rot history. Post-set fungicides are mainly for twig blight control. If this hasn't been an issue for you, then this is another cost-saving opportunity.

Blossom Blast: Did you have uprights with flowers that didn't open? We saw a serious infestation on a Pilgrim bed last year. It is likely caused by *Phyllosticta*. Control with mancozeb and chlorothalonil has been poor. Use sequential applications of Indar or Proline instead of starting at scattered bloom.

Insect Control

Tipworm: Use Movento only after set and the bees have been removed. Follow the label instructions. Bad infestations will require two applications. As of this writing we have not received a chemigation label for cranberries. This year's Movento application will only have a minimal impact on this year's crop; it is mainly for saving next

production.

WEATHER

This has been a relatively mild winter and spring with few frost days. I haven't heard of any significant frost damage so far this season. Nevertheless, vines are now at their most sensitive stages, so be very diligent. Our growing degree days are currently slightly greater than 2017, but less than 2015 or 2016. Rainfall for March and April was above average, but May has been relatively dry. With that in mind, don't forget that earlier season and in-bloom irrigation is often overlooked. Our current water use is ~ ½" week. If you are on sandy soils and it hasn't rained much over the past week, you will need to irrigate.

I've heard from Southern Oregon growers this spring about the plethora of uprights with umbrella bloom, despite there being no frost damage. The exact cause is unknown. The most obvious cause would be from tipworm, but it could also be related somehow to inadequate chilling hours. Let me know if anyone in WA is experiencing that same issue.

WEATHER HISTORY WSU Long Beach Research and Extension Unit								
Monthly Precipitation					Monthly Growing Degree Days (base 45°)			
Month	2016	2017	2018	20 yr ave.	2016	2017	2018	20 yr ave.
January	16.4	7.3	14.4	11.6	79	8	67	40
February	11.9	11.1	8.3	7.5	129	16	3	36
March	14.0	17.8	7.6	10.0	117	65	39	58
April	2.4	8.6	10.9	6.2	241	123	128	111
May	1.4	6.0	6.0	3.8	310	246	246	235
June	2.7	3.2	3.2	2.8	381	387	387	337
July	1.6	0.5	0.5	1.2	484	431	431	439
August	0.8	0.8	0.8	1.7	492	469	469	448
September	3.6	3.2	3.2	2.8	363	347	347	370
October	16.9	10.5	10.5	7.5	257	151	151	222
November	19.0	19.0	19.0	12.4	195	195	195	94
December	11.2	11.2	11.2	12.0	9	9	9	32
Totals	101.9	99.2	95.6	79.5	3057	2447	2472	2422

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Long Beach Research and Extension Unit

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