

May 2018

# Small Fruit Advisor

## A TerraLink Technical Newsletter

### ANNOUNCEMENT!

## Exclusive for German Nematode Supplier

TerraLink has reached an agreement to be the exclusive distributor and representative of predatory nematodes for the German firm E-Nema. Fraser Valley cranberry producers who have been using Marauder brand nematodes for control of Cranberry Girdler are already familiar with the consistent and high quality from E-Nema.

Predatory nematodes are one of the more unusual tools available to producers to help control pests of food and ornamental crops. With the steady advance of scientific research, these beneficial nematodes are becoming both more common and less expensive. Of the more than 80,000 species of nematodes known to exist, only a few are insect-parasitic (entomopathogenic nematodes, or EPN). We can and do use them to our benefit, and there are several commercially developed and produced species available for several situations.

One of the primary tools in the fight against Cranberry Girdler are EPN such as Marauder, which is TerraLink's brand of the predatory species *Steinernema carpocapsae*. Another species, *Heterorhabditis bacteriophora*, has also been used effectively. These two types of predatory nematode have different hunting and killing strategies, making a blend of the two an effective weapon against Girdler and other pests. In highbush blueberries, both these species can be used against Black Vine Weevil. E-Nema rears, offers, and does research on many other species of EPN as well.

For more information, see the TerraLink website. Search "nematode" or find the technical bulletins under the publications section or Grower Info. Or, call and inquire at one of our Sales Desks, where our friendly and knowledgeable Customer Service Reps can help you.

### Pest Control

## New Registrations in Berry Crops

The following are new registrations or have had additions made to existing labels.

#### Capture 240 EC insecticide:

Good news for producers of highbush blueberries. According to staff at the BC Ministry of Agriculture, the PMRA has determined that the use of Capture 240 EC for the control of Spotted Wing Drosophila in British Columbia meets the critical need criteria.

The phase out schedule for Capture is as follows:

Last day of sale by FMC: Dec. 31, 2018

Last day of sale by retailers: Dec. 31, 2019

Last day of permitted use by growers:

December 31, 2020

#### Alion herbicide:

Introduced back in 2013 for tree fruit and grape plantations, this Group 29 pre-emergence herbicide from the Bayer stable has now been registered on both blueberries and caneberries as well. It gives long term residual control of a broad spectrum of annual grassy and broad-leaf weeds. Alion prevents weeds from emerging by inhibiting the growth of the developing root in the seed germination zone.

#### Lagon 480 E insecticide:

A Minor Use registration for Lagon 480 E insecticide is now in place for control of Spotted Wing Drosophila in highbush blueberry, for post-harvest foliar application. A Group 1B organophosphate (active ingredient dimethoate), Lagon 480 E is an old and proven battle-scarred veteran that has been used for years for control of soft-bodied sucking-damage insects in cruciferous crops and many others.

#### Cygon 480 Systemic insecticide:

An analog of Lagon 480 E, Cygon 480 Systemic insecticide is also registered for control of Spotted Wing Drosophila in highbush blueberry. It is also a User Requested Minor Use Label Expansion (URMULE), also for foliar application post-harvest.



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## Plant Nutrition

# Fertigation in Blueberries

If you have a drip irrigation system installed in your blueberry field, then you are one of an increasing number of blueberry producers switching to this “micro” form of irrigation. If you don’t have such a system, you should consider it. Aside from the benefit of efficiency, it is an ideal way to apply nutrients to your field. It is a precise way to fertilize, and it should not be much more expensive than using granular fertilizer. Applying nutrients through your drip system is known as fertigation.

By now, you are probably aware that local research, and even non-local research, has shown that nitrogen fertigation provides bigger yields, and larger plants, on average, than applying the same amount of nitrogen as a granular split application\*. This is not necessarily the same for the other nutrients. There is a lot of scientific evidence showing the benefit of nutrients applied via liquid vs granular. There is not a lot of science specifically in blueberries, but it is nevertheless increasing, and we will endeavor to inform you when we learn of it. In any case, here are some other things you should probably know about fertigation in blueberries.

- Don’t forget – highbush blueberries can only efficiently take up the ammonium form of nitrogen from the soil. They are incapable of using the nitrate form.
- When humic acids are used in conjunction with fertigated nitrogen, root growth in the first two years after planting is nearly twice that when nitrogen is applied without humic acids.
- In coarse soils, such as sandy soils with low organic matter found in areas of the mid to upper Fraser Valley, highbush blueberries are more susceptible to potassium deficiency.
- The root systems of highbush blueberries under drip irrigation typically do not expand as much as non-drip fields. Keep this in mind when supplementing fertigated nutrients with granular fertilizer. Make sure to apply granular fertilizer within the drip zone.
- On average, it is the least expensive when macro nutrients are applied mostly in granular form, and secondary and

micronutrients are applied via fertigation (foliar micronutrients are also effective to some degree). This is not to say macro nutrients shouldn’t be applied through the drip.

If you have questions please call TerraLink at the Abbotsford office 800-661-4559 or the Delta office at 604-946-8338.

### References:

\**Potassium Fertigation in Highbush Blueberry. The Fluid Journal, Summer 2017. Bryla, D. and Orr, S.*



## Pest Control Research New Methods in Nematode Control

In the Spring edition of the Raspberry Industry Development Council Newsletter (RIDC News) there was an interesting article by Dr. Eric Gerbrandt (New Drip-Line Options for Nematode Suppression during Raspberry Establishment). This research focused on evaluation of post-plant suppression of nematodes. Following the demise of pre-plant custom fumigation in the Fraser Valley, producers have faced increased pressure from both nematodes as well as soil-borne diseases, especially in fields re-planted repeatedly to raspberries. In particular, the research focused on the old nemesis, the root lesion nematode *Pratylenchus penetrans*. Dr. Gerbrandt’s research holds promise and is worth repeating here.

So far, Dr. Gerbrandt has found that Vapam fumigation through a drip line can provide significant control of *P. penetrans* that can potentially result in increased first year cane growth. Also, post-plant applications of

nematicides such as the new Velum Prime and Nimitz may have a place in providing additional suppression of nematode. Velum has proven more effective than Nimitz so far. However, neither product has demonstrated to significantly alter populations of nematodes, and neither did they alter first year raspberry cane growth.

It must be recognized that scientific trials have to be repeated and evaluated over a longer time in order to give us long-lasting knowledge of new products and methods. Hopefully more work will be done to further show benefits to drip line fumigation and post-plant applications of nematicides.

**NEW!**

## Fruit & Vegetable Crop Inputs Product Guide

Next time you are in the TerraLink website, make sure to view a copy of our new Fruit & Vegetable Crop Inputs Product Guide. It contains all possible crop products offered by TerraLink for use by producers of any fruit or field vegetable crop. From nutrients, crop protection, crop covers to organic soil supplements, you will be able to find it in this new guide. Or, pick up a hard copy next time you find yourself having a coffee with the staff at one of our Sales Desks in Abbotsford or Delta.

