



# Vegetable Advisor

## A TerraLink Technical Advisor

Summer 2018

### 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 vegetable production, E-Nema produces EPN for use against cutworms, thrips, and other pests of vegetables. This includes control of western corn rootworm with the species *H. bacteriophora*. Western

Corn Rootworm is a fairly new pest in corn production in BC. 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 Field Vegetables

### Centurion EC herbicide:

A label expansion has been granted to Bayer's established Group 1 herbicide, Centurion EC, for control of labeled weeds in Crop Sub-groups 6A and 6B. These crops are the edible-podded and shell beans, such as Edamame. Dry bulb shallots are also included. Centurion EC is a systemic post-emergence grass herbicide. It is targeted at annual grasses. Note; it will at best only suppress quackgrass or couchgrass (*Agropyron repens*).

### Rimon 10 EC insecticide:

An insecticide that is an insect growth regulator, Rimon 10 EC now has a label

expansion for suppression of pepper weevil on both bell and non-bell field peppers. Unlike many modern insecticides that attack the insect nervous system, Rimon's mode of activity is disruption of deposition of the insect's cuticle, which causes the insect's death during molting (transition of one growth stage to the next one). If the target insect has completed its molts, it no longer has any effect. Rimon will control both lepidopteran and beetle insect pests. This is a Group 15 product. Active ingredient Novaluron.

### Kanemite 15 SC miticide:

A Group 20B product, Kanemite 15 SC miticide now has a label expansion for control of Two Spotted Spider Mite and Broad Mite on Summer Squash. It is effective on all growth stages of pest mites and has relatively low toxicity to beneficial insects. It has a fast knock-down effect and is residual.

## Produce Packaging Boost Fresh Market Sales with Attractive Packaging!

### Berry Flats:

Use these beautiful flats for strawberries, raspberries or blueberries! They are perfect for fresh market sales. These flats will hold twelve of the pressed green fibre pints, or four of the rectangle #1 1/2 size. Or, for a change, eight of the #8K blue foam trays also fit very nicely in the same flat.

### Baskets and Trays:

We have a wide choice of green pressed fiber berry baskets, including #5, #3, #1.5, quart and pint. Or try our blue foam trays in two sizes, #8K and #24.

### Blueberry Boxes:

Prices from the packer too low? Try roadside sales for extra cash! We stock sturdy corrugated blueberry boxes in two sizes: 10 lbs or 5 lbs of fruit. Our boxes have attractive blue and green graphics, with stacking tabs and good ventilation.

## Soil Health

# Managing Soil Compaction

Soil compaction is often thought of as a problem associated with perennial berry, grape or tree fruit plantations, in which equipment passes over the same places for many years. However, in reality soil compaction is but one form of damage to soils that is common to all types of agriculture. Fields under vegetable production can suffer from compaction just as much as those planted in perennial crops, except the compaction can be more widespread.

In native soil (not previously cultivated), particles are arranged randomly, and there are many spaces between these particles that allow for the presence and passage of air, water and living organisms. The wheels on heavy equipment eventually squashes those soil particles closer together, reducing those spaces and therefore reducing the proportion of air and water to solid soil particles. This effect is much worse when equipment is used on the soil in wet conditions, but regardless, tires and cultivation of any sort, in any conditions, will cause soil compaction given the passage of enough time.

Compacted soil is damaged soil and is bad for farm production. In a University of Guelph study that was reported in *The Grower* magazine in September 2014 researchers examined how air injected into a drip system in field-grown tomatoes, peppers, cucumbers and sweet corn significantly increased yields of between 13 and 18%. By adding air into soils with excess water in the spaces between soil particles, the researchers concluded that root respiration and microbial activity is increased. Obviously, compacted soils will suffer from reduced root respiration and microbial activity.

### How do we manage soils that are compacted?

One helpful method that has been used in perennial small fruit plantations is subsoiling. You don't have to be a berry farmer to benefit from subsoiling. Make sure to perform this task in a dry time of the year, as the fissure left by pulling the subsoiler will stay open through into wetter weather, allowing more air movement and better drainage. Subsoiling in wet weather will not only be more difficult, requiring more tractive power, but the subsoil fissure may close quickly again soon afterwards.

Another way of helping to recover compacted soil is to plant a cover crop of tillage radishes. These are typically daikon radishes that grow a large tuber up to 18 inches or more, with an even longer taproot. An article in *Top Crop Manager* (West) from December 2013 explains how these radishes break up compacted soil, and plough pans, as their roots grow downwards through the soil. Planted in the summer, the radishes rot in the spring, leaving natural air pockets that help air and water percolation through the soil. An added bonus is nutrients stored in the tubers, cycled up from the depth of the taproot to the surface layers of the soil where subsequent crops take advantage of it. TerraLink offers Aerifi variety tillage radish under our Richardson Seed brand. A crop of Aerifi tillage radishes also adds valuable organic matter to your soil, giving you several good reasons to try it. For more information on Aerifi or other Richardson Seed products, call and speak to our technical Customer Service Reps at one of our Sales Desks, in Abbotsford (800-661-4559) or in Delta (604-946-8338).

#### References:

1. *Research project examines drip irrigation on vegetable production. The Grower, September 2014, p.12*
2. *Tillage Radishes – A New Option for Improved Soil Health. Top Crop Manager (West), December 2013*

## Slug Control

# Reasons to Use Sluggo

Did you know that Sluggo Slug & Snail Bait is now registered for use at only 11 pounds per acre? This is half the rate it was previously, and so much less expensive. But, there are eight other great reasons why you should use Sluggo to control pesky slugs in your vegetables.

- **It is Different!** Sluggo has a different active ingredient from products that contain metaldehyde.
- **Sluggo is Safer!** The active ingredient in Sluggo will not harm children, pets, earthworms, wildlife and bees – unlike products containing metaldehyde.
- **It Works Better!** In cool weather, Sluggo has been shown to work better than competing slug control products that contain metaldehyde.
- **Leaves NO Residue!** The active ingredient in Sluggo is ferric phosphate, a compound commonly and naturally found in soils. Uneaten bait degrades and becomes part of the soil.
- **Long-lasting!** Sluggo is very rainfast. The pellets remain effective after rain or irrigation. Easy to use! Sluggo's smooth, clean pellets make the product very easy to handle and spread.
- **In-field Use!** Sluggo is registered for use right within the field, right up to beside the base of the plants. Metaldehyde products are not.
- **Fast-acting!** It is fast-acting and very effective. Slugs and snails are attracted to Sluggo and once affected, crawl away to die in secluded places.
- **Blend With Granular Fertilizer!** Sluggo can be easily and safely blended in with your granular fertilizer for ease of use and convenience.