

# The Grapevine

A TerraLink Technical Advisor

## Pest Control

### New Registrations in Grapes

#### Clouser SC insecticide

A new product from Dow AgroSciences, Clouser SC insecticide, active ingredient sulfoxaflor, was registered in grapes for suppression of leafhoppers. This Group 4C chemical is systemic and translaminar, fast acting and residual. Be very careful as it is toxic to honey bees. A maximum of 2 applications per season are allowed, The pre-harvest interval (PHI) is 3 days and the re-entry interval (REI) is 12 hours.

#### Aliette WDG fungicide

This old standby from Bayer is now registered for downy mildew in wine grapes and powdery mildew in table grapes. For either pathogen, a rate of 1.5 kg per acre can be applied up to a maximum of 7 times per season as a foliar spray, in water volumes greater than 60 L per acre. The PHI is 15 days. No more than 10.6 kg per acre of Aliette may be applied in accumulated total per year.

#### Intrepid 240F insecticide

This Group 18 chemical (active ingredient methoxyfenozide) is another effective insecticide from Dow AgroSciences. Intrepid 240F was recently given a minor use registration for Grapeberry Moth. Apply at the initiation off egg hatch and a repeat application may be necessary if populations are high or there are woodlots nearby. Don't forget that Intrepid 240F will also control lepidopteran pests. The PHI is 30 days.

#### Buran fungicide

For those of you growing grapes for organic production, here is an organic-certified new-generation product. Buran is a garlic-based fungicide for suppression of powdery mildew. Repeat applications and thorough

coverage are necessary to maintain disease protection. The rate of application is quite high, at over 7 L/acre. The PHI is zero days.

#### PyGanic EC 1.4 II insecticide

A pyrethrum-based organic insecticide registered in grapes for control of aphids and leafhoppers. It is a contact product that offers immediate control of both soft and hard-bodied insect pests, but without residual activity. Pyrethrum has been used for hundreds of years to control pests long before modern chemistry. Make sure to buffer the spray solution to a range of 5.5-7.0, and apply in early morning or late evening to avoid UV exposure.

## Nutrition from the Sea

### The Benefits of Stella Maris

Sustainably hand-harvested *Ascophyllum nodosum* seaweed from the intertidal shores of Nova Scotia's

Bay of Fundy is exclusively used in Stella Maris. Evolved in the freezing but nutrient rich water, it contains very unique, bioactive

components that when applied to plants allow for higher quality crops. Popular around the world for use on grapes, research has demonstrated a full range of benefits, such as improvements to rachis length, colour, size uniformity, as well as increased bunch weight and berries per bunch.

In nineteen of twenty field trials on wine grapes where bunch length was measured, Stella Maris treated vines produced noticeably longer bunches. Longer bunches

allow for better air flow and spray penetration which lead to improved grape quality. The average bunch length increase was 5.3%. This average covers all application programs and the researchers observed that the early season applications have the most influence on bunch length. For maximum benefits, follow a complete application program.

Many growers have also turned to applications of Stella Maris to improve root growth and plant establishment at planting or throughout the year.

Ask for more details on Acadian Seaplant's research work and stop-motion videos.

Stella Maris increases bunch length, improves colour and size uniformity and, if desired, helps reduce shatter of wine grapes. Fundamentally, applications will improve plant health and allow the plant to better tolerate stress.

## Plant Nutrition

### Maximize Growth with Novacal II

A manufactured granular gypsum-like product, Novacal II contains a natural plant extract derived from rice and cotton, called Nutrisorb. Carboxylic acid within Nutrisorb enhances activity in the root zone, improving auxin metabolism. This in turn induces production of root hairs and overall root growth. It stimulates the ability of the root hairs to absorb nutrients, and facilitates the colonization of beneficial microbes in the rhizosphere. The result? Increased root mass, volume and dry weight. It also increases respiration, nutrient uptake and translocation, and water use efficiency.

Novacal II can be applied by blending with fertilizer, or independently. Fall is a good time to apply it. A typical application rate is in the range of 50 to 150 lbs per acre.



Novacal II is superior to gypsum also in the nutrient make-up. Compared to regular gypsum that is normally about 20% calcium, Novacal II contains 28% calcium and 19% sulphur.

### Choose the Right Seed

## Cover Crops for the Vineyard

A cover crop can be planted with the intent of becoming a semi-permanent fixture or it can be used as a green manure or a mulch, meaning it will be grown and then killed and maybe even tilled into the soil. There are many benefits of cover cropping including soil conservation, weed control and enhancement of the soil properties to benefit the vines.

One of the most common reasons growers plant cover crops is to provide protection for the soil from erosion by wind and water. Although preventing the loss of topsoil is crucial and may be the primary objective, growers may not realize that they are improving the soil quality at the same time.



It has been suggested that one of the greatest benefits of cover crops to vineyards is the increase in soil organic matter that occurs during decomposition of plant matter after incorporation, or while the stand is growing. Perennial cover crops slough off about half their roots each year, returning organic mass and nutrients directly to the soil to be used by plants in the immediate proximity. This results in improved soil fertility and soil structure (increasing aeration, water infiltration and retention). These improvements also



## Keep your crop safe.

**PyGanic Crop Protection EC 1.4 II** is an organic-compliant product containing Pyrethrins, a botanical insecticide derived from chrysanthemums. It delivers quick knockdown and kill of crop-damaging pests, such as beetles, aphids, leaf hoppers and caterpillars.



- No pre-harvest interval
- No residual activity.
- Excellent IPM rotation product
- Controls both soft and hard bodied insect pests, fast!

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## TerraLink

**For your Viticulture and Tree Fruit inputs in the Okanagan Valley, please visit one of these locations:**

**Growers Supply Co. Ltd., Main Office**  
2605 Acland Road, Kelowna BC, V1X 7J4  
Tel: 250-765-4500 Fax: 250-765-4545  
[info@growers-supply-co.com](mailto:info@growers-supply-co.com)

**Growers Supply Co. Ltd. South Okanagan**  
360 Okanagan Ave. East, Penticton BC, V2A 8N3  
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[info@growers-supply-co.com](mailto:info@growers-supply-co.com)

**South Valley Sales Oliver**  
34625-91st Street, Oliver BC, V0H 1T0  
Toll Free: 1-888-875-6670  
Tel: 250-498-6408 Fax: 498-4022  
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**South Valley Sales Keremeos**  
1813-5th Street, PO Box 372, Keremeos BC, V0X 1N0  
Tel: 250-499-2900 Fax: 250-499-2960  
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add a buffering capacity which aids in resisting large changes in soil pH, providing a more balanced soil where vines are more likely to thrive and are better able to withstand disease and pests. The plants will also survive drought and stress better with these improved soil conditions. Additionally, the soil microbes and beneficial organisms will be able to multiply and aid in crop growth as the soil quality improves. One of the greatest benefits of increased soil microbe activity is increased nitrogen fixation. If the cover crop is a legume, and the soil biology is healthy, the nitrogen fixation will be maximized, again benefiting the crop.

Perhaps a more obvious effect than improved soil quality, cover crops crowd out weeds as they compete for available light, nutrients, moisture and space. (Some cover crops are even allelopathic, meaning they may inhibit or slow the growth of weeds by releasing natural toxins/chemicals.) Cover crops are sometimes selected to attract beneficial insects.

When it comes to choosing a cover crop for your vineyard, the opportunities are endless. Consider if you are looking for a permanent crop, or if you would like something short-term. Are esthetics important to you or are you most concerned about soil conditioning? Do you have a problem with pests? Would you like to seed grasses and legumes that are native to your area? An example of an interesting alternative to traditional cover crop options is wheatgrass. If you need extensive rooting to stabilize soil in an area with limited water, then wheatgrass may be the ideal choice for your vineyard. Whatever your situation, give us a call and we will help find a cover crop that will meet your goals.

#### Sources:

*Overview of Cover Crops and Green Manures, ATTRA*  
<http://www.attra.org/attra-pub/covercrop.html>  
*Mitham, P, November 2010. Cover Crops Can Green the Vineyard, Good Fruit Grower.*