

APPLE PIPS

~ Little Things to Grow From ~



Cueva™ is a patented, fixed copper fungicide that is effective for use on apples. It controls many common bacterial and fungal diseases - including fireblight and scab - using low concentrations of copper. This copper soap fungicide proves to be less phytotoxic, allowing for a broader range of application timings with less risk to the crop.

New Products for 2016



Introducing a new insecticide from Bayer - first in a new chemical sub-class (Grp. 4D), Sivanto™ Prime precisely targets key damaging pests like aphids, leafhoppers, and scale while at the same time having a favourable safety profile for bees and many beneficial insects. This “next-gen” Group 4 proves to be efficacious on insects feeding on the underside of leaves, even when applied to only the upper surface of leaves, making use of translaminar movement. Fast knockdown, combined with long window of application increases its usefulness in your IPM strategy.



Aprovia™ (Grp. 7) fungicide demonstrates excellent activity on many foliar diseases in several crops including pome fruit. It strongly binds to the plant’s wax layer and slowly penetrates into the tissue. This binding, plus translaminar activity and extremely high potency, delivers improved disease control even under heavy pressure. Aprovia™ is registered on scab, powdery mildew, and alternaria blotch.



Blush™ is a new plant growth regulator developed to promote colour change in bi-colour apples, thereby improving the commercial value of the crop. See the Blush™ brochure found within this mailer for more information.



Sercadis™ is a next generation (Grp. 7) fungicide labelled for a wide range of crops including apples. Powered by the active ingredient Xemium®, Sercadis is highly systemic and creates rainfast reservoirs on leaf surfaces that continuously distribute its unique chemistry throughout the leaf. Sercadis™ has great tank-mix flexibility to fit into your IPM program.



Silamol is a new product that is registered as a silicon fertilizer. It is unique in that it is comprised of a form of silicon (mono-silicic acid) that is extremely plant available. It can be taken up and utilized by the roots and/or leaves. For more details, find section on Silamol on page 2.



Serenade™ OPTI has replaced the Serenade™ MAX bio-fungicide, still registered for suppression on scab, powdery mildew and bacterial diseases, such as fireblight.

Label Expansion/Revision



As a precaution BASF is removing pome fruit from the Vivando™ Fungicide label. It is advised that growers DO NOT make applications to apples or other pome fruit crops.



Nealta™ Miticide 2015 saw our first experiences with new Nealta™ miticide. The product has excellent attributes and to fully realize these and give optimum results, certain conditions should be met. The following is recommended:

1. Apply early. Spray before visual damage is found; 1-3 mites per leaf is optimal timing.
2. Coverage is key. 1000L/ha minimum with aid of surfactant, summer oil preferred (watch around Maestro™ or sulfur).
3. Do not expect rapid knockdown. Nealta™ can take several days but will give good control of labelled mites.



Sevin™ XLR has been re-evaluated with label changes forthcoming. However, currently labelled product can still be used until Mar. 31, 2019.



Product	Active De-registered	Last Date of Sale	Last Date of Use
Diazinon	Diazinon	TBD	Dec. 31, 2016
Malathion 25WP	Malathion	Dec. 31, 2015	Dec. 31, 2016

4509 Bartlett Road
Beamsville, Ontario
L0R 1B1



Office: 905-563-8261
Toll Free: 1-800-263-1287
Fax: 905-563-7882

www.bartlett.ca | info@bartlett.ca

Fireblight Management Tips in 2016

Fireblight wreaked havoc across the North East in previous years. Many growers who have never had fireblight before are now faced with managing the most destructive disease to pome fruit. **Fireblight is manageable** when incorporating a full program.

Some factors that increase susceptibility of a tree to infection include high nitrogen fertility, young actively growing trees, and most critically, susceptible cultivar. Bloom time generally poses the greatest risk as flowers provide a pathway directly into the tree. Conditions favourable to development include: open flowers, temperatures greater than 18.3°C, a wetting event that moves the bacteria from the pistils to nectaries (rain, dew, spray), and the presence of the fireblight bacterium.

To limit the severity of damage in 2016 we recommend the following program.

1. Cut out any current fireblight cankers and either flail chop or burn.
2. Check tree lines for other hosts including: Mountain ash, Quince, Firethorn, Hawthorn, raspberry and the unattended apple or pear orchard.
3. Spray a labeled copper product starting at green tip to help reduce surface bacterium in the orchard from missed cankers.
4. Download a copy of Maryblight or Cougarblight.
http://county.wsu.edu/chelan-douglas/agriculture/treefruit/Pages/Cougar_Blight_2010.aspx
<http://www.caf.wvu.edu/kearneysville/Maryblyt/index.html>
5. Plan to make applications of Streptomycin and/or Kasumin through bloom if program alerts you to. Make sure you save a Strep spray on hand for the unlikely trauma event (availability of product goes quickly, when the heat is on!)
6. Consider the use of Apogee to decrease the susceptibility of shoot blight. Start these applications early (king bloom petal fall, and continue with low-moderate doses for at least 3 applications 2 weeks apart.
7. Prune out any fireblight strikes and remove from orchard if feasible, if not, leave till dry and flail chop. If possible, do not work in blocks with active fireblight bacterium present until trees have dried from morning dew.
8. In the event of a hail storm or high wind event, plan to have your strep spray on within 24hrs. The sooner the better!
9. Observe. Spend more time in young plantings, walking the rows multiple times/week, early, when susceptibility is high.
10. Removal of flowers, or treatment of Strep. plus a low rate of copper during year of planting can mitigate potential susceptibility.
11. The use of low copper rates and Serenade during the summer can aid in suppressing secondary spread.
12. Younger plantings can also benefit from ½ rates of Apogee to help thicken cell walls.
13. Russetting can be much less costly in comparison to a fireblight outbreak. Don't be afraid of using new copper formulations.

Product Highlight



Silamol is a highly plant-available form of the mineral element Silicon (monosilicic acid). Silicon is a structural component of plant cells as well as an anti-stress bioregulator. Silicon functions as a macronutrient in cell-wall biochemistry and plant structure but is often left out of the conversation as it is generally quite abundant in mineral soils. Monosilicic acid is formed naturally by the acidification and hydrolysis of silicates from mineral soils. This process is slow, and generally doesn't provide enough monosilicic acid to the plant to induce a response like the addition of foliar and/or soil applied monosilicic acid (Silamol). Silamol is registered in Canada as a fertilizer but acts more like a bioregulator in various ways: a good way to sum up its activity is that **it helps the plant help itself**. In periods of abiotic stress, Silamol has been proven to help regulate water and mineral flow, maintain strong cell walls, and induce disease response - all of this making your plant healthier in the long run.

General Rec: 1L product/acre/season - broken up in 6-8 sprays (150ml/ac). Add Silamol to clean water tank first.



Stella Maris is a product derived from kelp harvested from the intertidal zones of the Bay of Fundy. Stella has proved itself as a great tool for developing roots in young plantings when applied directly to the roots by drip irrigation or in a watering mix with a starter fertilizer such as 10-52-10. The program is adding 1-2L/ac every 2 weeks through the important root development phase.

Stella Maris can also be used as a foliar spray throughout the season at 1-2L/ac. In the US, the sister product is "Stimplex" and it has been implied in reduction of the effects of mite pressures as well as an increase in fruit colouration. Stella Maris is easy to use and tank-mix and has excellent effects on other crops such as transplanted tomatoes and peppers, grape vines, and strawberries.

SPEAK WITH YOUR BARTLETT REP FOR ADVICE ON PRODUCT CHOICE, RATE, AND TIMING.

Always follow label guidelines - visit www.bartlett.ca for current labels.

PLAN FOR QUALITY

Summer Oil Program

Horticultural mineral oil (i.e. superior oil) has a long standing tradition of use in orchards for more than 100 years. Of course it is still used today in it's traditional intent of early season sprays, but we have also been exploring it's use throughout the growing season. 5 years ago we received a label in Canada for a product that is now known as "Pure Spray Green 13E" which has allowed us to experiment with various timings and mixes to validate the products fit in modern orchards. We have seen very positive results and it has become a standard practice in many Ontario orchards. Here are some anecdotal comments from growers of the effects of integrating a summer oil program:

"Don't have issues with Powdery Mildew anymore"

"Made my insecticides have broader and longer activity"

"Haven't sprayed a miticide in years now"

"I have to plan out my spray schedule a little more, but it's worth it"

Mineral oil affects certain insect/mite eggs and motiles as well as fungal bodies by smothering their ability to breath or respire. It also acts as a spreader/penetrant for spray droplets that can help you achieve a better result with other sprays.

Some considerations to make when planning your spray program with Pure Spray Green 13E:

Do not mix with or spray within 14 days of Maestro/Captan, Sulphur, or Permethrin (Pounce, Perm Up).

Mixes readily with most other commonly used products.

Maestro can still be utilized in your spray program to bolster your early season scab and black rot program, as well as late in the season for summer diseases, while products like Manzate, Flint, Fontelis, Granuflo are commonly used with summer oil.

Precision Crop Load Management

In the past, crop load management was primarily achieved through chemical thinning with NAA/Carbaryl around the 10-12mm fruit stage, then some 'wait-and-see' and potentially some large hand-thinning bills. With this you were at the mercy of mother nature, and what seemed to be just dumb-luck!

To the benefit of the apple industry, there has been a large group of researchers dedicated to learning more about this very important practice. The concept of 'Precision Crop Load Management' has been developed as a result of this research with a goal of helping growers achieve a more consistent crop load of valuable fruit based on science, leaving less to chance. With PCLM we start with a defined target yield per acre, then correlate that number to fruit per tree. Prune to a precise bud load, then start chemical thinning early using the carbohydrate model. Then use models to predict fruit set and repeat thinning with Cilis Plus (6-ba) as needed. With a multi pronged approach you are spreading out your risk and enabling you to take more control of your thinning window and amount of thinners used. These techniques will prove to be extremely important as we move closer to the reality of losing Carbaryl in fruit production.

In the pursuit of maximizing yields and profit, the program gives growers the confidence to thin when appropriate and when not to thin. Your local Bartlett rep would be glad to aid you in these important decisions!

NOW REGISTERED!

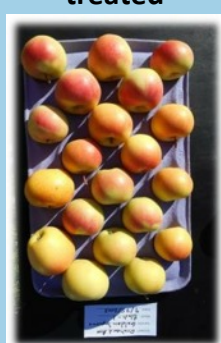
 **blush**®

untreated



Golden Supreme treated 21 days
before harvest mixed with retain

treated



Blush™ is a new plant growth regulator developed to promote colour change in bi-colour apples, thereby improving the commercial value of the crop. Prohydrojasmon is a synthetically produced jasmonate, one of a new group of plant hormones with several beneficial physiological properties. In addition to fruit de-greening, PDJ aids in fruit colour development by enhancing accumulation of anthocyanin within apples. Anthocyanins are red pigments that belong to a class of molecules called flavonoids. Along with stimulating fruit coloration, anthocyanins act as powerful antioxidants. Blush was specifically developed to bring out the red in Fuji, Gala, Honeycrisp, McIntosh, Paulared, Pink Lady and other bi-colour apple varieties.

BEST-USE GUIDE IN ATTACHED BROCHURE

PROVIDE AGRO

A Bartlett Company **BARTLETT** INC. EST. 1912

Equipment Update

UNIFORM FRUITING SURFACE INCREASED LIGHT PENETRATION DECREASED HAND LABOUR

FAMA has developed a hedger designed for high density plantings for shearing and shaping rather than "knocking down" big trees. The goal is to decrease labour, increase light penetration (colour, fruitfulness of lower canopy), and create a uniform fruiting surface (ease of harvest, mechanization, consistent fruit). Growers have been applying differing treatments based on their knowledge of their orchards history and end goals. For instance, a dormant to early spring timing with high severity could stimulate growth on weaker trees. A late June application can shape the tree while encouraging a slight and manageable shoot re growth with some additional fruit bud formation; this application has been the most popular in Ontario. FAMA has created a hedger that is cost effective, robust and adaptable to meet your needs, and we can help you integrate this technology into your operation.

FAMA PRUNING System
FABBRICA MACCHINE www.famapruning.com
THE ORIGINAL TYROLEAN HEDGER
+25 Years Experience



ULTRA EFFICIENT HIGH USER SAFETY BEST COVERAGE

H.S.S.

Hol Spraying Systems

Designed to put your spray precisely where you want it!

Making adjustments to your current sprayer can only go so far in successfully achieving the goal of spraying your target. This sprayer is the next step.

Many features are either standard or available to make the act of spraying safe, enjoyable, and effective. Give us a call to demonstrate how!



PACKHOUSE EQUIPMENT DESIGN AND BUILD - POWERED BY GREEFA

Greefa creates grading lines and packing solutions that prioritize gentle fruit handling. They have a wide range of products for apple sorting, packing, bagging that give your fruit the best possible chance of getting to market with limited damage. We have worked with this equipment for a long time and can help you design a custom system no matter what size packer you are.

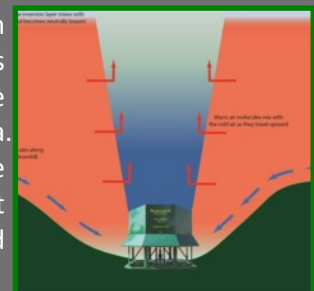


We also design custom peripherals to best utilize the Greefa systems. We use the newest design software to ensure that the finished product is to your exact specifications and high quality components to ensure our built-in-house machinery continues to do it's job for a long time. Our specialties are washing, dumping, drying, conveying equipment. These can be seamlessly integrated into your packing line and are always thoughtfully built with cleanliness and food safety in mind.

FLEXIBLE EFFECTIVE EFFICIENT SIMPLE



The ShurFarm "Cold Air Drain" is a system that has proven itself time and again over the last 20 years. Cold air acts like a liquid and will flow to low areas. This fan will remove these pockets by blasting the cold air high up into the atmosphere and effectively raising the overall temperatures in a certain area. Machines are available for varying areas (1/2 acre, 2-3, 6-9, 10-15) and can be either PTO driven or powered with a stand-alone gas engine with or without auto-start. They are easy to install (no pad), have low fuel consumption, and are low-maintenance.



4825 Union Road
Beamsville, Ontario
L0R 1B4

PROVIDE AGRO

A Bartlett Company **BARTLETT** INC. EST. 1912

Office: 905-563-8261
Toll Free: 1-800-263-1287
Fax: 905-563-7882

www.provideag.ca | info@provideag.ca

This 'Apple Pips' is available on both our websites: www.bartlett.ca & www.provideag.ca