

GH Grower Advisor

Newsletter for the Greenhouse Industry

Start With the Best Seed

Your Rijk Zwaan Source



RIJK ZWAAN

TerraLink is an exclusive partner of Rijk Zwaan Export, representing Western Canada. Our goal is to be welcome at your greenhouse/farm; enabling us to collaborate on developing varieties that are healthy to eat, have great flavor, and provide a strong rate of return on your investment. Please check out the TerraLink website for the latest Rijk Zwaan catalogues, 2013-14 variety recommendations and grower tips (www.tlhort.com). Please contact TerraLink directly if you require additional information.



Substrate Choices

Featured Media

For Greenhouse Vegetable growers TerraLink carries many types of growing media to suit all types of preferences. Increasingly popular is the use of Coco Slabs.

RichGro Coco Substrate is 100% natural, made from coco husks as well as coir and fibre. It is available in wrapped or unwrapped in slabs, 5 kg bricks for soil mixing and

propagation cubes. It provides more water distribution through the soil mix, improves aeration and won't break down over time. It is available with EC control as unwashed, washed or buffered slabs. 1 kg compressed material will equal 12 L volume when hydrated.

RichGro Coco Gerbera mix blocks offer coarse material used as a soil mix ingredient or for use in potted gerbera and rose production. The product is sold in pallet loads only and minimum orders may apply.



For the Greenhouse Floral and Ornamental grower TerraLink supplies all types of Sunshine mixes depending on your specific crop needs. TerraLink carries #1 – Sunshine Complete, a company-wide medium textured, well-drained all purpose mix. It is well suited for growing crops in containers ranging from cell packs to gallons. Basic Mix #2 is appropriate for the same general uses as Mix #1, but no nutrient charge has been added, allowing you to have complete control over fertilization. # 3, the Germination Mix, is suitable for a wide range of crops, particularly where less frequent watering is desired. It has shorter fibre peat and a low fertilizer charge to protect seedlings and plugs. Aggregate Mix #4 is recommended where high air capacity and fast drainage are needed, during winter months, with water or salt sensitive crops, or where frequent leaching is required. Plug Mix #5 is designed to promote better root development in ornamental and vegetable transplant plugs, and Gel Plus Mix #7 is suited for high water usage plants. The gel will hold available water for the plant, making this an excellent mix for plants that receive less than ideal care once they leave

the greenhouse or for plants needing frequent watering as with hanging baskets.

For those growers that want to mix their own blends in-house and make their own additions of peat, perlite, dolomite and fertilizers, all components are also available separately. Contact your sales representative or the TerraLink sales desk directly to inquire about our professional peat types and other amendments we have available.

Greenhouse Hygiene

Keeping it Clean!

Keeping your greenhouse pest and disease free often starts with a good cleaning in between crops to prevent any carry over to the next growing season. This is an extremely valuable step in regard to future plant health and should never be skipped or done half-heartedly.

Greenhouse cleaning and disinfecting options available at TerraLink include the following:

BioSentry – This is a broad spectrum disinfectant with a wide virucidal, bactericidal and fungicidal activity spectrum. It is effective in food safety programs, cleanup disinfection and for control of algae and fungus beneath crop benches. Biosentry 904 is composed of 3 ammonium chlorides (including new generation chemistry) providing 23% active ingredient for efficient disinfecting power. It is effective in 400ppm hard water (as CaCO₃) and contains sequestering agents, to prevent the precipitation of minerals and metals from hard water.

Hyperox – A germicide that can be used to disinfect commercial buildings and equipment, Hyperox may be

used through pressure washers or sprayers in wheel and foot dips, through water systems or as a mist through foggers.

Virkon® – A disinfectant, detergent and deodorant that attacks a broad spectrum of viruses, bacteria and fungi, Virkon can be used in the greenhouse industry for cleanup, disinfection and for preventing disease transfer when used in footbaths. Virkon can be used on all surfaces and in all situations and can be applied using a pressure washer or a fogger.

TL Glass Cleaner – TerraLink's brand of glass cleaner is a low pH cleaning agent designed to remove residue buildup on greenhouse roofs, walls and greenhouse equipment. TL Glass cleaner is perfect for shading compound removal and use in greenhouse crop turnaround clean up procedures. It is quick acting and produces streak free results. It has superior foaming action for overhead cleaning. Can be used on aluminum and stainless greenhouse equipment.

Most disinfectants need a minimum of 10 minutes of surface contact to effectively sanitize. For best results, rinse off most organic matter and soil before applying these products. Read labels prior to use to ensure that the products are properly mixed and applied. Also available are Hydrogen Peroxide Technical and Food Grade, Advance Bleach and disinfection foot mats. All labels are available at www.tlhort.com

What's New in Pest Control New Products & Label Updates

There are many options for pest and disease control in commercial greenhouses. Growers often find a favorite few chemicals that work and do not think to incorporate new products for use in rotation. Rotating between different chemistry classes is the best way to prevent a pest or disease from becoming resistant to the tried and true chemicals in your arsenal.

Some of the newer products for use in commercial greenhouses include but are not limited to the following:

MET52 EC

A contact bioinsecticide utilizing a naturally occurring soil pathogenic fungus, Met52 EC effectively controls thrips and whiteflies in greenhouse tomatoes, peppers, zucchini and strawberries. Met52 EC fungal spores are

suspended in an emulsifiable oil, which can be applied foliarly, or drenched into the soil. Within 3-7 days of contact, insect pests are controlled. There is no known resistance and it is compatible with IPM programs using beneficial insects. Active Ingredient: *Metarhizium anisopliae*.



Influence LC Fungicide

A biological fungicide for suppression of powdery mildew in greenhouse tomatoes and cucumbers, Influence is now available in a new liquid concentrate formulation. Influence LC is approved for organic production by Ecocert Canada certification. A 15% liquid concentrate formulation of garlic, it can be applied preventatively as part of your IPM program for suppression of powdery mildew. Influence LC is safe for use with beneficials and pollinators. The mode of action is inhibition of spore germination and mycelial growth of the pathogen. The manufacturer has conducted trials to demonstrate that application of Influence LC leaves no taste and smell of garlic on the crop and harvested portions.

Switch Fungicide

A minor use registration has been given to Switch to include Greenhouse lettuce for powdery mildew prevention and for Greenhouse tomato for powdery mildew and botrytis prevention. It is also registered for use on greenhouse peppers, cucumbers, spinach and outdoor ornamentals (except roses). Short re-entry intervals and days to harvest application times as well as being mostly harmless to beneficial insects make Switch a good rotational partner with your other fungicides. Active ingredients: cyprodinil & fludioxonil

GROTEK™ Ascend™

Vaporized Sulphur is a very effective, economical sulphur product for the control of powdery mildew in greenhouse crops, both vegetables (tomato, pepper and eggplant) and some ornamentals. Ascend™ Vaporized Sulphur is the only sulphur product registered for vaporization in Canada. It is easily applied using a

sulphur vaporizer. Follow label instructions on how to use this product with beneficial insects in an IPM program. Active Ingredient: sulphur 99.9%

Polydex

This is unique as it is the only registered water treatment algaecide in Canada. Use in greenhouse irrigation, ponds, tanks and distribution lines to keep them free from scale, algae and bacteria. The proprietary ionic copper accomplishes disinfection as a bacteriostatic algaecide when the positively charged copper ions form electrostatic bonds with negatively charged areas on the cell walls of harmful micro-organisms. Cell stresses lead to distorted cell wall permeability, minimizing the normal intake of life sustaining nutrients. Once inside the cell of the micro-organism, ionic copper reacts with sulphur-containing amino acids. As a result, the target organism can no longer perform photosynthesis, which leads to cell death. Most undesirable micro-organisms are killed at low copper ion concentrations whereas important beneficial bacteria, being more tolerant to copper, will survive. It may also be beneficial to growers to reduce copper deficiencies in plants. Use rates of 0.5 to 1 ppm for greenhouse irrigation use. Active Ingredient: Copper sulphate pentahydrate.

Coming Soon

Control Tough Pests with Pylon

Pylon® is a unique miticide- insecticide for the control of tough greenhouse pests, including mites and thrips. It is a cost-effective, broad-spectrum product that controls the target insects by interfering with the energy production of the pest. Its translaminar movement throughout the leaves and unique mode of action result in mortality of most pests within 72 hours. Pylon also has effective contact and ingestion activity. No other pest control product has the same active ingredient.

Product Attributes

- 14 to 21 days of control depending on the pest and population pressure
- Exceptional control of Western Flower Thrips
- Rainfast in 60 minutes
- Broad-spectrum control of nymph and adult mites
- Only registered product for foliar nematodes in greenhouses
- Excellent translaminar activity

Pylon will be available in 2014.