

Nutrients

Summer to Fall Fertilizers

For landscapes needing a bit more fertilizer from mid Summer into Fall, you want to reduce the amount of nitrogen and increase potassium. Excess nitrogen too late in the season prevents your plants from hardening off properly in the fall and can lead to plant losses or damage from cold injury. Here are some recommended later summer / fall fertilizers for landscape plants and turf grass.

Do not use landscape fertilizers in containers as the nutrients may release too fast due to the heat of the pots. High fertilizer concentrations may injure or kill your container plants.

Analysis: 15-5-30 +2.4S (65% UFlexx) Analysis: 15-5-32 + 4.9S (70% MU) Winterizer

High potassium, controlled release fertilizers designed for use on golf course fairways and sports fields or lawns throughout late summer and fall months. Stabilized urea minimizes urea volatilization and nitrate leaching, leaving more available nitrogen for uptake. Use of controlled release nitrogen via UFlexx results in minimal surge growth and prolonged colour response for up to 10 weeks, MU Methylene urea releases over 14-16 weeks. High potassium level assists in summer heat tolerance, winter cold tolerance plus disease resistance. Late applications aid in carbohydrate production and storage, resulting in stronger spring regrowth.

Analysis: 12-2-24 +8.8S +1Mg +1Fe 60% MU (methylene urea) Micro Prill Homogenous

RICHGROW 12-2-24 is a premium quality microsized homogenous fertilizer designed for even application to turfgrass. It is designed to be used on golf course greens, tees and surrounds. This fertilizer contains 60% controlled release nitrogen from Methylene Urea Technology. Typical turf response is up to 12 weeks depending on soil, climate and application rate conditions. RICHGROW 12-2-24 also contains Sulphur, Magnesium and Iron to make this a more complete nutrient package. Typically used during summer and fall months to provide steady nitrogen release and high potassium for heat / cold tolerance and disease resistance.

Analysis: 23-3-23 +3S +0.14Fe +micros (60%MU) Summer Balanced

A balanced 1:1 N & K fertilizer with controlled release nitrogen designed for use on golf course fairways and sports fields. Contains 60% controlled release nitrogen from Methylene 75 (methylene urea). Methylene 75 gradually releases nitrogen to turfgrass up to 14-16 weeks. Contains a full complement of micronutrients responsible for photosynthesis, protein synthesis and overall plant growth. A full analysis fertilizer that can be used from late spring through to fall.

Organic Based: Maximize Hi-P 5-20-14 +2Mg +6S 15% Organic Matter

Maximize organic based granular fertilizers were formulated to combat soil degradation. Every

MAXIMIZE blend contains over 15% organic matter by weight, so for every tonne you apply, you add over 150 kg of organic matter back to your soil.

There are many other fertilizer options available. Fertilize based on plant need.

Organics

BioFert - Your New Organic Source

In 2015 TerraLink bought BioFert Manufacturing Inc. After refitting and upgrading the manufacturing plant and redesigning and reformulating the product line, you now have access to a complete line-up of quality nutritional organic and organic based products. These are suitable for organic food producers as well as growers in the recreational, landscape and ornamental industries. We are committed to supplying innovative and technically advanced formulations to help you achieve your goals quickly and effectively. Our early season sales results are strong and well ahead of the past. BioFert has already been re-established as the leader to the organic agriculture market in Canada. By joining forces, TerraLink and BioFert have the necessary resources to bring the changes to the organic nutrient and bio-stimulants markets we envision. Biostimulants are an important part of our future.

There are many liquid, granular and water-soluble products available. Here are a few top sellers.



Liquids available in 20 L pails:

- FRUIT & BERRY 3-2-4 Yields superior quality fruits with good taste
- GENERAL PURPOSE 3-2-5 Balanced formula for annuals, perennials, herbs & tropicals
- LAWN FOOD 3-1-5 Fast acting liquid lawn fertilizer with iron
- TURF 12-0-0+4Fe Organic based liquid formulation fortified with iron.

Granular Fertilizers in 25 kg bags:

- BONE MEAL PLUS 4-13-0+13Ca Steamed fish bone meal with added humic acid derivatives
- GENERAL PURPOSE 4-3-9 Increases microbial activity and organic matter
- LAWN FOOD 8-2-3+3Fe Balanced, continuous feeding lawn fertilizer

Water solubles available in 5 kg or 20 kg bags:

- BLOOD MEAL 12-0-0 Water soluble, readily available nitrogen fertilizer
- GREENUP 0-0-15 Water soluble kelp based product for foliar application

For a complete product list and to view the updated catalogue, visit www.biofert.ca.

For a hard copy mailed to your home, please contact marketing@tlhort.com.

New Bylaws

Alternatives for NeoNics

With the recent prohibition of neonicitinoid pesticides by the City of Vancouver, landscapers and homeowners need to know the alternatives available for use in municipal and residential

properties. "Neonicotinoid" means a class of synthetic pesticides derived from nicotine that may be applied to seeds, soil, and foliage including but not limited to imidacloprid, clothiandin, thiamethoxam, dinotefuran, thiacloprid, acetamiprid, nitenpyram and niathiazine.

Here is a listing of common active ingredients used in organic pesticides:

 Acetic Acid — Concentrated vinegar used as a non-selective herbicide, sometimes combined with citric acid. Toxicity depends on active ingredient percentage.



Mungers Horticultural Vinegar is used for non-selective vegetation control in and around the garden, established trees and shrubs, sidewalks, driveways, patio, non-crop areas, right-of-way and industrial land sites. Leaves no harmful residue in the soil. Ecocert Certified

Boric Acid — A stomach poison for ants and other crawling insects, derived from natural borax deposits. Low toxicity to people and wildlife.

Niban Granular Bait is a ready-to-use bait for the control of ants, cockroaches and mole crickets in homes, apartments, garages, public and private institutions, schools, hotels, plus many other locations. For outdoor use around building foundations and under porches to control ants and mole crickets. Broad spectrum bait. Kills the queen to control the entire ant colony. Weatherized granule lasts through 7.5 cm of rain. Virtually no odour. No known resistance. Active Ingredient: Boric Acid 5%

Corn Gluten — A byproduct of corn milling used as a pre-emergent, granular herbicide

on turf and planting beds. Non-toxic to people, wildlife and fish.

- Diatomaceous Earth (Silicon Dioxide) A finely ground fossil used in a dust form for structural pests, slugs and other insects. Nontoxic to people, wildlife and fish.
- Dormant and Summer Oils Refined mineral oils used to smother over-wintering insect eggs and persistent pests, such as mites and mealybugs. Not compatible with all plants.

PureSpray Green Oil is a highly pure dormant and summer horticultural spray oil used for the control or suppression of listed insect, mite and scale pests affecting many crops including ornamental plants, shrubs and shade trees.

Insecticidal / Herbicidal Soaps —
Biodegradable fatty acids, useful as a
contact pesticide on a broad range of insect
pests. Fatty acids are also formulated as
non-selective herbicides. Very low toxicity
to people. Non-toxic to fish and wildlife.



Kopa Insecticidal Soap is an important part of an integrated pest management program. On its own, Kopa controls aphids, mealy bugs, mites and white flies on a wide variety of plants. Insecticidal soaps are also an excellent tank-mix partner with other insecticides because they are good surfactants, expanding the number of pests controlled. Insecticidal soaps leave no harmful residues and are low risk to bees once sprays have dried. Kopa Insecticidal Soap is the next generation of insecticidal soaps. Kopa kills plant-feeding insects and mites on contact, indoors, outdoors and in greenhouses. Kopa may be used up to the day of harvest and does not persist in the environment. Kopa is an important part of landscape pest control.



Fireworxx is a fast-acting fatty acid herbicide

to control troublesome weeds on hard surfaces, soil and mulches. An herbicidal soap based on pelargonic acid derived from natural sources, Fireworxx is a low-risk pesticide that packs a punch. It works particularly well on small weeds and as a burn down of larger weeds. Very effective for the control of unwanted moss on hard surfaces. It is easy to use and can be applied with standard spray equipment. By using Fireworxx on hardscaping and the selective herbicide Fiesta Lawn Weed Killer on lawns, you have weed control for the entire landscape even under most cosmetic pesticide bans. Fireworxx is biodegradable and breaks down rapidly in the soil. Available exclusively from Terralink: Ask for fast-acting, low risk, noncorrosive Fireworxx. Rainfast in 3 hours.

MOSS-ASIDE

Moss-Aside is a fast-acting herbicidal soap that controls silvery thread moss, moss and algae in golf greens and tees. Moss-Aside can also be used to control moss, algae, liverworts and lichens on hard surfaces or over the top of many plants, making it an ideal solution for nurseries and greenhouses. Moss-Aside is biodegradable, has no unpleasant odour, and does not stain. Moss-Aside is part of an integrated pest management program and the low-risk option for moss, algae and liverworts.

• Iron or Ferric Phosphate — A foodgrade dietary supplement used in slug and snail baits. Naturally found in soils, but not in the high concentrations used here. Non-toxic to people, wildlife or birds. Iron is also used as a lawn weed killer.

Sluggo is a slug and snail bait. Registered for use in field crops, vegetable crops, fruiting crops,

outdoor ornamentals, greenhouses, outdoor container grown ornamentals, lawns and grass grown for seed. (is OMRI listed).

FIESTA®

Fiesta Lawn Weed Killer (FeHEDTA) selectively controls broadleaf weeds. For use on lawns, golf courses, parks cemeteries, athletic fields and non-crop areas. Made with an iron chelate, it controls dandelion, white clover, black medic and several other broadleaf weeds. It also controls moss and algae.

- **Lime Sulphur** A calcium-sulphur compound used in a liquid form to control fungal diseases and some pests, usually as a dormant application. Low toxicity to people and mammals. Non-toxic to fish and birds.
- **Sulphur** A natural element sold in liquid, dust and wettable powder form to control fungal problems and some mites. Low toxicity to people and mammals. Non-toxic to fish and bees. As you can see, organic pesticides are not just a last resort or products we turn to in the absence of chemical alternatives.
- **Biological Insecticides** are living organisms rather than chemicals used to control pests and diseases.

Bioprotec CAF

Bioprotec for use on agricultural and greenhouse crops, forests, woodlands, ornamentals, residential and other treed areas. It is composed of Btk (Bacillus thuringiensis ssp. kurstaki) to control caterpillars.

They are safe, environmentally sustainable products that represent a growing market, one that is only going to get stronger as cities across Canada adopt bylaws that affect our gardens, and the products we use to maintain them. Other conventional landscape pesticides and herbicides are still available for licensed applicators. Contact our sales desk for your options.

Alternatives

Nematodes to Control Chafer and Leatherjackets

Recently the city of Vancouver prohibited the use of certain pesticides. Their goal is to minimize the negative effects to people, non-target organisms and to reduce pesticide runoff into nearby creeks and rivers. The main class of pesticides being banned are called neonicotinoids.

They were used quite extensively in the past for Chafer control in landscapes.

The European Chafer was introduced sometime around 2001 and has become a serious lawn pest in the lower mainland. Their life cycle is completed in one year and their population can increase rapidly. Adults emerge from the soil in June to mate. In July the females lay eggs and the small hatched grubs feed on the grass roots. Other wildlife is attracted to the grubs and also cause damage but digging up lawns to get to the grubs as a food source.

Prevention is done by following good lawn-care practices such as raking, dethatching, aerating, consistent fertilization, watering deeply and thoroughly 2-3 times a week and not mowing too severely. Cutting the grass at a 2 -3" height is recommended. This allows the soil to remain cool and moist. Bottom line is that the Chafer beetle seems to target weak lawns. Alternate ground covers, such as microclovers may also make your lawn Chafer resistant.

An infestation can be managed through the use of nematodes which are a microscopic roundworm. They move through wet soil to seek out and infect the grubs. The first larval stage of the chafer is the most vulnerable so time your nematode applications to coincide.

Where insecticide use is not permitted:

 For Crane Fly (Leatherjacket) control, apply nematodes, at recommended rates to the soil, in April through June and then again in September through early November. Minimum soil temperature of 12-15°C recommended. Do not apply when too cold as nematodes will not move.

- For Chafer beetle control, apply in late July into early August.
- Apply in areas of known infestation where specific lawns show signs of infestation.
- REMEMBER: The lawn must remain damp for at least 2-3 weeks after nematode applications as they move in the water between the soil particles and once they dry out, they die.

Applying nematodes is best done at a rate of 500,000 per square metre. The rate of liquid required to dispense the nematodes is approximately 12 litres per 100 square metres. The nematodes can be watered in with irrigation or by hand afterward.

Application methods: If using a spray tank make sure that the psi is below 300 and filters are removed or your nematodes will be pulverized and killed during application. If a flow meter is not used, it is best to time flow rate into a bucket using only water before nematodes are applied. By timing how long it takes to fill a 20 litre bucket, pump flow can be determined.



Read the tech sheet available on our website for more application information.

Applying nematodes in small areas is best done with an Earthway liquid spreader.

They are an excellent way to dispense nematodes in liquid. They are easy to fill and operate much like a granular spreader except that they spread liquid. They are a little bit harder to push but otherwise take a similar amount of time as granular

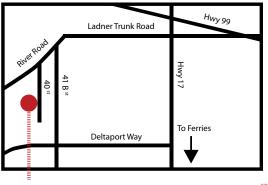
spreading. Set at the most open setting, which is the black/grey nozzle and the most compact spray (90 cm approximately), the Earthway will apply approximately 6 litres/95 square meters. If applied in a cross pattern (first one direction and then the other) the appropriate rate of 12 litres of liquid with nematodes can be achieved. Make sure the spreader is cleaned after each and every use.

Please order nematodes (or any other biological controls) by the end of the day every Wednesday for delivery the following Tuesday. For large amounts, please inquire with the TerraLink Sales Desk at 1-800-661-4559.

For tech sheets on other nematodes offered by TerraLink, or more information in general, type "nematode" into the search bar on the front page of our website, www.tlhort.com.



Two Locations to Serve You Better!



TerraLink Delta Location 4119 40th Street, Ladner Tel: (604) 946-2771 TerraLink Horticulture Inc. 464 Riverside Road, Abbotsford Tel: 604-864-9044

For current opening hours, please visit www.tlhort.com or scan this code:

