

# Forage Advisor

TerraLink Horticulture Inc.

**Avail®**  
**Phosphorous AVAIL**  
**Enhancer**

Details inside.

April 2010

New Spreading Technology Updates Terragator

## Refurbishment of Terragator Spreader

With the addition of a new spreading system and bin sitting on the back of the Terragator, TerraLink has the latest in spreading technology for a spinner type spreader. The new stainless steel bin and spreading gear includes changes like a sliding carriage, redesigned gate and product delivery system, and adjustable spinner angle and direction. Although it has more complex settings, the operator works with an advanced on-board computer system to control and operate the machine. The unit is capable of GPS mapping. Field and spreading data can be stored and transferred to almost any computer system. Built by New Leader, this system has proven itself in the Canadian and American markets and is a welcome upgrade to TerraLink's capabilities.



Some Things Never Change

## Lime Still Good Value

Soil pH is the most fundamental of the soil amendment crop inputs we use in Coastal BC. While this is an arguable statement it has a lot of truth. Crops have a preferred pH range that they like to grow in. The further the pH goes outside of that range the crop will not thrive anywhere near its potential. For local forage crops in most soils the ideal pH ranges from the mid 5's to the mid 6's.

Nutrients also have an ideal pH range for availability but they are not all the same. Some nutrients do better in slightly acid soils, some in near neutral soil. Typically the recommended pH range is between 5.7 up to 6.2 for most mineral soils. Certain nutrients like calcium are replenished almost exclusively by ground limestone unless manures containing high calcium are used. Calcium depletes from the soil by both crop uptake and from leaching which gets worse the further a soil is off the target pH range.

The price of lime has remained relatively stable the past few years, rising just slightly. For 2010 the cost of lime remains the same and is not projected to increase. Thankfully at this time fertilizer prices have returned to

near normal levels which results in less money being spent on nutrients and maybe this year a little more money will be available to invest in lime.

Agronomic Service

**TerraLink:**



## A Complete Agronomy Centre

- Soil testing services.
- On-site soils lab at our Abbotsford location.
- Agronomists on staff to provide professional recommendations.
- Custom application services for fertilizer and lime spreading in the Fraser Valley.

*New This Spring!* – a web-based agronomy data capture and record-keeping system.



*Rooted in your community.*

**TerraLink**



**NEW!**

It's a scientific fact. Up to 75-95% of the phosphorous fertilizer you apply to your soil can be tied up and never even make it to your crop's roots. Instead, the majority gets tied up in the soil by cations – positive elements such as calcium, iron, aluminum and magnesium. This means wasted fertilizer and wasted money.

**Avail**® increases phosphorous fertilizer efficiency by creating a “shield” around phosphorous molecules to block chemical bonds being formed between the cations of aluminum, calcium, iron and magnesium. This keeps more phosphorous available to your crops. The result is a potential yield increase by 10-15%.

This is not an idle claim. **Avail**® has been used in the Pacific Northwest of the USA for several years. Many scientific university tests have been conducted worldwide on a variety of crops in a variety of conditions. You can see these results for yourself by going to the manufacturer's web site (Simplot) at [www.chooseavail.com](http://www.chooseavail.com). You can choose to listen to testimonials by farmers,

or click on “RESEARCH DATA” at the top right, then click “WEST” to access research work done in climate and soil types like ours. Then, you can choose any of the research trials and look at them for yourself. Or, go back to the main page, click on “SCIENCE BEHIND AVAIL” and read more about **Avail**® works.



AVAIL® Phosphorous Enhancer

## Wasted Fertilizer is Wasted Money

“Make the most of your investment in fertilizer with **Avail**® Phosphorous Enhancer”.

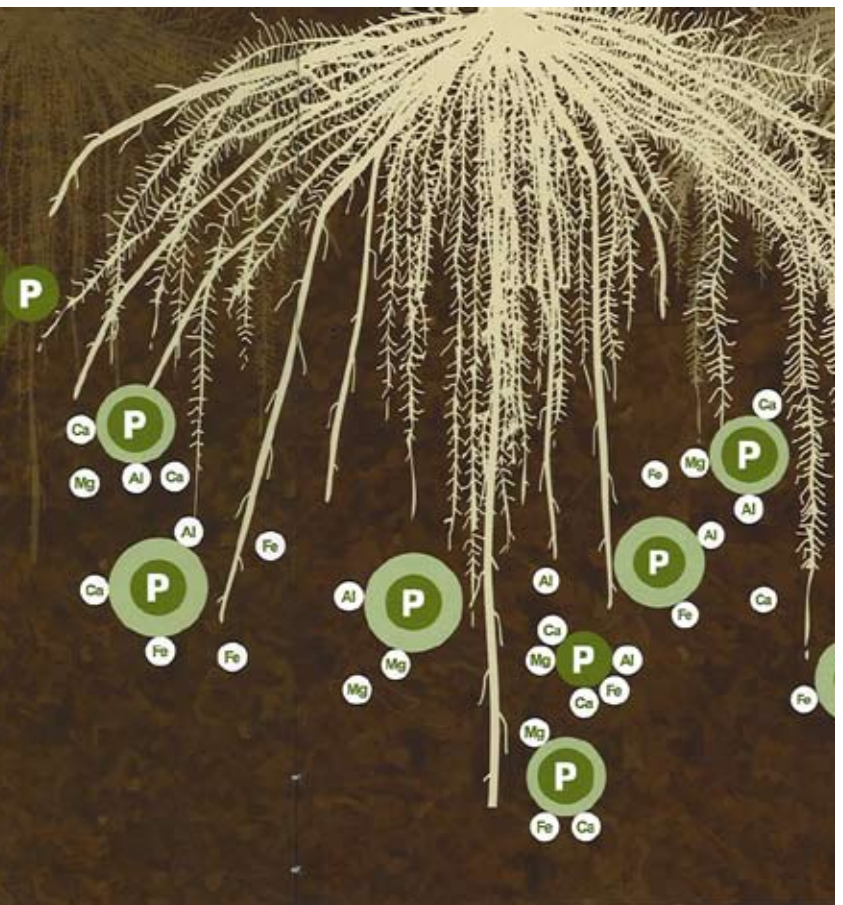


## Nutrients Locked Up? We have the key!



- Ca** Up to 75–95% of phosphorus fertilizer applied to the soil can be rendered unavailable to crops.
- Fe** AVAIL creates a negatively charged shield around phosphorus molecules.
- Al** This protects negatively charged phosphorus molecules from forming attractive bonds with other ions in the soil.
- Mg** AVAIL bonds with positive ions, keeping the phosphorus free and available to the crop all season.

**Increased phosphorus availability promotes higher yield potential.**



## AVAIL Sweet Corn – '09

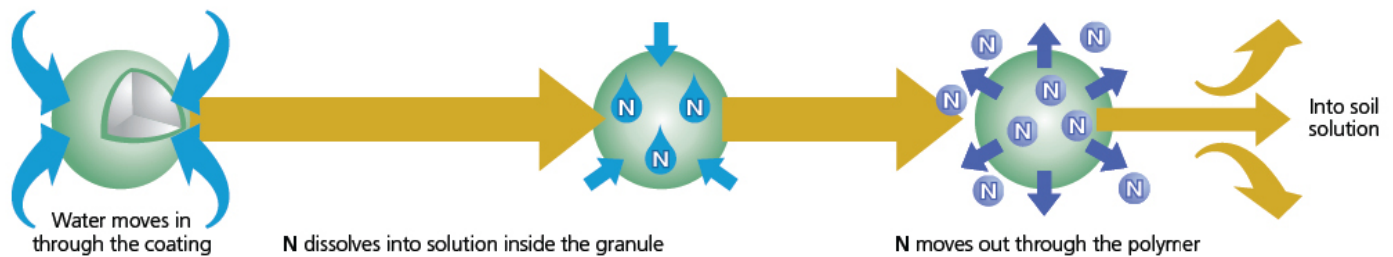
Albany, Oregon – (JA), Chehalis Silty Clay Loam; pH: 5.6-5.8 Very high initial soil P level Sidedressed with 280 lb of urea/ac. Planted June 30, Harvested October 13

	Starter Fertilizer Brand Rate/ac	Yield tons/ac	Gross Margin \$/ac	Avail Advantage \$/ac	Benefit to Cost Ratio
10-32-10	450 lbs	9.03t	\$ 1,324.94		
10-32-10 w/AVAIL (+\$21.00/ac)	450 lbs	11.8t	\$ 1,641.76	+ \$ 295.82	15:1
11-28-10 w/AVAIL (+ \$ 21.00/ac)	450 lbs	9.78t	\$ 1,435.68	+ \$ 95.45	5.5:1



# ESN Nitrogen

During the last decade, advancements in nitrogen management technology have proven their effectiveness but haven't become mainstream in this market. With fertilizer prices coming down, this year the improved products are more affordable and will be used by more farmers. Here is how ESN works:



ESN is polymer coated urea that is designed for use in farm crop situations where a slow metering of nitrogen occurs from a urea granule that is contained within a polymer coated shell. The polymer allows more urea to exit as the temperature rises. This typically is referred to as Slow Release or Controlled Release nitrogen. By not making all the urea nitrogen available at once (as with plain urea), the chances of losing significant amounts due to factors like evaporation, leaching or denitrification are greatly reduced.

In silage corn the use of ESN can save labour and fuel expense, and avoid side dressing nitrogen. With ESN all the required nitrogen can be applied at planting. The grower should prepare ahead of time with a soil sample and discuss previous crop history and manure application with an agronomist to decide if sidedressing is needed. If so, the product of choice to be applied at time of planting is ESN. It was designed particularly for this use and was proven in the Mid West corn belt. ESN begins to release urea nitrogen when the soil warms up in June, when the crop is at about the same height as you would side dress the corn. The ESN continues to release until it runs out in 60-90 days.

## Weed Control

# Integrity: New Herbicide for Corn



Weeds that emerge with the crop or shortly thereafter cause greater yield loss than weeds emerging at a later stage of crop growth. If weeds are not controlled in corn before the 3- to 4-leaf stage of growth, rapid and irreversible yield loss occurs, even if weeds are controlled for the remainder of the growing season.

Integrity is a new herbicide for control of grass and broadleaf weeds in field corn and sweet corn. Integrity can be applied as a spray in 3 ways:

1. Preplant
2. Preplant incorporated (3-4 cm)
3. Post plant but pre emergent

The simplest way to use Integrity is to plant the corn and then spray Integrity on the soil before the corn emerges. Unlike Primextra, Integrity will burn any corn which has already emerged. If applied at early spike, the corn will be burned and set back, but should recover. A ¼ inch of rain will make the soil moist enough for the herbicide to work well.

### Common weeds controlled:

Volunteer canola, chickweed, lambs quarters, mustards, nightshade, pigweed, shepherd's purse, smartweed, buckwheat, annual grasses plus many more.

If conventional corn is being grown apply Integrity at 0.45 L/acre for season-long control. (One 9.5 L container treats 20 acres). Integrity will control the emergence of weeds for 6-8 weeks due to its residual effect.

If glyphosate tolerant corn (eg: Roundup Ready) is being planted you can use the same rate of Integrity as above or apply at 0.3 L/acre (30 acres/jug) for early season control. If necessary for further weed control later in the season, glyphosate can then be applied to the corn. The benefit of using Integrity first rather than glyphosate is that Integrity offers better control on some weeds such as buckwheat and it has residual action while glyphosate does not. There are no restrictions as to what you can plant after using Integrity. This includes fall cover crops such as winter wheat, fall rye or triticale which are planted after harvest.

## Weed Control

# Refine SG

If you are looking for a broadleaf weed herbicide for seedling and established tall fescue or orchard grass, **Refine SG**® is the product to help you achieve your goals. **Refine SG**® controls or suppresses a total of 29 broadleaf weeds including Chickweed, Lamb's Quarters, Mustards, Annual Smartweed, Redroot Pigweed, Wild Buckwheat and more. **Refine SG**® is one of the most broad spectrum broadleaf products on the market today. It is a proven performer, being the #1 broadleaf herbicide used in the prairies in wheat and barley. It is

Dandelion controlled with Refine SG Herbicide



now approved for use on forages. Two tough weeds to control are dandelions and clover. **Refine SG**® will do an excellent job on both. If the dandelions are extra large or you want quicker activity add MCPA to the **Refine SG**® for extra punch on these two weeds.

One of the key benefits of **Refine SG**® is its rapid absorption in the plant for consistent weed control. Warm, moist growing conditions promote active weed growth and enhance the herbicide's activity by allowing maximum foliar uptake. Growth of weeds stops within 48 hours. After application the herbicide stops the growth of the targeted susceptible weeds by stopping cell elongation. Depending on growing conditions it may take 1-3 weeks to see noticeable symptoms such as discoloration of the dying weeds. Refine has very little soil movement and will not leave any soil residue.

Your best bet for control is on young, actively growing weeds in the spring before the upper canopy closes. In this area where we receive higher than typical rainfall, the 1 hour rain-fastness of **Refine SG**® is an added bonus to aid with control. Add the soluble granules to water only, then add a recommended adjuvant.

**Refine SG®** has a one week harvesting or grazing restriction. The small 486 g package (about a litre) treats 40 acres so impact on the environment is minimal. Storing left over product is easy as it is a granule. For control of broadleaf weeds in your grass try Refine SG this year. Call TerraLink for more details.

## Tall Fescue

# Yield and Texture Make For Good Feed

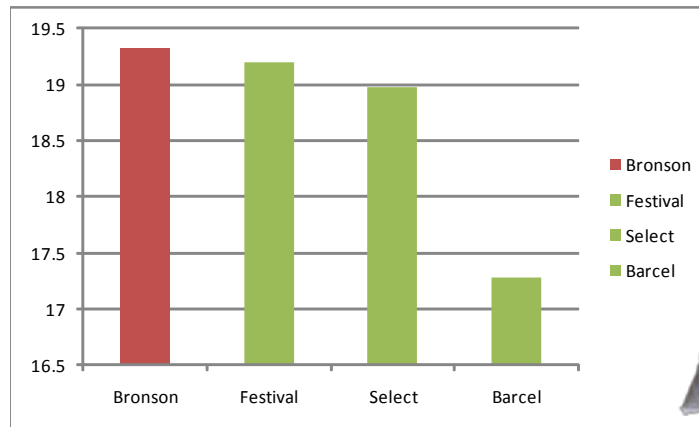
TerraLink's Richardson Seed Division is focused on selling varieties that provide the big yield that everyone is looking for but also have good texture and palatability. Our 2010 program features varieties and blends that meet those needs and more. Following are some of the best products available for the dairy farm.

### Bronson Tall Fescue

**Bronson** out yields the competition.



**Bronson** is endophyte free, has softer textured leaves than most varieties and withstands tough growing conditions including grazing, drought, and heat. **Bronson** is a high yielding variety that had the highest palatability rating in Wisconsin grazing studies. **Bronson** is best suited to high fertility and heavier soils. It withstands acid, alkaline and poorly drained soils. **Bronson** should be first harvested in late boot stage for high quality. Do not overgraze below 5-6 inches or cut too close.



**Bronson** can be sown at typical rates (25-35 lbs/acre). Renovation/Overseeding to existing pastures at 15-25 lbs/acre.

**Bronson TF is featured in our Premium Tall Fescue Blend and in our Tall Fescue blend.**

#### Premium Tall Fescue Blend

- 40% Barolex TF
- 20% Bronson TF
- 40% Seine TF

#### Tall Fescue plus Orchardgrass Blend

Bronson TF blended with our cocksfoot mottle virus resistant (CMV-r) cultivars AC Cheam and AC Chilliwack is very likely the best performing blend available for Coastal BC today.

#### Premium Tall Fescue / Orchardgrass Blend

- 30% Bronson
- 30% Barolex
- 20% AC Cheam
- 20% AC Chilliwack

#### Orchard grass and CMV-r Varieties AC Cheam and AC Chilliwack

Developed by Agriculture Canada (Agassiz) under Dr. Shabtai Bittman's guidance, these varieties topped the charts and beat out all other orchard grass cultivars trialed over a 10-15 year period at Agassiz. They clearly are the best of the best and provide full cocksfoot mottle virus resistance. High yield, winter hardy, persistent and cmv resistance are just a few of these varieties features and benefits. They are available blended into any forage mix the dairy farmer requires and sales are being restricted to forage producers in Coastal BC only as production and quantities are limited.

Like other specialty products, pricing on CMV-r varieties is slightly higher than normal compared to standard varieties due to the fact that production contracts began during the high priced years. Specialty varieties like these, produced in limited acreages, always demands a higher price at the seed producer level. We are hopeful upcoming changes on the buying side and currency adjustment will result in lower prices in the future. Our CMV-r varieties are featured in our Premium Orchardgrass Blend.



*Orchardgrass damaged by Cocksfoot Mottle Virus.*

#### Premium Orchardgrass Blend

- 50% AC Cheam
- 50% AC Chilliwack

#### Priced Ryegrass/Orchardgrass Blend.

For a blend of commonly used orchard grasses with some ryegrass for a quick start Richardson Seed has a blend featuring (by weight)

- 25% Annual and Westerwolds Ryegrass
- 25% Baridana Orchardgrass
- 25% Amba
- 25% TerraBrand

**Lower Price**