

2023

PRODUCT CATALOG

RESOURCES FOR REGENERATIVE AGRICULTURE



Keystone Bio-Ag, LLC

430 Voganville Road
New Holland, PA 17557

717-354-2115

Welcome!

Our mission is to educate, encourage, and empower farmers to produce healthy crops by supporting them with the products and information needed to make regenerative agriculture successful.

We believe that regeneration happens first in our hearts and minds; we must sincerely see a need for regenerative agriculture and desire to have it happen - and then it can, if we are committed. When the student is ready, the teacher will appear.

About 95% of the products that we sell are suitable for organic. This year, we have added a few new products that we have found useful for increasing plants' natural resistance to pests and disease.

We seldom recommend chemicals; plants can largely be resistant to insects and diseases when biology and nutrition is balanced. This may take time; it's a journey but is worth the effort.

Don't know where to start? Contact your consultant to discuss recommendations - we'll be happy to guide you through.

Remember to verify each product with your certifier before use.

Best wishes for a successful season!

-The Keystone Team



STARTING OUT?

Fly to page 9 to see our **Framework for Getting Results** diagram.

Terms of Sale

All products are sold as-is and without guarantee of any kind unless such guarantees are provided in writing.

Once credit is established and approved, customer terms are 3% discount if paid in 10 days, Net 30 days.

All returns are subject to a 10% restocking charge, 20% on returned sap test kits.

Purchases can be returned within 60 days if in like-new condition. Any other returns must be approved by manager. The buyer is responsible for returning product.

Special orders cannot be returned.



Conveniently located
in Lancaster County:

430 Voganville Road
New Holland, PA 17557

CONTACT INFO:

Call Center:

717-354-2115

Secretary:

717-354-0614

Fax Number:

717-354-6117

BUSINESS HOURS:

Monday to Friday:
7:00 AM to 5:00 PM

**Saturdays by chance
or appointment only.**

**CLOSED SUNDAYS
and all religious holidays.**

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REGENERATIVE AG Hotline

Insights for a farming revolution

Dial-in: 641-715-3800

Access Code: 178160

"Hotline by Mail" subscriptions also available

Regenerative Agriculture Hotline

The hotline is one of the ways we share useful and up-to-date information with our growers. A favorite for many farmers! To listen, dial 641-715-3800, and use access code 178160. You can then enter a Sharing ID to listen to a specific recording.

Sharing ID's are listed in our calendar and explained on the Hotline.

We also offer "Hotline by Mail" subscriptions. You get the same information, but on paper for easy reference. Subscribe to the **Hotline by Mail** by sending a check to Keystone Bio-Ag. Call for current pricing.

"Hotline by Mail" Quarterly subscription: 13 issues...

"Hotline by Mail" Yearly subscription: 52 issues...



Newsletters

We typically publish a quarterly newsletter that contains soil and plant health articles and helps keep you up-to-date with what we are learning and doing.

Typical Publishing Dates:

- January
- March
- June
- September

The newsletters are available to all customers who have an account with us. If you wish to stop receiving them, please contact us and ask to be removed from our mailing list.

Please note that when you do this, you can still have an open account, but you will receive no announcements or newsletters from us.



2023 Calendar

Our calendar is one way of saying THANK-YOU to our customers. The calendar includes pictures of crops and farms on the KBA program, delivery dates, meeting dates, sharing ID's for hotline updates, and motivational sayings.

Free with order (upon request) while supplies last.

Limit one per customer. We do not mail calendars except with orders.

2024 calendars should be available around December 1, 2023.

2023 Crop Recommendation Sheets

These sheets are designed as basic starting points that should be adjusted according to sap analysis. The back side of each recommendation sheet includes pictures of common challenges and starting recommendations for each particular challenge.

Recommendation Sheets available:

- | | | |
|---|--|--|
| <input type="checkbox"/> Asparagus | <input type="checkbox"/> Garlic | <input type="checkbox"/> Strawberries |
| <input type="checkbox"/> Beans and Peas | <input type="checkbox"/> Hemp | <input type="checkbox"/> Sweet corn |
| <input type="checkbox"/> Celery and Chard | <input type="checkbox"/> Lawn | <input type="checkbox"/> Sweet Potatoes |
| <input type="checkbox"/> Cole crops | <input type="checkbox"/> Lettuce and Spinach | <input type="checkbox"/> Tomatoes |
| <input type="checkbox"/> Cucumbers | <input type="checkbox"/> Onions | <input type="checkbox"/> Vine crops |
| <input type="checkbox"/> Cut flowers | <input type="checkbox"/> Peppers | <input type="checkbox"/> Zucchini |
| <input type="checkbox"/> Eggplants | <input type="checkbox"/> Potatoes | <input type="checkbox"/> Tree fruit - Apples |
| <input type="checkbox"/> Field corn | <input type="checkbox"/> Rhubarb | <input type="checkbox"/> Tree fruit - Cherries |
| <input type="checkbox"/> Forage and Pasture | <input type="checkbox"/> Root crops | <input type="checkbox"/> Tree fruit - Pears |
| <input type="checkbox"/> Garden | <input type="checkbox"/> Soybeans | <input type="checkbox"/> Tree fruit - Peaches |

Recommendation sheets are updated annually and are FREE upon Request.

Quality Agriculture

By John Kempf, VOLUME 1

John Kempf has finally produced a book of his own! In Quality Agriculture, John uses his great human relationship skills and knowledge of the plant & soil ecosystem to extract knowledge from the innovative scientists and growers he interviewed.

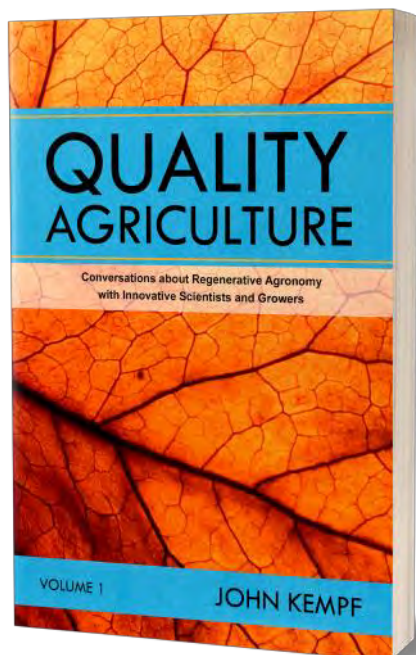
In volume 1, John interviews Michael McNeill, Don Huber, Jerry Hatfield, Robert Kremer, Gabe Brown, Dr. Kris Nichols, Dr. Jonathan Lundgren, Klaas Martens, Gary Zimmer, Tom Dykstra, Ed Curry, Dr. Gerald Pollack, and Matt Kleinhenz.

This book offers valuable insights into the path we need to take for providing the quality and quantity of food essential for farm profitability and food security.

This is the first of a series that John is planning to produce within the next few years.

QAG1... \$24.99 + Shipping & Handling

No handling charge if shipped with other products.





Winter Meetings

KBA typically hosts 1-2 meetings every winter. These meetings are an opportunity for you to learn more about the management practices that are helpful for improving soil and plant health while maximizing farm profitability.

John Kempf is usually the guest speaker at our February meeting, along with a few members of the KBA Team.

Summer Field Day

KBA typically hosts an annual field day every year, typically the first Tuesday or Wednesday of July. The field day is where you can learn practical, real world answers to your questions on plant nutrition, insect and disease resistance, or on maximizing your farm profitability.

The field day usually includes a forenoon field walk to tour the crops, followed by lunch, then an afternoon educational seminar.

All specials, winter meetings, and field days are announced on the Regenerative Agriculture Hotline (Weekly Hotline), and if you have an account with us, you should also receive a notice via a postcard or our quarterly newsletter.

Save 7-10%* by prepaying your fertilizer for next year!

*Details forthcoming in December. *Percentage not final.*

We have two winter prepay options:

7% Prepay Program

- Prepay is credited toward next year purchases.
- Get 7% discount till full prepay is spent.
- Can order and have delivered as needed.
- Prepay must be postmarked by Dec 23.

This program is designed for growers who want a discount for pre-paying, but don't have an actual order.

The prepay check you send will be credited toward your account and used to pay future orders, which will receive a 7% discount until the prepay money (credit) is used up.

A 5% discount is offered until January 28.

10% Prepay Program

- Place an actual order for a 10% discount.
- Orders shall be placed in person or by phone.
- Free shipping (before Mar. 1) on local orders.
- Prepay must be postmarked by Dec. 16.

This program is designed for growers who place an actual order for the next season.

You will receive a 10% discount on the order you place. We'll give you the actual total due so you can send a check for the exact dollar amount before the deadline.

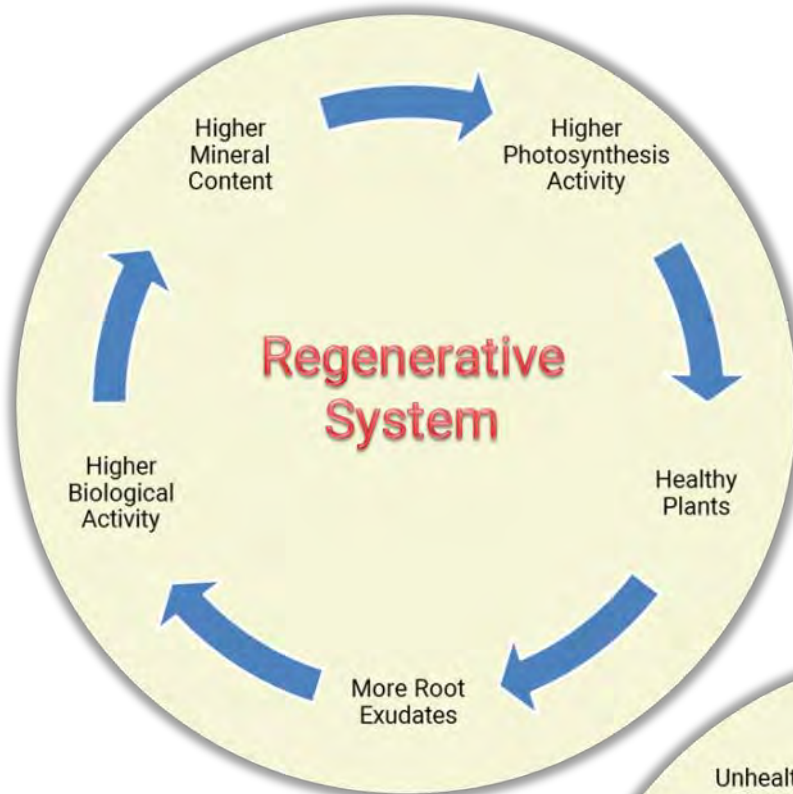
If you need recommendations, we can help you prior to order placement - if you call ASAP and no later than December 15.

Please note that this notice is based on the 2022 prepay program. Please watch for announcement containing final details for the December 2023 prepay program. The use of both programs is permitted if separate checks are used.

Garden Package Special

We offer a special on Garden Packages every February. The Garden Package includes the correct amount of fertilizer that is needed for either a 1000, 2000, 3000, or 4000 square feet garden, making it a convenient way for gardeners to work on regenerating their soils and plants without buying a large amount of product.

Free delivery within 30 miles while on special. Watch for announcements.



We believe that healthy plants can be resistant to insects and diseases.

We believe that plants can become healthy when they are supported with the proper nutrition.

We believe that photosynthesis is the major driver of the rest the plant and soil ecosystem.

We believe that farms can become more profitable when implementing regenerative agriculture, by focusing on limiting factors of quality and marketable yield.

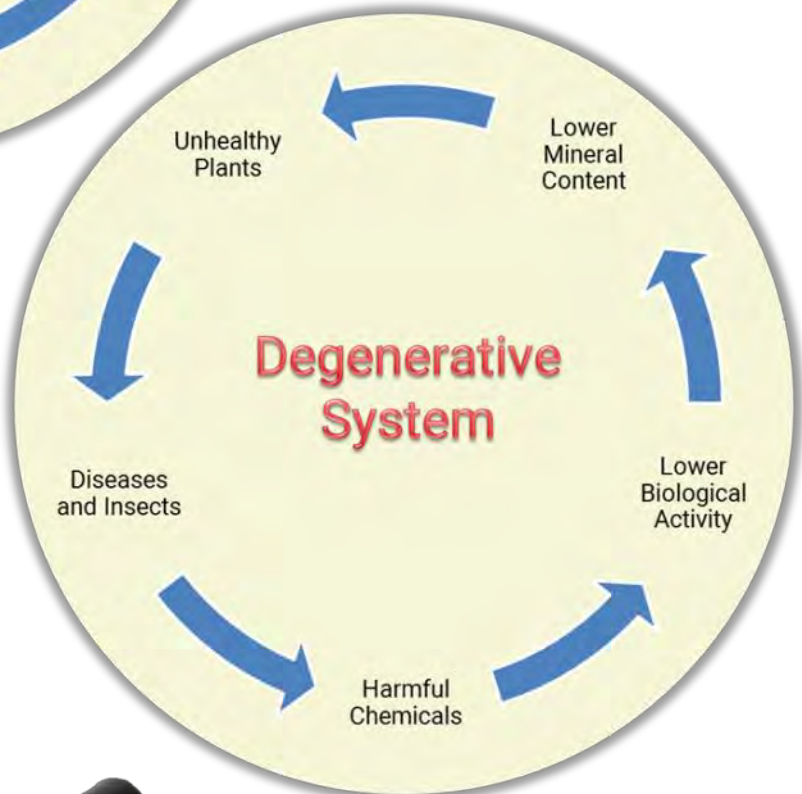
Some great quotes:

Insects are nature's garbage collectors and diseases are her cleanup crew.

-William Albrecht

Most plants are photosynthesizing at only 15-20% of their potential.

-John Kempf



Refractometers (brix meters) are a great tool to measure photosynthetic potential (brix content) in the field.



Vise grip for squeezing sap for brix check

1

Regenerate Heart and Mind

- **Believe the system is perfectly designed to work; that insects are nature's garbage collectors and diseases are her cleanup crew.**
- **Develop intense desire to understand, connect with, and support nature.**
- **Hold clear (positive) intentions, then align behavior.**
- **Give thanks! Express love and gratitude!**

2

Develop Written Goals

- **Develop projected planting schedule for entire year.**
- **Develop quality parameters and marketable yield goals.**
- **Identify areas of improvement to maximize profitability.**
- **Brainstorm potential.**

3

Explore Limiting Factors

- **Pest, disease, and weed history. What are they telling us?**
- **Check soil structure. Check for soil compaction.**
- **Test soil (both minerals and biology).**
- **Test water (including hardness).**

4

Determine Appropriate Recommendations

- **Water quality corrections?**
- **Subsoiling and Rejuvenate program to remediate soil compaction?**
- **Dry fertilizer and/or soil amendment?**
- **Transplant solutions, drip irrigations, and foliar applications?**
- **Management practices including cover cropping?**

5

Implementation and Observation

- **Don't put off till tomorrow what you can do today.**
- **Observe crops closely (touch them) and refer to goals daily.**
- **Use sap analysis to monitor for potential or hidden hunger.**

Results!!! High brix > high protein > high fat > high immune compounds!

Soil Testing is a Great Idea!

It is always good to start the program by doing a soil test. Although soil tests are not the complete picture, they do provide a good idea of where the nutrient levels are. For best results, use a soil test that your consultant is familiar with.



Soil tests can be taken by your consultant if practical. Or you can easily do it yourself if you have a soil probe. Find a clean bucket, then take about 15 cores of soil and mix them together, then send 2 cups of that to your consultant, or directly to the lab. Sampling depth should be 6 inches.

You will need soil test bags and a worksheet in order to send it to the lab directly. These are available from your consultant.

You will also need to choose which soil test you want to use. See options.

We recommend the Base Soil Test and the C/N Ratio as a standard test. For intense operations, you may want to use the Base Plus Test instead of the Base Soil Test, and especially if you are organic as your certifier may want to see you testing the trace minerals such as cobalt and molybdenum.

Results are available approximately 2 weeks later. An invoice will be sent with your soil test results.

Discuss the results with a qualified consultant.

Base Soil Test

Logan Labs: \$26.00 per test

Standard

Tests TEC, soil pH, organic matter, sulfur, phosphorus, calcium, magnesium, potassium, sodium, hydrogen, boron, iron, manganese, copper, zinc, and aluminum.

Base Plus Test

Logan Labs: \$36.00 per test

Tests everything on Base Test, plus cobalt, molybdenum, selenium, silicon, and estimated nitrogen release.

C/N Ratio

Logan Labs: \$32.00 per test

Standard

Tests carbon and nitrogen, and the ratio.

Nickel

Logan Labs: \$10.00 per test

Tests nickel content of the soil.

Saturated Paste Test

Logan Labs: \$26.00 per test

This test is a water soluble test, perfect for checking what nutrients might actually be available to your plants. Can also be used to show certifiers whether or not your soils have deficiencies of *available* trace minerals.

Tests soil pH, soluble salts, chloride, bicarbonates, sulfur, phosphorus, calcium, magnesium, potassium, sodium, boron, iron, manganese, copper, zinc, and aluminum.

Haney & PLFA Test

Ward Labs: \$133.00 per test

This is the best biological test that we have found up to this point. Also tests some minerals.

Geological Assay

Midwest Labs: \$40.00 per test

Gives information about the total mineral content of your soil, similar to a mining assay.

All prices subject to change without notice.

Plant Sap Analysis

Plant Sap Analysis is a breakthrough way to accurately detect nutrient deficiencies or imbalances in plants.

Because it tests the sap content, it can pick up potential deficiencies before the plant visually shows it and 2 weeks before tissue tests pick it up. This creates an opportunity to apply the precise amount of a needed nutrient before the deficiency triggers a disease or weakness.

Plant Sap Analysis measures several metrics that not commonly found in conventional agronomy, specifically testing the total amount of nitrogen, the amount of nitrate, & the amount of ammonium that is present. This can be used to indicate whether or not a plant is becoming susceptible to insect attack.

Sap tests are a powerful product validation tool. It can tell you very quickly if your program or products are doing what they should be doing.

Sap Analysis Kits need to be ordered in advance.

The kits are produced at the lab and sent out via FedEx.

Allow two weeks for delivery.

Kits include preprinted labels, bags, sampling instructions, and shipping information.



Example of a sap analysis report. Lot's of information but neatly organized.

Several Important Notes:

Labeled are preprinted with your contact information and with the specific crop that you asked to test. You should not change the labels manually. If you do need the labels repurposed for another crop, please return the labels to Keystone Bio-Ag, LLC a minimum of 2 weeks before you need them; we will repurpose them for FREE.

Nova Crop Control does not process citrus, grape, hemp, or sweet potatoes tests that come from the US.



Keystone Greenhouse Media

Complete Organic Potting Soil

Keystone Greenhouse Media is a high quality growing media formulated with balanced mineral nutrition to make growing transplants easier. Under normal conditions, all you need to do is add water.

Ingredients are all approved for organic.

Stock Sizes:

- 2 cubic feet bag

40 bags per skid.

*Please call to
check on availability.*

Thank-you!



Good Root Development



Consistent Germination



Strong, Robust Growth



Dry fertilizer can be blended according to your needs or soil test recommendations.

Delivery Options

- Spreader cart
- Spreader truck
- Bulk dump
- Tote sacks



Aeromaster Humus Compost

High quality humified compost

Aeromaster humus compost is a good base for any dry fertilizer blend because it keeps the fertilizer from tying up with other minerals in the soil, can hold up to 4 times it's weight in moisture (making it especially good for lighter soils), and because it magnifies the value of everything it is blended with.

Aeromaster humus compost is produced using state-of-the-art production methods. Every batch is tested to ensure that it meets the quality standard.

NOP approved with no restrictions. Use at 500-2000 lbs. per acre.

Stock Sizes:

- Per pound
- 2000 lb. Tote
- Bulk

For humus compost with added nutrients in 50 lb. Bags, see Aeromaster Premium Blend.



Aeromaster Premium Blend

Humus compost blended with minerals and rock powders

Aeromaster Premium Blend encourages soil loosening and vigorous root development - a convenient blend that is great for gardens, flowerbeds, greenhouses, and other intensive applications.

Broadcast 1-4 bags (50-200 lbs.) per 1000 square feet, apply directly in-row at 20-40 lbs. per 100 foot of row, or add 6-8 oz. to soil when transplanting seedlings into larger pots.

NOP approved with no restrictions.

Stock Sizes:

- 50 lb. Bag
- 2000 lb. Tote

Included in our popular Garden Package that is on special during early February. Watch for a postcard.



Aragonite - Damp

Highly Available Calcium (35%)

Aragonite is highly-available source of calcium. The percent of calcium content is similar to lime, but it is much more available to plants, improving quality. The damp material helps to stabilize blends that may otherwise be dusty, and provides a cheaper alternative to dried and screened Aragonite.

Use Aragonite at 200-400 pounds per acre. This rate may be increased up to 1000-2000 pounds per acre in tight, high-magnesium soils.

OMRI Listed. NOP approved with no restrictions.

Stock Sizes:

- Per pound
- Bulk
- 2000 lb. Tote

Looking for dry Aragonite? Call us to get a quote.



BioChar

Soil conditioner

BioChar is a great source of carbon (produced from charred wood) for increasing soil fertility of low pH soils. BioChar is full of pore spaces and has a tremendous water holding capacity - both are essential to soil biology.

BioChar has a high pH and works well for low pH soils at 25-100 lbs. per acre. For high pH soils, use humates or Aeromaster Humus Compost.

NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 1000 lb. Tote



Boron 10%

Pelletized boron derived from calcium pentaborate octahydrate

Most soils are deficient in boron and benefit from annual applications, or even more regularly at lower rates. When boron is deficient, calcium availability to plants will be poor, roots will be stunted, and general plant health suffers.

Pelletized 10% boron can be applied alone or blended with other minerals according to soil tests. Ask your consultant for boron rate recommendations. Be careful with boron rates in greenhouses and low calcium soils.

OMRI Listed. NOP approved with restrictions on boron.

Stock Sizes:

- Per pound
- 50 lb. Bag
- 2600 lb. Tote



Copper Sulfate

25% copper

Copper sulfate can be used in dry fertilizer blends when the soil copper levels are lower than 2-3 ppm. Normal rates are 2-5 lbs. per acre although higher application rates may occasionally be beneficial. Do not use in sheep pastures.

Always mix a good carbon source (humus compost or humates) with copper sulfate before applying, or copper oxidation in soil can occur.

If all trace minerals are low, consider using Micro Hume instead.

NOP approved with restrictions on copper.

Stock Sizes:

- Per pound
- 50 lb. Bag



Feather Meal, Hydrolyzed

Slow Release Nitrogen (approximately 13%)

Hydrolyzed Feather Meal contains about 80% feathers, which provide a steady nitrogen release to promote good plant growth, along with 20% blood meal, which provides a faster, more-immediate plant response. Hydrolyzed provides a much cheaper alternative to pelletized.

Apply Feather Meal according to nitrogen needs. A typical rate is 200-400 pounds per acre, although up to 1000 pounds may be applied if needed.

NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 2000 lb. Tote
- Bulk



Feather Meal, Pelletized

Slow Release Nitrogen (13-0-0)

Pelletized Feather Meal contains feathers, which provide a steady nitrogen release to promote good plant growth, along with meat and blood meal, which provide a faster, more-immediate plant response. Pelletized for easier use.

Apply Feather Meal according to nitrogen needs. A typical rate is 200-400 pounds per acre, although up to 1000 pounds may be applied if needed.

OMRI listed. NOP approved with no restrictions.

Stock Sizes:

- 50 lb. Bag

Special Sizes:

- 2000 lb. Tote



Fossil Shell

Diatomaceous Earth

Diatomaceous earth is an abrasive powder that kills crawling insects like slugs and ants by abrading and dehydrating them.

NOP approved with no restrictions.

Stock Sizes:

- 50 lb. Bag

36 bags per skid.

Don't Know What You Need?

Submit a soil test to one of our consultants and we'll help you make a good decision that is right for you, your farm, and your budget.



Grow PRO Plus

(5-11-2) Pelletized fertilizer blend

Grow PRO Plus is formulated to get a rapid growth response, with particular emphasis on quality. This is made possible by blending the right combination of amino acid nitrogen, calcium, phosphorus, and boron, along with products that stimulate fungal activity and root development.

Broadcast at 300-400 lbs. per acre or 10-30 lbs. per 1000 square feet. As a corn starter, apply 100-200 lbs. in-row per acre. On plastic layers, use 300-400 lbs. per acre. *Check with your organic certifier prior to use.*

Stock Sizes:

- Per pound
- 50 lb. Bag
- 2000 lb. Tote

Grow PRO Plus is a reformulation of Cycle & Cycle Plus.



Gypsum (Mined)

Calcium sulfate

Gypsum works well on high pH soils, especially those high in magnesium. Gypsum lowers magnesium, improves soil structure, assists in remediation of clay aging, provides a good source of sulfur, and provides a flush of available calcium for plant absorption, which improves fruit quality and storability.

The mined gypsum we stock is a powdery material that gives a fast response. Commonly used at 400 lbs. per acre but can be applied at rates up to 1200 lbs.

Gypsum does not raise pH and is NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 50 lb. Bag
- 2000 lb. Tote
- Bulk

We also have 50 lb. bags of non-organic pelletized gypsum.



Hi-Cal Lime

Powdered calcium carbonate

Hi-Cal Lime is a great calcium source for correcting low pH, low calcium soil. Apply at 500-1000 lbs. per acre, depending on soil pH and TEC.

Since lime increases pH, it should not be used on high pH soils. If you have a high pH soil but need calcium, choose gypsum or another form of calcium that does not raise pH.

On high calcium soils, applying boron is smarter than applying more lime.

Hi-Cal Lime is NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 2000 lb. Tote

Special Sizes:

- 50 lb. Bag

Another option is Aragonite, which releases much faster than lime does.



Humates

Soil conditioner

Humates are a great source of carbon for increasing soil fertility, stimulating fungal activity, & improving fertilizer performance, especially on high pH soils.

Humates have a low pH, which helps activate the fertilizers they are blended with. They also have a strong magnetic charge which prevents the fertilizer from leaching and from tying up with the minerals in the soil.

General application rate is 50-100 lbs. per acre.

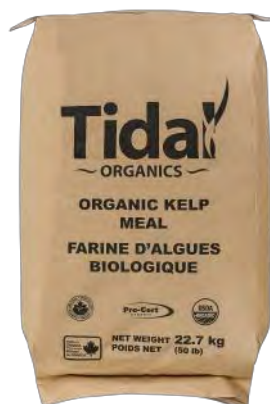
NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 2000 lb. Tote

Special Sizes:

- 50 lb. Bag



Kelp Meal

Tidal kelp: *Ascophyllum nodosum*

Kelp has one of the widest range of trace minerals to be found anywhere, but is especially known for its root stimulation and high iodine content.

Apply at 15-25 lbs. per acre. Release period starts around 2 weeks.

Analysis: <7% sulfates, <6% salts, 2%> potassium, and <.08% iodine.

NOP approved with no restrictions. Certified organic by ProCert.

Stock Sizes:

- 50 lb. Bag



K-Mag

Potassium magnesium sulfate. (Also called Sul-Po-Mag or Organic Trio)

K-Mag helps give energy to constipated soil and works well when calcium levels in the soil are high, but magnesium and potassium levels are low.

K-Mag contains 22% potash, 11% magnesium, and 22% sulfur in sulfate form, which can supply all the plant's sulfur needs if applied in adequate amounts.

K-Mag is pelletized for easy application. Apply at 25-200 lbs. per acre in low magnesium and potassium soils.

OMRI Listed. NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 50 lb. Bag
- 2000 lb. Tote
- Bulk



Micro Hume

Pelletized and chelated trace mineral blend

Micro Hume supplies key trace minerals in a form that will not tie up readily in soil. Contains 5% calcium, 8% sulfate, 2% manganese, 3% zinc, 2% boron, and 1% copper.

When all listed trace minerals are low, apply 50-200 lbs. per acre. Be very cautious with using high rates in greenhouses - the boron is very effective. If only a few of the trace minerals are low, consider using individual ingredients.

OMRI listed. NOP approved with restrictions on manganese, zinc, boron, and copper.

Stock Sizes:

- Per pound
- 50 lb. Bag
- 2000 lb. Tote



NutriBlend

Garden fertilizer blend

A convenient blend for gardens, grapes, and berries. NutriBlend is a combination of multiple products we use in field-scale vegetable production but formulated with a homeowner's needs in mind. Don't use in greenhouses!

Ingredients: Aeromaster Humus Compost, Aragonite, VolcanoPhos, Gypsum, Powershell, Wollastonite, Humates, Redmond Sea Minerals, and Micro Hume. The granulated texture ensures fast release of nutrients.

Ingredients are all approved for organic, with restrictions on multiple micronutrients.

Stock Sizes:

- 50 lb. Bag

Application Rates:

Broadcast: 50 lbs. per 1000 sq. ft.

Berries: 15 lbs. per 100' of row.

Grapes: 5 lb. / plant.

Asparagus: 50 lbs. per 1000 sq. ft.



Potassium Sulfate (0-0-50)

Pelletized dry potassium fertilizer

Potassium sulfate is a great form of potassium to use when soil potassium levels are low but magnesium levels are high enough. Pelletized for easy use.

This form of potassium (0-0-50) does not release till about 30-60 days after application, which makes it a great fertilizer where a strong potassium release is not desired until later in the plant's development stages, such as at fruit fill.

0-0-50 is 50% potash and 18% sulfate. Broadcast at 50-200 lbs. per acre.

OMRI Listed. NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 2000 lb. Tote
- Bulk



Powershell

Analysis: 8-4-1 (Crab shell type product)

Powershell promotes a quality growth response, provides available calcium and phosphorus, along with a great form of organic, slow release nitrogen that does not contribute to insect susceptibility like nitrate applications do.

Apply at 200-400 lbs. per acre. If you have problems with poor growth, include Powershell in your dry blend at 300-600 lbs. per acre, especially for nitrogen loving crops like cole crops, garlic, spinach, and strawberries.

NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 2000 lb. Tote

This is an improved REPLACEMENT for Sea Power. Contains a similar chitin content (about 18%) but higher nitrogen.



Redmond Sea Minerals

50/50 mix of Redmond Salt and Conditioner

Redmond Sea Minerals serve as a major electrolyte and growth promoter in fertilizer blends, and will contribute to sodium and chloride levels in soil.

Apply at 15-30 lbs. per acre. When used at too-high rates, Redmond salt will slow down potassium uptake. This is ideal on some crops, such as pastures, peppers and honey crisp apples, but not so desirable for most other fruiting crops which actually need the potassium release. **Do not use in greenhouses.**

OMRI listed. NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 50 lb. Bag
- 2000 lb. Tote

We also have 65/35 mixes available.



Sulfur 90

Also known as Elemental Sulfur or Tiger 90

Sulfur 90 provides a good form of sulfur for high pH soils. Sulfur helps get other nutrients in the plant by releasing hydrogen into the soil.

A typical rate is 20-40 pounds per acre, and can be increased up to 100 pounds if needed, provided that enough nitrogen is present to counterbalance it. Large amounts of sulfur are best added in the fall.

OMRI Listed. NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 2000 lb. Tote
- Bulk



Super Sequence

Economy blend that responds well on most soils

Super Sequence provides a strong release of calcium and responds well on most soil types. In addition to the calcium it contains, it provides the sequence of minerals needed for strong calcium availability: sulfur, boron, and silica, with an Aeromaster Humus Compost base. It helps release calcium that may already be in the soil but tied up due to high pH or poor biology.

Broadcast 200-400 lbs. per acre. **Do not use in greenhouses!**

NOP approved with restrictions on boron.

Stock Sizes:

- Per pound
- 2000 lb. Tote
- Bulk



VolcanoPhos

Calcium phosphate derived from volcanic ash

VolcanoPhos gives a good calcium, phosphorus, and manganese response on most soils, including high pH soils. High phosphorus availability promotes plant energy and early maturity.

VolcanoPhos is particularly helpful for reproductive / fruiting crops because of its high phosphorus and manganese content, which both stimulate fruit set.

Apply up to 200 lbs. per acre in low phosphorus soils.

NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 2000 lb. Tote



Wollastonite

Calcium magnesium silicate

Wollastonite is a good source of calcium and silica, which promotes stronger plants and disease resistance. It is also known to help alleviate aluminum toxicity problems, and can be used as a magnesium source.

General rates: 30-200 lbs. per acre. Apply up to 400 lbs. per acre if a strong calcium or magnesium effect is desired.

OMRI Listed. NOP approved with no restrictions.

Stock Sizes:

- Per pound
- 50 lb. Bag
- 2000 lb. Tote

Wollastonite makes an excellent barn-dry for cow stables.



Zinc Sulfate

35% zinc

Zinc sulfate should be used in dry fertilizer blends when the soil zinc levels are lower than 7 ppm, or if zinc to copper ratios are off. Normal rates are 5-10 lbs. per acre although higher application rates may occasionally be beneficial.

Zinc directly affects leaf size. Zinc can be applied annually as long as zinc levels do not become too high.

If all trace minerals are low, consider using Micro Hume instead.

NOP approved with restrictions on zinc.

Stock Sizes:

- Per pound
- 50 lb. Bag

DRY FERTILIZER TYPICAL ANALYSIS CHART

Product	N	P	K	Ca	Mg	Su	Si	Na	Fe	Mn	Zn	Cu	B	Mo	Co
Humus Compost	.41%	.34%	.30%	2.33%	.59%										
Aeromaster Premium Blend															
Aragonite				35%											
Bio-Char															
Boron 10%													10%		
Copper Sulfate						12%						25%			
Feather Meal	13%														
Fossil Shell (DE)															
Grow PRO Plus	5%	11%	2%	13%											
Gypsum				21%		17%									
Hi-Cal Lime				38%											
Humates															
Kelp Meal															
K-Mag			22%		11%	22%									
Micro Hume				5%		8%				2%	3%	1%	2%		
NutriBlend	.5%	4%	.20%	16%	.50%	3.5%									
Potassium Sulfate			50%			18%									
Redmond Minerals 50/50															
Powershell	8%	4%	1%												
Sulfur 90						90%									
Super Sequence	.40%	.24%	.26%	9%		5.29%									
VolcanoPhos		22.5%		21%	1.25%	1.65%			9.24%	.24%					
Wollastonite			1%	12%	3%		25%								
Zinc Sulfate							17%				35%				

Many of these products are biological or synergistic in nature, and thus do not have a high analysis but are still very effective. Quite often it is more about the ingredients than the actual analysis.

Primary Nutrients

N = Nitrogen

P = Phosphate

K = Potash

Secondary Nutrients

Ca = Calcium

Mg = Magnesium

Su = Sulfur

Na = Sodium

Trace Minerals

Si = Silica

Fe = Iron

Mn = Manganese

Zn = Zinc

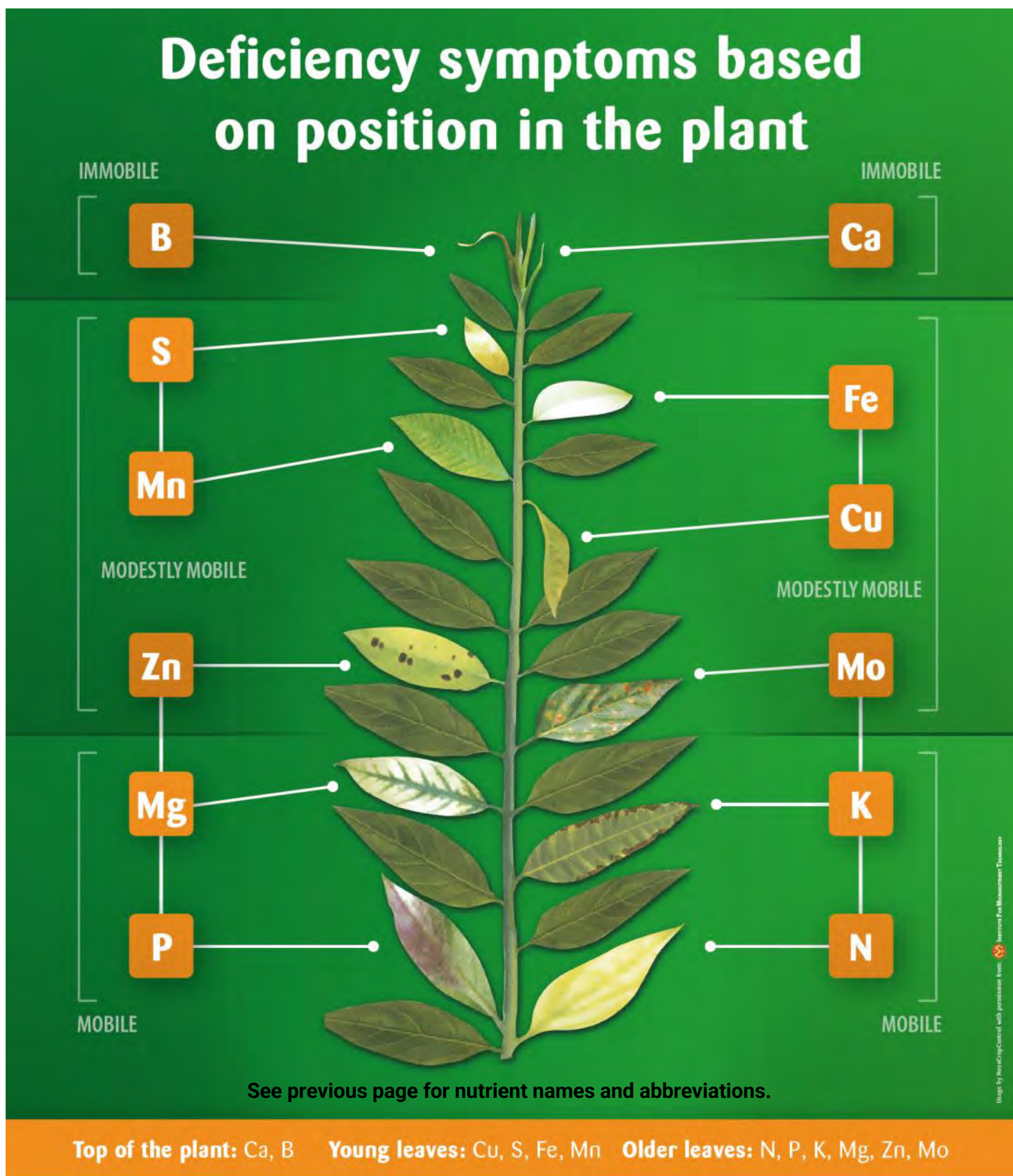
Trace Minerals

Cu = Copper

B = Boron

Mo = Molybdenum

Co = Cobalt



How to use this chart: See a deficiency in your plants?

Determine if the deficiency is showing up on the top or the bottom of the plants. Example, if an old leaf shows yellowing, but the veins are still green, it is a Magnesium deficiency. If the veins are not green, it is nitrogen deficiency.

FOLIAR & DRIP FERTILIZER TYPICAL ANALYSIS

Product	N	P	K	Ca	Mg	Su	Si	Na	Fe	Mn	Zn	Cu	B	Mo	Co
Accelerate			1%	1%						.4%				.017%	
Amino Blend	2.5%														
Boric Acid													17%		
Epsom Salt					9.8%	12.9%									
Foliar Blend	See label for ingredients and analysis														
Foundation Xtra															
Holo-Cal				7%									.02%		
Holo-K			12%			2%									
Holo-Phos			7%	7%											
HumaCarb															
HyperCaP	5%	8%		5%											
Key Factor	.6%	.55%	.65%		.85%			.24%	.10%	.20%		.05%	.06%	.17%	.05%
MicroPak						1%			.3%	.8%	.6%	.5%	.3%	.3%	.2%
Natural-Cal	3%			20%											
Natural-K			20%												
Natural-N	16%														
NatureSafe 7-7-7	7%	7%	7%												
NatureSafe 15-0-1	15%		1%												
NatureSafe 15-1-1	15%	1%	1%												
PhotoMag					1%	1%							.6%	.02%	.02%
Potassium Sulfate			52%			18%									
Rebound Boron													2%		
Rebound Cobalt															3%
Rebound Copper												2%			
Rebound Iron									3%						
Rebound Manganese										3%					
Rebound Molybdenum														3%	
Rebound Zinc											3%				
Rejuvenate	1%		3%		.5%										
Root Primer	2%														
SeaCrop					3%								.02%		
SeaShield	2%	1%				16%									
SeaStim															
Sil-Max	8%						30%								

*These products are biological in nature, and thus many do not have a high analysis but are still very effective.
Quite often it is more about the ingredients than the actual analysis.*



AEA products are manufactured with a special process that allows plants to easily absorb the applied nutrients.

With AEA products, there is no need to add spreader stickers to the foliar applications.

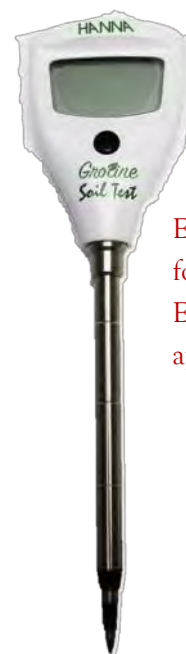
Tips for Effective Foliars

- Use rain water or reverse osmosis water; or water with a hardness of less than 5 grains per gallon (85 ppm)
- Target limiting factors of photosynthesis
- Keep EC levels of final tank mix under 3.00
- Apply in late evening or very early morning

We recommend using 30 mesh screens and flood jet nozzles on sprayers.



Fertilizer Screen
(Shown in bucket)



EC Meter
for testing
EC of foliar
applications.



Accelerate

Promotes bloom and fruit set

Accelerate contains cytokinins, crab shell, seaweeds, chitin, and key reproductive minerals (manganese, phosphorus, and calcium) that drive reproductive energy, resulting in improved bloom and fruit set.

Accelerate works well as a transplanting solution for reproductive crops, as a drip or foliar at 2 gallon per acre just prior to normal blossoming, or 1-3 qt. weekly in drip weekly as general maintenance. Adjust rates as needed.

NOP approved with restrictions on manganese.

Stock Sizes:

- 1 gal. jug
- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Foliar Blend

A Keystone Blend of AEA Products

A liquid blend formulated to make foliar spraying easier. Contains PhotoMag, Rebound Iron, Rebound Manganese, SeaStim, HoloPhos, Rebound Cobalt, and Molybdenum. We are seeing fairly balanced trace mineral uptake with this recipe.

Apply at 2-4 qt. per acre as needed.

NOP approved with restrictions on trace minerals.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



NEW PRODUCT

NO PHOTO AVAILABLE
AT TIME OF CATALOG PRINTING

Foundation Xtra

Helps prepare soil for marginal water quality

A blend of organic acids, fulvic acids, and wetting agents that improve nutrient release from soil by disassociating carbonate and bicarbonate bonds. Prepares soil for marginal water quality.

Apply at a rate of 1-2 qt. per acre in the drip. Consider a higher amount for the initial application.

Please check with your certifier prior to use.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box



HoloCal

Highly effective chelated calcium

HoloCal provides a form of chelated calcium that is easily absorbed by plants, promoting production of high quality, robust crops.

Calcium deficiencies include spindly plants, blossom end rot, poor fruit quality, soft fruit, bitter pit, tip burn, and poor fruit storability in general.

Use HoloCal as a foliar spray at 1-4 qt. or in drip irrigation at 2-4 qt. per acre. HoloCal contains some boron, but extra may help if boron is very deficient.

NOP approved with restrictions on boron.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Holo-K

Liquid chelated potassium

Holo-K provides potassium chelated with organic acids to enhance it's availability to plants and keep it from tying up in the soil.

Potassium deficiencies includes hollow heart, green core, yellow shoulder, early blight, poor fruit size, poor flavor, and brown leaf margins on old/lower leaves.

Apply Holo-K at 1-4 qt. per acre in foliar or 2-4 qt. per acre in drip as needed for maintain of potassium levels and fruit sizing.

NOP approved with restrictions on cobalt.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



HoloPhos

Available phosphorus for high-energy crop production

HoloPhos provides phosphorus in a form similar to that produced by soil biology for rapid plant growth, energy, and sugar metabolism.

HoloPhos, containing organic acids, does not suppress mycorrhizal fungi or create a dependency on future phosphorus applications like soluble forms do.

Use 1-4 qt. HoloPhos per acre as a foliar spray or in drip. We also find applications of Rejuvenate and Santerra to work well in drip for phosphorus.

NOP approved with no restrictions.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



HumaCarb

Nutrient stabilizer

HumaCarb is used to stabilize applications of soluble nitrogen, phosphorus, or sulfur. It prevents these soluble nutrients from leaching or complexing with other minerals in the soil, reducing potential fertilizer loss.

HumaCarb is already in most of our liquid products but can be a benefit as a liquid nitrogen or phosphorus stabilizer, therefore reducing the required rate.

Check label for specific rates and instructions.

NOP approved with no restrictions.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



HyperCaP

High energy calcium, phosphorus, and nitrogen (5-8-0)

HyperCaP is very effective at raising plant calcium and phosphorus levels for optimal plant energy and performance. When these two nutrients are in adequate supply, other nutrients will be more easily absorbed by plants.

HyperCaP also increases root development & reduces fruit quality challenges.

HyperCaP can be used in drip or foliar applications at 2-4 qt. per acre (maintenance rate: 1-2 qt.) or as a side dress at 2-4 gallon per acre.

Not approved for organic use.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Key Factor

Broad range fertilizer and stimulant

Key Factor is a combination of Rejuvenate, SeaShield, SeaCrop, SeaStim, Rebound Manganese, PhotoMag, HoloPhos, Rebound Iron, Rebound Zinc, Rebound Copper, Rebound Cobalt, and MicroPak for convenient application.

Use 4-8 qt. Key Factor per acre as a transplanting solution, 2-4 qt. Key Factor per acre as a base starting fertilizer in drip irrigation.

NOP approved with restrictions on iron, manganese, zinc, copper, boron, moly, cobalt.

Stock Sizes:

- 1 gal. jug
- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



MicroPak

Chelated trace mineral package

MicroPak is a blend of iron, manganese, zinc, copper, boron, molybdenum, cobalt, and sulfur; all minerals that have important roles in plant health, chelated in such a way that they're easily absorbed and very effective.

Use MicroPak at 1-2 pt. per acre in foliar applications, or 1-2 qt. per acre in drip applications.

NOP approved with restrictions on iron, manganese, zinc, copper, boron, moly, cobalt.

Stock Sizes:

- 1 gal. jug
- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



NutriPlus

Plant Derived Amino Acids

NutriPlus contains active freshwater algae cells and high levels of certain amino acids that promote increased yield and quality by stimulating biology and the uptake of nutrients, especially calcium and potassium. In addition, its high glycine content promotes higher levels of photosynthesis.

NutriPlus enhances many other fertilizers and may act as a complexing agent for other nutrients. Apply at a rate of 1-2 qt. per acre.

Organic approved.

Stock Sizes:

- 5 gal. box



Pro-Cal

Completely Water Soluble Calcium (3-0-0 + 20% Calcium)

An organic calcium carbonate milled down to 1-micron particle size, creating a completely water soluble calcium. Pro-Cal is also chelated with plant-derived protein nitrogen to facilitate calcium uptake and transportation within plants.

Calcium is extremely important for plant production and quality. Pro-Cal delivers better calcium uptake than any other calcium product we have used. Apply at 1-4 pounds per acre as needed in either drip or foliar. Does not stain plants. We recommend applying NutriPlus with it for an even better response.

Stock Sizes:

- 8 lb. Bucket
- 44 lb. Bag



Pro-K

Liquid, low salt index potassium

Pro-K is a liquid 20% potassium derived from plants to promote more-efficient uptake during heavy fruiting seasons. Pro-K is unique from most other products on the market in that it is derived from plants and does not have a high salt index, not contain large amounts of sulfate.

Apply at 1-4 qt. per acre as needed for potassium uptake.

Organic approved.

Stock Sizes:

- 5 gal. box



PhotoMag

Protein production blend

PhotoMag is a blend of minerals and products that encourage the conversion of sugars and soluble forms of nitrogen into complete proteins, leading to increased disease and insect resistance, higher protein content, & great flavor.

PhotoMag is very effective as a foliar application, but also works well in drip irrigation. For fruits and vegetables, use regularly at 1-2 qt. per acre. For forages, apply 1 gal. at spring green-up. For corn starter, use 2-4 qt. per acre.

NOP approved with restrictions on magnesium, sulfur, boron, molybdenum, and cobalt.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Rebound Boron

Highly effective liquid boron

Boron is an important micronutrient. Deficiencies lead to poor calcium uptake, poor root development, hollow heart, hollow stems, splits in root crops, poor fruit set, delayed maturity, and reduced uptake of all nutrients.

If liquid boron is desired, apply 1-4 qt. Rebound Boron in drip or foliar during the growing season. Using HoloCal with boron applications is recommended as boron toxicity can occur when plants are calcium deficient.

NOP approved with restrictions on boron.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Boric acid is also a very effective boron.

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Rebound Cobalt

Highly effective chelated cobalt

Cobalt is essential for strong root development, nitrogen fixation, production of vitamin B-12, and for suppressing the ethylene production that triggers long internodes, premature plant death and shorter shelf life. Cobalt is also a tremendous biological stimulator.

Apply 1-2 pt. Rebound Cobalt per acre in drip or foliar when the plant cobalt levels need to be addressed individually during the growing season.

NOP approved with restrictions on cobalt.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Rebound Copper

Highly effective chelated copper

Copper is essential for disease resistance, stalk strength and flexibility, and skin elasticity of fruit. A deficiency leads to blossoming and pollination problems, yield loss, lodging, brittle leaves, and drought stressed appearance.

Apply 1-2 qt. Rebound Copper per acre in drip or foliar when the plant copper levels need to be addressed individually during the growing season.

NOP approved with restrictions on copper.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Rebound Iron

Highly effective chelated iron

Iron is critical for getting high brix content; it aids photosynthesis by giving plants a nice dark green color (chlorophyll) and by improving leaf thickness.

Apply 1-2 qt. Rebound Iron per acre in drip or foliar when the plant iron levels need to be addressed individually during the growing season.

NOP approved with restrictions on iron.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Rebound Manganese

Highly effective chelated manganese

Manganese is critical for getting high brix content; it influences water hydrolysis and photosynthesis. It is also essential for resistance to many diseases, needed for blossoming and pollination, and for regulating potassium.

Apply 1-2 qt. Rebound Manganese per acre in drip or foliar when the plant manganese levels need to be addressed individually during the growing season.

NOP approved with restrictions on manganese.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Rebound Molybdenum

Highly effective molybdenum

Molybdenum is essential for nitrogen fixation, for converting nitrates into complete proteins through protein synthesis, and for resistance to viruses.

Apply 1-2 pt. Rebound Molybdenum per acre in drip or foliar when the plant molybdenum levels need to be addressed individually during the season.

NOP approved with restrictions on molybdenum.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Rebound Zinc

Highly effective chelated zinc

Zinc is important for good leaf size and shape, also many other plant functions related to plant health and disease resistance.

Apply 1-2 qt. Rebound Zinc per acre in drip or foliar when the plant zinc levels need to be addressed individually during the growing season.

NOP approved with restrictions on zinc.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Rejuvenate

Food and energy source for biology

Rejuvenate contains complex carbohydrates, liquid humates, and other powerful compounds that benefit and feed soil biology, which results in breathable soil with less compaction, better soil structure, increased residue digestion, improved nutrient release, and a flush of microbes and biology.

Rejuvenate can be sprayed directly on the soil (both spring and fall) at a rate of 1-4 gal. per acre, or weekly through drip irrigation at 1-2 qt. per acre.

NOP approved with no restrictions.

Best Seller!

Stock Sizes:

- 1 gal. jug
- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote
- Bulk per gallon



Root Primer

Promotes larger root development

Root Primer contains amino acids, proteins, and carbohydrates that promote a larger root system, as well as a form of Fulvic acid that benefits mycorrhizal fungi, which are beneficial in promoting a plants natural immune response.

Apply at a rate of 1-4 qt. per acre as needed

Please check with your certifier prior to use.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel



SeaCrop

Concentrated ocean minerals with low sodium content

SeaCrop is an outstanding microbial enhancer that is loaded with enzymes and organic substances that occur naturally in oceans. SeaCrop is derived from ocean water that has most of the sodium removed.

SeaCrop can be used in drip or foliar applications at a rate of 1-2 pints per acre. For fireblight or viruses, use up to 6 qt. per acre in the foliar. For corn starter, use 2 qt. per acre in starter blend.

NOP approved with no restrictions.

Stock Sizes:

- 1 gal. jug
- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. Tote



SeaShield

Liquid crab and shrimp shell, chitosan. 12-13% fatty acid content.

SeaShield is a cold processed liquid crab and shrimp shell that contains chitosan and is very effective at stimulating fungi and immune response in plants. SeaShield also promotes the development of a glossy, waxy sheen on the leaf surface which is indicative of a high fat and lipid content.

Can be applied regularly in drip or foliar at a rate of 1-4 qt. per acre, or with Rejuvenate as a fall application at a rate of 1-2 gallon per acre.

NOP approved with no restrictions.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



SeaStim

Concentrated liquid seaweed and root stimulant

SeaStim is a liquid kelp extract produced with a mechanical, cold process that maintains the potency of its natural compounds. SeaStim promotes healthy cytokinin production which leads to strong root development.

With stronger and larger roots, plants can absorb more nutrition and withstand more weather extremes such as frost and drought.

Apply SeaStim in drip or foliar at a rate of 1-4 qt. per acre.

NOP approved with no restrictions.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. box
- 55 gal. barrel

Special Sizes:

- 30 gal. barrel
- 275 gal. tote



Sil-Max

30% Silica

Finally a silica product that can be mixed and applied with other nutrients. Silica improves plants' natural resistance to pests and disease, and research indicates that silica helps resistance to lodging and improves brix content by positioning the plant for optimal sunshine absorption.

Sil-Max also contains amino acids to improve silica response.

Apply 1 pounds per acre in drip several times per season.

Please check with your certifier prior to use.

Stock Sizes:

- 12 lb. Bucket



Amino Acid Nitrogen

High energy nitrogen (15%)

Amino acids provide nitrogen that is readily absorbed by plants and contributes to overall health and energy, without the increased susceptibility to diseases and insects that is common with applications of nitrate nitrogen.

Apply at a rate of 3-6 pounds per acre in drip or 1-3 pounds per acre in foliar.

Choose from either blood meal (15-0-1), or meat meal (15-1-1). Our best seller is the 15-1-1, which dissolves much better and is easier to use.

Both 15-0-1 and 15-1-1 are OMRI Listed and NOP approved with no restrictions.

Stock Sizes:

- 8 lb. bucket
- 50 lb. Bag



Explorer 16-0-0

High energy plant-derived nitrogen (16%)

Explorer is a soy-protein hydrolysate that provides protein nitrogen, which stimulates plant production, along with amino acids that stimulate nutrient uptake. Explorer has the higher amino acid content of any soy-protein hydrolysate on the market. We have experienced higher brix from using Explorer.

Explorer is a powder that is completely water-soluble, and much easier to use than blood meal and meat meal. Apply at a rate of 1-4 pounds per acre.

NOP approved with no restrictions.

Stock Sizes:

- 44 lb. Bag
- 8 lb. Bucket



7-7-7 NatureSafe

Plant-derived Nitrogen, Phosphorus, and Potassium Package

7-7-7 is a dry soluble fertilizer derived from plants. Provides amino acid nitrogen, along with easily-absorbed phosphorus and potassium. The form of phosphorus and potassium is what makes this product special: an organic phosphorus that is not derived from rock phosphate, and organic potassium not derived from potassium sulfate. Low salt index. Great energy package.

Apply 7-7-7 at a rate of 1-5 pounds per acre, whenever nitrogen, phosphorus, and potassium is needed. Dissolves easier than 15-0-1 and 15-1-1. OMRI Listed.

Stock Sizes:

- 50 lb. Bag
- 8 lb. Bucket



Boric Acid

17% boron. Soluble and highly effective

Boric Acid is a fast release source of boron that can be dissolved in water and applied through drip irrigation at a rate of 1-3 pounds per acre. When using in foliar, we recommend using with HoloCal to avoid potential boron toxicity.

Boron is an important micronutrient. Deficiencies lead to poor calcium uptake, poor root development, hollow heart, hollow stems, splits in root crops, poor fruit set, delayed maturity, and reduced uptake of all nutrients.

NOP approved with restrictions on boron.

Stock Sizes:

- 55 lb. Bag

For highly effective liquid boron, use Rebound Boron.



Epsom Salt

Soluble magnesium sulfate

Epsom salt is a good source of magnesium and sulfur, which are very beneficial to plants. Epsom salt can be used to green up plants that have a magnesium or sulfur deficiency or to help convert excessive nitrates within plant sap.

Epsom salt is best applied through drip irrigation at a rate of 2-4 lbs. per acre. It can also be foliar fed, but should not be used at more than 1 oz. per gallon of water; even less when combined with other products.

NOP approved with restrictions on magnesium and sulfate.

Stock Sizes:

- 50 lb. Bag

For highly effective liquid epsom salt, (with additions) use PhotoMag.



Potassium Sulfate (0-0-52)

Soluble potassium

0-0-52 provides a strong release of potassium almost immediately after application. Potassium is needed for growth energy and for filling fruit.

0-0-52 is 52% potash and 18% sulfate. Use in drip irrigation at 3-10 lbs. per acre (although higher rates are sometimes used in peak fruit fill stage) preferably with a carbon source such as Rejuvenate, Key Factor, or molasses.

Do not make a strong solution when blending with microbial inoculants.

NOP approved with no restrictions.

Stock Sizes:

- 50 lb. Bag



Sodium Molybdate

Molybdenum source for soil applications

Sodium Molybdate is very effective at raising the molybdenum levels in the soil and plants. Molybdenum is needed in order to convert nitrates into complete proteins and also for nodulation and nitrogen fixation.

Sodium Molybdate must be dissolved in water and sprayed on the soil to ensure even coverage. Apply 4-7 oz. Sodium Molybdate in severely deficient soil but retest before reapplying, as excess molybdenum can be toxic.

NOP approved with restrictions on molybdenum.

Stock Sizes:

- Weighed out to exact amount
- 50 lb. Bag



Cobalt Sulfate

Cobalt source for soil applications

Cobalt Sulfate is very effective at raising the cobalt levels in the soil. Cobalt is needed for good root development, and for nodulation and nitrogen fixation. It is also an key building block of vitamin B-12, which produces energy.

Cobalt Sulfate must be dissolved in water and sprayed on the soil to ensure even coverage. Apply up to 12 oz. in severely deficient soil but retest before reapplying, as excess cobalt can be toxic (although not as bad as molybdenum).

NOP approved with restrictions on cobalt.

Stock Sizes:

- Weighed out to exact amount
- 50 lb. Bag

Cobalt can oxidize in soil, especially bare soil. We recommend applying it with Rejuvenate or another sugar form.



BioCoat Gold

Seed treatment containing mycorrhizal fungi

BioCoat Gold is a blend of multiple species of mycorrhizal fungi that enhance seed germination and inoculate plant roots with a fungal network that can access nutrients and moisture that are outside the plant's own root zone.

Use BioCoat Gold as a seed treatment at 1-2 oz. per 50 lb. of seed. Can also be used in transplant water and drip irrigation at 1-4 oz. per acre. BioCoat Gold needs to contact a living root system in order to colonize and work.

NOP approved with no restrictions.

Stock Sizes:

- 1 lb. package
- 5 lb. package
- 20 lb. bucket



Micro 5000

Beneficial leaf applied microbial package

Micro 5000 is a combination of beneficial microbes that thrive on leaf surfaces and protect the plant from disease attack, in addition to helping the plant absorb more nutrients from the atmosphere and foliar applications.

Apply 1-2 oz. Micro 5000 per acre in all fruit and vegetable foliar applications. Up to 4 oz. per acre can be used on plants with severe disease pressure.

NOP approved with no restrictions.

Stock Sizes:

- 1 acre package (2.66 ounces)
- 5 acre package (13.3 ounces)
- 10 acre package (26.6 ounces)
- 25 acre package (66.5 ounces)



OP-8

Hydrocarbon remediation inoculant

OP-8 is a powerful microbial inoculant that cleans up hydrocarbons in soil. Hydrocarbons, mostly coming from chemical applications, seriously limit plant health and yield by restricting root development and nutrient uptake. Biology is also compromised whenever hydrocarbons are present.

Apply OP-8 at a rate of 4-8 oz. per acre as a spring or fall application when moisture is adequate, or through drip irrigation at 1-4 oz. per acre.

NOP approved with no restrictions.

Stock Sizes:

- 4 oz. package
- 1 lb. package

Tip:

Mix and apply OP-8 with Rejuvenate for a higher success rate.



Pepzyme

Liquid enzyme enhancer

Pepzyme is a high quality liquid enzyme enhancer that enhances the growth and metabolism of the plant growth promoting organisms that break down organic matter and nutrients to make them available to plants.

Apply 1-2 oz. Pepzyme per acre with every foliar application, or in transplant solutions at a rate of 4 oz. per acre. It is also helpful for mixing and stabilizing drip irrigation mixes; use 1-4 oz. per acre or as needed.

NOP approved with no restrictions.

Stock Sizes:

- 1 acre package (12.8 ounces)
- 5 acre package (64 ounces)
- 10 acre package (128 ounces)
- 25 acre package (320 ounces)



Santerra

Powerful microbial inoculant

Santerra is a powerful microbial inoculant that helps soil loosening, root development, nutrient availability, and disease resistance. Santerra has fast become one of our most popular products because of the results that growers are seeing. *So when in doubt, put some Santerra out.*

Apply Santerra at 2-4 oz. per acre with the Rejuvenate program, 2-4 oz. per acre in transplant solutions and 1-2 oz. per acre in drip irrigation regularly.

NOP approved with no restrictions.

Stock Sizes:

- 4 oz. package
- 1 lb. package
- 5 lb. package
- 20 lb. bucket



Spectrum

General microbial inoculant

Spectrum is a blend of plant growth promoting rhizobacteria (PGPR) and other microbes such as disease suppressive bacteria, nitrogen fixing bacteria, chitin digesting bacteria, and phosphorus solubilizing bacteria.

Apply Spectrum at 1.76 oz. per acre in transplant solutions and drip irrigation, generally with Rejuvenate. Can also be used in foliar applications.

NOP approved with no restrictions.

Stock Sizes:

- 1 acre package (1.76 ounces)
- 5 acre package (8.8 ounces)
- 10 acre package (17.6 ounces)
- 25 acre package (44 ounces)



Spectrum DS

Sodium digesting bacteria

Spectrum DS contains Spectrum and sodium digesting bacteria. Sodium digesting bacteria benefits soils and plants suffering from high sodium levels that are restricting potassium uptake or damaging roots; a scenario common in greenhouses where absence of natural rainfall allows sodium accumulation.

Apply Spectrum DS at a rate of 1/2 teaspoon per 1000 sq. ft. in drip or foliar. Or apply in fall directly on the soil at a rate of 1 teaspoon per 1000 sq. ft.

NOP approved with no restrictions.

Stock Sizes:

- 1 acre package (1.76 ounces)
- 5 acre package (8.8 ounces)



Sample picture of various sizes of microbial inoculants in stock.



Aquamonics Water Unit, set up for 2" irrigation

Aquamonics Water System

Water Restructuring Device

The Aquamonics Water System uses a specific pattern of energy to change the bond angle of water so that it more actively hydrates living cells, allowing them to perform better and heal faster.

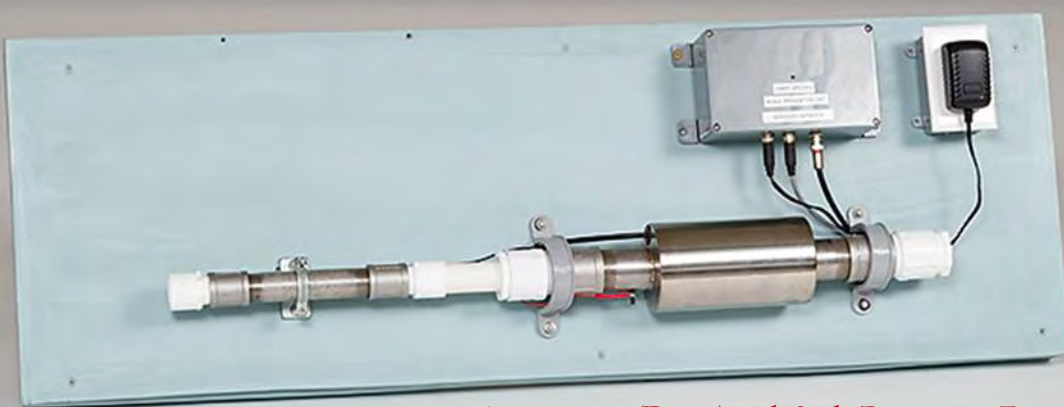
The Aquamonics Water System does not take anything out of the water; it simply restructures the minerals and the hardness so that it does not bond with minerals that are being added to the drip irrigation or buildup calcium inside the pipes, as readily.

The Aquamonics Water System does not restrict the normal water flow, making it ideal for applications such as drip irrigation where some water units, including reverse osmosis systems, are not practical.

The unit comes with several exciting options; such as the digital system and the Scale Prevention feature.



Aquamonics w/o Scale Prevention



Aquamonics (Demo) with Scale Prevention Feature

All units are custom ordered. Please call to discuss your needs and options. Please specify if you want the 12 volt or 110 volt power cord.

Comes with a 4 month money-back guarantee if you don't see results.



Commercial Reverse Osmosis

Affordable unit that cleans up hard water for more effective foliar applications

The Commercial Reverse Osmosis Unit uses a membrane to remove the minerals and the bicarbonates that contribute to hard water.

This results in cleaner water that is a more effective carrier for the more desirable minerals and products that are being added to the tank mix. Water needs to have a 5 grains of hardness per gallon or less for the most effective foliar applications. Water with 10 grains of hardness per gallon may reduce the effectiveness of any product that is put into the tank mix by as much as 70%.

This unit can produce up to 100-250 gallons of clean reverse osmosis water per day with 90 psi water pressure; if its membrane is kept clean. It can produce as much as 750 gallons reverse osmosis water per day when a pump is hooked up to increase the pressure.

The unit comes on a wood base that can easily be mounted close to a large water tank or on a liquid fertilizer tote. The unit is complete with garden hose fittings for easy hookup.

Comes with a 4 month warranty. Warranty includes only workmanship of the product. It does NOT include membrane failure as a result of improper use. Cleaning membrane is owner's responsibility.

Replacement membranes, filters, and parts are available upon request, at normal cost.

Booster pumps available in 12 volt or 110 volt.





Xcite

Liquid Feed Supplement with Carbon (for cows)

Xcite is a good toxin binder, enhances microbial protein production which reduces the need for as-fed protein, and helps the overall health of the herd. When molds and mycotoxins are present in the feed, Xcite helps production. It also improves quality of the manure, which has improved crop yields.

Feed Xcite at a rate of 4-7 oz. per head per day. Or feed to calves to help prevent diarrhea at a rate of 1/2 oz. per head per day.

NOP approved with no restrictions.

Stock Sizes:

- 5 gal. bucket
- 55 gal. barrel
- 275 gal. tote



MagCo Plus

Calming Aid and Digestive Supplement (frequently used for chickens)

MagCo Plus is derived from concentrated ocean water with most of the sodium and chloride removed. MagCo Plus is loaded with 86 naturally occurring minerals that promote good digestion and feed efficiency, improve weight gain, and reduce mortality rate. The Magnesium content calms the birds.

MagCo Plus is a true liquid that is typically injected into water or mixed with feed at a rate of 1/2 oz. per 1000 pounds of live weight per day.

NOP approved with no restrictions.

Stock Sizes:

- 2.5 gal. jug
- 5 gal. bucket
- 55 gal. barrel

Special Sizes:

- 275 gal. tote

Grazier's Essentials

For all livestock

Grazier's Essentials consists of Agri Dynamic's complete mineral and vitamin licks. They are offered in four complete free choice pre-mixes containing macro and trace minerals, vitamins, kelp, probiotics, enzymes and Dyna-Min Clay. They offer a 2:1, a 1.5:1, a 1:1, and a 1:2. The desired ratio of these two elements depends on the soil, the forage and special needs during pregnancy. Your animals can intuitively balance their nutritional needs. All you need to do is provide two licks, the 2:1 and the 1:2. Or, if you can only provide one lick, make a choice based on your pasture: 1.5:1 for predominantly grass pastures or 1:1 for predominantly legume pastures.

Ratio's available:
(Ca/P ratio)

- 1:1
- 1:2
- 1.5:1
- 2:1

All available in 50 pound bags.

Winter-Mune

Vitamin A, D, and E supplement

Winter-Mune is a free choice supplement to augment winter immunity by providing critical vitamins that are missing in stored feeds or due to lack of sunshine. Avoid health issues related to vitamin deficiencies by providing Winter-Mune in October through mid-April. Also feed during drought conditions, when forages are less than optimum or compromised by mold and mycotoxins.

Non-Stock Sizes:

- 50 lb. bags

Desert Dynamine

Colloidal and Ionic Trace Mineral

Dyna-Min has been improving animal health for over 65 years! It's best described as a "bouillon cube" of numerous natural elements, mostly minerals that are biologically available. Research has proven that Dyna-Min physically attracts various contaminants such as coliform bacteria, nitrate-nitrogen and ammonia. It acts as an effective buffer, improves calcium utilization and bone formation and promotes weight gain. Dyna-Min produces higher levels of digestive enzymes and lower levels of internal parasites. Livestock producers claim their animals are healthier and more productive on Dyna-Min.

Non-Stock Sizes:

- 50 lb. bags

Flies Be Gone

Flies Be Gone performs as an internal repellent. It causes livestock to be less palatable to external blood sucking parasites, such as flies, mosquitoes, lice and ticks. The minerals become aromatically systemic and impart a scented characteristic to the perspiration fluids of the livestock. Flies Be Gone is an excellent approach to managing fly and lice problems, especially when used with Ecto-Phyte which is an all-natural, aromatic livestock spray.

Non-Stock Sizes:

- 50 lb. bags



Somato Check

Organic Somato Check is a natural animal feed supplement that aids in balancing the intestinal bacteria and in stimulating the immune system, thus providing defense against subclinical mastitis.

Product Sizes:

- 85 ct. container (in 1 oz. capsules)
- 50 lb. bags (not in capsules)



Limber Res-Q

Limber Res-Q is formulated to address the needs of horses challenged with injuries, over exertion, and age related joint deterioration.

Product Sizes:

- 5 lb. bucket
- 50 lb. bag



Spring Cover Crop Mix

Multi species spring blend

The spring cover crop mix is a blend of 4010 peas, 4 varieties of oats, matrix peas, spring barley, prong horn triticale, crimson clover, 2 varieties of turnips, barkant radishes, and 2 varieties of rape.

The spring cover crop mix is formulated for a rapid spring field cover.

Sow at a rate of 1-2 bags per acre.

Seeds are Non-GMO and Untreated.

Stock Sizes:

- 50 lb. Bags

Fall Cover Crop Mix

Multi species fall blend

The fall cover crop mix is a blend of nomini barley, triticale, peas, Jim oats, cereal rye, hairy vetch, red clover, yellow blossom sweet clover, and balansa clover.

This blend will tolerate cold weather reasonably well.

Sow at a rate of 1-2 bags per acre.

Seeds are Non-GMO and Untreated.

Stock Sizes:

- 50 lb. Bags

RecoverIt

Easily established cover crop blend

RecoverIt is a blend of Sunn Hemp, Buckwheat, Jerry Oats, and Red Ripper Peas that fixes nitrogen into the soil, improves phosphorus availability, and enhances general nutrient availability. It establishes easily and grows rapidly.

Sow at a rate of 50-100 lbs. per acre; In spring, sow after danger of frost has passed. In summer, sow only when adequate moisture is present. In fall, sow by mid-September or one month before first killing frost. Will winter-kill.

Seeds are Non-GMO and Untreated.

Stock Sizes:

- 50 lb. Bags
- 10 lb. Bags

Winter King Alfalfa

4th generation seeds

Winter King 4 is the newest generation of Midwestern Bio-Ag alfalfa varieties. Bred for optimal performance on the regenerative soil program, Winter King was selected from the most persistent and highest yielding plants.

A dark green, tall variety with a dense leaf canopy and multi-foliolate leaf expression rate of 86% which is an indicator of quality and digestibility.

Sow at 15-25 pounds per acre.

Seeds are Non-GMO and Untreated.

Stock Sizes:

- 50 lb. Bags



Soil Rejuvenate Program

Primary Goals	Critical Elements
<ul style="list-style-type: none">• Feed and inoculate soil biology.• Develop loose, breathable, and structured soil with less compaction.• Increase residue digestion and minimize disease carryover.• Encourage rooting potential.• Improve nutrient release.• Improve carbon cycling process.	<ul style="list-style-type: none">• Rejuvenate• Santerra• SeaShield• Apply just before a light rain for maximum benefit.

Notes:

Rejuvenate application rates may vary depending on context and soil pH. Typically the higher the soil pH, the more Rejuvenate it will take to achieve the same result. General application rates are 1-4 gallons per acre.

Santerra is typically applied at 1-4 ounces per acre.

SeaShield is also beneficial to stimulate fungal activity, at a rate of 1-2 gallon per acre.

Complete Photosynthesis

Primary Goals	Critical Elements
<ul style="list-style-type: none">• Increase volume of photosynthesis (brix levels) by as much as 3x.• Example: take plants with brix level of 4 up to brix level of 12.• Metabolize all the forms of sugars into complete carbohydrates.• Produce resistance to soil borne fungal pathogens such as verticillium, fusarium, rhizoctonia, pythium, phytophthora, etc.	<ul style="list-style-type: none">• Major photosynthesis minerals: Nitrogen, Magnesium, Iron, Manganese, Phosphorus.• Water.• Carbon Dioxide.• Sunlight.

Notes:

This is what we call **Level 1 of the Plant Health Pyramid**. This level must be addressed properly before the rest of the regenerative agriculture system will work properly.

Only 5-10% of crop weight comes from minerals. The other 90-95% of crop weight comes from photosynthesis; the sugars that are produced from raw ingredients such as water and carbon dioxide.

To get adequate levels of carbon dioxide, soils need to have aggressive biological activity and structured, breathable soil. Consider using the Soil Rejuvenate Program to jumpstart this.

*Most plants are photosynthesizing
at only 15-20% of their potential.
-John Kempf*

Complete Protein Synthesis

Primary Goals	Critical Elements
<ul style="list-style-type: none"> • Convert all the soluble forms of nitrogen (nitrate and ammonium) into amino acids and complete proteins. • Nitrates concentrations in plant sap at zero ppm. • Ammonium concentrations in plant sap at less than 50 ppm. • Produce resistance to insects with simple digestive systems such as cabbage loopers, corn borers, corn ear worm, aphids, whiteflies, leafhoppers, thrips, etc. 	<ul style="list-style-type: none"> • Adequate levels of sugars coming from photosynthesis; or applications of products containing sugar or carbohydrates. • Magnesium. • Sulfur. • Boron. • Molybdenum. • Cobalt. • Nickel?

Notes:

This is what we call **Level 2 of the Plant Health Pyramid**. Level 1 must be addressed first before this level will work as it was designed to.

Protein synthesis stops or slows down when plants are too hot. Keep greenhouse temperatures beneath 80° if at all possible, using 30% shade cloth if needed.

Healthy crops can continue photosynthesis and protein synthesis in higher temperatures than unhealthy plants can; about a 20° difference.

PhotoMag contains magnesium, sulfur, boron, molybdenum, and cobalt. Use PhotoMag as a starting point then address minerals individually if needed.

Increased Lipid Synthesis

Primary Goals	Critical Elements
<ul style="list-style-type: none">• Get plants extremely energy efficient so that they develop a surplus of energy, which is stored as lipids, fats, and oils.• Plants develop a glossy, waxy sheen on the leaf surface as a result of the higher fat content.• Produce resistance to air-borne fungal and bacterial pathogens such as downy mildew, powdery mildew, late blight, fire blight, rust, bacterial speck, and bacterial spot.	<ul style="list-style-type: none">• Aggressive soil biology in the root zone to digest minerals and turn them into complete microbial metabolites which can be much more efficiently absorbed by the plants than individual mineral ions.• No nitrate absorption.• No ammonium absorption.

Notes:

This is what we call **Level 3 of the Plant Health Pyramid**. Level 1 and 2 must be addressed first before this level will work as it was designed to.

Increased PSM Synthesis

Primary Goals	Critical Elements
<ul style="list-style-type: none"> Plant's immune pathways such as Systemic Acquired Resistance (SAR) and Induced Systemic Resistance (ISR) are producing high levels of immune compounds and plant secondary metabolites (PSM), also called essential oils. Produce increased resistance to the beetle family such as japanese beetles, corn root worm beetles, squash bugs, Colorado potato beetles, cucumber beetles and stink bugs, etc. 	<ul style="list-style-type: none"> Correct microbes in/on both the rhizosphere and phyllosphere. Can be temporarily stimulated with products that trigger the SAR and ISR response. Try SeaShield or SeaStim in foliar. Try Santerra or Spectrum in drip.

Notes:

This is what we call **Level 4 of the Plant Health Pyramid**. Level 1, 2, and 3 must be addressed first before this level will work as it was designed to.

Seedling Development

Primary Goals	Critical Elements
<ul style="list-style-type: none">• Strong root development, complete with white hair roots.• Thick seedling stem.• Colonize mycorrhizal fungi and other microbes for a healthy rhizosphere (root zone) with good nutrient uptake.	<ul style="list-style-type: none">• Healthy seeds with a high manganese content.• Multiple species of mycorrhizal fungi (BioCoat Gold).• Santerra (in harsh environments).• Calcium.

Notes:

Framing / Vegetative Stage

Primary Goals	Critical Elements
<ul style="list-style-type: none"> • Rapid growth with tightly spaced internodes, which increases the future reproductive sights (on reproductive crops), and also enables them to actually fill out more fruit. • Robust and stocky plants. • Wide, thick, healthy leaves. 	<ul style="list-style-type: none"> • Photosynthesis minerals: Nitrogen, Magnesium, Iron, Manganese, and Phosphorus. • Constant calcium release coming from soil, either from aggressive biology or timing calcium fertilizer applications for peak release. • Boron. • Zinc. • SeaCrop. • Rejuvenate and Santerra in drip. • Potassium (during finishing stages).

Notes:

Use amino acid forms of nitrogen only! Nitrate applications will also trigger fast growth but it will be spindly and have less weight.

Bud Initiation

Primary Goals	Critical Elements
<ul style="list-style-type: none">• Maximize number of buds that can develop.• Bud uniformity, size, and energy.• Maximize blossom size.• Influence quality of bloom.	<ul style="list-style-type: none">• Calcium.• Manganese.• Phosphorus.• Boron.• Seaweed.• Zinc.• Copper.

Notes:

While Accelerate is a product that is formulated to help a plant’s overall reproductive health and the quality of bud initiation, it is not the end-all. Sometimes individual nutrients may need to be supplemented.

Bud initiation on most berry crops occurs in later summer or in the fall.

Blossoming and Pollination

Primary Goals	Critical Elements
<ul style="list-style-type: none"> • Improve pollination percentage and strength. • Impact speed of pollination. • Support pollen and pollen tube strength to minimize abortions, June drop, and misshaped fruit. 	<ul style="list-style-type: none"> • Calcium. • Manganese. • Phosphorus. • Boron. • Seaweed. • Zinc. • Copper.

Notes:

While Accelerate is a product that is formulated to help a plant's overall reproductive health and the quality of blossoming and pollination, it is not the end-all. Sometimes individual nutrients may need to be supplemented.

Cell Division

Primary Goals	Critical Elements
<ul style="list-style-type: none">• Maximizing <i>potential</i> fruit size, firmness, and quality.• Produce largest amount of cells possible during the cell division stage.	<ul style="list-style-type: none">• Manganese.• Calcium.• Boron.• Seaweed.• Limit potassium to avoid blocking of calcium uptake.

Notes:

Plants are typically in this stage for about 10-14 days immediately after the blossoming and pollination stage.

About 60% of the calcium that goes into the fruit, will enter during this 10-14 day window. Calcium is critical in this stage for fruit quality.

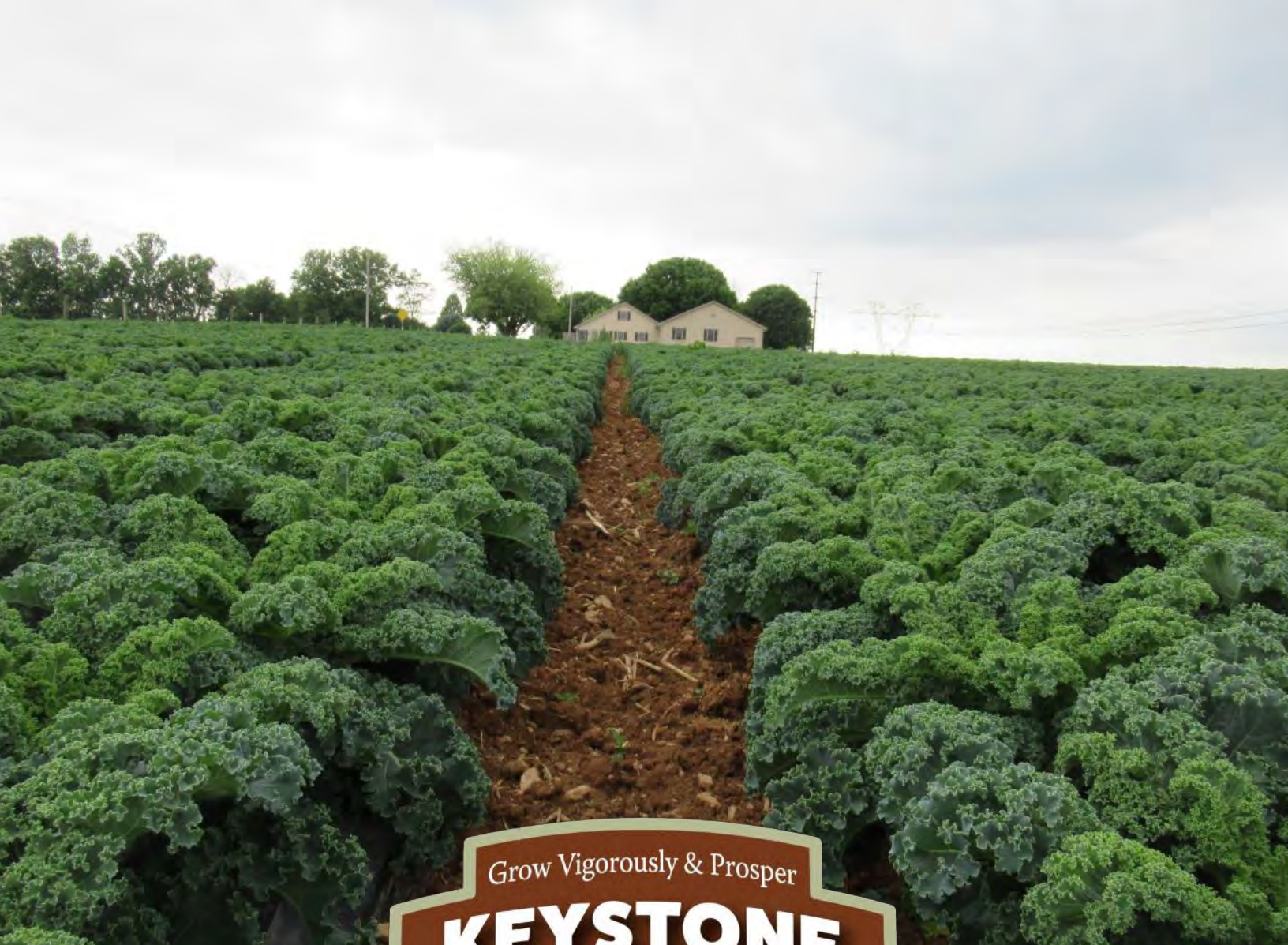
Cell Expansion / Fruit Fill

Primary Goals	Critical Elements
<ul style="list-style-type: none"> • Maximizing <i>actual</i> fruit size, firmness, and quality. • Develop large, delicious fruit. • Maximize quantity of sugars being transported to the fruit / grain. • Maximize quality parameters such as protein content, fat content, fruit firmness, test weight, and storability (shelf life). • Keep plants dark green and prevent premature die-down by influencing speed of senescence. 	<ul style="list-style-type: none"> • Photosynthesis minerals. • Potassium. • Boron. • Nitrogen. • Calcium. • Magnesium. • Sulfur. • Molybdenum. • Cobalt.

Notes:

Plants switch to this stage immediately after they get through the cell division stage.

PhotoMag contains magnesium, sulfur, boron, molybdenum, and cobalt. Use PhotoMag as a starting point then address minerals individually if needed.



Our mission is to educate, encourage, and empower farmers to produce healthy crops by supporting them with the products and information needed to make regenerative agriculture successful.

717-354-2115