



YOUR CROP HEALTH PARTNER



The fertilizer industry is experiencing an unprecedented period of change due to volatility, increasing demand and the implementation of cutting-edge technologies. More than ever, relying on strong partnerships is crucial to sustain growth, mitigate risk and overcome uncertainty. With 40+ years of experience and a distribution network spanning over 65 countries, OMEX is proud to provide Canadian Ag retailers and their farming communities with the most innovative and diversified range of fertilizer products. We believe this makes OMEX your ideal partner for growth and prosperity.

In the face of rapid change, our constant investment in manufacturing, R&D and personnel puts us in a prime position to continue spearheading technological advancements to meet demand and guarantee sustainability. In 2019, OMEX celebrated its 20th anniversary in the Canadian market.

This is not just a milestone, but also a sign of trust from the communities we service. Nothing is more gratifying than meeting customers and seeing the positive impact that OMEX products and technologies have had on their farms.

As we pursue our company's objectives, we will continue to fulfill our commitment to research and education, while upholding our unwavering philosophy of providing tangible solutions to farming challenges. With that goal, we have created this guide to help Ag retailers, agronomists and farmers make their best decisions when choosing Primers, Starters, Foliars, PGRs, Biologicals, Biostimulants and other plant health promoters. If the products within this guide do not fit your or your customers' specific needs, we also offer a variety of tailor-made formulations – contact us for your custom solution.

OUR VISION

To lead the market in the development and manufacturing of the most innovative line of plant nutrition products, designed from science to improve plant health and performance, for the agriculture and horticulture industry.

Contents



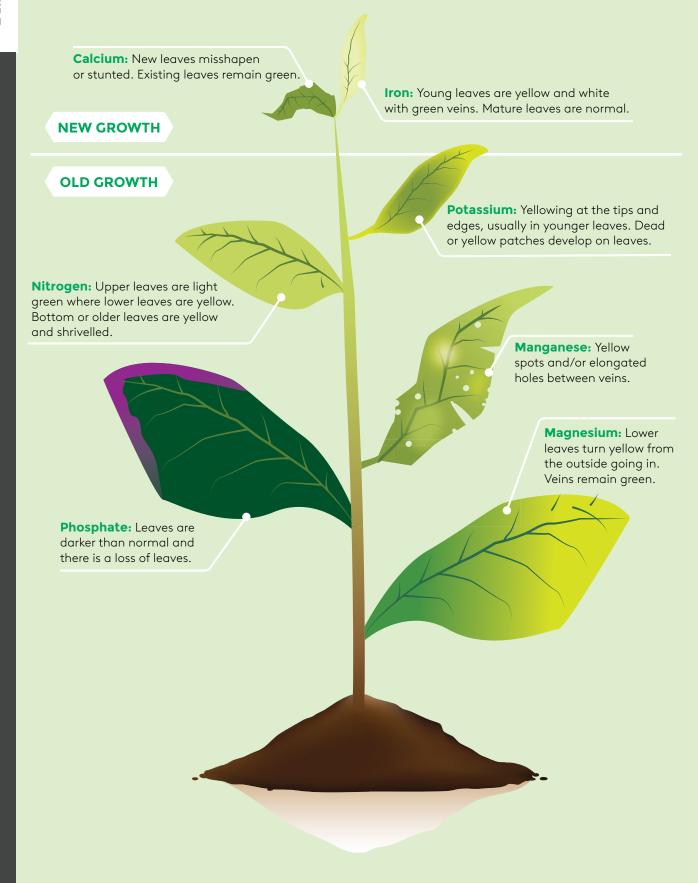
VISUAL GUIDE TO DEFICIENCY

How to ID Nutrient Deficiencies4
Nitrogen
Phosphorus
Potassium
Sulfur 8
Magnesium
Calcium10
Zinc
Copper
Manganese
Iron14
Boron
Molybdenum
Chloride
Nutrients Deficiency Diagnostics 18 Product Analysis & Descriptions 20 Application Rates by Crop 22

	PRIMERS
	Primer Zn24
$\overline{\perp}$	Primer Cu
	Primer Mn
	Pulse Primer
	Pulse Pak
	Primer Canola
	Primer Soybean30
	STARTERS
	Starter P
	Additives
	TPA34
	Perfuze
	MicroCharger

	FOLIARS
\top	C3
	P339
	Nutri-Boost
	SuperB + KB78 41
	SuperMn+
	uPtaKe IC43
	Zintake44
	Foliar Advance Cu45
	Foliar Advance Zn
	Fortis
	CalMax Complete
_	PK Bulk
त्य	BIOLOGICALS
4	AgriFlora Soil 51
	AgriFlora Foliar
	PLANT GROWTH REGULATORS
狐	StimPro
$\overline{}$	StimPro-K
	Cytokelp
	GA3
	StimPro JA
	StimPro SA
	JUITI 10 5/
	Chitosan
	Chitosan .60 Tria .61
	Chitosan
	Chitosan
	Chitosan
	Chitosan .60 Tria .61 SPECIALTY PRODUCTS FeRRoGreen .63 Organomex .64 pHix .65
	Chitosan .60 Tria .61 SPECIALTY PRODUCTS FeRRoGreen .63 Organomex .64 pHix .65 SopHtner95 .66
	Chitosan .60 Tria .61 SPECIALTY PRODUCTS FeRRoGreen .63 Organomex .64 pHix .65 SopHtner95 .66 Opal .67
	Chitosan .60 Tria .61 SPECIALTY PRODUCTS FeRRoGreen .63 Organomex .64 pHix .65 SopHtner95 .66 Opal .67 SW7 .68
	Chitosan .60 Tria .61 SPECIALTY PRODUCTS FeRRoGreen .63 Organomex .64 pHix .65 SopHtner95 .66 Opal .67 SW7 .68 StimPro Armour .69
	Chitosan .60 Tria .61 SPECIALTY PRODUCTS FeRRoGreen .63 Organomex .64 pHix .65 SopHtner95 .66 Opal .67 SW7 .68
	Chitosan .60 Tria .61 SPECIALTY PRODUCTS FeRRoGreen .63 Organomex .64 pHix .65 SopHtner95 .66 Opal .67 SW7 .68 StimPro Armour .69
	Chitosan .60 Tria .61 SPECIALTY PRODUCTS FeRRoGreen .63 Organomex .64 pHix .65 SopHtner95 .66 Opal .67 SW7 .68 StimPro Armour .69 Yucca .70

Compatibility Charts



VISUAL **GUIDE TO** DEFICIENCY

How to ID Nutrient Deficiencies

Are the symptoms on old or new leaves? Do the leaves show necrosis Is the discoloration (bits are dying)? Are they everywhere, only between the discolored (eg chlorosis)? veins (interveinal) or blotchy? Are the leaves wrinkled, curled or small? **BOTH OLD NEW** OLD **LEAVES LEAVES AND NEW LEAVES** Calcium Tips or edges (also dead Potassium of leaves **Phosphorus** buds) scorched **NECROSIS** Boron Manganese, Dead (also dead Magnesium Chlorine blotches buds) Sulfur, Uniform Nitrogen Copper **CHLOROSIS** Chlorine Molybdenum Blotchy (YELLOWING) Interveinal Iron, Potassium, Manganese, Zinc (between the Magnesium veins) Nickel **OTHER** Red or Boron Phosphorus **DISCOLORATION** purple Potassium, Wrinkled Zinc, Boron, Molybdenum Curled **DISTORTED** Curled under Magnesium **LEAVES** and wilted Sulfur, Potassium, Small, Zinc Manganese Copper stunted Calcium, Zinc, Boron, Nitrogen, Manganese shaped Molybdenum Potassium









Nitrogen Deficiency

SENSITIVE CROPS: All crops

SYMPTOMS

- > Light green, yellow leaves first evident in older leaves
- > Stunted growth
- > Lower protein levels
- > Delayed maturity
- > Decreased resistance to disease and pests
- > Smaller fruit
- > Lower yields
- > Shorter shelflife in storage

FUNCTIONS OF NITROGEN:

- > An essential element in all living systems
- > Needed by all cells
- > Occurs in the living substance (protoplasm) of cells
- > A major component of protein
- > A major component of chlorophyll
- > Affects both yields and quality

Treatment Options

Apply a good fertility program in the soil with enough Nitrogen to fulfill the targeted yield goals. Complement with a foliar program containing high percentage of Nitrogen especially when farming a light textured or sandy soil; dealing with compacted soil or a soil with low organic matter. Also, waterlogged conditions create high demand on Nitrogen.

The following OMEX products can assist with addressing and correcting Nitrogen deficiency:

Liquid Urea 20-0-0 / ASK YOUR OMEX REPRESENTATIVE Liquefied urea solution.

gaiN28 / ASK YOUR OMEX REPRESENTATIVE Stabilized Nitrogen source.

AmiNo13 / ASK YOUR OMEX REPRESENTATIVE Nitrogen solution derived from amino acids.

uPtaKe IC 13-7-4 / PAGE 43

Complete packaged of NPK with micronutrients rich in Nitrogen.

Soluble Powders / ASK YOUR OMEX REPRESENTATIVE Various dry soluble powders with 15% or 20% Nitrogen.





Phosphorus Deficiency

SENSITIVE CROPS: All crops

SYMPTOMS

- > Reduced growth
- > Sometimes stunted and only evident from shortened internodes, smaller leaves, reduced shoot growth
- > Dark green colour in some crops
- > Purpled leaves in some crops (e.g. Brassicas)
- > Reduced tillering in cereals
- > Small, misshapen fruit. Can be pulpy with poor storage life
- > Poor seed development

FUNCTIONS OF PHOSPHORUS:

- > Necessary for proper cell division and the formation of new cells
- > Photosynthesis
- > Sugar and starch formation
- > Energy transfer
- > Carbohydrate transport

Treatment Options

Apply a good fertility program in the soil with enough Phosphorus to fulfill the needs of the crop grown and targeted yield goals. Complement with a foliar program containing high percentage of Phosphorus especially early in the season when the conditions are wet and cold or if the crop is experiencing a drought. Apply Phosphorus as well when the crop is switching from vegetative to reproductive stage. Light textured soils, sandy soils, alkaline or heavy limed soils, acidic soil rich in Aluminum and/ or Iron reduce the availability of Phosphorus. Also, waterlogged conditions create high demand on Phosphorus. The following OMEX products can assist with addressing and correcting Phosphorus deficiency:

Starter P / PAGE 32

High analysis, seed-safe liquid Starter fertilizer for use in-furrow at seeding.

C3/Nutri-Boost / PAGE 38, 40

Foliar products with a high analysis of NPK and micronutrients with the Stress Reliever Technology for use with the herbicide or during periods of stress.

uPtaKe IC 5-25-5/8-32-5/PAGE 43

Foliar products with a high analysis of Phosphorus for use at anytime of the growing season to prevent or address deficiencies.

PK Bulk / Zintake / PAGE 49, 44

Good sources of Phosphorus, Potassium and Magnesium or Zinc.

Lucky 13 / ASK YOUR OMEX REPRESENTATIVE

Suspension containing Nitrogen, Phosphorus, Potassium and micronutrients.

Soluble Powders / ASK YOUR OMEX REPRESENTATIVE Good source of Nitrogen, Phosphorus, Potassium and micronutrients.







Potassium Deficiency

SENSITIVE CROPS: Cereals, corn, canola, pulses, beans, peas, sunflowers, potatoes, tomatoes, broccoli, rhubarb, cucurbits, lettuce, apples, berries, citrus, grapes, nuts, passionfruit, stone fruit

SYMPTOMS

- > Light green, yellow older leaves which develops into leaf scorch
- > Stunted growth
- > Lodging
- > Reduced disease resistance
- > Weakened stalks
- > Misshapen seed and fruit

FUNCTIONS OF POTASSIUM:

- > Aids in photosynthesis and the functioning of chlorophyll
- > Controls the opening/closure of stomata
- > Formation and translocation of starches, sugars, proteins and fats
- > Protein formation
- > Aids with enzyme actions
- > Maintenance of cell internal pressure
- > Reduces wilting and respiration by maintaining balance of salts and water in cells
- > Increases root growth and resistance to disease and drought
- > Decreases lodging

Treatment Options

Apply a good fertility program in the soil with enough Potassium to fulfill the targeted yield goals. Complement with a foliar program containing high percentage of Potassium especially when farming a light textured or sandy soil; dealing with compacted soil or a soil with low organic matter. Apply Potassium especially when the crop is subject to a drought or an excessive rainfall. The following OMEX products can assist with addressing and correcting Potassium deficiency:

K25 / ASK YOUR OMEX REPRESENTATIVE

Potassium solution for use in-furrow with a Starter P or for top dressing.

Primer Mn / PAGE 26

Seed dressing with high analysis of Phosphorus, Potassium, Zinc and Manganese.

Liquid K Xtra with PGRs / PAGE 55

Potassium solution that can be used alone or with PGRs at various stages of growth and development.

C3+K / Nutri-Boost / PAGE 38, 40

Foliar products with a high analysis of NPK and micronutrients with the Stress Reliever Technology for use with the herbicide or during periods of stress.

Lucky 13 / ASK YOUR OMEX REPRESENTATIVE

Suspension with a high analysis of NPK and micronutrients.

K50 / ASK YOUR OMEX REPRESENTATIVE

Highly available source of Potassium.

CalMax Complete / PAGE 48

Suspension with a high analysis of NPK, Ca, Mg and micronutrients.

Soluble Powders / ASK YOUR OMEX REPRESENTATIVE

Dry soluble powders rich in NPK and micronutrients.









Sulfur Deficiency

SENSITIVE CROPS: Wheat, barley, oats, triticale, corn, canary seed, canola, sunflower, peas, lentils, chickpeas, beans, alfalfa, clover, medic

SYMPTOMS

- > Similar to Nitrogen deficiency
- > Uniform pale green to yellow leaf starting in the new leaves
- > In legumes, the nodules produced are smaller, pale rather than pink, and reduced in number
- > In field crops, poor yield, low protein, pale green and yellow leaves
- > Purpling of margins and interveinal areas is common on both young and old leaves

FUNCTIONS OF SULFUR:

- > Constituent of several amino acids which are essential for protein production
- > Aids in activities of various enzymes and vitamins
- > Required for chlorophyll formation
- > Deficiency adversely affects the oil content in some oil crops and the baking quality in wheat crops
- > Aids in Nitrogen stabilization
- > Essential for nodule formation in legumes

Treatment Options

Apply a good fertility program in the soil with enough Sulfur to fulfill the targeted yield and quality goals. Complement with a foliar program containing high percentage of Sulfur especially if farming a light textured or sandy soils or soils with low organic matter. Sulfate form is prone to leaching under wet conditions while elemental does not become available if the conditions are dry. The following OMEX products can assist with addressing and correcting Sulfur deficiency:

Thio-S56 / ASK YOUR OMEX REPRESENTATIVE Sulfur source for use in-furrow or as a foliar.

Foliar Advance Zn/Cu/Mn/PAGE 45, 46 Good source of sulfate and micronutrients (Zn or Cu or Mn).

Fortis / PAGE 47

Good source of sulfate and micronutrients (Zn, Cu, Mn, Fe, ...).

Flowable Sulfur \$720 / ASK YOUR OMEX REPRESENTATIVE Suspension with high level of Sulfur.

Foliar Supreme / ASK YOUR OMEX REPRESENTATIVE Suspension with Phosphorus, Potassium and high level of Sulfur.





Magnesium Deficiency

SENSITIVE CROPS: Vines, pome fruit, stone fruit, citrus, tomatoes, capsicums, broccoli, cauliflower, lettuce, potatoes, parsley, pumpkin, cereals, oilseeds, corn, and other root crops

SYMPTOMS

- > Interveinal chlorosis beginning in the tops of older leaves. Veins remain green, while the chlorotic areas turn yellow to brown (other colours in some plants)
- > Leaves become brittle and necrotic and may drop prematurely
- > Yield may be seriously reduced
- > Leaves develop a purplish color between veins
- > Some varieties can develop interveinal red chlorotic areas

FUNCTIONS OF MAGNESIUM:

- > The center molecule of the chlorophyll
- > Co-factor of various enzymes
- > Aids plant to form sugar and starches
- > Plays an important part of the translocation of Phosphorus

Treatment Options

Apply Magnesium to crops grown on sandy or acidic soils; to crops having received heavy application of Potassium or grown on heavy manured land, particularly in high rainfall areas or when the conditions are cold and wet. Under severe Mg deficiency defoliation of the terminal shoots progresses from the base to the tip. The following OMEX products can assist with addressing and correcting Magnesium deficiency:

Perfuze Mg / PAGE 35

Use to coat the dry blend and even the distribution of Magnesium in the field.

Omex Mg / ASK YOUR OMEX REPRESENTATIVE Fully chelated Magnesium source for use with in-furrow starter fertilizer (i.e., Starter P).

Sequestri-Mg / ASK YOUR OMEX REPRESENTATIVE Sequestered Magnesium that allow mix-ability with Phosphoruscontaining products.

Uptake Mg / ASK YOUR OMEX REPRESENTATIVE Foliar product for the prevention or quick correction of Mg deficiency.

PK Bulk / PAGE 49

Suspension of Phosphorus, Potassium and Magnesium to prevent or correct deficiencies.







Calcium Deficiency

SENSITIVE CROPS: Tree crops, fruit and vegetables, pod crops, cereals, canola, pulses

SYMPTOMS:

- > Soft fruit
- > Senescent breakdown and poor storage life of fruit
- > Internal and external disorders on many fruits and vegetables
- > Crop Lodging
- > Terminal buds and root tips fail to develop normally
- > Stunted root systems
- > Leaves of grasses do not open properly, tips stick to the next lowest leaf

FUNCTIONS OF CALCIUM:

- > Proper functioning of growing points, particularly roots tips
- > Forms compounds which strengthen cell walls
- > Aids in cell division and elongation
- > Neutralizes organic acids
- > Aids in the proper working and permeability of cell membranes
- > Essential for pollen tube elongation
- > Regulates protein synthesis
- > Slows down the aging process

Treatment Options

Calcium is not easily translocated in plants, so a constant supply is required. It should be foliar applied in fruiting crops, and be available from after flowering onward. The following OMEX products can assist with addressing and correcting Calcium deficiency:

Pulse Primer/Pulse Pak / PAGE 27, 28

Seed dressing rich in Calcium for pulses.

Sequestri-Cal / ASK YOUR OMEX REPRESENTATIVE

Sequestered Calcium that allow mix-ability with Phosphoruscontaining products.

P3 / PAGE 39

Source of Calcium with the Stress Reliever Technology® for use on pulses at herbicide timing.

Liquid Cal / ASK YOUR OMEX REPRESENTATIVE For quick correction of Calcium deficiency.

CN9 / ASK YOUR OMEX REPRESENTATIVE Supplies Calcium and Nitrogen.

Cytokelp / PAGE 56

PGR with Cytokinins that provides Calcium and Magnesium.

CalMax / PAGE 48

Provides an adequate amount of Nitrogen, Calcium, Magnesium and micronutrients.

CalMax Complete / PAGE 48

Provides a complete range of nutrients including Nitrogen, Phosphorus, Potassium, Calcium, Magnesium and micronutrients.











Zinc Deficiency

SENSITIVE CROPS: Cereals, cotton, fruit, citrus trees, nuts, oil seed crops, pome fruit, rice, stone fruit, vegetables, pulses

SYMPTOMS

- > Poor seed vigor
- > Reduced size of leaves, misshapen leaves
- > Chlorosis, leading to necrosis and premature leaf fall
- > Chlorotic leaves and dieback in citrus
- > Rosetting and/or "little leaf" in fruit trees
- > "Tram lining" in corn (light striping on both side of midrib)
- > Bronze spotting on older leaves later giving a mottled appearance in legumes
- > Reduced development and size of fruit

FUNCTIONS OF ZINC:

- > Formation of chlorophyll
- > Uptake and use of water in plants
- > Zinc influences the rate of seed and stalk maturation
- > Involved in several enzyme systems, growth hormone auxins, and synthesis of nucleic acids

Treatment Options

Apply Zinc onto crops grown on high pH or heavily limed or manured soils; crops grown on peat or muck soils with high organic matter; crops grown on light, sandy soils or soils with low organic matter. Soils with high content of N, K or Mq can reduce the availability of Zn. Also, when conditions are cold and wet in the spring Zn availability become low. The following OMEX products can assist with addressing and correcting Zinc deficiency:

Primer Zn / PAGE 24

Seed dressing containing Phosphorus, Potassium and Zinc that supplements the seedlings with Zn for the early season growth and development.

Perfuze Zn or ZnB or ZnBMn / PAGE 35

Use to coat the dry blend and even the distribution of Zn in the field.

Omex Zn / PAGE 33

Fully chelated Zinc source for use with in-furrow with Starter P.

MicroCharger / PAGE 36

Source for several micronutrients including Zn for use with Starter P or an early season foliar.

Foliar Advance Zn / PAGE 46

Readily available Zn source for foliar spray at herbicide or fungicide timing.

Zintake / PAGE 44

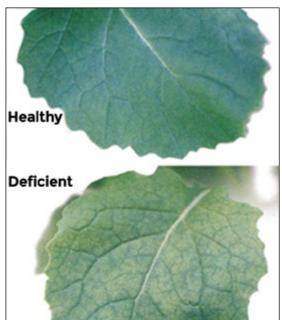
Good source of Phosphorus, Potassium and Zinc.

Fortis / PAGE 47

Recommended at flag leaf for cereals to trigger lignin production and provide straw strength. Use at various stages for other crops to promote health and correct deficiencies.







Copper Deficiency

SENSITIVE CROPS: Cereals, corn, alfalfa, citrus trees, lettuce, carrots, onions, oilseeds, tomatoes, spinach, flax, blueberries, beets, peppers

SYMPTOMS

- > Marginal chlorosis of young leaves
- > Twig dieback
- > Pigtailing
- > Necrotic, brown spots over leaf surface
- > Reduced growth and yields

FUNCTIONS OF COPPER:

- > Chlorophyll production
- > Photosynthesis
- > Production of proteins
- > Involved in several enzyme systems
- > Oxidation reduction reactions
- > Formation of lignin
- > Water movement regulation
- > Seed production

Treatment Options

Apply Copper onto crops subject to excess Nitrogen or Phosphorus; crops grown on high pH or heavily limed soils; crops grown on peat or muck soils with high organic matter; crops grown on leached out acid soils or sand; or when the conditions are cold and wet in the spring, delaying the availability of Cu. Soils high in Manganese content can reduce the availability of Cu. The following OMEX products can assist with addressing and correcting Copper deficiency:

Perfuze Cu / PAGE 35

For coating the dry blend and evenly distributing Copper in the field.

Primer Cu / PAGE 25

Seed dressing containing Phosphorus, Potassium, Zn and Cu that supplements the seedlings with Cu for the early season growth and development.

Omex Cu / PAGE 33

Fully chelated Copper source for use with in-furrow Starter P.

MicroCharger / PAGE 36

Source for several micronutrients including Copper for use with Starter P or an early season foliar.

Foliar Advance Cu / PAGE 45

Readily available Copper source for foliar spray at herbicide or fungicide timing.

Fortis / PAGE 47

Recommended at flag leaf for cereals to trigger lignin production and provide straw strength. Use at various stages for other crops to promote health and correct deficiencies.

Ergone / ASK YOUR OMEX REPRESENTATIVE

Use on cereals at early flowering stage to help mitigate infection of the kernels (i.e., Ergot, FHB).







Manganese Deficiency

SENSITIVE CROPS: Citrus, pome fruit, stone fruit, vines, strawberries, tomatoes, potatoes, pulses, vegetables, cereals (especially oats), sorghum

SYMPTOMS

- > Small grains can show a longitudinal striping
- > "Grey fleck" in oats
- > Chlorosis in fruits (more evident on the shady side of the tree)
- > Chlorosis of recently matured leaves with no reduction in leaf size
- > Less pronounced mottling in some broad leaf plants
- > Crop lodging
- > Disease expression

FUNCTIONS OF MANGANESE:

- > Chlorophyll production
- > Photosynthesis (water spliting)
- > Nitrogen and carbohydrate metabolism
- > Oxido-reduction reactions
- > Enzyme activity
- > Combines with Cu, Fe, and Zn to aid in plant growth and development processes

Treatment Options

Apply Manganese onto crops grown on high pH or heavily limed soils; crops grown on peat or muck soils with high organic matter; crops grown on light, sandy soils or soils with low organic matter. When the conditions are cold and wet in the spring Mn availability become low. Soils with high content of Cu, Fe or Zn can reduce the availability of Mn. The following OMEX products can assist with addressing and correcting Manganese deficiency:

Primer Mn / PAGE 26

Seed dressing containing Phosphorus, Potassium, Zn and Mn that supplement the seedlings with Mn for the early season growth and development.

Perfuze Mn / Perfuze ZnBMn / PAGE 35

Use to coat the dry blend and even the distribution of Mn in the field.

Omex Mn / PAGE 33

Full chelated Manganese source for use with in-furrow with Starter P.

MicroCharger / PAGE 36

Source for several micronutrients including Mn for use with Starter P or an early season foliar.

Foliar Advance Mn / ASK YOUR OMEX REPRESENTATIVE

Readily available Mn source for foliar spray at herbicide or fungicide timing.

SuperMn(+) / PAGE 42

Readily available Mn source for foliar spray at herbicide or fungicide timing. Also provides NPK and tank-mix with the herbicide.

Fortis / PAGE 47

Recommended at flag leaf for cereals to trigger lignin production and provide straw strength. Use at various stages for other crops to promote health and correct deficiencies.









Iron Deficiency

SENSITIVE CROPS: Vines, fruit crops, stone fruit, citrus fruit, field peas, beans, cereals, blueberries, soybeans

SYMPTOMS

- > Young leaves will show interveinal chlorosis with green veins
- > Stunted growth
- > Yellowing of leaves (margins and tips can scorch) will appear later in season
- > Reduced yield and quantity

FUNCTIONS OF IRON:

- > Key role in photosynthesis
- > Chlorophyll development and function
- > Plays a role in energy transfer
- > Important for the structure of proteins and enzymes
- > Iron increase Nitrogen fixation and use

Treatment Options

Apply Iron onto crops grown on high pH or heavily limed soils; crops grown on poorly drained and/or aerated soils; crops grown on sandy soils with a low CEC or soils with high levels of Cu. Soils with low availability of K especially when associated with high K levels are prone to develop Fe deficiency. When high Nitrate Nitrogen (N-NO₃-) is used or present in the soil, Fe deficiency may develop. The following OMEX products can assist with addressing and correcting Iron deficiency:

Perfuze Fe / PAGE 35

Use to coat the dry blend and even the distribution of Fe in the field.

Omex Fe / PAGE 33

Fully chelated Iron source for use with in-furrow starter fertilizer (i.e., Starter P).

FeRRoGreen / PAGE 33. 63

Ortho-ortho EDDHA-chelated Fe source for use with in-furrow or foliar.

MicroCharger / PAGE 36

Source for several micronutrients including Iron for use with Starter P or an early season foliar.

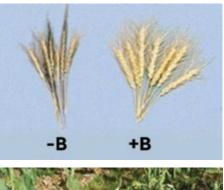
Straightline / ASK YOUR OMEX REPRESENTATIVE

Readily available source of Fe for foliar use.

uPtaKe IC 8-32-5 / PAGE 43

Foliar with a complete nutrient package that include Macro- and micronutrients such as Fe.









Boron Deficiency

SENSITIVE CROPS: Cotton, barley, corn, oats, sorghum, sunflower, clover, alfalfa, navy beans, soybeans, citrus, nuts, pome fruit, stone fruit, root crops, vegetables, oilseeds, canola, wheat

SYMPTOMS:

- > Thick, curled and brittle tissues
- > Growth points can die, forming multiple side shoots
- > Cracking, splitting tissues, sometimes with gummosis
- > Stunted growth
- > Reduced flowering, seed and fruit set
- > Small, misshapen fruit
- > Aborted flowers/pods
- > Loose glumes in cereals
- > Internal flesh disorders in fruit and tuber crops (i.e., hallow heart)

FUNCTIONS OF BORON:

- > Cell division
- > Translocation of Calcium
- > Protein synthesis
- > Carbohydrate metabolism
- > Pollen viability
- > Pollen and fruit set and formation
- > Hormone formation

Treatment Options

Boron is mobile in the soil and immobile in the plant. A constant supply is recommended throughout the season especially when the young seedlings are developing and during the reproductive stage. Foliar Boron is recommended to guarantee an adequate flowering especially if hot and dry or with high relative humidity; even when sufficient amount of Boron is detected in the soil test.

Borate is the preferred form for soil application. However, for foliar only boric acid is available through the leaves. The following OMEX products can help prevent or correct Boron deficiency:

Perfuze B, Perfuze ZnB / PAGE 35

Use to coat the dry blend. It evens the distribution of Boron in the field.

Sunalta B / ASK YOUR OMEX REPRESENTATIVE

Borate form for application in-furrow or with burn-off or top-dressing.

Super B / PAGE 41

Foliar boric acid for use at early vegetative growth to heal wounds from chewing insects or hail; at early flowering or during grain fill.

KB78 / PAGE 41

Foliar boric acid with Potassium to address or prevent Boron and Potassium deficiency.







Molybdenum Deficiency

SENSITIVE CROPS: Cucurbits, crucifers, pulses

SYMPTOMS

- > Similar to N deficiency
- > Yellow, pale leaves
- > Stunted growth
- > Necrotic leaf margins and tips
- > Symptoms begin in older leaves first
- > Flower wither or are suppressed
- > Poor nodulation

FUNCTIONS OF MOLYBDENUM:

- > Co-factor in the enzyme nitrate-reductase
- > Aids in the conversion of nitrates to ammonium (initial stage of synthesis of proteins)
- > Helps plants to utilize nitrate N
- > Essential for rhizobia to enable pulses to fix atmospheric N
- > Involved in Phosphorus and Iron metabolism

Treatment Options

Apply onto crops grown on soils derived from parent material low in Molybdenum (i.e., Prairies soils); when soils are acidic or have a low level of Phosphorus. The following OMEX products can assist with addressing and correcting Molybdenum deficiency:

Dry Molybdenum / ASK YOUR OMEX REPRESENTATIVE Powder highly soluble in water and can be added in-furrow or foliar with various fertilizers.

Pulse Primer/Pulse Pak/Primer Soybeans / PAGE 27, 28, 30 Seed dressing for Pulses and other Nitrogen fixing plants.

Omex Moly / ASK YOUR OMEX REPRESENTATIVE Liquid solution of Molybdenum for use at various stages of growth and development.

Omex Foliars / PAGE 37-49 All OMEX foliars contain Molybdenum.







Chloride Deficiency

SENSITIVE CROPS: Alfalfa, broccoli, brussel sprouts, cabbage, cauliflower, lettuce, oil palm, potato, small grains, beets, tomatoes, cereals, canola, canary seed.

SYMPTOMS

- > Wilting
- > Restricted, highly branched root system
- > Leaf mottling
- > Leaflet blade tip wilting with chlorosis
- > In cabbage, absence of cabbage odour

FUNCTIONS OF CHLORIDE:

- > Cation balance, transport
- > Diminishes effect of fungal infections
- > May compete with nitrate uptake, promoting use of ammonium, which may factor in its role in disease suppression
- > Works in tandem with K for the proper function of stomatal openings, controlling internal water balance
- > Photosynthesis specifically the control of gas/water exchange

Treatment Options

Avoid applying Chlorides early in ground as it interferes with Phosphorus and Nitrate uptake. Use as a foliar to improve disease control and promote health in the crop. Crops such as canary seeds require high levels of Chlorides.

Chlorides have a low deliquescence point and can be taken up fast by the leaves causing a leaf burn. Apply with high volume of water early in the morning or late at night. The following OMEX products can assist with addressing and correcting Chloride deficiency:

Liquid K Xtra / ASK YOUR OMEX REPRESENTATIVE

Potassium solution that can be formulated with Chlorides to address Chloride deficiency.

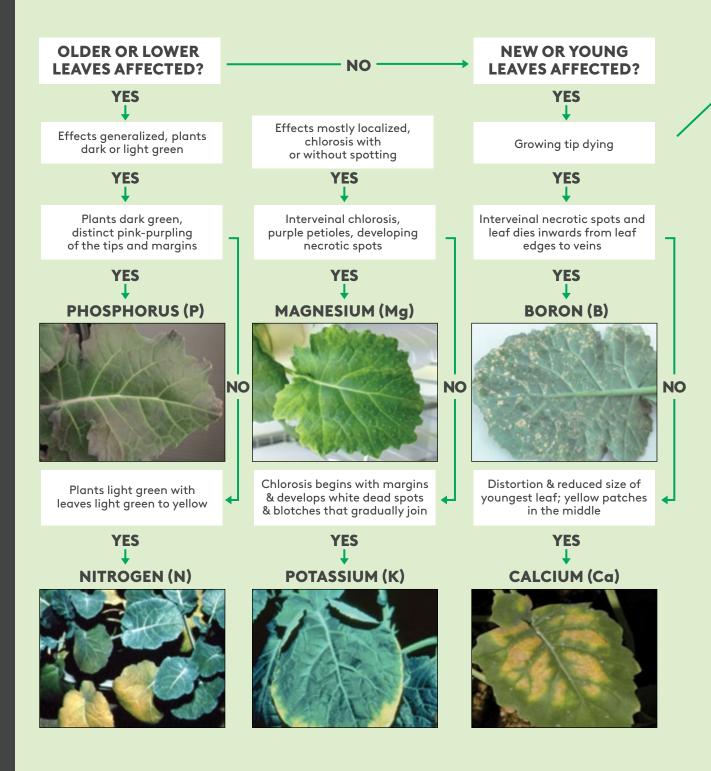
Liquid Cal / ASK YOUR OMEX REPRESENTATIVE

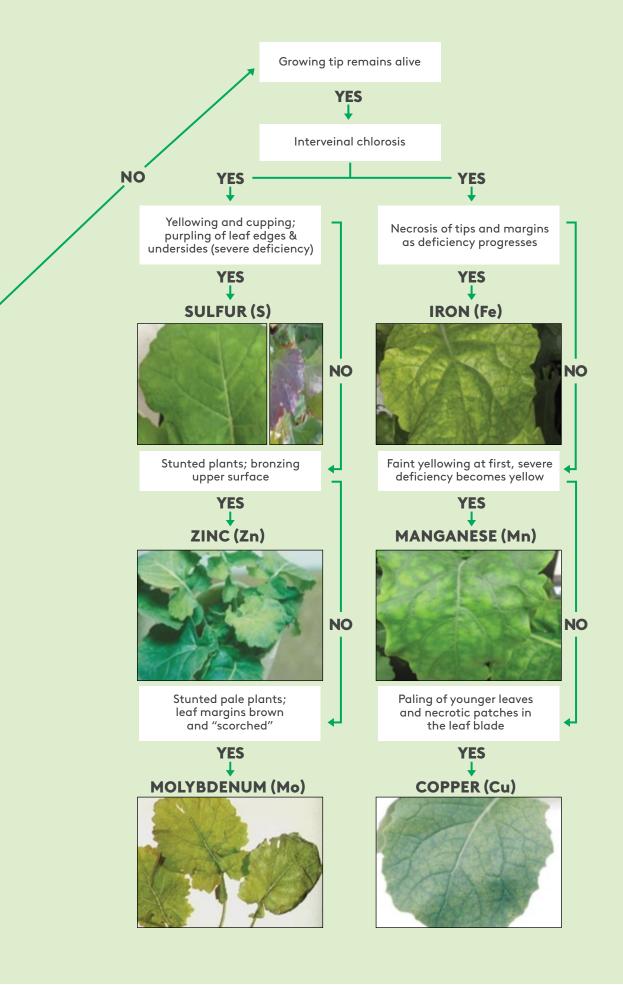
Calcium solution that can be formulated with Chlorides to address Chloride deficiency.

Omex CI / ASK YOUR OMEX REPRESENTATIVE

NPK and micronutrient solution that can be formulated with Chlorides to address Chloride deficiency.

NUTRIENTS DEFICIENCY DIAGNOSTICS





Product Analysis and Descriptions

PRODUCT	ANALYSIS	DESCRIPTION	
PRIMERS:			
Primer Cu®	0-22-3 with 3.4% Zinc & 3.4% Copper	*Phosphorus, Potassium, Zinc and Copper based product *Used as a nutrient seed dressing on cereals (wheat, barley, oats)	
Primer Mn®	0-27-6 with 3.8% Zinc & 1.5% Manganese	*Phosphorus, Potassium, Zinc and Manganese based product *Used as a nutrient seed dressing on cereals and oilseed crops	
Primer Zn®	0-22-3 with 6.7% Zinc	*Phosphorus, Potassium and Zinc based product *Used as a nutrient seed dressing on cereals and oilseed crops	
Pulse Primer®/ Pulse Pak [™] / Primer Soybean®	10% Calcium	*Rhizobium-friendly and 100% safe to use with all pulse crops *Calcium-based	
Primer Canola®	0-22-3 with canola essential micronutrients	*A balanced formulation with Phosphorus, Potassium and a series of micronutrients that are essential for the early season growth and development of canola	
STARTERS:			
Starter P®	9-32-2	*A superior source of Phosphorus and has a very low salt index, making it root friendly and selectively available to the emerging plant roots *Offers better control of the early "tie–up" of Phosphorus	
Perfuze™	35% Mg; 50% Zn; 15% B; 50% Cu; 12.5% B+22% Zn; 25% Mn ; 20% Fe; 25% Zn + 10% B + 16% Mn	*Highly concentrated liquid suspension intended for coating dry PKS blends with micronutrients	
TPA®	5-15-5	*Biodegradable beta protein, crystal inhibitor, prevents Phosphorus from being tied up *Nutrient absorption enhancer which allows for higher nutrient uptal by plant	
Single Elements: OMEX Cu®, OMEX Fe®, OMEX Mn®, OMEX Zn®, OMEX Zn®, OMEX Molybdenum®, FeRRoGREEN™	Copper EDTA 7.5%, Zinc EDTA 9%, Manganese EDTA 5%, Iron EDTA 5%, Molybdenum EDTA 1.5% or 3%, FeRRoGREEN™ EDDHA-Fe 3%	*Fully water soluble solution of single elements (Zn, Cu, Mn, Fe, Mo,) to prevent and correct nutrient deficiencies	
FOLIARS:			
C3®	6-12-6	*Low salt index fertilizers	
C3®+Cu	6-12-6 with 0.5% Copper	*Early season stress relief	
C3®+K	6-12-12		
P3 [™]	5% Calcium	*Helps overcome environmental stresses and enhance vigour *Early season in-crop spray	
Nutri-Boost®	6-17-5 + TE	*A custom designed formulation to help growers manage stress conditions with a well-balanced nutrient program	
uPtaKe IC®	5-25-5 + TE 13-7-4 + TE 8-32-5 + TE	*Custom formulated, low salt index foliar macro fertilizer designed to complement a well-balanced nutritional program	
SuperMn+	10-10-4 with 6% Manganese	*High performance multi-nutrient enhanced product *Addresses both Manganese issues and uses this opportunity in the plants metabolic cycle to boost plant health and growth with addition of N, P, K, Mn and S	
SuperB [®] KB78 [®]	4-0-0 with 10% Boron 3-0-7 with 8% Boron	*Boron primarily regulates carbohydrate metabolism and sugar translocation in plants *Boron is essential for protein synthesis, seed and cell wall formation, germination of pollen grains and growth of pollen tubes	
Foliar Advance Cu™	9-15-0 with 5% Copper	*A fully water-soluble Copper solution in a form readily available to plants *Most effective when applied as a foliar spray *Supplies a sufficient amount of Copper to correct deficiencies	

PRODUCT	ANALYSIS	DESCRIPTION		
FOLIARS CONTIN	UED:			
Foliar Advance Zn™	10-0-0 with 9% Zinc	*A fully water-soluble Zinc solution in a form readily available to plants *Most effective when applied as a foliar spray *Supplies a sufficient amount of Zinc to correct deficiencies		
$\mathbf{Zintake}^{TM}$	0-26-4 with 9% Zinc	*Helps increase Zinc density and proteins in the seed		
Fortis™	3-0-1 with 4.5% S, 2% Cu,2% Mn, 1.25% Zn, 0.25% B + TEs	*Low salt index liquid fertilizer with high levels of Copper, Manganese and Zinc *Provides enhanced uptake and translocation, while minimizing tissue damage *Improves lignification & straw strength *Helps prevent lodging		
CalMax Complete®	10-0-3, 11% Ca + 0-28-19 + micropackage	*A reacted Calcium formulation formulated with the AXM Technology™ that allows for a better uptake and translocation of Calcium. Very complete nutrient package		
PK Bulk™	0-29-5 with 4% Mg	*A user friendly formula used to mitigate or correct Phosphorus, Potassium and Magnesium deficiency		
SPECIALTY PRODU	JCTS:			
Liquid K Xtra™	0-0-12	*A superior Potassium fertilizer formulated for fast foliar uptake and translocation		
FeRRoGREEN™	EDDHA-Fe 3%	*EDDHA chelated Iron for correction of Iron chlorosis in calcareous and high pH soils		
lsomex®	De-icing/anti-icing agent (50% Potassium Acetate)	*A de-icing agent for use on concrete surfaces, walkways, highways, bridges and runways		
Isoway RTU™	De-icing/anti-icing agent (25% Potassium Acetate)	*An anti-icing agent for use on footpaths and public thoroughfares and anywhere ice poses a risk to pedestrians and users.		
Opal®	Potassium Salts of Fatty Acids	*A contact insecticide that controls a variety of common garden and crop pests		
Organomex [™]	6-2-4, 3-1-8 + Secondary + micropackage	*Organically certified, non-GMO containing fertilizer suspensions with hi analysis of NPKS, secondary nutrients (Ca, Mg) and micronutrients. Idea for transplants, greenhouse or hydroponically-grown crops, as well as horticultural and field crops *Excellent source of Ca and K for soft fruits and vegetables		
pHix®	Water conditioner/hardness/ pH adjuster	*Water conditioner that adjusts pH and reduces hardness, preventing the tie-up of phosphate-based pesticides. It improves spray water quality to ensure optimum efficiency of herbicides such as Glyphosate. Use for burn-off and desiccation		
So <i>pH</i> tner95 [™]	Soil conditioner & water hardness adjuster	*A water softner and a pH reducer designed for soil and foliar applications, where the pH need to be lowered into a more acidic range. Excellent chelating agent *Use with in-crop sprays		
SW7	0-8-0 with 62% Si	*Wetter, spreader, sticker with silica.		
Yucca	50% extract of Yucca Schidigera	*Natural non-ionic surfactant.		
BIOLOGICALS:				
Agriflora Soil	Rhizobactaria Bacillus subtilis 2x10°. CFU/g & B. amyloliquefasciens 2x10°	*Microbial supplement designed to enhance plant growth and development, nutrients uptake, the overall health, yield and quality. For soil or seed application.		
Agriflora Foliar	Rhizobactaria Bacillus subtilis 2x10°. CFU/g & B. amyloliquefasciens 2x10°	Microbial supplement for foliar application		
PGRS:				
Chitosan	4% Chitosan	*Naturally found in crustacean shells and fungal cell walls, stimulate growth.		
Cytokelp	0.17-0-0.24 + 0.13% Ca, 0.08%Mg with 0.25% Kinetin, 6% Kelp extract, 5% Yucca extract	*PGR with Kinetin, Kelp and Yucca extract.		
StimPro	3-IBA 0.85%, Kinetin 0.15%	*PGR with Auxins and Cytokinins.		
StimPro-Armour	0-0-15 with 25% Si	*Wetter with K and Si. Stimulate plant defenses.		
StimPro-GA3	5% GA3	*PGR with GA3 to break dormancy and stimulate growth and developement.		
StimPro-JA	0.025% JA	*PGR with Jasmonic acid to trigger defenses towards diseases and pests.		
StimPro-K	0.9% Kinetin, 0.3% SA, 0.3% Vit B1 & C	*PGR with Cytokinins to stimulate cell division and reduce stress.		
StimPro-SA	0-0-4.6 with 10% SA	*PGR with Salicylic acid to trigger defenses towards diseases.		
Tria	0.5% Tricontanol	*Naturally occuring biostimulant.		

Application Rates by Crop

CROP	ADDUCATION	PROPUST	TIMING	DATE
CROP	APPLICATION	PRODUCT	TIMING	RATE
	Seed dressing	Primer (Zn/Cu/Mn)®	Seed dressing/coating	3 mL/Kg of seed; 122 bu per 10 L jug; 410 L per 5000 bushel bin. For corn use 9-12 ml/Kg.
		Starter P®	Seed placed (in-furrow)	3-5 US gal/ac
	Starter fertilizer	Perfuze™	Dry fertilizer coating	0.5-5 L/metric ton of blend.
		TPA®	Seed placed (in-furrow)	0.25-0.5 L/ac
	Foliar application	C3®	Herbicide: 3-5 leaf stage; after hail	1L/ac
CEREALS:		Foliar Advance Cu™	Herbicide/Fungicide	0.5-1 L/ac
WHEAT OATS BARLEY CORN		Nutri-Boost®	Herbicide: 3-5 leaf stage; after hail	2 L/ac
		uPtaKe IC®	Various stages/Fungicide	2-3 L/ac
		Zintake TM /Foliar Advance Zn TM / Omex Zn	Various stages; especially soft dough. Use Omex Zn with herbicide on corn	1-2 L/ac
		PK Bulk™	Various stages; Correct Mg deficiency	1-2 L/ac
		Fortis™	Flag leaf	1 L/ac
		Liquid K Xtra™ w/ PGRs	Herbicide: 3-5 leaf stage	2 L Liquid K w/ 75 mL PGRs/ac
	pH/hardness	So <i>pH</i> tner95™	For any in-crop spray (soften the water)	1L/100 US gal of water
	adjuster	pHix [®]	Glyphosate pre-burn/dessication	0.5 L/ 100 US gal of water
				6 mL/Kg of seed or 73 x 50
	Seed dressing	Primer Canola®	Seed dressing/coating	lbs bags per 10 L jug 1 mL/Kg of seed or 367 bu
		Primer Soybean®	Seed dressing/coating	per 10 L jug
		Starter P®	Seed placed (in-furrow)	3-5 US gal/ac
	Starter fertilizer	Perfuze™	Seed placed (in-furrow)	0.5-5 L/metric ton of blend.
OILSEEDS:		TPA®	Seed placed (in-furrow)	0.25-0.5 L/ac
CANOLA		C3®	Herbicide: 1-4 leaf stage (1st spray); after hail	1L/ac
MUSTARD FLAX		Nutri-Boost®	Herbicide: 1-4 leaf stage (1st spray); after hail	2 L/ac
SOYBEANS		SuperMn+	Herbicide: 2nd spray	1-2 L/ac
SUNFLOWERS	Foliar	SuperB®/KB78®	Early bolting & with Fungicide; after hail	0.5-1 L/ac
	application	uPtaKe IC®	Various stages	2-3 L/ac
		Zintake [™] / Foliar Advance Zn [™]	Fungicide	1-2 L/ac
		PK Bulk™	Various stages; Correct Mg deficiency	1-2 L/ac
	pH/hardness adjuster	So <i>pH</i> tner95™	For any in-crop spray (soften the water)	1L/100 US gal of water
		pHix [®]	Glyphosate pre-burn/ Harvest Aid	0.5 L/ 100 US gal of water
	Seed dressing	Pulse Primer®/ Pulse Pak™	Seed dressing/coating	3 mL/Kg of seed; 122 bu per 10 L jug; 410 L per 5000 bushel bin
	Starter fertilizer	Starter P®	Seed placed (in-furrow)	3-5 US gal/ac
		Perfuze™	Seed placed (in-furrow)	0.5-5 L/metric ton of blend.
PULSES		TPA®	Seed placed (in-furrow)	0.25-0.5 L/ac
& ALL: PEAS LENTILS CHICKPEAS	Foliar application	P3™/Zintake™ + SR	Herbicide; after hail	P3 [™] : 0.25 L/ac; Zintake [™] : 1-2 L/ac
FABA BEANS		SuperB®/ KB78®	Early bolting & with Fungicide; after hail	0.5-1 L/ac
DRY BEANS ALFALFA		uPtaKe IC®	Various stages	2-3 L/ac
ALIALIA		PK Bulk™	Various stages; Correct Mg deficiency	1-2 L/ac
		Zintake™/ Foliar Advance Zn™	Various stages	1-2 L/ac
	pH/hardness	SopHtner95™	For any in-crop spray (soften the water)	1L/100 US gal of water
	adjuster	pHix®	Glyphosate pre-burn/dessication	0.5 L/ 100 US gal of water

PRIMERS

With the intensive farming and stress conditions encountered every season, all harvested seed suffers from an unbalanced nutrient density to guarantee a maximum germination and vigor. Applying key nutrients onto the seed as Primers or seed dressings helps to balance the nutrients' density and quarantee an even emergence and an optimal seedling growth and development up to the 3-5 leaf stage.

OMEX PRIMERS add nutrients onto the seed, optimizing the balance between macro- and micronutrients to maximize seedling emergence and vigor. PRIMERS help the plant cope with early-season cold and wet conditions to get the crop off to a strong start and be more competitive with the weeds.



Promoting Faster Emergence & Root Development

ANALYSIS (0-22-3 WITH 6.7% Zn)

WHAT IS IT?

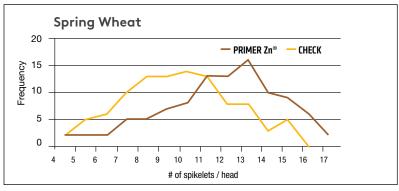
- > Seed dressing for application onto cereals and oilseed prior to seeding.
- > Unique formulation with high concentrations of Phosphorus, Potassium and Zinc.
- > The Gel Rheology Technology™ keeps the highly concentrated product suspended and helps with seed adhesion and drying out.

WHEN & WHY USE IT?

- > To reduce the effect of cold and wet conditions and when seeding into a dry soil.
- > If seeding into high pH soils, heavy manure land, soils with high organic matter.
- > To provide nutrients lacking in sandy and light-textured soils.
- > Western Canadian soils are Zinc deficient and the harvested grains from these soils are low on Zinc.
- > Zinc is required for energy production and protein synthesis.
- > Phosphorus and Zinc are key drivers for an optimum germination
- > Zinc aids in the prevention of maturity delays.

WHAT TO EXPECT?

- > Quick emergence and establishment of the seedlings.
- > Good root development and biomass.
- > Advanced days to maturity.









Application Guidelines



Cereals: 3 mL/Kg of seed; 122 bu per 10 L jug; 410 L per 5000 bushel bin.

Oilseeds: 6 mL/Kg of seed or 73 x 50 lbs bags per 10 L jug.

Primer Zn® should not be used with Rhizobia on pulses.

Primer Zn® can be applied onto the seed in combination with other seed treatments. Check the best option for your targeted combination (see compatibility charts).

If required, Primer Zn® can be diluted with water for a more uniform coverage onto the seed. It is highly recommended to wash the seed treatment equipment after using the product.

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*Primer Zn® is a registered trademark of OMEX Agriculture Inc.





Ultimate Copper Seed Nutrition

ANALYSIS (0-22-3 WITH 3.4% Zn & 3.4% Cu)

WHAT IS IT?

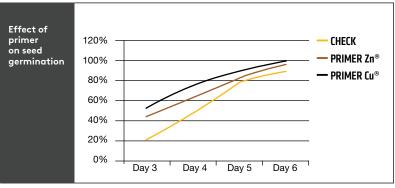
- > Seed dressing for application onto cereals seed prior to seeding.
- > Unique formulation with high concentrations of Phosphorus, Potassium, Zinc and Copper.
- > The Gel Rheology Technology™ keeps the highly concentrated product suspended and helps with seed adhesion and drying out.

WHEN & WHY USE IT?

- > In areas where Copper deficiency ('pig tailing', ergot, lodging) is prevalent.
- > To prevent the effect of cold, wet conditions and when seeding
- > If seeding into high pH soils; soils with high N levels; sandy and light-textured soils.

WHAT TO EXPECT?

- > Contributes to stronger roots and stems.
- > Maximizes Copper uptake early in the growing season as Copper is placed in close proximity to the growing root tips.
- > Helps prevent deficiency symptoms ('pig tailing', lodging and exposure of ergot).
- > Corrects deficiency, preserves yield and prevents maturity delays.









Application Guidelines



Cereals: 3 mL/Kg of seed or 122 bu per 10 L jug; 410 L per 5000 bushel bin.

Primer Cu® is NOT recommended on pulses, especially with liquid inoculant.

Primer Cu® can be used alone or in combination with other seed treatments. Check the best option for your targeted combination (see compatibility charts).

Primer Cu[®] can be diluted with water for more uniform coverage onto the seed. Dilution improves the dry down time.

Primer Cu® requires the use of highgrade steel equipment and plumbing.

It is highly recommended to wash the seed treatment equipment with water after use.

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*Primer Cu® is a registered trademark of OMEX Agriculture Inc.





Promotes Roots... Triggers Crop Defenses

ANALYSIS (0-27-6 WITH 3.8% Zn & 1.5% Mn)



Application Guidelines



Cereals: 3 mL/Kg of seed or 122 bu per 10 L jug; 410 L per 5000 bushel bin.

Oilseeds: 6 mL/Kg of seed or 73 x 50 lbs bags per 10 L jug.

Primer Mn® can be used alone or in combination with other seed treatments. Check the best option for your targeted combinations (see compatibility charts).

Primer Mn® can be diluted with water for a more uniform coverage onto the seed. Dilution improves the dry down time.

Primer Mn® should NOT be used with liquid Rhizobia on pulses.

It is highly recommended to wash the seed treatment equipment with water after use.

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*Primer Mn® is a registered trademark of OMEX Agriculture Inc.

WHAT IS IT?

- > Seed dressing for application onto cereals, oilseed and pulses prior to seeding.
- > Unique formulation with high concentrations of Phosphorus, Potassium, Zinc and Manganese.
- > The Gel Rheology Technology™ keeps the highly concentrated product suspended and helps with seed adhesion and drying out.

WHEN & WHY USE IT?

- > To help reduce the effect if cold and wet conditions and when seeding into a dry soil.
- > When seeding into high pH soils, heavy manure land, soils with low organic matter.
- > When farming sandy and light-textured soils.

WHAT TO EXPECT?

- > Enhanced secondary root development which maximizes the uptake of all nutrients.
- > Primer Mn® triggers the crop's natural defenses (i.e. Phytoalexins), which in conjunction with the fungicide seed treatment:
 - > improves the quality and grade of the grains;
 - > preserves yield.









The Trigger for Root **Growth & Nodulation**

ANALYSIS (10% Ca)

WHAT IS IT?

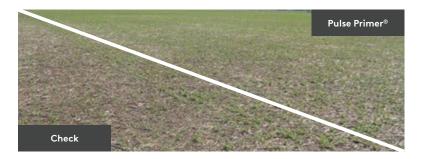
- > Seed dressing for application onto pulse seed (peas, lentils, chickpeas, ...).
- > Calcium-based seed dressing.
- > Rhizobia-friendly formulation.
- > The Gel Rheology TechnologyTM keeps the highly concentrated product suspended and helps with seed adhesion and drying out.

WHEN & WHY USE IT?

- > When seeding into wet and cold conditions or when the top soil is dry.
- > If seeding into low pH soils, heavy manure land, soils with high Nitrogen levels.
- > If farming sandy and light-textured soils.
- > When seeding into heavy textured soil with high Mg content.

WHAT TO EXPECT?

- > Early emergence and a better stand.
- > Extensive root growth.
- > Better nodulation.
- > Better Nitrogen use efficiency and preservation of yield.









Application Guidelines



Pulse crops: 3 mL/Kg of seed.

Pulse Primer® can be used alone or in combination with seed treatments, dry and liquid inoculants. Check the best option for your targeted combination (see compatibility charts).

Pulse Primer® can be diluted with water for a more uniform coverage onto the seed.

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*Pulse Primer® is a registered trademark of OMEX Agriculture Inc.





Promotes Roots & Nodulation... **Triggers Natural Defenses**

ANALYSIS (0-27-6 WITH 3.8% Zn & 1.5% Mn + 10% Ca)



Application Guidelines



Pulse crops: 3 mL (1.5ml Pulse Primer + 1.5ml Primer Mn)/Kg of seed or 122 per per 10L jug; 410L per 5000 bushel bin.

Pulse Primer™ can be used alone or in combination with seed treatments, dry and liquid inoculants. Check the best option for your targeted combination (see compatibility charts).

Pulse Pak™ can be diluted with water for a more uniform coverage onto the seed. Dilution improves the dry down time.

Pulse Pak™ should NOT be used with liquid Rhizobia inoculant on the seed.

When using Pulse Pak™, it is highly recommended to use dry granular inoculant.

It is highly recommended to wash the seed treatment equipment with water after use.

The product is available in cases 2 x 10L jugs (1 jug of Pulse Primer (Part A) and 1 jug of Primer Mn (Part B).

*Pulse Primer® is a registered trademark of OMEX Agriculture Inc.

WHAT IS IT?

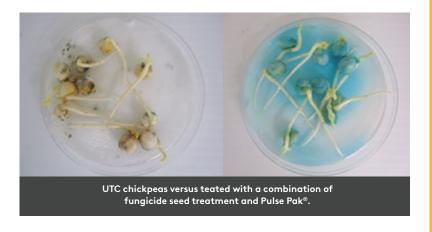
- > Seed dressing for application onto pulse seed (peas, lentils, chickpeas, ...).
- > Calcium-based seed dressing.
- > Rhizobia-friendly formulation.
- > The Gel Rheology Technology™ keeps the highly concentrated product suspended and helps with seed adhesion and drying out.

WHEN & WHY USE IT?

- > When seeding into wet and cold conditions or when the top soil is dry.
- > If seeding pulses into low pH soils, heavy manured land or soils with high Nitrogen levels.
- > If farming sandy and light-textured soils.
- > Most importantly when farming land challenging with soil-borne/ seed-borne diseases that thrive under wet conditions.

WHAT TO EXPECT?

- > Pulse Pak™ enhances secondary root development, which maximizes the uptake of all nutrients.
- > Pulse Pak™ triggers the crop's natural defenses (i.e., Phytoalexins), which in conjunction with the fungicide seed treatment:
 - > improves the control of soil- and seed-borne diseases;
 - > prevents root rots and damping-off;
 - > improves crop emergence and establishment;
 - > and helps preserve yield.
- > Better Nitrogen use efficiency and preservation of yield.







Balanced Nutrition for Germinating Canola

ANALYSIS (0-22-3 WITH CANOLA ESSENTIAL MICRONUTRIENTS)

WHAT IS IT?

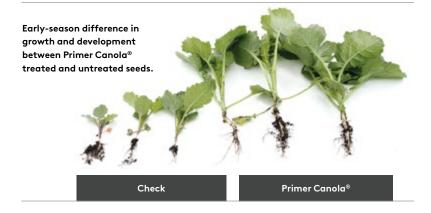
- > Seed dressing for application onto canola and mustard seed prior to seeding.
- > Unique formulation with high concentrations of Phosphorus, Potassium and Zinc as well as other essential micronutrients.
- > The Gel Rheology Technology™ keeps the highly concentrated product suspended and helps with seed adhesion and drying out.

WHEN & WHY USE IT?

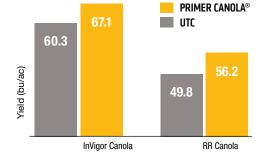
- > To improve early-season establishment of canola in cold and wet soil conditions.
- > To provide readily available Phosphorus, Potassium, Zinc and other micronutrients that are limited by the cold and wet conditions.
- > To trigger earlier emergence allows canola seedlings to outcompete weeds.

WHAT TO EXPECT?

- > Reduced risk of a poor stand and the need to re-seed.
- > Canola cabbages out and bolts quicker, resulting in an earlier flowering to beat the summer heat.
- > Advanced maturity, earlier dry down and better management of the harvest operation.



Yield advantage in LL and RR canola treated with Primer Canola® vs an untreated check (Manitoba, 2014).





Application Guidelines



Canola: 6 mL/Kg of seed or 73 x 50 lbs bags per 10 L jug.

Primer Canola® can be used alone or in combination with other pesticides or biological seed treatments.

Primer Canola® can be diluted with water for a more uniform coverage onto the seed.

When diluted with water the dry down is faster.

It is highly recommended to wash the seed treatment equipment with water after using the product.

The product is available in cases of 2x10 L jugs, 450 L and 1000 L IBC's.

*Primer Canola® is a registered trademark of OMEX Agriculture Inc.





Earlier Seeding... Better Root System... Hastened Maturity

ANALYSIS (10% Ca WITH SOYBEANS ESSENTIAL MICRONUTRIENTS)



Application Guidelines



Apply Primer Soybean® at 1 ml/kg of seed at or prior to planting.

If required, Primer Soybean® can be diluted with water for a more uniform distribution onto the seed.

Primers can be used alone or in combination with inoculants and seed treatments. Check the best option for your targeted combinations (see compatibility charts).

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*Primer Soybean® is a registered trademark of OMEX Agriculture Inc.

WHAT IS IT?

- > Seed dressing for application onto soybeans seed prior to seeding.
- > Unique formulation with high concentrations of calcium.
- > The Gel Rheology Technology $^{\text{TM}}$ keeps the highly concentrated product suspended and helps with seed adhesion and drying out.
- > It is Rhizobium-friendly and safe to use with all commercially available liquid and dry inoculants in Canada.
- > Low inclusion rate

WHEN & WHY USE IT?

- > To reduce the impact of cold, wet conditions or when seeding into dry top soil.
- > When seeding into heavy manured land.
- > If planting soybeans into light-textured soils or high Magnesium soils.
- > If seeding into a soil with a history of high Nitrogen application.

WHAT TO EXPECT?

- > Better root growth and early-season establishment.
- > Early seed emergence.
- > Better nodulation.
- > Hastened maturity.



Left: Check Right: Treated





STARTERS

OMEX STARTERS are in-furrow applied fertilizer strategically placed to provide readily available Phosphorus for maximum uptake into the plant. This immediate access to Phosphorus enhances rapid root growth and nutrient uptake, leading to an accelerated emergence of the seedlings. This well and timely placed, seed-friendly fertilizer supports early plant establishment and acts as a complement to a balanced fertility program.



Maximizing Phosphorus Use Efficiency

ANALYSIS (9-32-2 WITH THE STARTER TECHNOLOGY™)



Application Guidelines



WHAT IS IT?

- > Starter fertilizer for in-furrow.
- > High Phosphorus content.
- > Formulated with 70% Ortho- (readily available form) and 30% Poly-phosphate (converts slowly as soil warms up).
- > Low salt index.
- > No chloride.
- > Seed safe.

WHEN & WHY USE IT?

- > When seeding into cold and wet conditions.
- > In soils with high levels of Ca^{2+} , Fe^{3+} or Al^{3+} .
- > Use to improve early-season availability and uptake of Phosphorus.
- > Use to reduce phosphorus tie-up by Ca^{2+} , Fe^{3+} or Al^{3+} .
- > Use to supplement a well-balanced soil fertility program.

WHAT TO EXPECT?

- > Improved root and shoot development and crop establishment.
- > Strong advantage of the crop over the weeds.
- > Enhanced tolerance to early season environmental stress.
- > Less signs of phosphorus deficiency on the seedlings (purpling).

3-5 US gal/ac in-furrow

EDTA-chelated micronutrients as required.

Always recommended to use with a complete spring-applied fertilizer program.

*Starter P® is a registered trademark of OMEX Agriculture Inc.

At 1-2 leaf stage





At cabbage stage







ADDITIVES

Single Elements











OMEX® SINGLE ELEMENTS ARE FULLY CHELATED SOLUTIONS OF:

> Copper EDTA 7.5% > Iron EDTA 5% > Zinc EDTA 9% > FeRRoGREEN™ > Manganese EDTA 5% > Omex Moly®

OMEX® chelated micronutrients (Zn, Cu, Mn, Fe) are recommended for the prevention and correction of deficiencies in crops (1-4L/ac). OMEX Moly® is a water soluble solution with a guaranteed analysis of 1.5% or 3% Molybdenum. It is recommended for the prevention and correction of Molybdenum deficiency in crops, to encourage nodulation in pulses, especially in acidic soils (low pH). The preferred use is as a soil application to prevent deficiency. When soil application is not possible, OMEX® Single Elements may be applied in-crop alone or with pesticides or other fertilizers, directly to the foliage to correct deficiency. OMEX® Single Elements may be applied via ground sprayers (high-volume), aircraft or fertigation systems.

Fertilizer Coatings & Additives:



ImPhos® is a liquid additive specifically formulated to impregnate dry Phosphorus (MAP, DAP, ...) in order to prevent its tie-up with Ca^{2+} (calcareous soils), Fe²⁺ and Al³⁺ (acidic soils). It has been formulated in a highly concentrated form to be applied at low volume on dry fertilizer, enhancing drying time and reducing chances for caking. Once applied to the soil, the impregnated Phosphorus is protected in a readily available form for a period of 100-150 days, depending on the moisture and temperature conditions.

ImPhos® is recommended at a rate of 0.5-1.0 L per acre with the starter fertilizer and 3.0 L/ metric ton of dry fertilizer.



TPA® is a liquid additive intended to be used with the liquid starter fertilizer (Ortho P[™], 10-34-0) or to impregnate dry Phosphorus (MAP, DAP, ...). TPA® enhances nutrient availability and maximizes Phosphorus use efficiency. In addition, the negatively charged molecule reduces Phosphorus tie-up with Ca²⁺ (calcareous soils) or Fe²⁺/Al³⁺ (acidic soils). TPA® provides 10% of Potassium that triggers the release of additional Potassium from the clay layers and is biodegradable, preventing the accumulation of any residuals over time.

TPA® is recommended at a rate of 0.5-1.0 L per acre with the starter fertilizer and 3.0 L/ metric ton of dry fertilizer.







Nutrient Uptake Efficiency Enhancer

ANALYSIS (5-15-5)

Application m **Guidelines**



WHAT IS IT?

- > TPA® stands for Thermo Poly Aspartate.
- > Highly polymerized and negatively charged beta protein.
- > Biodegradable and lasts 120 days in the soil.

WHEN & WHY USE IT?

- > Used in starter fertilizer to reduce the binding of phosphorus with Ca^{2+} , Fe^{3+} or Al^{3+} .
- > Applied in alkaline soils with high content of Ca^{2+} and in acidic soil with high levels of Fe^{3+} or Al^{3+} .
- > By reducing the tie-up, TPA® increases nutrient availability.

WHAT TO EXPECT?

- > Improved root development and growth.
- > Better nutrient availability and uptake visible in tissue tests.
- > Increased tuber count in potatoes with an even size.
- > Improved marketable yield in potatoes.

water (micro jet or drip).

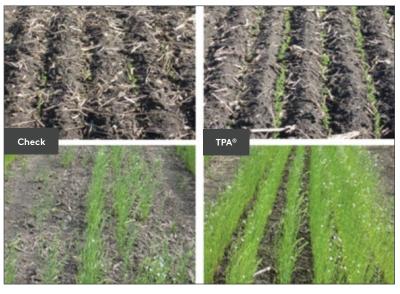
TPA® may be used to reduce corrosion in liquid fertilizer tanks.

It can be applied in combination with

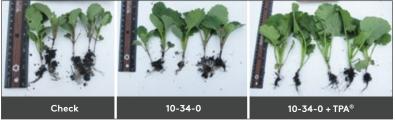
450 L and 1000 L IBC's.

Also available with PGRs.

*TPA® is a registered trademark of OMEX Agriculture Inc.











Better Distribution of Micronutrients in the Field

ANALYSES: PERFUZE Mg: 5-5-5 WITH 35% Mg/ PERFUZE B: 5-5-5 WITH 15% B PERFUZE Zn: 5-5-5 WITH 50% Zn / PERFUZE Cu: 5-5-5 WITH 50% Cu PERFUZE BZn: 5-5-5 WITH 12.5% B + 22% Zn / PERFUZE Mn: 5-5-5 WITH 25% Mn PERFUZE ZnBMn: 5-5-5 WITH 25% Zn + 10% B + 16% Mn / PERFUZE Fe: 5-5-5 WITH 20% Fe



Application Guidelines



WHAT IS IT? > Highly concentrated liquid suspension intended for coating dry PKS blends with micronutrients.

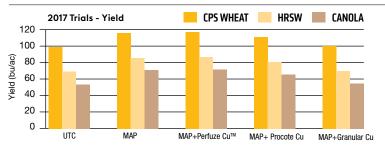
- > It can also be applied on other porous materials placed in the seed row (i.e., gypsum).
- > Formulated with Micronutrient Delivery System (MDS Technology™).
- > Various analyses offered.

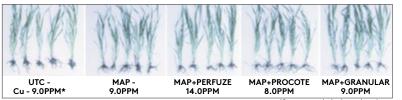
WHEN & WHY USE IT?

- > Used to correct micronutrient deficiencies and address micronutrients crop demand based on a soil test and crop removal.
- > When soil-applied micronutrients are required.
- > Allows for a better distribution of micronutrients in the field.
- > In high pH soils, soils with high organic matter, heavy manured land, sandy and light textured soils and other situations restricting micronutrients availability.
- > Most cost-effective and efficient way of applying micronutrients to the soil.
- > Treatment possible at low temperatures (-25°C).

WHAT TO EXPECT?

- > Even coverage of the fertilizer granules.
- > Faster drying time.
- > As a liquid product, Perfuze[™] helps reduce dust during blending.
- > Better access of the roots to essential micronutrients.
- > Correction of the expected micronutrients deficiencies.
- > Healthier crops with a preserved yield and quality.





Copper content in the tissues shown in ppm

Application rates of Perfuze™ vary depending on the crop, soil deficiency, broadcasting or banding application

The addition of diatomaceous earth is recommended for blends with a high percentage of urea to accelerate drying

blenders, rubon blender or other

The product is available in 5L Pails, 450 L and 1000 L IBC's.

*Perfuze™ is a trademark of OMEX Agriculture Inc





Growing Plants will Never Run Out of Essential Micronutrients

ANALYSIS (0-3-3 WITH 3.0% Zn, 2.0% Mn, 1.0% Cu, 0.5 % Fe)



Application Guidelines



WHAT IS IT?

- > MicroCharger[™] is a supplementary source of micronutrients including Zinc, Manganese, Copper and Iron.
- > For use at seeding or throughout the growing season.

WHEN & WHY USE IT?

- > MicroCharger™ is used to protect plants and stimulate continuous development of the root system throughout the plant lifecycle.
- > MicroChargerTM should be used on the basis of a soil and/or tissue analysis on all types of soils and crops and through the foliage in a high volume of water to correct or prevent micronutrient deficiencies.

WHAT TO EXPECT?

- > More effective nutrient uptake compared to plants treated with a single element leading to less micronutrient deficiencies.
- > Helps preserve yield and prevent deficiencies.
- > Contribute in keeping the crop healthy.

Nutrient deficiencies that can be corrected using MicroCharger™















- A- Zinc deficiency in corn
- B- Copper deficiency in wheat
- C- Manganese deficiency in wheat
- E– Manganese deficiency in Chickpeas
- F– Manganese deficient in canola
- G- Copper deficiency in wheat

MicroCharger™ may also be sprayed on the granular fertilizer blend at 0.5 L/acre.

MicroCharger[™] may also be mixed with liquid fertilizer at 1 L/acre.

compatibility before mixing.

450 L and 1000 L IBC's.

*MicroCharger™ is a trademark of OMEX Agriculture Inc.





OMEX FOLIARS are liquid products formulated with specific nutrients and technologies to be applied with herbicides, fungicides and insecticides. FOLIARS boost a plant's metabolism during periods of biotic or abiotic stress to preserve yield potential. Sluggish crop growth can often appear around the 2-3 leaf stage when the seedling's limited root system cannot access the soil applied fertilizer. By applying foliar nutrition at this time, plants will have access to the crucial energy needed to hasten root growth and to quickly recover from early season stress. FOLIARS can also be used to quickly supply essential nutrients during peak demand to prevent or correct deficiencies when they occur.



The Stress Reliever

ANALYSIS (6-12-6 WITH THE STRESS RELIEVER TECHNOLOGY™)

WHAT IS IT?

- > C3[®] is a low salt index liquid fertilizer for in-crop spray.
- > Also available with high K analysis (C3®+K 6-12-12) and as C3® + 0.5% Cu.
- > Contains the Stress Reliever Technology™ (offsets energy re-allocation during stress periods).

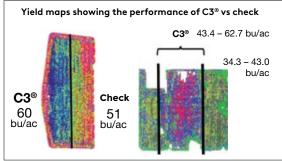
WHEN & WHY USE IT?

- > Use with the herbicide at 3-5 leaf stage.
- > C3[®] boosts the metabolism, provides energy (high Phosphorus analysis) and relieves the crop from early-season stress (cold, wet, physical or chemical injury, ...).
- > C3® is compatible with most commonly used pesticides (see compatibility charts).
- > Use after hail storm with SuperB® (10% Boron) to mitigate tissue damage and re-stimulate growth and branching.
- > Use to advance crop maturity.

WHAT TO EXPECT?

- > Improved root and shoot growth and development.
- > Stronger plants with an enhanced ability to cope with environmental stresses.
- > Re-bouncing from periods of stress (from yellowing to greener crop)
- > C3[®] preserves yield potential.
- > Less stalling and an advancement of crop maturity, hence an advantage in yield and quality.





Small plot trials since 2005 have shown a consistently positive response to C3®.

Field scale demonstration trials resulted in 8-13% (4-10 bu/acre) yield



Application Guidelines



of 10 US gal/ac of water.

Can be used alone or in combination with pesticides (see compatibility

Can be mixed with micronutrients

Recommended for cereal crops at the

Past these stages, check with your local

Tank-mix with 0.5 L/ac of Super B® on hail-damaged crops.

Pesticides. If applied with Super B®, add Super B® last to the tank.

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*C3® is a registered trademark of OMEX Agriculture Inc.





Advanced Calcium Nutrition

ANALYSIS (5% Ca WITH THE STRESS RELIEVER TECHNOLOGY™)

WHAT IS IT?

- > P3[™] is a low salt index calcium-based liquid fertilizer.
- $> P3^{TM}$ is a foliar for in-crop spray.
- > It's formulated with the Stress Reliever Technology™ (offsets the energy re-allocation during stress periods).

WHEN & WHY USE IT?

- > Use at herbicide timing on all pulse crops (peas, chickpeas, lentils, faba beans, ...).
- $> P3^{TM}$ helps boost the metabolism and relieves the crop from early-season stress (cold, wet, physical or chemical injury, ...).
- > Use after hail storm with Super B® (10% Boron) to mitigate tissue damage and re-stimulate growth and branching.
- > Use to advance crop maturity.
- > P3[™] contains Calcium, which is important for cell division and elongation as well as cell wall development.
- > Calcium is important for nitrate uptake and metabolism and Phosphorus uptake.
- > Involved in the control of enzyme activity and starch metabolism.
- > Vital during the nodulation process in legumes.
- > Calcium is not very mobile in the soil or in plant tissue, therefore a continuous supply is essential.

WHAT TO EXPECT?

- > P3TM improves root growth, nodule development and above ground vegetative growth.
- > P3TM aids in the reduction of stress from environmental stresses, such as extreme cold, excessive moisture, high temperatures, herbicide and hail damage.





Check







Application Guidelines



5-10 US gal/ac of water.

Can be used alone or in combination with pesticides (see compatibility charts).

Recommended on all pulses at herbicide timing.

Ideal timing is 1-6 node stage for peas and 1-9 node stage for lentils

450 L and 1000 L IBC's.

*P3™ is a trademark of OMEX Agriculture Inc.



Nutri-Boost

Give Sluggish Crops a Boost

ANALYSIS (6-17-5 + MICROS WITH THE STRESS RELIEVER TECHNOLOGY™)



Application Guidelines



Cereals and Canola: 2 L/ac with 5-10 US gal/ac of water.

Can be used alone or in combination with pesticides (see compatibility charts).

Recommended for all crops at the 3-5 leaf stage.

Past this stage, check with your local OMEX® rep for other available products.

Tank-mix with 0.5 L/ac of SuperB® on hail-damaged crops.

Add Nutri-Boost® Fertilizer last when tank mixing with Pesticides. If applied with

450 L and 1000 L IBC's.

*Nutri-Boost® is a registered trademark of OMEX Agriculture Inc.

WHAT IS IT?

- > Nutri-Boost® is a low salt index liquid fertilizer for in-crop spray.
- > It's formulated with a high content of Phosphorus along with a complete micronutrients package.
- > Contains the Stress Reliever Technology[™] (offsets energy re-allocation during stress periods).

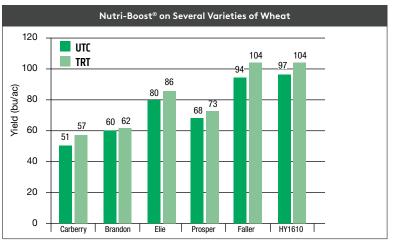
WHEN & WHY USE IT?

- > Use with the herbicide at 3-5 leaf stage.
- > Nutri-Boost® boosts the metabolism, provides energy (high Phosphorus analysis) and relieves the crop from early-season stress (cold, wet, physical or chemical injury, ...).
- > Use after hail storm with SuperB® (10% Boron) to mitigate tissue damage and re-stimulate growth and branching.
- > Use to advance crop maturity.

WHAT TO EXPECT?

- > Improved root and shoot growth and development.
- > Stronger and healthier plants capable of withstanding environmental stresses.
- > Faster recovery from stress (from yellowing to greener crop).
- > Nutri-Boost® helps prevent maturity delays and preserves yield and quality.







SuperB KB78



SUPER B® ANALYSIS (10% BORON) KB78® ANALYSIS (8% BORON)



Application Guidelines



0.5-1.0 L/ac with a minimum of 5-10 US gal/ water.

especially under severe deficiencies.

applications allowing two weeks

450 L and 1000 L IBC's.

*Super B® and KB78® are registered trademarks of OMEX Agriculture Inc. / Point of Deliquescence = the relative humidity limit below which water evaporates and the fertilizer salts out

WHAT IS IT?

- > Liquid fertilizer with high guaranteed analysis of Boron.
- > Formulated with the most available form of Boron for foliar uptake (boric acid).
- > OMEX® Boron solutions are formulated to reduce Point of Deliquescence¹ and promote nutrient uptake by the plant.

WHEN & WHY USE IT?

- > Recommended on a variety of field, horticultural and vegetable crops.
- > Use to mitigate or correct Boron deficiency and supplement soil-applied Boron.
- > Boron is critical for cell division, cell wall structure, and sugar transport.
- > Increasing Boron levels in the plant, makes plants less attractive to insects and complements the effect of insecticides.
- > Application of Boron accelerates the translocation of carbohydrates in the plant and helps with grain fill.
- > Boron is highly recommended after hail because it is involved in the wound-healing process.
- > It is essential for the formation of viable pollen and therefore seed fertilization and development.
- > Boron can be deficient during hot and dry conditions.
- > Flower abortion (heat blast) and blanks in canola/pea are visible signs of Boron deficiency.
- > Boron is immobile in plants, but vital at critical times. It is required in small doses at the right time and is crucial at flowering time.

WHAT TO EXPECT?

- > Stronger plants with a better xylem and phloem vessels.
- > Better seed set; less missing seeds in the pod and less abortion.
- > Induces branching in some crops (i.e., soybeans).
- > When used with Nutri-Boost® or C3®, it helps with wound healing and allows for a faster recovery from hail damage.
- > KB78[®] contains Potassium (K) and represents an added-value when K is deficient, under hot and dry conditions and when crop is switching to reproductive mode.

Germinating pollen tubes in canola











The Solution to Manganese Deficiency

ANALYSIS (10-10-4 WITH 6% Mn)

WHAT IS IT?

- > SuperMn+® is a highly concentrated suspension of NPK with a guaranteed analysis of 10-10-4 with 6% Manganese.
- > Fast-acting and longer-lasting than similar Manganese sulfate derived products on the market.
- > Formulated to be tank-mixed with glyphosate and other herbicides without impacting weed efficacy.

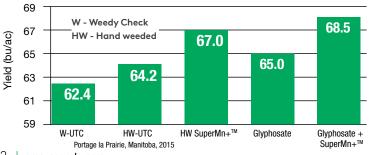
WHEN & WHY USE IT?

- > It is recommended during herbicide timing and under conditions that reduce Manganese uptake (i.e., cold and wet).
- > Recommended for areas with soil pH > 6.5, where Manganese availability is limited.
- > Also on high pH or limed soils; heavy manured soils; low pH soils; lighter soils with low potassium or low organic matter; peat soils; soils high in Cu, Fe or Zn.
- > Use when a poor root system is observed to trigger secondary root formation.
- > Highly recommended when dealing with leaf and root diseases.
- > SuperMn+® is effective on soybeans and other pulses, oilseeds, cereals, fruits and vegetables with high Manganese requirements.

WHAT TO EXPECT?

- > Less Manganese deficiency, greener crop with an efficient photosynthetic activity.
- > An improvement of the overall nutrient status of the crop.
- > Better fending off diseases and prolong control when used with fungicides (activation of the shikimate pathway).
- > Preservation of yield potential.







Application Guidelines



Mix the highly concentrated suspension thoroughly before transfer into the spray tank (if a jug, shake well. If a shuttle, circulate or push air through).

to adding SuperMn+®.

Maintain proper agitation while mixing.

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*SuperMn+® is a registered trademark of OMEX Agriculture Inc.





Improved Plant Nutrition

ANALYSES (13-7-4; 5-25-5; 8-32-5 + MICRO PACKAGE)



- > High analysis source of Nitrogen, Phosphorus and Potassium, as well as micronutrients, in a specifically formulated foliar blend.
- > Low salt index customized formula.
- > Various analysis:
 - > uPtaKe IC® 5-25-5 + micro package.
 - > uPtaKe IC® 13-7-4 + micro package.
 - > uPtaKe IC® 8-32-5 + micro package.

WHEN & WHY USE IT?

- > Use to supplement a well-balanced soil-applied fertility when the soil is unable to transfer nutrients (waterlogging, drought, heat, high humidity).
- > Use to mitigate or correct crop deficiency and based on tissue test.
- > Phosphorus uptake through the leaves is far greater than through
- > Uptake and utilization of Phosphorus is improved when balanced with Potassium and Nitrogen.

WHAT TO EXPECT?

- > uPtaKe IC® reduces the impact of stress (i.e., wet, cold, dry).
- > uPtaKe IC® prevents the appearance of nutrient deficiencies and growth stall of the crop, which could lead to yield loss or delay in maturity.
- > uPtaKe IC® improves the nutritional status of the crop during periods of shortage.
- > When used with well-balanced soil fertility, uPtaKe IC® provides a positive ROI.



Improved vegetative development.

Check Treated 13-7-4 5-25-5 8-32-5 76 bu/ac 78.3 bu/ac 91.1 bu/ac 90.9 bu/ac



Application Guidelines



Use alone or in combination with pesticides for cereals (3-5 leaf stage, flag, heading), canola (rosette, early bloom at fungicide timing, after poding), flax and legumes (early bloom

For potatoes, perform 3 applications (10-14 day intervals), beginning at tuber initiation.

The products are available in 10 L jugs, 450 L and 1000 L IBC's.

*uPtaKe IC® is a registered trademark of OMEX Agriculture Inc





Revolutionizing Phosphorus and Zinc Nutrition

ANALYSIS (0-26-4 WITH 9% Zn)

WHAT IS IT?

- > Highly concentrated formula with Phosphorus, Potassium and Zinc.
- > Low salt index foliar fertilizer.
- > Formulated for fast absorption and long-lasting effect.
- > Also available with the Stress Reliever Technology™ for use at herbicide timing on pulses.

WHEN & WHY USE IT?

- > Early in the season when the conditions are wet and cold to make Phosphorus, Potassium and Zinc less readily available.
- > With the Stress Reliever Technology™ for use at herbicide timing on peas, lentils, chickpeas or flax.
- > Late in the season especially on durum wheat and flax prone to accumulate cadmium if soil Zinc is deficient.
- > To mitigate or correct zinc deficiency in crops grown under low Zinc in the soil, high pH soils, high organic matter soils, light textured and sandy soils, in heavy manured or lime soils, and waterlogged soils.
- > For biofortification, especially for seed growers to produce vigorous seed.

WHAT TO EXPECT?

- > Zintake[™] increases Zinc content in the tissue and Zinc content and proteins in the seed.
- > Zintake™ improves crop vigor and health, and increases the crop's metabolism to better cope with environmental stresses.
- > ZintakeTM improves crop production, yield and quality.
- > Zintake[™] decreases Cadmium levels in the seed (i.e. durum wheat and flax).





Application Guidelines



Recommended on a wide variety of crops.

1-2 L/ac in 5-10 US gal/ac of water.

Can be combined with commonly used pesticides (check compatibility charts).

450 L and 1000 L IBC's.

*Zintake™ is a trademark of OMEX Agriculture Inc.





One Step Closer to Preventing Ergot

ANALYSIS (9-15-0 WITH 5% Cu)

WHAT IS IT?

- > Low salt index liquid fertilizer for in-crop foliar spray.
- > Good source of readily available Copper for quick absorption and translocation into the plants; especially for cereals prone to develop Copper deficiency, lodge and become susceptible to ergot.

WHEN & WHY USE IT?

- > For use on crops prone to develop Copper deficiency ("pig tailing" in cereals, pale leaves in broadleaf crops).
- > Recommended for crops grown on high peat soils, sandy and light textured soils, high organic matter soils, heavy manured land, high pH soils and any soils showing low Copper contents.
- > Use to prevent or correct Copper deficiency.
- > Cereal species vary in their sensitivity to Copper deficiency. Sensitivity increases moving from winter wheat to spring wheat, to spring wheat, barley, oats, triticale and rye.
- > Use to improve grain quality (i.e., plumpness in barley with lower proteins).
- > Use in areas where crops are prone to lodging to improve lignification.
- > Use on crops that show pale color and a lesser chlorophyll production and efficiency.

WHAT TO EXPECT?

- > Foliar Advance Cu[™] improves chlorophyll production, photosynthesis and the overall crop health.
- > Foliar Advance CuTM improves lignification and contributes to the reduction of lodging.
- > Foliar Advance Cu[™] provides high level of pollen fertility, minimizing the chances of infection with ergot.
- > Reducing the chances for ergot translates into an improved seed quality and grade, hence saving on seed cleaning costs.







Application Guidelines



1 L/ac with a minimum of 10 US gal/ac of water.

To lessen Copper deficiency, use multiple

- > At 5 to 8 weeks after seedling
- > When the oldest heads reach the boot stage.
- a severe deficiency.

(see compatibility charts).

higher rates of surfactant if the weather

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*Foliar Advance Cu™ is a trademark of OMEX Agriculture Inc.



Foliar Advance

The Zinc **Biofortification Solution**

ANALYSIS (10-0-0 WITH 9% Zn)



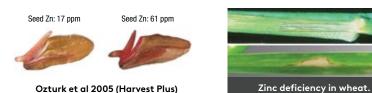
- > Low salt index liquid foliar fertilizer with Nitrogen and high Zinc content.
- > Highly soluble and available form of Zinc.

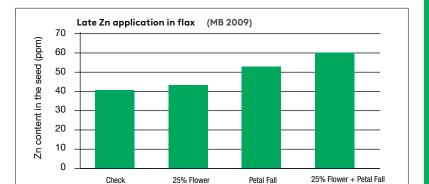
WHEN & WHY USE IT?

- > On most crops grown in Canada as our soils and grains contain lower contents of Zinc.
- > Recommended for crops grown on high pH soils, sandy and light textured soils, high organic matter soils, heavy manured or limed land, heavy textured soils with high K or Mg and any soils showing low Zinc contents.
- > Use to prevent or correct Zinc deficiency, especially under cold wet conditions.
- > Use to improve grain quality and seed vigor.

WHAT TO EXPECT?

- > Foliar Advance Zn™ promotes cell growth, secondary root development, formation of new leaves, vigorous shoot growth and an improved stress tolerance.
- > Foliar Advance Zn[™] prevents/corrects Zinc deficiency and increases Zinc content in the tissues.
- > When applied at the milk/soft dough stage in cereals, Foliar Advance Zn^{TM} increases the Zinc and protein content of the grain.
- > The increase in Zn content automatically decreases Cadmium (Cd) content especially in durum wheat and flax.
- > Excellent response to Zinc by pulse crops, oilseeds and cereals.







Application Guidelines



Can be combined with pesticides

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*Foliar Advance Zn™ is a trademark of OMEX Agriculture Inc.





Strengthens and **Prevents Lodging**

ANALYSIS (3-0-1 WITH 4.5% SULFUR AND MICRONUTRIENTS)

WHAT IS IT?

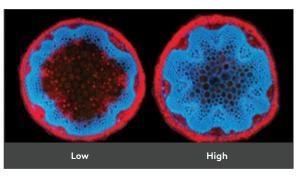
- > FortisTM is a low salt index liquid fertilizer with high levels of Copper, Manganese and Zinc.
- >The product is formulated with fully water soluble ingredients and OMEX®'s proprietary technology that enhances uptake and translocation, while minimizing tissue damage.

WHEN & WHY USE IT?

- > Fortis $^{\!\mathsf{TM}}$ is recommended on all cereal crops at the flag leaf stage.
- > Crop lodging is caused among others (K deficiency, Mn deficiency, too much rain and wind...) by a weak straw strength.
- > Yield and grain quality losses to lodging could be significant as it hampers gain fill and may lead to premature sprouting.
- > Copper and Manganese are key micronutrients for the process of lignification, which allows for the thickening of the straw.
- > Manganese is a trigger for the shikimate pathway and plant health.
- > Zinc stimulates the use of Phosphorus and enhances metabolism.
- > Boron is an important component for cell wall structure.

WHAT TO EXPECT?

- > FortisTM improves lignification and straw strength and help prevent lodging.
- > Fortis[™] corrects Copper, Manganese, Zinc and Boron deficiencies.
- > Fortis[™] improves chlorophyll production and photosynthesis.
- > Given the role of Copper for pollen fertility, Fortis™ contributes to ergot prevention and seed quality.



High ligninaccumulating stem (right) versus low accumulating stem (left) (Dr. H. Wang). Lignin (shown in blue) is a compound that adds strength to plant cell walls.





Application Guidelines



Apply Fortis™ at 1 L/ac with a minimum of 10 US gal of water

with fungicides see compatibility charts. Some combination may be physically effect on the leaves.

higher rates of surfactant.

Avoid spraying Fortis™ under hot and dry conditions. Spray preferably late during the day going to the evening.

450 L and 1000 L IBC's.

*Fortis™ is a trademark of OMEX Agriculture Inc.





Advanced Calcium Nutrition

ANALYSIS: (10-0-3, 11% Ca + 0-28-19 + MICROPACKAGE)

Application Guidelines



WHAT IS IT?

- > CalMax Complete® is a reacted Calcium formulation.
- > It contains high analysis of Calcium, Nitrogen, Phosphorus, Potassium and micronutrients.
- > CalMax[®] is formulated with the AXM Technology[™] that allows for a better uptake and translocation of Calcium.

WHEN & WHY USE IT?

- > CalMax Complete $^{\tiny{\circledR}}$ is recommended on all crops, especially fruits and vegetables.
- > Calcium is taken up in the plants by mass flow but is immobile in the plant. A constant supply is recommended to avoid shortages and deficiencies.
- > Calcium is important for roots and shoots structure early on in the season; during flowering and guidance of pollen tubes; and during fruits maturation and bulking.
- > A typical application should cover these three phases of growth and development (i.e., for potatoes: CalMax Complete® is recommended at tuber initiation, then 2-3 times after that within 10-14 day intervals each).

WHAT TO EXPECT?

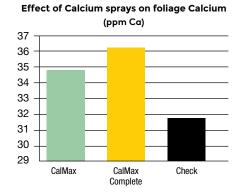
- > Strong and vigorous plants.
- > High Calcium levels in the tissues (leaves, stems, tubers).
- > Better pollination, less misses in pod crops and less flower abortion.
- > Better skin set in tuber crops and less hallow heart.
- > Higher firmness in soft fruits, allowing for a better storability and tolerance to harvesting and handling of the produces.
- > Reduced bitterpit and other internal disorders induced by the lack of Calcium.

Compatible with most commonly used pesticides (see compatibility charts).

(2)CalMax Complete® and (3)pesticide.

The product is available in cases (Part B: Complete®), 450 L + 270 L, and 1000 L + 600 L IBC's.

*CalMax Complete® is a registered trademark of OMEX Agriculture Inc.











The Best Phos-Mag Solution

ANALYSIS (0-29-5 WITH 4% Mg)

WHAT IS IT?

- > PK Bulk[™] is a fully water soluble, plant available liquid fertilizer.
- > It contains high concentrations of Phosphorus, Potassium and Magnesium.
- > PK Bulk[™] has a guaranteed analysis of 0-29-5, 4% Mg.
- > PK Bulk[™] is user- and equipment-friendly and easier to handle.

WHEN & WHY USE IT?

- > PK Bulk[™] is suitable for all major field and horticultural crops and vegetables. These include cereals (wheat, barley, oats, corn), oilseeds (canola, mustard, flax), pulses (peas, chickpea, lentils, beans), tuber and root crops (potatoes, carrots).
- > Use to mitigate or correct Phosphorus, Potassium and Magnesium deficiency.
- > PK BulkTM contains Magnesium, which is a vital for chlorophyll and protein synthesis.
- > Magnesium deficiency is often experienced in areas of light sandy soils with a low pH.
- > Deficiency in Magnesium translates into a lack of vigor and a delayed reproductive stage.
- > The symptoms of such a deficiency exhibit as pale white strips on the leaf, leaf tip browning and reddish interveinal discoloration.

WHAT TO EXPECT?

- > High Phosphorus content will lead to an increase in biomass and an optimum yield.
- > PK $\operatorname{Bulk^{TM}}$ contains Magnesium, which is the center molecule of chlorophyll that makes the crop greener.
- > Magnesium is also important for carbohydrate transport and helps with grain fill.
- > Magnesium prevents damage from the oxidative stress encountered late in the season.
- > PK Bulk[™] helps reduce delays in the reproductive stage.







Application Guidelines



Apply PK Bulk™ at 1-2 L/ac in a spraying volume of 10-15 US gal of water.

Repeat at 1-2 week intervals, with a maximum of 3-5 applications per season.

Can be combined with other fertilizers

450 L and 1000 L IBC's.

*PK Bulk™ is a trademark of OMEX Agriculture Inc.



BIOLOGICALS

Beneficial microbes evolved a mutualistic or symbiotic relationship with cultivated plants. They have the ability to stimulate their growth and development while benefiting from the root exudates for their food.

The use of beneficial microbes allows an improvement of nutrients uptake, stimulate plant growth and development, overall health, and enhance yield and quality.



The Microbial Supplement for **Enhanced Production & Health**

ANALYSIS: RHIZOBACTERIA BACILLUS SUBTILIS 2x109 CFU / G | BACILLUS AMYLOLIQUEFACIENS 2x10° CFU / G

Application Guidelines



WHAT IS IT?

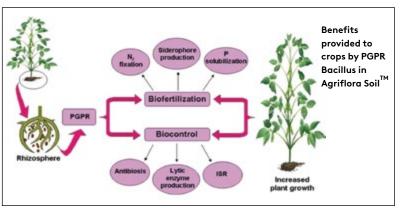
- > CFIA-registered supplement: Reg. # 2017129A, Fertilizers Act.
- > Agriflora Soil™ is a microbial supplement designed to enhance plant growth and development, nutrients uptake, the overall health, yield and quality.
- > Agriflora Soil™ is formulated with a consortium of two PGPR (Plant Growth Promoting Rhizobacteria) from the genus Bacillus; a naturally-occurring beneficial.
- > It's seed, plant and user safe.
- > Also has an organic certificate.

WHEN & WHY USE IT?

- > The product is recommended on all crops including field, horticultural and vegetable crops such as potatoes, soybeans, corn, legumes, brassicas and cereals.
- > PGPR Bacillus interacts with crops, resulting in:
 - > an increase in production of phytohormone such as auxins, cytokinins and gibberellins, which activate growth and development;
 - > a better root growth and colonization of the rhizosphere;
 - > an increase in bio-availability of essential nutrients such as N, K, Fe, Ca and Mg;
 - > a better solubilization of phosphates;
 - > a facilitated growth and development in the presence of stress such as high salinity and poor soil.

WHAT TO EXPECT?

- > An improved growth and development especially under stress conditions.
- > Better nutrients uptake.
- > More tolerance to adverse conditions due to weather, pathogens and pests.
- > Altogether leads to a preserved yield and quality.



In-furrow:

40-80 ml/ac at seeding with small grains; 400-800 ml/ac for vegetables at planting. Agriflora $Soil^{TM}$ is compatible mixed with liquid fertilizers (including concentrates).

Seed Treatment:

Apply at a rate of 100ml/100kg of seed. Compatible with microbial inoculants.

Dry Fertilizer Impregnation:

Agriflora Soil™ can be applied on granular fertilizer through impregnation (3-5 L/metric Ton).

Can be combined with liquid fertilizers used as starters or through the drip irrigation.

SHAKE WELL before using the concentrated product.

Use immediately after dilution. Do not store for later use.

Store at 2 - 25°C.

Do not mix with antibiotics, peroxides, quaternary ammonium, hypochlo<u>rites</u> or other antibacterial products.

Results may vary from one site to another.

*Agriflora Soil™ is a trademark of Abnatura.





The Sprayable **Microbial Supplement**

ANALYSIS: RHIZOBACTERIA BACILLUS SUBTILIS 2x10° CFU / G BACILLUS AMYLOLIQUEFACIENS 2x10° CFU / G

WHAT IS IT?

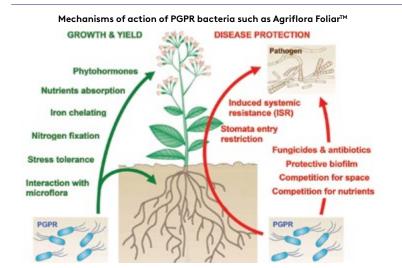
- > CFIA-registered supplement: Reg. # 2017129A, Fertilizers Act.
- > Agriflora Foliar™ is a microbial supplement formulated for foliar application to allow an improvement of nutrients uptake, stimulate plant growth and health, and enhance yield and quality.
- > Agriflora Foliar[™] contains two naturally-occurring Rhizobacteria Bacillus with plant growth promoting abilities.
- > It's seed, plant and user safe.
- > Also has an organic certificate.

WHEN & WHY USE IT?

- > Agriflora Foliar $^{\text{TM}}$ is recommended on all crops and during many stages of growth and development.
- > Early in the season Agriflora Foliar™ with its rapid colonization of the rhizosphere provides roots with a biofilm shield against pathogens
- > It also produces essential auxins, cytokinins and gibberellins that stimulate plant growth and encourage branching.
- > As a symbiotic beneficial, Agriflora FoliarTM secretes a myriad of exoenzymes involved in improving the uptake of phosphorus (P) and other macro- (N, K), secondary (Ca, Mg) and micro-nutrients (Zn, Mn, Cu, Fe). This lead to an optimal growth and development, which allow crop to remain healthy and resilient to a variety of biotic and abiotic stresses.

WHAT TO EXPECT?

- > Stimulation of growth and development.
- > Optimal uptake of nutrient and less deficiencies.
- > High tolerance to biotic and abiotic stresses caused by the environment, pathogens and pests.
- > Higher yields and quality.





Application Guidelines



SPRAY

Application rate: 80 ml/ac Mix at a ratio of 2:1,000 (vol:vol).

Example:

Agriflora Foliar™ Water 200 ml 500 ml

Spray to wet the soil, stems and foliage. The sprayed volume may vary depending on crop type, growth stage and spraying equipment. For ultra-low volume (ULV), calculate the amount based on a standard spray volume. Start treatment with two applications 7 days apart (boost). Repeat applications at a frequency of 14-28 days. Keep the frequency every 7-14 days during periods of unfavorable conditions.

Can be combined with liquid fertilizers.

SHAKE WELL before using the concentrated product.

Use immediately after dilution. Do not store for later use.

Store at 2 – 25°C.

Do not mix with antibiotics, peroxides, quaternary ammonium, hypochlorites or other antibacterial products.

Results may vary from one site to another.

*Agriflora Foliar™ is a trademark of Abnatura





Plant Hormones are organic substances, other than a nutrient, that, in minute amounts, modify plant growth and development processes. Often they are produced in one organ and active in other parts of the plant.

A Plant Growth Regulator (PGR) is any of various synthetic or naturally occurring plant substances (as an auxin or gibberellin) that regulate growth and development.

NATURAL PLANT HORMONES	PRODUCTION SITE	ROLE
CYTOKININS	ROOTS, SHOOTS	STIMULATE CELL DIVISION IN ROOTS, BUDS AND TILLERS; RETARDS SENESCENCE
AUXINS	UPPER PARTS	STIMULATE CELL ELONGATION, FLOWERING
GIBBERELLINS	SEED, YOUNG TISSUES	STIMULATE CELL ELONGATION, ESPECIALLY STEMS; BREAK DORMANCY
ETHYLENE	WHOLE PLANT	SENESCENCE AND RIPENING HORMONE; BLOCKS AUXINS EFFECT
ABSCISIC ACID	GRAIN, SHOOT, FRUITS	INHIBITS PLANT GROWTH, DROUGHT HORMONE, RIPENING



GRO-Root Xtra Special (StimPro™)

ANALYSIS (3-IBA 1.00%, KINETIN 0.25%, 0.3% SA, 0.3% VIT B1, 0.3% VIT C)

WHAT IS IT?

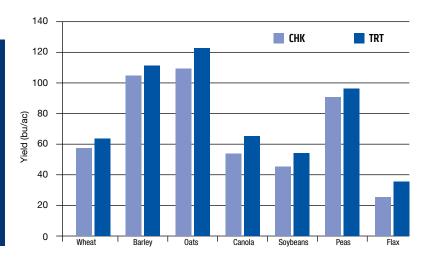
- > StimProTM is a CFIA registered plant growth regulator (Fert. Act # 2003001A)
- > It contains Auxin and Cytokinin.

WHEN & WHY USE IT?

- > StimProTM is recommended on all crops at the 3-5 leaf stage.
- > Use through drenching applications for rooting and to alleviate transplant shock.
- > StimProTM can be sprayed onto the leaves and translocated down to the roots for rapid cell division and new root tissue growth.
- > StimPro[™] is a plant growth regulator product that contains an auxin to encourage root formation and cytokinin to increase the rate of cell division.
- > When the plant is small, additional auxin is needed from the new leaf tissue in order to maximize root growth.
- > During difficult climatic conditions, the leaves have a difficult time emerging rapidly enough to supply the roots and growing plants with the appropriate amounts of auxin.
- > When early conditions are cool, the foliar spray of StimPro™ will give the seedling added vigor in both root and top growth.
- > StimProTM acts as a safener when sprayed with herbicide.

WHAT TO EXPECT?

- > Increased plant vigor and stalk strength.
- > Increased root mass.
- > Increased nutrient uptake.
- > Healthier plant, reduces transplant shock.
- > StimProTM increases plant weight, root weight, crop quality and yield.





Application Guidelines



IMPORTANT: Water pH must be below 7.

Rate: 75 ml/ac (160 acres to the case).

Can be tank mixed with most commonly used pesticides (check compatibility charts).

The product is available in $2 \times 6 L$ cases, 450 L and 1000 L IBC's.

*StimPro™ is a trademark of Agrowchem Inc.





StimPro-K™

ANALYSIS (0.9% KINETIN, 0.3% SA, 0.3% VIT B1, 0.3% VIT C)

WHAT IS IT?

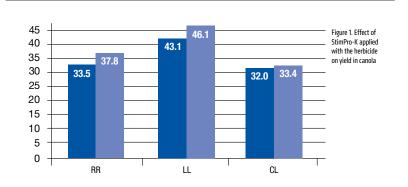
- > StimPro-KTM is CFIA registered plant growth regulator: Reg. # 2003001A, Fertilizers Act.
- > It's a cytokinin.

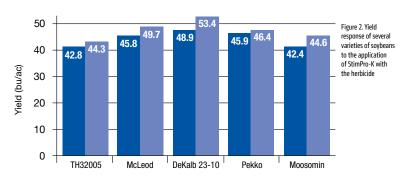
WHEN & WHY USE IT?

- > StimPro-KTM is recommended on all crops including cereals, pod crops such as canola, soybeans and pulses, oilseeds, forages as well as fruit and vegetables.
- > Applied early in the season (3-5 leaf stage) StimPro- K^{TM} increases the rate of cell division, differentiation and growth.
- > Applied later in the season (during seed and fruit set) StimPro- K^{TM} increases the size of the cells making higher thousand kernel weight (TKW) and bigger size fruit.
- > StimPro- K^{TM} advances the growth and development of the main stem and tillers resulting in a high test weight and more even maturity of the harvested grain.

WHAT TO EXPECT?

- > Greener crop especially in periods of stress.
- > Bushier plants with an increased branching.
- > Even tiller and main stems.
- > Higher TKW.







Application Guidelines



StimPro-KTM is recommended at rate of 75ml/ac (160 acres per case). Check the label for more information by crop and stage.

Apply StimPro-K™ early to encourage branching and impact yield potential.

Applied during fruit and seed set, StimPro-K[™] can increase the TKW.

Apply the mixture of StimPro-K™ + K (Liquid K Xtra) at 3-5 leaf stage in cereals to even the tillers and main stem and lower the chances of lodging.

The mixture is compatible with most commonly used herbicides (see compatibility charts).

This product is available in, 2x6 L, 450 L and 1000 L IBC's.

It's also available mixed in with a variety of nutrients especially K (Liquid K Xtra).

*StimPro-K™ is a trademark of Agrowchem Inc.





Plant Growth Regulator

ANALYSIS (0.17-0-0.24 + 0.13% Ca, 0.08%Mg, WITH 0.25% KINETIN, 6% KELP EXTRACT AND 5% YUCCA EXTRACT)



Application Guidelines



WHAT IS IT?

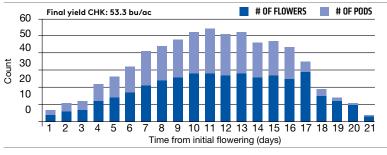
- > Cytokelp™ is a CFIA registered plant growth regulator (Fertilizers Act # 2015147A).
- > It contains the Cytokinin Kinetin.
- > Cytokelp™ also contains Kelp and Yucca extracts that are well documented to be involved in reducing stress and stimulating growth.

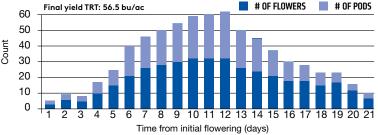
WHEN & WHY USE IT?

- > Cytokelp™ is recommended on a variety of field crops, vegetables and fruit trees.
- > It can be applied in-furrow, by drip-irrigation or drenching or as in-season foliar at the 3-5 leaf stage and early bloom.
- > CytokelpTM contains naturally occurring plant biostimulants that help seedling and plant growth and may increase the number and size of flowers/fruit, crop quality and yield while reducing environmental stress.
- > Kinetin is the only Canadian registered cytokinin that can be used on a variety of crop species.
- > Kinetin increases the rate of cell division, differentiation and growth.
- > It also delays senescence in plant tissues, increases flower set, fruit formation and side branching.
- > Kinetin applied at the right timing can lead to an enhancement of growth and development, seed and fruit set and ultimately yield.

WHAT TO EXPECT?

- > Stimulation of crop growth and development especially under stress situations.
- > Cytokelp™ increases the plant biomass; number and size of flowers/fruit,





Use on all field crops at 162 ml/ac at 3-5 leaf stage and at early bloom stages. On vegetable apply Cytokelp™ 14-21 days after emergence.

On turf apply 20-40 ml/100 meter square when grass becomes established. Repeat as necessary.

Cytokel p^{TM} can be used for hydroponic at 2 ml/L on all crops from 3-5 leaf stage to bloom.

The product is available in 2 x 6 L cases, 450 L and and 1000 L IBC's.

*Cytokelp™ is a trademark of Agrowchem Inc.



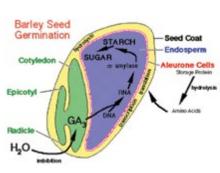


Breaking Dormancy

ANALYSIS: 5% GA, (GIBBERELLIC ACID)

WHAT IS IT?

- > CFIA-registered supplement: Reg. # 2018121A, Fertilizers Act
- > The product contains gibberellic acid (GA₂), a very potent plant growth regulator that control several processes of crops growth and development.
- > GA_z is the hormone that triggers rice to grow out of the water in the paddies.
- > GA₃ promotes plant and flower growth and increased fruit set.
- > It aids in frost protection, overcoming dormancy, and inhibits root formation in cuttings.
- > Applications of very low concentrations can have a profound effect.
- > However, excessive application or higher rates may result in undesirable stem elongation.
- > Timing of application is also crucial for insuring a beneficial effect.







Barley seed germination showing the early involvement of GA_x in the process.

WHEN & WHY TO USE IT?

- > The product is recommended on all crops including field, horticultural and vegetable crops as well as fruit trees, turf and ornamentals.
- > It can be used to break dormancy and enhance emergence in tuber and root crops.
- > GA, is produced first in the seed to trigger production of the alpha-amylase that stimulates seed germination.
- > It helps with tolerance to cold and frost conditions early in the season.
- > GA, is known to increase fruit and seed size.
- > Gibberellins stimulate cell elongation and cause the plants to grow taller.

WHAT TO EXPECT?

- > Better germination and early season establishment.
- > An improved growth and development especially under cool and cold stress conditions.
- > Better seed and fruit sizes.
- > Enhanced yield and quality.



Application Guidelines



Follow the recommended rates and timing listed on the label for each crop and do not exceed the recommendation.

Rate varies from 20-500 ml per acre depending on the crop and stage of growth and development.

Fill spray tank with half of the full volume of water and then add required amount of StimPro-GA,™ 5%, followed by the remaining water. Add desired amount of surfactant after adding all required water.

Agitate vigorously for a minimum of 10 minutes before beginning application.

Use appropriate water volume to guarantee good coverage.

For full product activity, application should be made under cool, slow-drying weather conditions, preferably early in the morning or late in the day. Avoid hot, windy periods. StimPro-GA₃™ 5% has low solubility in water and cannot be used in high concentrations. In solution, it has limited stability and should be applied as soon as possible.

Several factors may affect StimPro-GA₃™ 5% efficacy including:

Rainfall within 4-6 hours of application will reduce activity significantly.

Very early maturing varieties may not respond to StimPro-GA_₹™ 5%.

Trees under stress because of low soil moisture, nutrient deficiency, severe weed competition, insect, disease or rodent damage may not respond to StimPro-GA $_{3}^{TM}$ 5%.

Inadequate spray coverage.

A heavy crop load (high fruit/leaf ratio) may reduce effectiveness.

All necessary precautions should be taken to avoid spray drift into adjoining residential properties, orchards, aquatic habitats and roadways.

*StimPro-GA,™is a trademark of EZ-Gro Inc.





Defense Responses Aid to Pathogens & Pests

ANALYSIS: 0.025% JA (JASMONIC ACID)

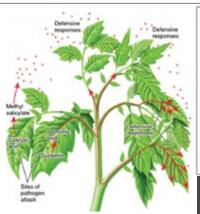


Application Guidelines



WHAT IS IT?

- > CFIA-registered supplement: Reg. # 2018135A, Fertilizers Act
- > The product contains Jasmonic acid (JA), a naturally-produced growth regulator involved in many plant processes including growth and development and defense responses against pests and pathogens.
- > JA is the signal molecule of the Induced Systemic Resistance (ISR) that allows plants to trigger their natural immunity against intruders.
- > Jasmonate are also used by plants as a long range signal to warn neighboring plants to prepare for upcoming infection/infestation.



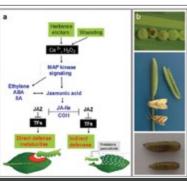


Figure 1. JA signaling to reduce the spread of disease and pests throughout the plant.

WHEN & WHY USE IT?

- > The product is recommended on all crops including field, horticultural and vegetable crops as well as fruit trees, turf and ornamentals.
- > Apply JA to increase crop survival during abiotic stress.
- > Use JA to keep crops healthy.
- > JA helps prolong crop tolerance/resistance to biotic stress caused by pathogens and pests.
- > Use JA to prevent infection by necrotrophs or to reinforce the effect of mono-site fungicides (i.e., Strobilurins) in controlling them.
- > The use of JA alongside mono-site fungicides is a tool to reduce resistance build-up on the farm.
- > Use JA to complement the efficacy of insecticides (chewing or sucking insects) and reduce the build-up of resistance.

WHAT TO EXPECT?

- > Healthier crops and long lasting effect of disease control when used together with fungicides.
- > An improved growth and development especially under cool and cold stress conditions.
- > Healthier crops often yield higher.
- > Better seed and fruit quality.

Rate: 40-80ml/ac

Follow the recommended rates and timing listed on the label for each crop and do not exceed the recommendation.

JA can be used as a foliar spray, a soil drench and through fertigation systems.

Compatible and can be mixed with most fungicides, insecticides and other liquid fertilizers.

Do not mix concentrates together.

Add water to spray tank to ¾ full followed by JA, pesticides and fertilizers.

When mixing with liquid fertilizer, do not exceed the recommended rate of 80 ml/ac/application.

*StimPro-IA™ is a trademark of EZ-Gro Inc.





Trigger Defense Response & Prevents the Build-up of Resistance

ANALYSIS: 0-0-4.6 WITH 10% SA (SALICYLIC ACID)

WHAT IS IT?

- > CFIA-registered supplement: Reg. # 20187069A, Fertilizers Act
- > The product contains salicylic acid (SA), an important plant hormone that regulates several processes of crops growth and development, photosynthesis, transpiration, ion uptake and transport as well defense responses against pathogens and pests.
- > SA regulates processes spanning from seed germination to nodulation, stomatal opening and thermoregulation to respiration and immune responses.
- > Salicylic Acid improves resistance to environmental stressors including drought, temperature, and salinity; and enhances flowering and fruit yield.
- > SA is typically produced in the infected parts of the plant and is translocated systemically to alert the healthy parts. This process is called the Systemic Acquired Resistance (SAR).
- > Applications of very low levels of SA prior to the disease spread or in combination with mono-site fungicides (i.e., Strobilurins) can lead to a significant reduction in disease pressure.

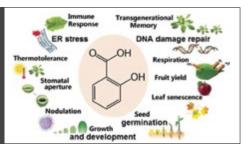
WHEN & WHY USE IT?

- > The product is recommended on all crops including field, horticultural and vegetable crops as well as fruit trees, turf and ornamentals.
- > Use SA to keep crops healthy.
- > SA helps prolong crop tolerance/resistance to biotic stress caused by pathogens and pests.
- > Use SA to prevent infection by biotrophs or to reinforce the effect of mono-site fungicides (i.e., Strobilurins) in controlling them.
- > The use of SA alongside mono-site fungicides is a tool to reduce resistance build-up on the farm.

WHAT TO EXPECT

- > Healthier crops and long lasting effect of disease control when used together with fungicides.
- > An improved growth and development especially under cool and cold stress conditions.
- > Healthier crops often yield higher.
- > Better seed and fruit quality.

Figure 1. Various processes controlled by or involving the effect of SA.





Application Guidelines



Rate: 20ml/ac

Follow the recommended rates and timing listed on the label for each crop and do not exceed the recommendation.

StimPro-SA-L-10%™ can be used as a foliar spray, a soil drench and through fertigation systems.

Compatible and can be mixed with most fungicides, insecticides and other liquid fertilizers.

Do not mix concentrates together.

Add water to spray tank to ¾ full followed by StimPro-SA-L-10% ™, pesticides and fertilizers.

When mixing with liquid fertilizer, do not exceed the recommended rate of 20 ml/ac/application.

*StimPro-SA™ is a trademark of EZ-Gro Inc.

Wheat-B graminis





Chitosan

The Natural Elicitor

ANALYSIS: 4% CHITOSAN



Application Guidelines



WHAT IS IT?

- > CFIA-registered supplement: Reg. # 2017113A, Fertilizers Act.
- > Chitosan[™] is a compound naturally found in crustacean shells and fungal cell walls, and can be very beneficial to plant production and growth.
- > ChitosanTM enhances plant survival and yield in times of heat, cold stress or drought.
- > When foliar-applied to crops it allows the plants to grow with less water.
- > Exogenous application of ChitosanTM has also been shown to accelerate growth, germination and improve the quality of flowers and fruit.
- > Applied to produce, Chitosan™ helps prolong their shelf life and prevents early decays.
- > Application of ChitosanTM can trigger plant defense responses and lead to a significant reduction in disease pressure.
- > Timing of application is crucial for insuring a beneficial effect.

WHEN & WHY USE IT?

- > The product is recommended on all crops including field, horticultural and vegetable crops as well as fruit trees, turf and ornamentals.
- > Chitosan™ improves seed germination and seedling establishment.
- > Apply ChitosanTM to improve the overall health and resilience of the crop to stressful conditions (cold, heat, drought, ...).
- > ChitosanTM helps plants manage water use efficiency (WUE).
- > As a biostimulant, Chitosan™ triggers plant's natural immunity against pathogens and can be used to complement fungicides effect.
- > Applied post-harvest, Chitosan™ can prolong produce shelf life.

WHAT TO EXPECT?

- > An improved growth and development especially under cold, hot and drought stress conditions.
- > Healthier crops often yield higher.
- > Better seed and fruit quality.



of spurge seeds

(Source: Pabón-Baquero et al. 2015).

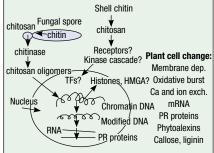


Figure 2. Versatility of use of Chitosan™ in many fields including the elicitation of plant innate defenses to pathogens.

Follow the recommended rates and timing listed on the label for each crop and do not exceed the recommendation.

Rate: 60-250ml/ac depending on the crop and stage (see the label).

To prepare solution, add one half the total amount of water, add recommended volume of Chitosan™ and continue adding water until desired application volume is reached.

For foliar applications, apply with minimum volume of 10 US gal/ac.

*Chitosan™ is a trademark of EZ-Gro Inc.





The Natural Biostimulant

ANALYSIS: 0.5% TRIACONTANOL

Application Guidelines



Include TRIA™ with dry or liquid fertilizer applied in-furrow.

Include with all foliar sprays (60ml/ac).

Apply with enough water to guarantee a uniform coverage.

TRIA™ is compatible with most commonly used pesticides and fertilizers.

*TRIA™ is a trademark of EZ-Gro Inc.

WHAT IS IT?

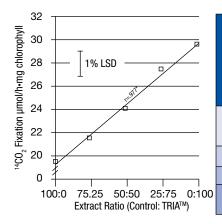
- > CFIA-registered supplement: Reg. # 2018063A, Fertilizers Act.
- > Triacontanol is a plant growth regulator naturally found in plant epicuticular waxes and beewax.
- > It is present in abundance in the leaves of most plants.
- > Triacontanol affects many aspects of crops growth and development including photosynthesis; protein synthesis; water uptake and nutrients; yield; seed and fruit number, size and quality; and oil production.
- > Triacontanol triggers the release of Adenosine, a fast-acting second messenger important for the regulation of transpiration and translocation of sugars, amino acids, soluble proteins, and fatty acids in various crops.

WHEN & WHY USE IT?

- > The product is recommended on all crops including field, horticultural and vegetable crops as well as fruit trees, turf and ornamentals.
- > Include low doses with all sprays.
- > Use to enhance growth and protect against abiotic stress.

WHAT TO EXPECT?

- > An improved growth and development especially under stress conditions.
- > Better regulation of water use efficiency (WUE).
- > Better translocation of sugars and other metabolites.
- > Enhanced oil content in oilseeds.
- > Good yield along with quality.



TREATMENT	ACTIVE SITE CONCENTRATION	ACTIVITY	SPECIFIC ACTIVITY						
	nmol/mg Chl	µmol CO ₂ /h•mg Chl	µmol CO ₂ / min•mg protein						
Control	13.4	261.3	4.73						
TRIA™	12.9	351.8*	6.61*						
*F-ratio for difference between treatments is significant at the 1% level.									

Figure 1. Effect of the addition of Triacontanol on photosynthesis and CO, fixation (Source: Houtz et al., 1985).





Although our main focus is to provide seed dressings, starters, fully water-soluble foliar suspensions, Plant Health Promoters-PHPs, Plant Growth Regulators-PGRs, Biologicals and Biostimulants, we strive to supply many tailored formulations that fit specific needs, crops and farm conditions.

In addition, we supply organically-certified products and pesticides as well as many additives including water conditioners, wetters, stickers and spreaders.

Ferrogreen

The Iron Chlorosis Corrector

ANALYSIS (EDDHA-Fe 3%)

WHAT IS IT?

- > FeRRoGREEN™ is a liquid fertilizer formulated with 3% Fe in EDDHA form.
- > The FDDHA-chelated Orth-Ortho form of Iron is the most available form in-furrow in a variety of soil conditions.

WHEN & WHY USE IT?

- > FeRRoGREENTM is recommended on a wide variety of field crops, ornamentals, turf, vegetables and fruit trees to mitigate or correct iron deficiency.
- > It is most effective when applied during the vegetative growth stage.
- > The best application is in-furrow but the product can also be applied by drip irrigation, drenching or side-dressing.
- > Soybeans interveinal Iron chlorosis is a nutrient deficiency that leads to the yellowing of the foliage and stunting of the plants.
- > It is a yield limiting factor in many areas where soils are calcareous with a limited availability of Iron.
- > The symptoms typically appear a few weeks after seedlings emergence as interveinal chlorosis on the first trifoliate leaves. The leaves eventually turn yellow with dark green veins with necrotic edges that may progress to the center. The entire plant dies if the severity of the deficiency is high.
- > Due to the poor Iron translocation in plants, the new growth becomes more affected as the deficiency intensifies.
- > The symptoms tend to show up in irregularly shaped spots randomly distributed across a field.
- > Iron uptake is believed to occur through the root tip. However, recent findings have shown that the majority of usable Iron is absorbed through the root hairs.

WHAT TO EXPECT?

- > The usage of FeRRoGREEN $^{\text{TM}}$ in-furrow on soybeans, grown in area with low-, moderate- and high-iron chlorosis prevalence, prevented and/or corrected iron chlorosis and led to a prolonged "greenness" of the leaves.
- > The application of FeRRoGREEN™ in areas with calcareous and high pH soils, prone to develop iron deficiency, has shown a correction of the shortage and a prevention of yield loss.
- > Keeping the leaves green prevented a decrease in photosynthesis rate and carbohydrate translocation, hence preserving yield.



Application Guidelines



FeRRoGREEN™ is compatible with commonly used pesticides and fertilizers and easily tank-mixed (Check compatibility charts).

The best application is in-furrow but the product can also be applied by drip irrigation, drenching or side-dressing.

FIELD CROPS: Such as soybeans, corn, sunflowers and alfalfa: apply 0.5-2.0 L/ac in-furrow or foliar.

VEGETABLES: Such as potatoes, tomatoes, peppers, melons, squash, cucurbits: apply 1.0-4.0 L/ac at planting or during vegetative growth.

TREES: Apply 1-6 L/ac by drenching or drip-irrigation.

BERRY CROPS: Apply 1-4 L/ac (250-500ml per 1,000 row ft) in-furrow, by drenching, side-dressing or drip-irrigation.

VINEYARDS: Apply 1-8 L/ac.

Ornamentals: Apply 60ml per 1,000 square feet or 60-120 ml per 1,000 row feet.

TURF: Apply 60-120ml per 1,000 square feet every 5-6 weeks.

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*FeRRoGREEN™ is a trademark of OMEX Agriculture Inc.



Organomex /

Alleviating Deficiency and Boosting Growth

ANALYSIS (6-2-4 / 3-1-8)

WHAT IS IT?

- > Organomex[™] includes concentrated suspensions containing Nitrogen, Phosphorus, Potassium and micronutrients.
- > Available in two analysis: 6-2-4 (vegetative growth) and 3-1-8 (reproductive stage).
- > It's formulated with plant extracts and Kali Vinasse and do not contain any GMO ingredients or 'live' material.
- > Extremely effective multi-purpose fertilizers that can be used as a foliar feed or as a fertigation product.
- > OrganomexTM is the industry standard for certified fertilizer for organically-grown crops.
- > Formulated to be rapidly taken up by both the foliage and roots so that beneficial results are achieved quickly and economically.

WHEN & WHY USE IT?

- > Organomex[™] is recommended for all crops including turf, horticultural, field crops, vegetables and fruit crops, shrubs and trees and in greenhouses and nurseries.
- > Organomex $^{\text{\tiny{TM}}}$ contains a well-balanced combination of nutrients that encourage strong and healthy growth in fruiting and flowering plants.
- > It does not exhibit any phytotoxicity, therefore ideal for seedlings, transplants and stressed plants where conventional fertilizer application may cause leaf burn or root damage.
- > Organomex[™] is a source of Calcium, which is vital for cell wall formation and maintenance.
- > Kali Vinasse is a co-product from sugar beet refining and contains 40% Potassium.
- > Organomex[™] also contains Nitrogen and Phosphorus derived from a hydrolysed sugar beet.
- > It acts as a sticker/spreader for other foliar nutrients, improving the efficacy of the spray.

WHAT TO EXPECT?

- > Healthy and vigorous crops.
- > Organomex[™] elicits microbial and earthworm activity in the soil.
- > Organomex $^{\text{TM}}$ is able to boost slow growing crops in cold, wet or waterlogged soils.
- > Good vegetative growth followed by an optimum flower and fruit set.
- > Excellent fruit and produce quality to withstand harvest conditions, transport and storage.





Foliar rate: 2-4L per acre depending on deficiency.

Drip irrigation rate: 2.5-5ml/L of water.

For turf apply Organomex[™] at 1.5-3 oz / 1000 sq feet.

Organomex™ is for use on a variety of crops, including turf.

Shake the container and add the required amount into half-filled spraying tank while maintaining a constant agitation then add the rest of the water.

A compatibility test is recommended if the desired combination of products has not been previously used.

These products are available in 10 L jugs, 200 L drums and 1000 L IBC's.

*Organomex™ is a registered trademark of OMEX Agriculture Inc.



Black heart in celery, blossom end rot in tomatoes and bitter pit in apples due to Calcium deficiency that could be corrected with the spray of Organomex™.





The Water Conditioner

WHAT IS IT?

- > pHix[®] is a water conditioner formulated with a stabilized Sulfur.
- > It creates an ideal environment in the spraying tank for maximum herbicide efficacy by reducing water hardness to levels below 50 ppm.
- > pHix® has also an acidic nature that allows lowering the pH of the spray solution to 2.5-3.5.

WHEN & WHY USE IT?

- > Use with glyphosate at pre-burn and for crop desiccation.
- > Traditional spray water has a level of hardness of 100-800 ppm and a pH of around 7.5.
- > The Sulfur fraction in pHix® causes Gypsum to precipitate out of the water thereby improving the water quality.
- > pHix® lowers the solution pH to the point where Glyphosate cannot be chemically tied up with positively charged ions such as Calcium, Magnesium and Iron, which are the source of water hardness.
- > Improves solubility of other Phosphate-based pesticides.
- > Benefits of "facilitated diffusion" from the urea-based component
- > Low usage rate a 10 L jug can treat 400 acres at 5 US gal/ac spray volume.
- > pHix[®] is extremely economical.

WHAT TO EXPECT?

- > Improved water quality, which is critical to herbicide performance
- > Effective at lowering the pH in the spray tank compared to Ammonium Sulphate.

VARIABLES	PHIX®	AMMONIUM SULPHATE				
Nitrogen	Urea - neutral Ammonium low burn potential	Ammonium higher burn potential				
Sulphur	Stabilized Sulphuric acid	Sulphate				
pH - Concentrate	1.0	4.5-5.0				
pH - Spray Solution	2.3-3.5	5.0+				
Rate	0.5 L/400 L 0.125% of the spray solution	1 L/ac 2.5-5.0% of the spray solution				





Application Guidelines



Phosphate-based pesticides requiring low pH.

It is suggested that water be tested for both pH and level of hardness. Water with higher mineral content will require higher rates of pHix[®].

Always add pHix® FIRST to condition the water before adding the pesticide.

Spring Rate for pre-burn: 0.5 L/100 US gal of water.

Fall Rate as a harvest aid and desiccation of hard to kill weeds: 1.0-2.0 L/100 US gal of water.

For in-crop use during the season, use sopHtner 95^{TM} instead of pHix $^{\otimes}$ to soften the water.

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*pHix® is a registered trademark of OMEX Agriculture Inc.



SopHtner95

The In-Crop pH Reducer and Water Softner

Application

Guidelines



WHAT IS IT?

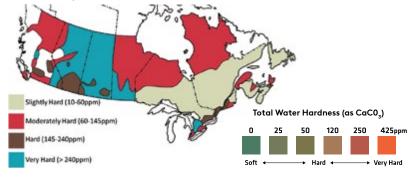
- > SopHtner 95^{TM} is a soil and water pH conditioner.
- > It controls algae and buffers the tank mix spraying solution.
- > SopHtner95[™] is formulated using naturally-occurring organic acids and represents an environmentally sound management tool for lowering alkaline soil conditions.
- > It is safer for in-crop use where acidic conditions are required for better efficacy.
- > Acts as a weak chelator improving the efficiency of uptake through the leaves.

WHEN & WHY USE IT?

- > Hard water often has high pH due to the level of carbonate it contains. The continuous application of high pH water tends to increase the pH of the soil.
- > Many herbicides and fungicides require an acidic solution for better efficacy.
- > By adding SopHtner95 TM , hardness of the water can be lowered, which reduces the possibility of soil pH raise.
- > SopHtner95TM is a pH reducer designed for soil and water applications, where the pH needs to be lowered into a more acidic range.
- > Non-Exhaustive List of herbicides often affected in the efficacy of water hardness: 2,4D Amine, Amitrole, Atrazine, Bentazone, Clethodin, Dicamba, Endothal, Fluazifop, Glufosinate Ammonium, Glyphosate, Imazamox, Imazapyr, Imazethapyr, MCPA Amine, Metsulfuron-Methyl, Paraquat, Picloram, Quizalofop, Sethoxydim and Trakoxydim.

WHAT TO EXPECT?

- > SopHtner95TM reduces the pH of the water and conditions the soil for turf, trees and ornamentals and greenhouse soil mixes.
- > The product is safer for use in-crop and to the users more than other pH reducers such as sulfuric acid and ammonium sulfate.
- > When adding SopHtner 95^{TM} to a mixture containing micronutrients, part of these elements can be chelated and made more available to the crop.



WARM & COOL SEASON TURF:

Apply at 60 - 180 ml in a minimum of 2 US gal water per 1,000 sq. ft (60 - 180 ml per 100 sq meter).

SopHtnerTM should be applied monthly. The ideal pH range is 6.0 - 6.5.

TREES & ORNAMENTALS:

Soil Drench: 1 L per 100 US gal of tank mix (250 ml per 100 L water).

Repeat the application every 30 days or as needed. The ideal pH range 5.0 - 6.5.

GREENHOUSE GROWING MEDIA:

Mix 120 - 180 ml per 1 US gal of water (120 - 180 ml per 4 L water).

If pH is not sufficiently lowered, continue to adjust pH over several waterings at a rate of 60 - 120 ml per US gal of water.

HAND WATERING:

Mix $\frac{1}{2}$ - $\frac{3}{4}$ teaspoon per US gal of water.

Saturate soil with solution.

ALL FIELD CROPS:

Apply 100 ml per 10 US gal spray volume.

The product is available in 10 L jugs, 450 L and 1000 L IBC's.

*SopHtner95™ is a trademark of OMEX Agriculture Inc.





The Insecticidal Soap

ACTIVE INGREDIENT: POTASSIUM SALTS OF FATTY ACIDS (47%)

OPAL® INSECTICIDAL SOAP

- > Opal[®] Insecticidal Soap is a contact insecticide that controls a variety of common garden and crop pests.
- > The easy-to-apply spray can be used indoors, outdoors and in greenhouses.
- > Opal® Insecticidal Soap does not persist in the environment and can be used up to the day of harvest.

MODE OF ACTION

> Opal® acts in two ways: (i) suffocation and disruption of the structure and permeability of insect cell membranes, resulting in death; (ii) via direct contact with pests and has no residual insecticidal activity once the spray has dried.

PESTS AFFECTED

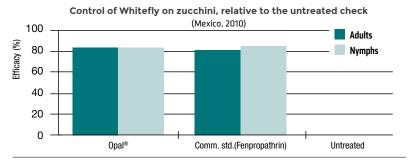
> Opal® is effective on aphids, earwigs, mealybugs, spider mites, psyllids, pear and rose slugs (sawfly larvae), soft brown scale, whitefly, and other common garden and crop pests.

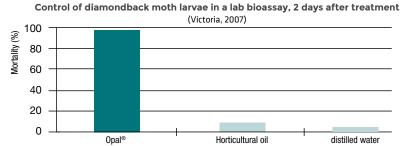
USE SITES

> Opal[®] can be used outdoors, indoors and in greenhouses on vegetables, fruit trees, houseplants, ornamental and shade trees, bedding plants, shrubs, and flowers.

REDUCED RISK

- > Opal® may be used up to the day of harvest and does not persist in the environment.
- > Re-Entry Interval if used indoors: 12 hours.
- > Pre-Harvest Interval: 0 days.





Application Guidelines



Rate: 2L in 100L of water.

Can be used alone or mixed with fertilizers or other pesticides.

A compatibility test is recommended if the desired combination of products has not been previously used.

The product is available in 2 x 10 L cases, 200 L drum and 800 L IBC's.

*Opal® Insecticidal Soap is a registered trademark of OMEX Agriculture Inc.





A Silicon-Based Non-Ionic **Wetting & Spreading Agent**

ANALYSIS (0-8-0 W/ 62% Si)

Application Guidelines



WHAT IS IT?

- > OMEX® SW7™ (Siliphos) is a silicon based wetter, designed to give enhanced uptake of foliar nutrients.
- > Silicon is widely recognized as a beneficial element to many crops. It is transported in the xylem and deposited in the epidermal cells. It complexes with calcium in the cell walls and acts as a physical strengthener and also to alleviate abiotic and biotic stress.
- > It also plays a part in the plants defense mechanism at the local level and is useful in reducing pest infestation.

WHEN & WHY USE IT?

- > SW7TM is used to improve uptake of foliar nutrients applied to the leaves.
- > When $SW7^{TM}$ is used at higher rates, it supplies silicon to the crop. This can have a secondary effect of deterring pests such as aphids, red spider mite, thrips and whitefly.
- > The silicon-oxygen bonds are hydrophobic and the organic clusters are hydrophilic, creating a superior wetting agent, which spreads quickly to cover a large surface area – greater than conventional surfactants.
- > Microscopic examination reveals a high degree of stomatal flooding may also occur which can extend into the intercellular spaces. On contact with water, the bonds begin to degrade and the process runs to completion after 36-72 hours depending on temperature.
- > The breakdown products are natural, being silica (e.g. sand), water and carbon dioxide.

WHAT TO EXPECT?

- > Even spread of the foliar solutions on the surface of the leaves.
- > Enhanced uptake of nutrients through the leaves.
- > Good protection against certain diseases such as powdery mildew.
- > Deterrence of many chewing and sucking insects.





Apply SW7™ at 40 ml-80 ml/acre

For use on all agricultural and horticultural crops, especially fruit, vegetables and potatoes.

SW7[™] can be mixed with a wide range of foliar nutrients. Always consult the appropriate nutrient product guide before use.

It is suitable for dilution with both hard and soft water.

Add the required quantity of SW7™ to the spray tank and agitate thoroughly.

SW7™ is compatible with most commonly used pesticides, growth regulators and fertilizers.

The product is available in 1 L bottles.

*SW7™ is a trademark of OMEX Agriculture Inc.





The Crop Protector

ANALYSIS: 0-0-15 WITH 25% Si

WHAT IS IT?

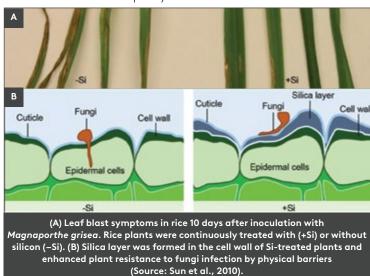
- > CFIA-registered supplement: Reg. # 2017096A, Fertilizers Act.
- > StimPro Armour™ is a 25% potassium silicate liquid fertilizer additive.
- > It helps crops against a myriad of stresses including excess or lack of moisture, temperature and salt.
- > Silica offers two levels of protection: (i) Si inserts in the cell wall forming a physiological barrier; (ii) Si activates biochemical pathways that increase water use efficiency (WUE) and prevents water loss.
- > Silica is also known for lessening the effect of wide fluctuations of temperatures and to protect against heat.
- > Si plays an important role in the defense against biotrophs (i.e., mildew) and chewing insects.

WHEN & WHY USE IT?

- > The product is recommended on all crops including field, horticultural and vegetable crops as well as fruit trees, turf and ornamentals.
- > Use low volumes with all sprays.
- > Being a cell wall strengthener silica increases resistance to lodging caused by strong winds or heavy rains among others.
- > Silica is known to enhance P, K, Ca and Mn uptake and translocation.
- > Use to alleviate drought, salt, metal toxicity (Zn, Mn, Fe, Al, Cd, As, ...).

WHAT TO EXPECT?

- > An improved growth and development especially under cold, hot and drought stress conditions.
- > Treated crops remain healthy and reach their higher potential.
- > Better water use efficiency by the crop.
- > Better seed and fruit quality.



Application Guidelines



StimPro Armour™ can be used in-furrow with starter fertilizer as well as with all

Apply with enough water to guarantee a uniform coverage.

Rate: 20-40 ml/ac (for most crop; check the label for specifics); 75-120ml/ solution or soil & compost.

*StimPro Armour™ is a trademark of EZ-Gro Inc.





The Non-Ionic Surfactant, Spreader, Activator

ANALYSIS: 50% EXTRACT OF YUCCA SCHIDIGERA

WHAT IS IT?

- > CFIA-registered supplement: Reg. # 2018085A, Fertilizers Act.
- > It is a natural extract of Yucca schidigera, a plant that grows in some of the harshest environments.
- > YuccaTM is a rich source of steroidal saponins as well as other stress-alleviating compounds and antioxidants.
- > Saponins are natural surfactants and wetting agents.
- > When added to the spray tank, saponins from the Yucca™ extracts reduce the surface tension, hence facilitating the spread of fertilizer solution onto the entire leaf.
- > When applied onto the soil with liquid starters, Yucca™ extract acts as a wetting agent reducing the formation of dry spots or water channels. This improves nutrients and water uptake in the root zone.

WHEN & WHY USE IT?

- > The product is recommended on all crops including field, horticultural and vegetable crops as well as fruit trees, turf and ornamentals.
- > Include low doses with all sprays or soil applied fertilizers.
- > Use with fertilizers to enhance efficacy and improve hydration and coverage.
- > Saponins are known for their stimulatory activity of growth and development as well as their protective effect against biotic and abiotic stresses.

WHAT TO EXPECT?

- > Better spread and improved coverage of the foliage.
- > Improved water use efficiency (WUE).
- > Protection against dehydration, excess UV and heat.

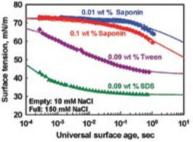


Figure 1. Effect of saponins from the Yucca extract on the breakage of surface tension as compared to other non-ionic surfactants (Source: Stanimirova et al. 2011).

Active ingredients may be trapped in spray deposits

Strong adhesion limits contact area

Little spray droplets movement through cuticular pores

Limited translocation due to restricted uptake





Figure 2. Effect of the addition of Yucca extract on the improvement of the contact angle and wetting of the leaves.



Contact angle: 180 deg Non-Wetting

Contact angle: <90 deg Wettina

Contact angle: 0 deg Perfect Wetting

Application Guidelines



Rate: 10-20ml per acre.

Yucca[™] can be mixed with commonly used liquid fertilizers intended for in-furrow or foliar.

Include with all foliar sprays of fertilizers and/or pesticides.

Apply with enough water to guarantee a uniform coverage.

*Yucca™ is a trademark of EZ-Gro Inc.



Mixing Order of OMEX® Products & Pesticides

Depending on the ingredients included in the formulation, pesticides are either acidic (pH < 7.0) or alkaline (pH > 7.0). OMEX® products intended to be used in combination with these pesticides are formulated to be compatible. Although we do our best to track any yearly changes in formulations of pesticides, if unacquainted, change in some of the additives and surfactants may cause changes in the physic-chemical properties of the products, hence leading to incompatibilities with our fertilizers.

Compatibility charts of the most commonly used combinations are listed on page 4-6. We highly recommend a jar test for any combination that is not listed. Please arrange with your local OMEX® rep for further testing.

Sudden changes in pH may cause incompatibility in the spraying tank. The order of adding the products is crucial. The following step-by-step guidelines are highly recommended:

- 1. Fill the tank with clean water up to 80%-90%
- 2. Add the water conditioner (if required) while filling with water
- 3. Turn on the agitation
- 4. Add the herbicides, fungicides or insecticides and continue to mix thoroughly

- 5. Add other adjuvants (as required)
- 6. Add the AS, UAN (if required)
- 7. Add the OMEX® fertilizer
- 8. Add the remainder water

Compatibility Charts COMPATIBILITY OF SEED TREATMENTS AND OMEX® PRI WITH SIMULTANEOUS MIXING (10=BEST AND 1=WORST)

COMPATIBILITY OF SEED TREATMENTS AND OMEX® PRIMERS

	OMEX®	Products				
FUNGICIDES	Primer Zn®	Primer Cu®	Primer Mn®	Pulse Primer®	Pulse Pak™	Primer Soybean®
Allegiance*	9	9	7	8	8	8
Anchor	6	5	5	9	7	9
Apron Maxx	-	-	-	10	10	10
Apron Advance	-	-	-	9	9	9
Charter	9	9	9	-	-	-
Cruiser Maxx Beans	-	-	-	10	10	10
Cruiser Maxx Cereals (CMC)	9	9	8	-	-	-
CMC + ProSeed 480 FS	8	8	7	-	-	-
CMC + Vibrance 500 FS (V)	8	8	7	-	-	-
CMV Cereals	8	8	7	-	-	-
CMV Cereals + ProSeed 480 FS	8	8	7	-	-	-
CMV Quattro [◊]	7	9	7	-	-	-
CMV Beans	-	-	-	10	10	10
DB Red	7	3	6	-	-	-
Dividend XL**	9	8	9	-	-	-
Dividend XL RTA§	4	4	4	-	-	-
Evergol Extend	-	-	-	10	3	10
Gemini	9	9	9	-	-	-
Insure [‡]	9	6	9	-	-	-
Intego Solo	-	-	-	9	9	9
ProSeed	9	9	8	-	-	-
Rancona [†]	4	6	4	-	-	-
Raxil MD	9	9	9	-	-	-
Raxil WW	9	9	9	-	-	-
Raxil Pro	9	9	8	-	-	-
Raxil Pro Shield	9	9	9	-	-	-
Trilex AL	-	-	-	10	10	10
Trilex Evergol	-	-	-	10	3	10
Vibrance# 500 FS	9	9	8	-	-	-
Vibrance Quattro [◊]	7	9	7	-	-	-
Vitaflo 280	7	4	7	9	7	9

General Recommendations:

- > Treat sequentially if possible
- > Always do a jar test to assess compatibility
- > Do not slurry products over an extensive period of time
- > Keep the mixes agitated at all times
- > Do not treat directly into a seeder
- > Dilute with water (1 ml/kg of seed) where required
- > Avoid Thiram based products

A rating greater than 6 is useable. If below 6, dilute with water to thin the solution.If mixing products in advance of use, add water (1 ml/kg seed) to maintain consistency.

A colour change may occur with the use of Primer Cu®.

- The mixes of Allegiance with Primer Mn®, Pulse Primer®, Pulse PakTM & Primer Soybean®s tend to separate overtime but go easily back in suspension upon agitation.
- ** The rating was done with the commercial formula from 2010.
- § Avoid mixing in the same vessel. Recommended only as a simultaneous or sequential application.
- ‡ The mix Insure with Primer Cu® tends to thicken overtime.
- † Not recommended with Primer Zn® and Primer Mn®. The mix tends to thicken.
- # Add Vibrance first then the required water then Primer Zn/ Cu/Mn® second and stir well.
- ♦ The mixes of Primer Zn/Mn® tend to thicken with Vibrance Quattro and Cruiser Vibrance Quattro. Dilute with water.

Results may vary, so all users should do their own compatibility testing. The above information is not intended as a guarantee of product compatibility.

All compatibility tests were conducted using the higher recommended rates of herbicides and foliars in 10 gal of spraying water volume. Results may vary according to the hardness of the water. A rating equal or greater than 6 is useable.

IMPORTANT: The foregoing represents laboratory results. It is recommended that users conduct their own compatibility testing. Laboratory tests may not be indicative of field results depending on local conditions. The above information is not intended as a guarantee of product compatibility.



Compatibilty Charts

COMPATIBILITY OF HERBICIDES AND OMEX® FOLIARS WITH SIMULTANEOUS MIXING (10=BEST AND 1=WORST)

OMEX® Products													
				_ c	Di K			oducts					
HERBICIDES	C3®	P3 [™]	Nutri- Boost®	Spray Sol'n 6-18-10	uPtaKe IC 5-25-5	uPtaKe IC 13-7-4	uPtaKe IC 8-32-5	SuperB®	KB78®	FA Cu	SuperMn+	Lucky 13 [™]	C3® + SuperB®
2,4-DB Amine	9	9	9	9	9	9	8	9	9	0	8	8	9
2,4-DB Ester	9	9	9	9	9	9	8	9	9	7	8	8	9
Accord										9	-		-
Achieve Liquid	9	7	9	9	9	7	7	8	8	9	8	7	9
Ares	9	9	9	9	9	9	9	9	9	9	9	9	9
Ares + Merge	9	9	9	9	9	9	9	9	9	9	9	9	9
Assert	9	9	9	9	9	9	9	9	9	9	,	,	,
Assure	9	9	9	9	9	9	9	9	9	9			
Attain	9	9	9	9	9	9	9	9	9	9			
Authority 480	8	8	8	8	8	8	8	9	9	8			
Axial	9	9	9	9	9	9	9	9	9	8			
Barricade II	9	9	9	9	9	9	9	9	9	0			
Basagran	9	9	9	9	9	9	9	9	9	0	7	9	9
	9	9	9	9	9	9	9	9	9	0		9	9
Basagran + Reflex Benvel II	9	8	9	9	9	9	9	9	9	9	6	9	9
Benvel II Buctril M	9	9	9	9	9	9	9	9	9	9	0	7	7
	-	9	9	9	9	9	9	9	9				
Buctril M + Thumper	9									9	0	0	
Centurion	8	8	9	9	9	8	8	8	8	8	8	8	8
Curtail M	9	8	9	9	8	8	8	8	8	9	8	7	8
Embutox	8	8	8	9	9	8	8	8	8	8	9	9	8
Enforcer M	9	9	9	9	9	9	9	9	9	9			_
Equinox	9	9	9	9	9	9	9	9	9	8	9	9	9
Estprop	8	9	9	9	9	8	7	8	8	8	7	9	9
Everest 2.0	9	9	9	9	9	9	9	9	9	9	9	9	9
Express SG	9	7	9	9	8	8	8	8	8	9	8	8	8
Express SG & 2, 4-D Ester	9	7	9	9	8	8	8	8	8	8	8	8	8
Frontline XL	8	8	7	8	8	8	7	8	8	9	8	8	8
Frontline XL + Bumper 418 EC	9	7	7	9	9	9	8	9	9	7	8	9	9
Glyphosate													
>Roundup	9	9	9	9	9	9	7	9	9	9	9	9	9
>Touchdown Total	9	9	9	9	9	9	7	9	9	9	9	9	9
>Weather Max	9	9	9	9	9	9	7	9	9	9	9	9	9
>Cheminova	9	9	9	9	9	9	7	9	9	9	9	9	9
>Traxion	9	9	9	9	9	9	7	9	9	9	9	9	9
>RT540	9	9	9	9	9	8	9	9	9	9	9	9	9
>Mavrick III	9	9	9	9	9	9	9	9	9	9	9	9	9
>Transhorb HC	8	9	8	8	8	8	8	9	9	9	9	8	9
Harmony										9			
Heat + Amigo/Merge	9	9	8	9	9	9	9	9	9	9	9	9	9
Horizon										9			
Infinity	9	9	9	9	9	9	8	9	9	9	6	9	9
Liberty	9	9	9	9	9	9	8	8	8	9	9	8	9
Liberty + Centurion + Amigo + Decis	9	9	9	9	9	9	9	9	9	8	9	9	9
Lontrel	9	9	9	9	9	9	7	8	8	9	8	8	9
МСРА	9	9	9	9	9	9	9	9	9	9	4	9	8
MCPA + Prestige	9	9	9										
Octtain XI	8	8	8	8	8	8	8	8	8	8	8	8	8
Odyssey	9	7	9	9	9	8	7	7	7	9	8	7	8
Odyssey + Lontrel	9	9	9	9	9	9	9	9	9	9	9	9	9
Odyssey + Merge	9	9	8	9	9	9	9	9	9	9	9	9	9
Odyssey Ultra	9	9	9	9	9	9	9	9	9	9	9	9	9
Poast Ultra	8	8	8	8	8	8	8	8	8	9	8	8	8
Pixxaro	9	9	9	9	9	9	9	8	8	9	9	9	9
Prestige	9	9	9	9	9	9	9	9	9	8	9	8	9
Prestige + MCPA										5			
· -			·										

Compatibilty Charts

CONTINUED: COMPATIBILITY OF HERBICIDES AND OMEX® FOLIARS WITH SIMULTANEOUS MIXING (10=BEST AND 1=WORST)

	OMEX® Products												
HERBICIDES	C3®	Р3™	Nutri- Boost®	Spray Sol'n 6-18-10	uPtaKe IC 5-25-5	uPtaKe IC 13-7-4	uPtaKe IC 8-32-5	SuperB®	KB78®	FA Cu	SuperMn+	Lucky 13™	C3® + SuperB®
Prestige XC	9	9	9	9	9	9	9	9	9	9	9	9	9
Puma Advance	9	9	9	9	9	9	6	8	8	9	8	7	8
Pursuit	9	9	9	9	9	9	8	9	9	9	8	8	8
Refine Extra										9			
Refine SG	9	9	9	9	9	9	9	9	9	9	9	9	9
Refine M	9	9	9	9	9	9	9	9	9	9	9	9	9
Sencor	9	7	8	9	9	9	7	7	7	9	8	7	9
Simplicity	9	7	9	9	8	8	5	7	7	9	8	8	8
Simplycity GoDry	8	9	9	8	9	9	9	8	9	9	9	9	9
Solo	9	9	9	9	9	9	9	9	9	9	9	9	9
Solo + Merge	9	9	9	9	9	9	9	9	9	9	9	9	9
Solo + Basagran	9	9	9	9	9	9	9	9	9	9	9	9	9
Solo + Basagran + UAN	9	9	9	9	9	9	9	9	9	9	9	9	9
Solo + Lontrel dry	9	9	9	9	9	9	9	9	9	9	9	9	9
Solo ADV	6	9	9	9	9	9	9	9	9	9	9	9	9
Solo Ultra	9	9	9	9	9	9	9	9	9	7	9	9	9
Thumper	9	7	9	9	9	8	8	7	7	8	8	8	8
Trophy	9	8	9	9	9	9	8	7	7	9	8	7	8
Triumph Plus										9			
Tundra	9	9	9	9	9	9	9	9	9	9			
Varro	8	8	7	7	8	8	8	8	8	8			
Velocity m3	8	8	9	9	9	9	9	9	9	8	9	8	8
Viper	9	9	9	9	9	9	9	9	9	9	8	9	9
Viper ADV	9	8	9	8	8	9	9	9	9	8	7	8	9
XtendiMax	9	9	8	8	8	9	8	9	9	9	9	9	9

All compatibility tests were conducted using the higher recommended rates of herbicides and foliars in 10 gal of spraying water volume. Results may vary according to the hardness of the water. Although P3™ is compatible with most Glyphosate products, C3® is recommended instead. A rating equal or greater than 6 is useable.

COMPATIBILITY OF FUNGICIDES AND OMEX® FOLIARS WITH SIMULTANEOUS MIXING (10=BEST AND 1=WORST)

FUNG-								OMEX® P	roducts						
ICIDES	Super Mn+®	FA Cu	FA Zn	Zintake™	Nutri- Boost®	K50 [™]	CalMax®	SuperB®	KB78®	Lucky 13 [™]	Lucky 13 [™] + SuperB®	5-25- 5	8-32- 5	13- 7-4	Cytokelp™
Acapela	9	7	7	7	9	9	8	9	9	8	8	9	9	9	8
Astound	6	8	7	5	8	8	8	8		9	7	9	9	9	8
Bravo 500	9	8	9	9	9	8	8	8		8	8	9	9	9	
Bumper 418 EC															8
Caramba	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Dithane		9													
Folicur	6	7	7	7	8	8	7	8		9	9	9	9	9	7
Headline	9	8	9	9	8	8	8	8		9	9	9	9	9	8
Lance	6	8	7	8	8	8	8	8		9	9	9	9	9	8
Priaxor DS		7							7						7
Proline	8	8	7	7	8	9	8	8		9	8	9	9	9	8
Prosaro 250 EC	8	8	9	9	9	9	8	8	9	9	9	9	9	9	9
Ronilan		9													
Quadris	8	8	8	8	8	8	8	8		9	9	9	9	9	8
Quilt	8	7	8	8	8	8	8	9		8	8	9	9	9	7
Stratego 250EC	9	9	9	9	9	9	9	9		9	9	9	9	9	8
Tilt 250	9	7	9	8	9	8	8	8	9	9	9	9	9	9	8
Twinline	8	8	8	8	9	9	8	9	9	8	8	9	9	9	8
Vertisan								9	9						9

All compatibility tests were conducted using the higher recommended rates of herbicides and foliars in 10 gal of spraying water volume. Results may vary according to the hardness of the water. A rating equal or greater than 6 is useable.

