

Organic and Amino Acid Based Fertilizers

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# History of Baicor®

**BAICOR, L.C.** based in beautiful Logan, Utah was founded in 1989 by Dr. Gene W. Miller who has spent his adult life in researching, developing, and teaching plant nutrition at Utah State University. Since 1989 he has applied his knowledge to the preparation of quality and effective specialized fertilizers for agriculture, golf, and home and garden markets.

BAICOR® is a manufacturer of fertilizers specializing in liquids for foliar and soil applications. BAICOR® has a well-equipped research laboratory keeping up with tomorrow's innovations. Blends of nutrients required by specific plants have been developed after years of research and testing. This has resulted in the present line of Baicor's® phyto plus products, which will always reflect the most advanced stages of fertilizers for the health, vigor, color and increased yield of plants.

BAICOR® prides itself on research to maintain a position at the forefront of plant nutrition. Well-equipped laboratories in plant nutrition, agronomy, plant physiology and microbiology are staffed full time by world-renowned scientists:

#### • Prof. Dr. Gene W. Miller

Plant nutrition, biochemistry, and biology

#### • Dr. Olga Vedina

Plant physiology, agronomy, and biology

The efficiency of present products and new developments are tested in a large modern greenhouse and field plots.

Now BAICOR® brings these exceptional products to you. The line of BAICOR® plant nutrients is 100% environmentally friendly and organically based. Each is specifically formulated to provide the optimum level of nutrients that plants need.

BAICOR® uses products which include all essential nutrients required for plant growth and development. OMRI-approved products for agriculture are available for the organic grower.

BAICOR'S® products are chelated and complexed from organic and amino acids found naturally in plants and in the soil. These are true chelates with a ring structure and a high stability constant (they generally do not fall out or precipitate when mixed with phosphate or one another).

Our products are made with the finest natural materials and blended scientifically together to assure quality and effectiveness. Continuous research and development will keep BAICOR® on the cutting edge of plant nutrition.

LIQUID MEASUREMENT CONVERSION			
1 teaspoon		1/3 Tablespoon	5 ml
1 Tablespoon	1/2 fluid ounce	3 teaspoons	15 ml, 15 cc
2 Tablespoons	1 fluid ounce	1/8 cup, 6 teaspoons	30 ml, 30 cc
1/4 Cup	2 fluid ounces	4 Tablespoons	59 ml
1/3 cup	2 2/3 fluid ounces	5 Tablespoons + 1 teaspoon	79 ml
1/2 Cup	4 fluid ounces	8 Tablespoons	118 ml
2/3 Cup	5 1/3 fluid ounces	10 Tablespoons + 2 teaspoons	158 ml
3/4 Cup	6 fluid ounces	12 Tablespoons	177 ml
7/8 Cup	7 fluid ounces	14 Tablespoons	207 ml
1 Cup	8 fluid ounces / 1/2 Pint	16 Tablespoons	237 ml
2 Cups	16 fluid ounces / 1 Pint	32 Tablespoons	473 ml
4 Cups	32 fluid ounces	1 Quart	946 ml
1 Pint	16 fluid ounces / 1 Pint	32 Tablespoons	473 ml
2 Pints	32 fluid ounces	1 Quart	946 ml, 0.946 Liters
8 Pints	1 Gallon / 128 fluid ounces		3785 ml, 3.78 Liters
4 Quarts	1 Gallon / 128 fluid ounces		3785 ml, 3.78 Liters
1 Liter	1.057 Quarts		1000 ml
	AREA MEASUREM	ENT CONVERSION	
1 Sq. Yard	9 Sq. Feet	0.92 Sq. Meters (M)	
1 Acre	160 Sq. Rods	4,840 Sq. Yards	43,560 Sq. Feet
	1 Sq. Rod	30.25 Sq. Yards	272.25 Sq. Feet
1 hectare (ha)	100 ares (a)	10,000 Sq. Meters (M)	2.2 Acres

### Nature of Baicor® Products

**BAICOR®** products are chelated and complexed from organic and amino acids found naturally in plants and in the soil. These are true chelates with a ring structure and a high stability constant (they generally do not fall out or precipitate when mixed with phosphate or one another). This is not true of many other products which do not remain in solution when mixed together and/or with phosphate, thus tying up the nutrients that are needed in the first place.

BAICOR® Chelates and/or Complexes contain "facilitators" which aid in penetration into plant cells, effective translocation to sites of action and provide all or most of the nutrients needed by plants. All BAICOR® products are non-phytotoxic when used as directed. BAICOR® products contain an organic base consisting of organic compounds which function metabolically and are found naturally in the plant.



**BAICOR®** pledges to provide products that excel in effectiveness and quality. We are continuously improving products and developing new ones that incorporate natural components for increased uptake, chelation, and utilization. Continuous research incorporates the use of new proprietary agents that have shown to be scientific breakthroughs in enhancing plant nutrition. Proprietary agents may include natural growth promoting components, mixtures of organic acids, amino acids, carbohydrates, extracts from plants and micro-organisms, proponents of humic acid and folic acid, agents to alleviate crop stress (chemical damage, frost, heat drought). Products that focus on specific needs are now available.

- Bio-Amino Nitrogen™ 4-1-1
- High Tide<sup>™</sup> 1-2-2
   Conventional
- High Tide™ O-O-O WSDA
- Excel Triple 5<sup>™</sup> 5-15-5 + 5% Ca
- Slam Dunk™ 0-21-28

We are presently testing new products that enhance growth and yield and provide disease resistance to crops.

## Bio-Amino Nitrogen<sup>™</sup>

4-1-1

attack.

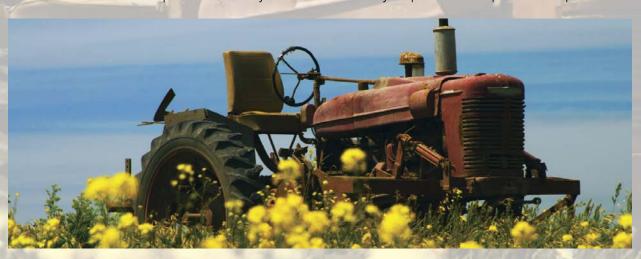
Amino and organic acids help in the sequestering, uptake and translocation of nutrients. The L- Amino acids are the

immune defense system creating a resistance to pathogen

basic components of protein, which are essential for structural and enzymatic activities.

Plants normally synthesize their own amino acids, but under stress may break down protein to provide the essential amino acids. Use of Bio-Amino Nitrogen helps to supply needed L- amino Acids to eliminate stress, provide the building blocks for protein synthesis and a nitrogen source.

Bio –stimulants enhance utilization and translocation of nutrients in plants and the soil. These components are also utilized as a food source to the plant and soil mycorrhizae which may help in root and plant development.



### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 50 parts water to 1 part of BAICOR fertilizer. Add at least 50 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 100 parts of water before introducing product.

**TANK MIX:** 1 pint (500 mls) per 100 gallons (400 liters) of water to enhance sequester the utilization of plant uptake of fertilizer blends and foliars.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 - 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

GRAIN CROPS: Apply 0.5 - 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 quarts per acre.

0.40% Urea Nitrogen

Available Phosphate (P2O5)......1.0%

Soluble Potash (K<sub>2</sub>O)......1.0%

**SPRINKLER IRRIGATION:** Apply 1 - 3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 50 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.



# High Tide 1-2-2 • for Organic Growing

**HIGH TIDE** for organic growing is a high concentrate of Seaweed (Ascophyllum Nodosum).

It contains natural organic acids, amino acids and detergents to enhance uptake and facilitate translocation to cellular sites of activity.

High Tide is an active source of plant growth regulators (cytokinins), and also enzymatic and non-enzymatic antioxidants and may do the following:

### GUARANTEED ANALYSIS

Total Nitrogen (N)	.1.0%
0.35% Ammoniacal Nitrogen	
0.65% Urea Nitrogen	
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	.2.0%
Soluble Potash (K <sub>2</sub> O)	.2.0%

- Improves stress and temperature tolerance to treated crops.
- Give disease resistance and protect cellular membranes.
- Increase nutrient uptake, efficiency, and growth stimulation
- Improves salt tolerance
- Enhance the establishment of new seedlings
- Retard plant senescence.

Early applications are beneficial to help plants deal with early season temperature and disease stresses while helping to maximize plant development yield and quality.



### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING

AERIAL APPLICATIONS: Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

FOLIAR APPLICATIONS: Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

FRUIT, NUT & VINE CROPS: Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.25 - 0.5 quarts per acre. NOTE: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations

FIELD AND VEGETABLE CROPS: Apply 0.25 - 0.5 quarts per acre.

GRAIN CROPS: Apply 1 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

SPRINKLER IRRIGATION: Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

SOIL APPLICATION RATES: Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

1 qt/acre 2.5 qts/acre 4 ats/acre

# Excel Triple 5<sup>TM</sup> 5-15-5

P<sub>RODUCT</sub>

**Excel Triple 5**™ is a high phosphate product and contains calcium. This combination is unique to only a few products, where both calcium and phosphate remain in true solution. Baicor researchers have produced Excel Triple 5, which incorporates high amounts of calcium, phosphorus and also potassium. Calcium is primarily taken up through the underdeveloped root tip in the soil. At times of peak demand, although there is adequate calcium in the soil, the plant may experience deficiency. This may result in blossom end rot in tomato, bitter pit in apple, internal brown spot in

### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	5.0%
4.0% Nitrate Nitrogen	
1.0% Urea Nitrogen	
Available Phosphate (P2O5)	15.0%
Soluble Potash (K <sub>2</sub> O)	5.0%
Calcium (Ca)	

potato, etc. Foliar addition of calcium may assure adequate nutrients for growth and development. Phosphorus is present in high amounts in the only plant usable phosphate form, phosphate. The highest concentration of phosphorus within the plant is in the cell plasma; it is intimately involved in all energy-related reactions. Plants with adequate phosphorus are more resistant to all stress conditions including disease infections. Potassium is required in large amounts by the plant. It is involved in over 40 enzymatic reactions, which are crucial in plant metabolism. The opening and closing of stomates, water relations and membrane integrity require the

Nitrogen is required in high amounts for critical structural and metabolic roles, i.e. synthesis of building- block amino acids and complex metabolites such as proteins, nucleic acids and porphyrins. Nitrogen is present in the most usable nitrate form for uptake and translocation.



### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

essential potassium nutrient.

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 100 parts of water before introducing product.

FRUIT, NUT & VINE CROPS: Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 - 1.5 quarts per acre. NOTE: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

GRAIN CROPS: Apply 0.5 - 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1 - 3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration
Beginning Deficiency
Severe Deficiency



# PROBUCT Slam Dunk

Slam Dunk™ 0-21-28 Contains organic acids, amino acids and natural biological compounds with growth regulators. Phosphorus is entirely in the plant – usable ortho-phosphate form for maximum growth and development. The high ortho-phosphate is in combination with highly concentrated potassium in the ionic form for maximum uptake, translocation and utilization. This is a combination of two of the essential nutrients required in highest amounts by the plant.

### **GUARANTEED ANALYSIS**

Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	21.0%
Soluble Potash (K <sub>2</sub> O)	28.0%

Phosphorus is essential for the myriad energy reactions required in plant metabolism as well as components in the nucleus important in cellular reproduction.

Potassium is necessary for plant water relation's control, including stomata regulation and transpiration, and enzymatic reactions in glycolysis, Krebs cycle and over 40 other metabolic reactions requiring potassium to function.

This product fits the grower's need where there is a demand for high concentrations of soluble, usable phosphorus and potassium.



### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

AERIAL APPLICATIONS: Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

FOLIAR APPLICATIONS: Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

FRUIT, NUT & VINE CROPS: Including (but not limited to) almonds hazelnuts, grapes, pecans and walnuts. Apply 1 - 2 quarts per acre. NOTE: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

### FIELD AND VEGETABLE CROPS:

Apply 1 - 2 quarts per acre

GRAIN CROPS: Apply 1 - 2 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 2 quarts per acre

SPRINKLER IRRIGATION: Apply 1 - 2 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

SOIL APPLICATION RATES: Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

1 qt/acre 2 qts/acre

3 ats/acre

### Nutra Green<sup>™</sup> 5-10-5 + Chelated Micronutrients

### Benefits of Nutra Green™

Nutra Green™ is a unique and True All Purpose fertilizer. Many other products use this word "All Purpose" but may mislead consumers. Nutra Green™ contains the essential nutrients needed by the plant in a completely balanced, organic-based formula, ideal for optimal plant development. It is used all around the world in Agriculture and is excellent for all horticultural plants as well as vegetable gardens. Nutra Green™ contains high balanced concentrations of micro-nutrients compared to other all purpose fertilizers.

• Excellent Greening and Color Of Plants: Nutra Green™ has been found to be one of the strongest and most effective organic-based foliar products on the market today. Major Resorts, Agriculture, Agronomists and Horticulturists rely on its effectiveness. Green-up without rapid growth: Nutra Green™ contains a unique proprietary combination of plant-based amino acids, organic acids and carbohydrates. Quick visual response: The chelated and complexed nutrients contained in Nutra Green™ are rapidly absorbed into plant tissue to provide a rapid and sustained green-up.

### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	5.0%
Available Phosphate (P2O5)	10.0%
Soluble Potash (K <sub>2</sub> O)	
Magnesium (Mg)	
1.0% water soluble magnesium (Mg)	
Boron (B)	0.1%
0.1% water soluble boron (B)	
Copper (Cu)	0.1%
0.1% water soluble copper (Cu)	
Iron (Fe)	1.0%
1.0% water soluble iron (Fe)	
Manganese (Mn)	0.5%
0.5% water soluble manganese (Mn)	
Zinc (Zn)	0.1%
0.1% water soluble zinc (Zn)	

Also available in 10-9-5 + Micros.

- Nutra Green™ also contains secondary nutrients (magnesium and sulfur) and a full range of micronutrients (iron, zinc, manganese, copper and boron) which are 100% chelated to alleviate most deficiencies.
- Iron, zinc and manganese deficiencies are very common in calcareous or high pH soils. The plant may yellow due to iron, zinc or manganese deficiencies. Nitrogen will not correct the problem; only proper nutrition will restore the natural green color and vigor of plants.
- Helps with Plant Stress Tolerance: Nutra Green™ provides the plants with high levels of phosphorus and potassium, which increases plant's tolerance to many stress conditions. There are also some indications by researchers, that phosphorus and potassium play a key role in reducing disease infections.

### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 4 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 - 4 quarts per acre.

GRAIN CROPS: Apply 1 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

# **PK** 2-6-12

**PK 2-6-12** is a low nitrogen, high potassium and phosphorus fertilizer containing selected micronutrients including molybdenum and cobalt. This product is designed for crops under stress or where limited vegetative growth is desirable.

It is advantageous to use PK 2-6-12 to increase blooming and fruit set or at later stages of plant growth, for root enhancement.



### **GUARANTEED ANALYSIS**

	Total Nitrogen (N)2.0%
	1.0% Ammoniacal Nitrogen
	1.0% Urea Nitrogen
	Available Phosphate (P <sub>2</sub> O <sub>5</sub> )6.0%
	Soluble Potash (K <sub>2</sub> O)12.0%
	Boron (B)0.05%
	0.05% water soluble boron (B)
	Cobalt (Co)0.01%
	0.01% water soluble cobalt (co)
	Copper (Cu)0.05%
	0.05% water soluble copper (Cu)
	Manganese (Mn)0.05%
	0.05% water soluble manganese (Mg)
	Molybdenum (Mo)0.01%
ĺ	0.01% water soluble molybdenum (Mo)
į	Zinc (Zn)0.05%
	0.05% water soluble zinc (Zn)

### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 2 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS:

Apply 1 - 2 quarts per acre.

GRAIN CROPS: Apply 1 - 2 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 2 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1 - 2 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

## Manganese Shotgun™

**Manganese Shotgun** is a high concentration of manganese, zinc and iron. The micro nutrients are highly chelated with organic acids, amino acids and carbohydrates that are natural components of the plant. These components are easily recognized by the plant, bio-degradable and supply energy to the plant and soil micro-organisms.

### **Benefits of Manganese Shotgun**

- Soils are often deficient in multiple trace nutrients;
   Manganese Shotgun contains high amounts of Manganese with Zinc and Iron.
- Natural components provide faster uptake, translocation and use of micronutrients.
- Manganese is essential for steps in the photosynthetic pathway.



### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1 - 3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**GUARANTEED ANALYSIS** 

Iron (Fe)......2.0%

Manganese (Mn) ......4.0%

Zinc (Zn)......2.0%

2.0% water soluble iron (Fe)

2.0% water soluble zinc (Zn)

4.0% water soluble manganese (Mn)

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

## Zinc Shotgun™

**Zinc-Shotgun™** is a fertilizer that focuses on micronutrients to satisfy needs of customers seeking high zinc with manganese, iron and copper. The micronutrients are completely chelated with natural organic acids, amino acids, and carbohydrates that are readily bio-degradable and supply energy to the plant and soil microflora.

Many soils are low in zinc and also require other micronutrients for the growth of good crops.

### Benefits of Zinc Shotgun™

- Complete, organically complexed micronutrient package containing essential elements to improve plant health and growth.
- Organically complexed with plant based amino acids, organic acids and complexed polysaccharides.
- The nutrients are readily absorbed by the plant for a faster response.
- Designed to be applied both by foliar application and fertigation practices and is also effective when applied directly to the soil.



### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**GUARANTEED ANALYSIS** 

Copper (Cu) ......0.1%

Manganese (Mn) ......2.0%

Zinc (Zn)......4.0%

0.1% water soluble copper (Cu)

2.0% water soluble manganese (Mn)

2.0% water soluble iron (Fe)

4.0% water soluble zinc (Zn)

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

### Iron Combo Chelate™

### 4.5% Fe

### Prevent & Correct Iron and Micronutrient Deficiencies

**Iron Combo-Chelate™** is a broad spectrum micro-nutrient fertilizer containing natural, organic-based, chelates of iron, zinc, manganese, copper and boron. It can be applied to lawns, trees, shrubs, greenhouse plants, flowers and gardens. Any plant with Iron Chlorosis or micro-nutrient deficiencies can be effectively foliated with Iron Combo-Chelate™.

#### Benefits of Iron Combo-Chelate™

•	A complete micro-nutrient fertilizer containing natural
	chelates of iron, zinc, manganese, copper, and boron.

### **GUARANTEED ANALYSIS**

Boron (B)	0.2%
Copper (Cu)	0.2%
0.2% water soluble copper (Cu)	
Iron (Fe)	4.5%
4.5% water soluble iron	
Manganese (Mn)	1.0%
1.0% water soluble manganese (Mn)	
Zinc (Zn)	1.0%
1.0% water soluble zinc (Zn)	

- When applied to chlorotic plants, greening can be seen within a week and can be maintained with consecutive applications.
- The nutrients are quickly absorbed for a fast response.
- Designed to be foliar applied and foliar absorbed, however it can be added to fertigation solutions.
- 100% Organically chelated, no synthetic chelates and 100% biodegradable.



### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1 - 3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

### Plant Stimulator "BUFFER"

**PLANT STIMULATOR™** is a bio-stimulant containing selected biological stimulants including natural plant metabolites, protein and enzyme precursors. It enhances utilization and translocation of nutrients in fertilizer blends & foliars.

### **GUARANTEED ANALYSIS**

3.0% Urea Nitrogen

PLANT STIMULATOR™ is also designed to buffer, chelate and complex nutrients to keep them in solution and in a form readily available for plant uptake, translocation and metabolic use. It is composed of natural derivatives from plant extracts including carbohydrates, and organic acids.

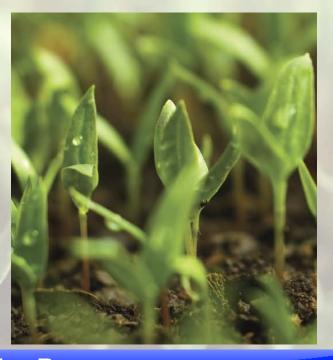
PLANT STIMULATOR™ contains natural components found in the plant itself and is readily biodegradable.

PLANT STIMULATOR™ is 4 products in one:

- Bio-Stimulant
- Water buffering agent
- Microbe food for soil microorganisms
- Foliar enhancer (Makes nutrients more available)

#### Benefits of PLANT STIMULATOR™

- Improves nutrient uptake
- Food source for micro-flora in the soil
- Excellent water buffer (1 part to 4000 parts water)
- Enhances utilization and translocation of nutrients



### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

AERIAL APPLICATIONS: Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product

FOLIAR APPLICATIONS: Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

FRUIT, NUT & VINE CROPS: Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 - 1.5 quarts per acre. NOTE: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

SOIL APPLICATION RATES: Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

1 qts/acre 2 qts/acre

3 qts/acre

### **Uptake**™ 3-20\*-17

**UPTAKE**<sup>™</sup> is a unique and effective product that contains high amounts of phosphorus and potassium to enhance and stimulate plant and root development.

Plants with high levels of phosphorus have an increased tolerance to many stress conditions; phosphorus levels help plants to recover from injury more rapidly. There are also reports that phosphorus plays a key role in reducing disease infection.

Potassium stimulates over 40 enzymes within the plant that are responsible for plant growth and development.

### Benefits of UPTAKE™

- Phosphorus is one of the six macronutrients required by crops (nitrogen, potassium, calcium, magnesium, sulfur). Phosphorus is often the most neglected by growers, yet no element plays a more important role in the overall metabolic process of the plant.
- Phosphorus can be quickly absorbed by the tissue and is very effective when applied as a foliar.
- The highest distribution of phosphorus within the plant is in the cell plasma and it is a key ingredient in the many energy requiring reactions in the plant.
- Plants with high level of phosphorus have increased tolerance to many stress conditions. Good phosphorus levels also help crops recover from stress or injury more rapidly. There are also some indications by researchers that P plays a key role in reducing disease infections.

### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 2 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 - 2 quarts per acre.

GRAIN CROPS: Apply 1 - 2 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 2 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1 - 2 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**GUARANTEED ANALYSIS** 

Available Phosphate (P2O5)\*......4.0%

Soluble Potash (K<sub>2</sub>O) ......17.0%

Boron (B) ......0.02%

2.10% Ammoniacal Nitrogen

20.0% Total Phosphoric Acid (P<sub>2</sub>O<sub>5</sub>)

0.9% Urea Nitrogen

0.02% water soluble bron (B)

0.1% water soluble cobalt (Co)

0.001% water soluble molybdenum (Mo)

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

### Golden Grain™ 7-5-5

**GOLDEN GRAIN**™ is specially formulated for grain crops. This

fertilizer is balanced with phosphorus, potassium and nitrogen content containing high levels of trace nutrients, iron, zinc, and manganese. It contains proprietary activators to assist and help in translocation of nutrients essential for plant growth.

#### Benefits of GOLDEN GRAIN™

- GOLDEN GRAIN™ is especially blended to supplement the nutrients generally required by grain crops for optimum growth.
- Grain crops often have a need for supplemental nitrogen, phosphorus and potassium. Especially in calcareous,

high pH soils iron and other micro-nutrients (zinc, manganese) are limiting. Iron is essential for chlorophyll formation and is required by the plant for many metabolic roles including nitrate reduction, nitrogen fixation and photosynthesis. A yellowing of grain may be a deficiency of nitrogen and iron. Potassium is essential for activity of many enzymes and aids in the uptake and transport of nutrients through cellular membranes. Adequate phosphorus is necessary for grain development and maturity.

The window of application has been found to be at the flag leaf stage (4-5 inches high). The grower at this time applies bronate or 2-4 D (herbicide) and the GOLDEN GRAIN™ may be included at this time to save the grower cost of additional applications. A single foliar at this time has shown consistent increases from 10% to over 20% in yield. Additional foliars may increase these levels even higher.



### **Application Rates**

WINDOW OF APPLICATION PRIOR TO FLAG LEAF STAGE AT THE TIME HERBICIDE.

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 4 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 - 4 quarts per acre.

**GRAIN CROPS:** Apply 2 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**GUARANTEED ANALYSIS** 

Total Nitrogen (N)......7.0%

Manganese (Mn) ......0.2%

Zinc (Zn)......0.2%

2.30% Ammoniacal Nitrogen

1.35% Nitrate Nitrogen3.35% Urea Nitrogen

0.5% water soluble iron (Fe)

0.2% water soluble zinc (Zn)

0.2% water soluble manganese (Mn)

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

# Soil Stimulator

### "Root & Soil Stimulator"

### **SOIL STIMULATOR™** is "5 Products in one"

- Calcium Enriched
- Soil Conditioner, used as an aid to improve soil structure.
- · Liquid Compost, which will stimulate micro-flora and make nutrients more available.
- Starter Fertilizer, fortified with nitrogen and calcium.
- · Alleviates calcium deficiencies such as blossom end rot in tomatoes, bitter pit in apples etc.

SOIL STIMULATOR™ is a Soil and Root Stimulator!!! It is used as an aid to improve soil texture, increase water

penetration, increase cell wall structure, improve nutrient uptake, stimulate micro-flora and improve alkaline (high pH) and saline soils.

#### Benefits of SOIL STIMULATOR™

- Contains naturally occurring plant extracts and liquid fermentation products containing enzyme precursors, microbial metabolites, natural plant hormones, organic acids, carbohydrates, glycosides and enzyme stimulants.
- Enhances microbial activity.
- Contains natural plant extracts that aid in penetration of water into the soil, resulting in greater oxidation and healthy microbial activity.
- A food source for micro-organism fostering their growth in the soil. This enhances the release of nutrients from the soil in useful forms for plant growth and development.
- · Contains readily available calcium for plant uptake. The Nitrogen and calcium stimulate plant growth and calcium is available to replace sodium on the soil micelle (the soil component that absorbs nutrients). Together with increased oxidation and penetration it results in improved soil texture and improvement of alkaline and salinity conditions.
- Contains natural components such as saponin to aid in soil penetration.
- Helps reduce salts in the soil.
- Essential for early root growth and new root growth.

### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

AERIAL APPLICATIONS: Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

FOLIAR APPLICATIONS: Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

FRUIT, NUT & VINE CROPS: Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 2 - 4 quarts per acre. NOTE: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 2 - 4 quarts per acre.

**GUARANTEED ANALYSIS** 

Total Nitrogen (N)......9.0%

Calcium (Ca) ......5.0%

3.0% Urea Nitrogen

1.0% Ammoniacal Nitrogen 5.0% Nitrate Nitrogen

GRAIN CROPS: Apply 2 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

SPRINKLER IRRIGATION: Apply 2 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

SOIL APPLICATION RATES: Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency

0.5 qts/acre

### **Micro-Feast**™ Micronutrients & Microbe Enhancer

**MICRO-FEAST™** is a unique product like no other! It is a fertilizer and fosters helpful micro-organism growth when used in the soil. It feeds and builds micro-flora to help make nutrients more available to the plant.

MICRO-FEAST™ is specially formulated to stimulate microbial growth in the soil and enhance soil fertility. The Nitrogen, Phosphorus, Potassium, Iron, Manganese and Zinc are in proper chelated and complexed forms for better utilization for plant and root health.

### Other Benefits of MICRO-FEAST

 Contains plant metabolites, carbohydrates and enzyme precursors that are combined with organic and amino acids together with essential mineral nutrients.

### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	5.0%
3.5% Urea Nitrogen	
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	3.0%
Soluble Potash (K <sub>2</sub> O)	4.0%
Iron (Fe)	
0.2% water soluble iron (Fe)	
Manganese (Mn)	0.05%
0.05% water soluble manganese (Mn)	
Zinc (Zn)	0.05%
0.05% water soluble zinc (Zn)	

- Provides available nutrients for foliar absorption and a healthy soil rich in a balanced micro-flora.
- Provides a fully degradable energy source for use in the plant.
- Compatible with most fertilizers, herbicides and pesticides available on the market today, however a jar test is recommended.



### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

Add 20 - 100 parts water to product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 2 gallons per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 2 quarts - 1 gallon per acre.

GRAIN CROPS: Apply 2 quarts - 1 gallon per acre.

TURF GRASSES: Apply 1 - 4 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1 - 2 gallons per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency 0.5 gal/acre 1 gal/acre 1 - 1.5 gal/acre

### **NBE**

**NBE**<sup>™</sup> is a unique product that was designed to accelerate growth and development of seedlings. When applied on the seed, growth of the root and shoot is increased significantly in the first 10 days. For germinating seeds, this accelerated growth establishes a larger root mass, provides a shoot that is able to penetrate the soil surface and have a larger leaf surface to initiate a higher photosynthetic rate. This often means the difference for a good or successful crop and could eliminate reseeding under poor soil conditions.

### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	1.0%
1.0% Urea Nitrogen	
Available Phosphate (P2O5)	1.0%
Soluble Potash (K <sub>2</sub> O)	1.0%

NBE™ regulates the growth both at the germination stage and later growth stages. Foliar applications have been shown to increase crop yield. In addition to the accelerated growth response, treated seeds are more resistant to diseases. This is provided through the presence of natural substances that induce disease resistance to the seedling and plant. This early resistance may help eliminate early rot of the seed and diseases common in seedlings.

NBE™ has been scientifically tested on many crops and plants including wheat, potatoes, sugar beet, corn and grasses. The increase in root mass helps increase nutrient uptake and may help improve drought resistance of the plant.

The seed needs to be wetted with NBE™ before planting or in the seed bed; foliar application is also an effective way of enhancing plant growth.

NBE<sup>™</sup> may be diluted 50 to 100 times depending on application procedures. It may be sprayed directly on the seed in the hopper or mixed directly with or applied over the seed.



### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**FOLIAR APPLICATIONS:** Use at least 50 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 gallon per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 gallon per acre.

GRAIN CROPS: Apply 1 gallon per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 2 gallons per acre in 50 gallons of water.

HYDRO SEEDING: 4 gallons per acre diluted 50 times with water.

**TRANSPLANTING:** Mix 2fl oz of NBE™ per gallon of water that is used for transplanting.

**SPRINKLER IRRIGATION:** Apply 1 - 2 gallons per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 50 parts water to 1 part BAICOR fertilizer. Apply directly to seeds unless it has been determined/tested by the consultant or grower before planting or in the seed bed.

SEED TREATMENT: 2-4 gallons/acre diluted 50 times with water

# Gene's Booster<sup>™</sup> 19-2-2 + Iron

**GENES BOOSTER™** is specially formulated for crops and plants that utilize high amounts of nitrogen. GENES BOOSTER™ is chelated with organic and amino acids found naturally in plants and soil. GENES BOOSTER™ contains three forms of nitrogen for fast and long term uptake as well as phosphorus, potassium and chelated iron.

GENES BOOSTER™ is readily absorbed by the plant, translocated to various tissues and metabolized for optimum growth and development.

• Iron Chlorosis is a world-wide problem. Almost all soils have adequate total iron but the amount of available iron to the plant is dependent on factors such as soil pH, iron forms and plant species. Iron is one of the least understood nutrients and the analysis (both soil and plant) is not accurate to determine effective levels for plant use. Foliar sprays of iron are the preferred way to supply this essential nutrient to plants. Iron may be quite immobile when taken up through the roots; thus new growth often has iron deficiency.

### Benefits of GENES BOOSTER™

- The chelating agents contained in GENES BOOSTER™ are rapidly absorbed into the plant tissue to provide rapid and sustained green-up.
- Provides both nitrogen and iron in high concentrations. Both nutrients are crucial to healthy greening due to their direct involvement in chlorophyll formation.
- Will mix in most solutions containing phosphate because of the total chelation of the micro-nutrients. The nutrients are readily absorbed by the plant for a faster response.
- Contains unique forms of phosphorus and potassium for complete plant use and balanced plant health.
- Compatible with most fertilizers, herbicides and pesticides available on the market today, however a jar test is recommended.

### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 100 parts of water before introducing product.

GRASS & PASTURE APPLICATIONS: Apply 16oz/1000 square feet (5 gallons per acre). Apply adequate amount of water (30-100 parts water to 1 part fertilizer). Consult a verified consultant on rate and recommendations for total nitrogen required per 1000 square feet per growing season. Apply monthly during the growing season, or as needed. (Note) this dilution ration is recommended for established grass. Newly seeded turf requires a high dilution (60-100 parts water to 1 part fertilizer).

**GUARANTEED ANALYSIS** 

Total Nitrogen (N) ......19.0%

Available Phosphate (P<sub>2</sub>O<sub>5</sub>).....2.0%

Soluble Potash (K<sub>2</sub>O) ......2.0%

Iron (Fe)......1.0%

4.1% Ammoniacal Nitrogen

3.8% Nitrate Nitrogen 11.1% Urea Nitrogen

1.0% water soluble iron (Fe)

**CROPS REQUIRING HIGH AMOUNT OF NITROGEN:** Apply 2 - 4 quarts per acre at 100x dilution with water. Consult a verified consultant on rate and time of application.

# Nutra-Gel<sup>™</sup> 12-13-9 + micros

**NUTRA-GEL™** is an excellent all-purpose fertilizer as well as a great starter for your plants, providing continuous fertilization for up to 3-6 months. After its nutrients are exhausted, the gel continues to act as an absorbent and can even take up new nutrients, providing plants with better growing conditions.

NUTRA-GEL™ is a unique and advanced fertilizer unlike any other. Infiltrated in this gel are all the essential nutrients, which are required by plants. These nutrients are in a specially balanced formula designed for optimum plant growth. This gel alone can hold up to 200-400 times its own weight in water, which helps to keep the moisture in the soil.

#### **Benefits of NUTRA-GEL™**

- Excellent starter fertilizer.
- Needs only one application, lasts 3-6 months for continuous feeding.
- Alleviates transplant shock: When used in transplanting, NUTRA-GEL™ can help in increasing the survival rate of the plant.
- Conserves water- Nutra-Gel absorbs over 200x its own weight in water.
- Contains all Essential nutrients for optimum plant health.
- Patented technology.
- Produces more robust plants: the balance of nutrients contained in NUTRA-GEL™ provides optimal growth.



**GUARANTEED ANALYSIS** 

Manganese (Mn)......0.025%

 Zinc (Zn)
 0.024%

 Boron (B0
 0.02%

 Copper (Cu)
 0.01%

7.0% Nitrate Nitrogen

5.0% Ammoniacal Nitrogen

### **Soil Application Rates**

Pot Size	No. of the second	<u>lutra Gel Amour</u>
2 1/2 incl	n1,	/5 teaspoon (1 pinch)
4 inch	1,	/2 teaspoon
	1	
8 inch	1	1/2 teaspoons
1 gallon.		/2 Tablespoon
2 gallon.	1	Tablespoon
5 gallon.	2	Tablespoons
15 gallon	6	Tablespoons (3 oz.)
1 cubic y	rard1	lb.

### For Contractors & Professionals

1lb of Nutra-Gel per cubic yard

Spade Size Width / Soil	Nutra Gel
42" / 0.25 cubic yards	0.25 lbs.
67" / 1.5 cubic yards	1.5 lbs.
90" / 3.5 cubic yards	3.5 lbs.
1,000 square feet	2 to 4 lbs
10,000 square feet	20 to 40 lbs
2 Cubic ft. potting soil bag	2 Tablespoons

### Alfalfa Blend™ 5-8-8

**ALFALFA BLEND™** is specially formulated for alfalfa and nitrogen fixing plants. Yield, relative feed value (RFV), protein and fiber content and other valuable components are important for alfalfa crops. ALFALFA BLEND™ is a foliar fertilizer with a balanced phosphorus, potassium and nitrogen content containing high levels of trace nutrients, iron, copper, boron, molybdenum and cobalt. It is an ideal product to enhance plant growth and development.

### Other Benefits of ALFALFA BLEND™

- Potassium is required in high amounts for its many functions in plants. Over 40 enzymes require it for their activity. In addition, potassium is essential for the control of the stomata and thus is important in maintaining turgidity of plants and photosynthetic activity. Potassium is present in the readily usable organic acid form.
- Nitrogen is required for the over-all growth and development of the plant. Important components such as amino acids, proteins, nucleic acids, etc., all contain nitrogen.
- Phosphorus is readily absorbed by the plant cells and is required for energy processes in the cells of plants.
- Molybdenum, Iron, Copper and Boron are contained in this product, which are all essential for good plant growth and development.
- Molybdenum is required for the conversion of nitrates to amino acids and protein. Molybdenum is essential for nitrogen fixation that occurs in plants such as alfalfa or microorganisms.
- Boron is required for hormone maintenance and carbohydrate conversion or translocation.
- Iron is essential for chlorophyll formation. Iron is also required by the plant for many metabolic roles including
  nitrate reduction, nitrogen fixation and photosynthesis. Iron is an activator and component for many enzymes
  that control plant growth.
- ALFALFA BLEND™ is recommended to be applied at any cycle of growing season, before first crop cutting (when sufficient leaves are present.) to enhance the yield and the RFV/protein of the crop.

### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**ALFALFA:** Apply 4 - 6 quarts of Alfalfa Blend at early stages of growth and after each cutting.

FIELD AND VEGETABLE CROPS: Apply 1 - 4 quarts per acre.

**GRAIN CROPS:** Apply 1 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1 - 4 quarts per acre with irrigation water Use check valve to prevent back flow into water system

**GUARANTEED ANALYSIS** 

Total Nitrogen (N)......5.0%

Available Phosphate (P<sub>2</sub>O<sub>5</sub>).....8.0%

Copper (Cu) ......0.1%

Molybdenum (Mo) ......0.02%

2.3% Ammoniacal Nitrogen

0.9% Nitrate Nitrogen

0.1% water soluble boron (B)

0.5% water soluble iron (Fe)

0.1% water soluble copper (Cu)

0.02% water soluble molybdenum (Mo)

1.8% Urea Nitrogen

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

## **Calphos**<sup>™</sup>

**Calphos™** is a unique product like no other. Through the innovation of our research team, Baicor® has been able to produce a product with high amounts of Calcium and Phosphorus that remain in solution. Calcium is primarily taken up through the root tips in the soil. In times of peak calcium demand, the plant may not be able to satisfy its needs by root uptake. This results in internal brown spot for potatoes, blossom end rot in tomatoes, bitter pit in apples etc. Foliar addition of calcium assures

adequate nutrients for membranes, cell wall development and plant structure.

### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	7.0%
0.4% Ammoniacal Nitrogen	
5.3% Nitrate Nitrogen	
1.3% Urea Nitrogen	
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	2.8%
Calcium (Ca)	
6.0% water soluble calcium (Ca)	

#### Benefits of Calcium

Essential for cell wall formation and structure, necessary for development of firm fruit and vegetables.

- Regulates nutrient uptake by roots throughout the entire plant. Helps grain and seed development.
- Essential for early and new root growth, enhances pollen germination.
- Necessary for protein and sugar transfer throughout the plant.
- Stronger cell walls helps resist disease and stress conditions.

### Benefits of Phosphorus

- Phosphorus can be quickly absorbed by the tissue and is very effective when applied as a foliar.
- The highest distribution of phosphorus within the plant is in the cell plasma and it is a key ingredient in the many energy requiring reactions in the plant.
- Plants with high level of phosphorus have increased tolerance to many stress conditions. Good phosphorus
  levels also help turf grass recover from stress or injury more rapidly. There are also some indications by
  researchers that P plays a key role in reducing disease infections.

### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration 2 qts/acre
Beginning Deficiency 3 qts/acre
Severe Deficiency 4 qts/acre

### High Phos™ 8-25-3

**HIGH PHOS™** is a unique source of high phosphorus with potassium and chelated iron designed for use in the soil. It is meant to be added to the soil through the drip line, sprinkle irrigation or banding near the plant as a supplement to complete soil nutrition.

Phosphorus is required in high levels to supply the many energy requiring reactions in the metabolism of the plant. The polyphosphate is readily converted into usable forms and is soluble in the soil solution for uptake into the plant.

The balanced formulation of essential nutrients contains organic and amino acids to stabilize the nutrients and facilitate their chelation, uptake, translocation and use.

### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	8.0%
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	25.0%
Soluble Potash (K <sub>2</sub> O)	
Sulfur (S)	1.0%
Iron (Fe)	0.04%
0.04% water soluble iron (Fe)	
Manganese (Mn)	0.01%
0.01% water soluble manganese (Mn)	
Zinc (Zn)	0.01%
0.01% water soluble zinc (Zn)	



### **Soil Application Rates**

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Best results are obtained when High Phos is applied to the root zone.

Maintenance Concentration Beginning Deficiency Severe Deficiency

### Micro-Mix™

MICRO-MIX™ is a high zinc trace nutrient fertilizer that contains complexed zinc, iron, manganese and boron to satisfy the needs of your plants for essential micro-nutrients. The micro-nutrients are completely complexed and contain a base of natural organic and amino acids, which are readily biodegradable, and supply energy to the plant.

MICRO-MIX™ is an excellent product to be used as a starter fertilizer or in banding applications. It is an essential foliar for effective micro-nutrient uptake. MICRO-MIX™ may be mixed with 10-34 at proper dilutions (jar test is recommended when mixing with 10-34). The organic acids, amino acids and carbohydrates make this an excellent general purpose foliar/soil product when more than one trace element nutrient is deficient.

### **GUARANTEED ANALYSIS**

Magnesium (Mg)	0.50%
0.50% water soluble magnesium (Mg)	
Boron (B)	0.1%
0.1% water soluble boron (B)	
Iron (Fe)	0.7%
0.7% water soluble iron (Fe)	
Manganese (Mn)	1.2%
1.2% water soluble manganese (mn)	
Zinc (Zn)	3.0%
3.0% water soluble zinc (Zn)	

#### Other Benefits of MICRO-MIX™

- MICRO-MIX<sup>™</sup> is designed to provide effective uptake, translocation and utilization to the growth site.
- Nutrients are quickly absorbed by the plant for a fast response.



### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 per acre.

**SPRINKLER IRRIGATION:** Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

# 2-9-5 + Micronutrients

**2-9-5** is a complete low nitrogen nutrient package that is a balanced and truly chelated fertilizer for effective nutrient uptake.

2-9-5 is specially formulated to be used as a starter or in banding for soil applications. It is also an effective foliar fertilizer during the crop growing season. It can also be applied with drip line irrigation systems and fertigation/injector, pivot and line systems.

#### Benefits of 2-9-5

- Highly efficient 2-9-5 contains high levels of readily available phosphorus for plant's cells and is rapidly absorbed by the plant. Phosphorus is a key ingredient in the photosynthetic process needed for growth and development. Phosphorus is required for energy processes in the cells of plants.
- Contains a unique proprietary combination of plantbased amino acids, organic acids and complex carbohydrates, which are found naturally in plants and soil.
   These are also used as a food source by both plants and micro-organisms for energy.
- Contains secondary nutrient (Magnesium) and a full range of micro-nutrients (Iron, Zinc, Manganese, Copper and Boron) which are 100% chelated to alleviate most deficiencies. For example, the Iron Chelate in 2-9-5 is many times more effective than non-chelated products.
- Compatible with most fertilizers, herbicides and pesticides available on the market today, however a jar test is recommended.

## Application Rates

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 4 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 - 4 quarts per acre.

### **GUARANTEED ANALYSIS**

П		
	Total Nitrogen (N)2.04 1.5% Ammoniacal Nitrogen 0.5% Urea Nitrogen	%
ı	Available Phosphate (P2O5)9.0	%
ı	Soluble Potash (K <sub>2</sub> O)	
	Magnesium (Mg)	
ı	0.5% water soluble magnesium (Mg)	
ı	Boron (B)	5%
ı	0.05% water soluble boron (B)	
ı	Copper (Cu)0.05	5%
١	0.05% water soluble copper (Cu)	
Į	Iron (Fe)	%
ĺ	0.5% water soluble iron (Fe)	
ı	Manganese (Mn)0.4	%
ı	0.4% water soluble manganese (Mn)	
ı	Zinc (Zn)0.66	%
ı	0.6% water soluble zinc (Zn)	
•		

GRAIN CROPS: Apply 1 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

# Gold Star<sup>™</sup> 10-9-5 + Micronutrients

**Gold Star™ 10-9-5** is a specialized balanced nutrient package that is a truly chelated fertilizer for effective nutrient uptake.

Gold Star™ is specially formulated to be used as a starter or in banding for soil applications as well as an effective foliar fertilizer during the crop growing season. It can also be applied with drip line irrigation systems and fertigation/injector, pivot and line systems. This product works great for greenhouse purposes.

### Benefits of Gold Star™ 10-9-5

• Contains a unique proprietary combination of plant-based amino acids, organic acids and complex carbohydrates, which are found naturally in plants and soil. These are also used as a food source by both plants and micro-organisms for energy. Gold Star™ also contains the secondary nutrient (Magnesium) and a full range of micro-nutrients (Iron, Zinc, Manganese, Copper and Boron) which are 100% chelated to alleviate most deficiencies.

### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	10.0%
2.2% Ammoniacal Nitrogen	
0.6% Nitrate Nitrogen	
7.2% Urea Nitrogen	
Available Phosphate (P2O5)	9.0%
Soluble Potash (K <sub>2</sub> O)	5.0%
Magnesium (Mg)	0.5%
0.5% water soluble magnesium (Mg)	
Boron (B)	0.05%
0.05% water soluble boron (B)	
Copper (Cu)	0.05%
0.05% water soluble copper (Cu)	
Iron (Fe)	0.5%
0.5% water soluble iron (Fe)	
Manganese (Mn)	0.4%
0.4% water soluble manganese (Mn)	
Zinc (Zn)	0.6%
0.6% water soluble zinc (Zn)	

- Highly efficient Gold Star™ contains high levels of readily available phosphorus for the plant's cells and is rapidly
  absorbed by the plant. Phosphorus is a key ingredient in the photosynthetic process needed for plant growth
  and development. Phosphorus is required for energy processes in the cells of plants.
- Compatible with most fertilizers, herbicides and pesticides available on the market today, however a jar test is recommended.

### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

GRAIN CROPS: Apply 0.5 - 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 per acre.

**SPRINKLER IRRIGATION:** Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

# Foliar Friend "Sticker / Spreader"

**FOLIAR FRIEND™** is an organic surfactant (wetting agent) that helps fertilizers and other products penetrate deep into the leaves of plants to increase their effectiveness.

It is a special formulation of natural organic materials that act as a surfactant, wetting agent and penetrant. (Decreases the drop size, spreads liquid on the leaf of the plant.)

### **GUARANTEED ANALYSIS**

Active Ingredients: ......................2.0% Saponin

FOLIAR FRIEND™ also helps to open up the soil and increase penetration.

FOLIAR FRIEND™ enhances performance and uptake of nutrients, herbicides and pesticides by assisting in penetration through the waxy cuticles of leaves!



### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING

**AERIAL APPLICATIONS:** Use at least 1000 parts water (1 pint / 125 gallons) per acre to 1 part of BAICOR fertilizer. Add at least 400 - 800 volumes of water before other additives are introduced.

**FOLIAR APPLICATIONS:** Add 16 ounces of Foliar Friend\*\* (1 pint) per 125 gallons of water (0.4 liters per 400 liters) per acre. When mixing, add at least 100 volumes of water before other additives are introduced.

**FRUIT, NUT & VINE CROPS:** Add 16 ounces of Foliar Friend™ (1 pint) per 125 gallons of water (0.4 liter per 400 liters) per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

**ROW CROPS:** Add 16 ounces of Foliar Friend™ (1 pint) per 125 gallons of water (0.4 liter per 400 liters) per acre. When mixing, add at least 100 volumes of water before other additives are introduced.

**SPRINKLER IRRIGATION:** Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use 1 - 4 quarts per 100 gallons of water per acre. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

### Starter™ 2-2-4

Crops respond well to optimum levels of fertilization both in terms of yield and quality. In addition to soil and plant analysis, fertilizer rates are dependent on a number of factors, such as time of harvest, variety, plant population, and previous crop. Soil tests, plant tissue analysis and observations of visual deficiency symptoms are important diagnostic tools when problems with micronutrients are suspected.

Starter has been formulated to mix with a Mark-Out blend. When applied in the soil it will generally aid in the uptake of nutrients for the plant.

In addition to your fertilizer program, Baicor® suggests a nutritional supplementation program for Potatoes, Vegetables and other crops as follows:

**1** Use Starter in combination with Mark-Out Fertilizers. Mark-Out application rates should be based on soil test recommendations. Use Mark-Out or side dressing next to the tuber/seed, the product should not come in contact with the tuber or seed.

### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	2.0%
0.30% Ammoniacal Nitrogen	
0.20% Nitrate Nitrogen	
1.50% Urea Nitrogen	
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	2.0%
Soluble Potash (K <sub>2</sub> O)	4.0%
Boron (B)	
0.002% water soluble boron (B)	
Cobalt	0.002%
0.002% water soluble cobalt	
Iron (Fe)	0.2%
0.2% water soluble iron (Fe)	
Manganese (Mn)	0.3%
0.3% water soluble manganese (Mn)	
Molybdenum (Mo)	0.002%
0.002% water soluble molybdenum (Mo)	
Zinc (Zn)	0.8%
0.8% water soluble zinc (Zn)	

**2** Pre-plant with Liquid Fertilizers and/or Fungicides: Add 1 to 1.5 gallons Starter per acre and apply in the soil.

Use a jar test for fertilizer compatibility.

### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 2 gallons per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 qt - 1 gallon per acre.

GRAIN CROPS: Apply 1 qt - 1 gallon per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 qt - 1 gallon per acre.

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency 1 - 2 qts/acre 2 qts/acre - 1 gal/acre 1 - 1.5 gal/acre

### **BAICOR Chelates**

### NOT ALL CHELATES ARE CREATED EQUAL

The main reason our chelates are preferred over other forms of fertilizer is the effectiveness, compatibility and stability in mixing with other nutrients and products. They protect the nutrient from falling out (precipitating) and assists in the plant uptake and translocation.

The organic chelates have a high stability constant, are bio-degradable and can be used by the plant as an energy source. Chelates are in the most available form for immediate use for plant growth, translocation and development. Chelates may be combined directly with nitrogen, phosphate and potassium, and will remain in a true solution.

### **COPPER CHELATE 5.0%**

Crucial for photosynthesis, respiration, seed, chlorophyll formation, amino acid conversion and zinc uptake.

1 U.S. Gallon • Net Weight 10.26 lbs.

3.78 Liters • 4.66 Kg. • Specific Gravity 1.23 • pH: 1.3

### GUARANTEED ANALYSIS

Copper (Cu) ......5.0% 5.0% water soluble copper (Cu)

### **IRON CHELATE 5.0%**

Essential for chlorophyll formation.

Catalyzes many enzymatic reactions essential for respiration and photosynthesis.

1 U.S. Gallon • Net Weight 11.18 lbs.

3.78 Liters • 5.08 Kg. • Specific Gravity 1.34 • pH: 2.7

### **GUARANTEED ANALYSIS**

Iron (Fe)......5.0% 5.0% water soluble iron (Fe)

#### **MAGNESIUM CHELATE 5.0%**

Aids phosphorus use in energy transformation, seed germination, nitrogen metabolism, chlorophyll formation and growth.

1 U.S. Gallon • Net Weight 10.26 lbs.

3.78 Liters • 4.66 Kg. • Specific Gravity 1.23 • pH: 0.6

### **GUARANTEED ANALYSIS**

### **MANGANESE CHELATE 5.0%**

Aids nitrogen utilization, phosphorous and magnesium uptake.

Serves as an activator for enzymes.

1 U.S. Gallon • Net Weight 10.43 lbs.

3.78 Liters • 4.74 Kg. • Specific Gravity 1.25 • pH: 1.4

### **GUARANTEED ANALYSIS**

Manganese (Mn).....5.0% 5.0% water soluble manganese (Mn)

### Zinc Chelate 5%

**ZINC CHELATE™** is chelated with organic and amino acids. It is an excellent soil and foliar fertilizer which helps to prevent and relieve zinc deficiencies. The mixture of organic and amino acids and selected carbohydrates facilitate its entry into the plant and utilization when used as a foliar or in the soil. This product is readily absorbed by the plant, translocated to various tissues and metabolized for optimum growth and development.

### **GUARANTEED ANALYSIS**

Zinc (Zn) 5.0% water soluble zinc (Zn) 5.0%

ZINC CHELATE™ may be combined directly with other Baicor fertilizers and will remain in solution. All plants require 13 essential nutrients in addition to carbon dioxide, water and light. If any one of the nutrients is missing or deficient, the plant will not complete its normal life cycle. Zinc is required in high micro-levels by plants for maintaining enzymatic activity and auxin levels. It is involved in the production and use of growth regulators as well as making enzymes function correctly. A deficiency of zinc greatly reduces plant growth and quality of crops such as potatoes, sugar beets and wheat. ZINC CHELATE™ has been tested against other well known competitor products in independent studies and has been shown to have significantly greater uptake and accumulation.

#### Benefits of ZINC CHELATE™

- Increases leaf and fruit size & quality
- Helps calcium translocation
- Essential in uniform seed formation
- Enzyme activator
- Essential for transformation of carbohydrates and helps regulate consumption of sugars to promote plant growth

### **Deficiency Symptoms:**

- Zinc deficiency is found in the new growth of the plant.
- Abnormal leaf size (small) and shape occur. Reduced chlorophyll, usually recognized by chlorotic rosette appearance or yellowed areas in new leaves.
- Reduced set, fruit development and size. Deficiencies will lower crop yield and quality.

### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

### Calcium Chelate 5%

**CALCIUM CHELATE 5.0%** is chelated with organic and amino acids. It has a stability constant high enough to be mixed with phosphorus and remain in true solution. The mixture of organic and amino acids, and selected carbohydrates facilitate its entry into the plant and utilization when used as a foliar or in the soil. This product is readily absorbed by the plant, translocated to various tissues and metabolized for optimum plant growth and development.

### **GUARANTEED ANALYSIS**

**Calcium** is taken up through the root tips in the soil. In times of calcium demand the plant may not be able to satisfy its needs by root uptake. This results in internal brown spot for potatoes, blossom end rot in tomatoes, etc. Foliar addition of calcium assures adequate nutrients for membranes, cell wall development and plant structure.

#### **Benefits of CALCIUM CHELATE 5.0%**

- Essential for cell wall formation, structure, and development, necessary for development of firm fruit and vegetables.
- Regulates nutrient uptake by roots throughout the entire plant, helps grain and seed development.
- Essential for early root growth, new root growth and enhances pollen germination.
- Necessary for protein and sugar transfer throughout the plant.
- Essential for stronger cell walls helps resist disease and stress conditions.

#### **Deficiency Symptoms:**

- Death of growing parts (terminal buds & root tips), poor root development, yellowing of tissue, brittleness of leaf and stem tissue, fruit and vegetable disorders, premature shedding of blossoms and buds.
- The apical (new growth) of plants (roots, leaves and buds) is stunted and even die back of new growth.
   Abnormalities such as blossom end rot of tomato fruit, loss of cellular structure in apples (bitter-pit) and hollow heart of potatoes may occur.

### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

FRUIT, NUT & VINE CROPS: Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. NOTE: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

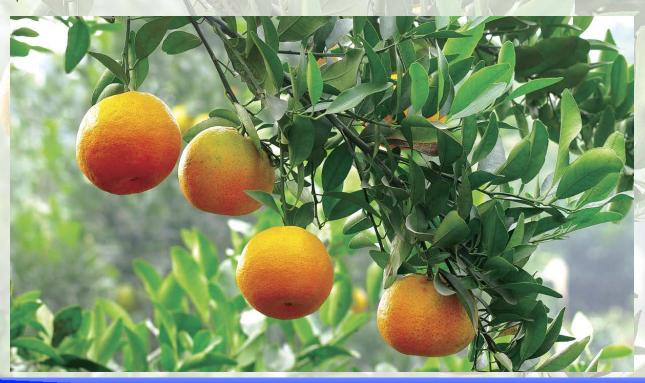
## Calcium + Boron

A blend of **Calcium** and **Boron** complexed with organic acids, amino acids and carbohydrates designed to provide these nutrients to the plant by foliar, soil, and banding. Calcium and Boron often work together in preventing blossom end rot, potato tuber problems etc. Readily taken up by the plant and utilized.

Calcium is essential for the structural strength of plants and assists in the uptake of nutrients into sites where they are required.

### **GUARANTEED ANALYSIS**

Calcium (Ca)	5.0%
5.0% water soluble calcium (Ca)	
Boron (B)	1.0%
1.0% water soluble boron (B)	



### **Application Rates**

### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

licensed consultant for recommendations

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency

## **BAICOR Complexes**

Complexes are not 100% chelated products and are not meant to be mixed with phosphorus in general. Some companies consider and sell their complexes as chelated which is misleading; **we want you to know the difference.** 

Our complexes are extremely effective. We use natural organic and amino acids and carbohydrates to help in greater translocation and uptake for the plant. **The nutrients are generally higher in percentage and are less costly as well.** 

### COMPLEXED ZINC 13%

- Increases leaf and fruit size & quality
- Helps calcium translocation
- Essential in uniform seed formation

1 U.S. Gallon • Net Weight 11.93 lbs. 3.78 Liters • 5.42 Kg. Specific Gravity 1.43 • pH: 3.6

### COMPLEXED POTASSIUM 1-0-10 & 1-0-23

- Maintains turgor in cells, improves color in fruits
- Necessary for formation of sugars and many enzymatic reactions.

1 U.S. Gallon • Net Weight 9.68 & 10.76 lbs. 3.78 Liters • 4.39 & 4.75 Kg. Specific Gravity 1.16 & 129 • pH: 5.9 & 7.4

### COMPLEXED PHOSPHOROUS 3-12-0

- Promotes root flower and seed development
- Energy transformation and storage
- Formation of RNA and DNA

1 U.S. Gallon • Net Weight 9.34 lbs. 3.78 Liters • 4.24 Kg. • Specific Gravity 1.12 • pH: 3.5

### COMPLEXED IRON 5.0%

- Essential for chlorophyll formation
- Catalyzes many enzymatic reactions essential for respiration and photosynthesis

1 U.S. Gallon • Net Weight 10.09 lbs. 3.78 Liters • 4.58 Kg. • Specific Gravity 1.21 • pH: 1.9

### **COMPLEXED MANGANESE 10.0%**

- Aids nitrogen utilization, phosphorous and magnesium uptake
- Serves as an activator for enzymes

1 U.S. Gallon • Net Weight 11.68 lbs. 3.78 Liters • 5.30 Kg. • Specific Gravity 1.40 • pH; 2.3

Each of these products contains an organic base. The complexed metals are in the available form for immediate use for plant growth and development. The natural organic base is fully biodegradable providing energy for cellular metabolism.



## **BAICOR Complexes**

### **COMPLEXED CALCIUM 12.0%**

### Regulates nutrients uptake by roots to the entire plant

 Maintains cell wall development for firmer fruits and vegetables

1 U.S. Gallon • Net Weight 11.41 lbs. 3.78 Liters • 5.18 Kg. • Specific Gravity 1.37 • pH: 5.2

### COMPLEXED CALCIUM A+ 10-0-0 12%

1 U.S. Gallon • Net Weight 12.43 lbs. 3.78 Liters • 5.65 Kg. • Specific Gravity 1.49 • pH: .43

### **COMPLEXED MOLYBDENUM 3.0%**

Conversion of nitrate to amino acids, essential for nitrogen fixation

1 U.S. Gallon • Net Weight 9.01 lbs. 3.78 Liters • 4.09 Kg. • Specific Gravity 1.08 • pH: 6.1

### **COMPLEXED COBALT 3.0%**

 Part of vitamin B12 and essential for nitrogen fixation

1 U.S. Gallon • Net Weight 9.09 lbs. 3.78 Liters • 4.13 Kg. Specific Gravity 1.09 • pH: 4.5

### **COMPLEXED BORON 3.0%**

- Assists calcium & sugar uptake
- Important for early growth, flowering and fruit set

1 U.S. Gallon • Net Weight 9.26 lbs. 3.78 Liters • 4.20 Kg. • Specific Gravity 1.11 • pH: 7

Each of these products contains an organic base. The complexed metals are in the available form for immediate use for plant growth and development. The natural organic base is fully biodegradable providing energy for cellular metabolism.



## Complexed Silicon 3.0%

Silicon is an essential mineral element for some plants and is beneficial for all higher plants. It can function as an essential trace element in metabolic roles and also accumulate in large quantities in certain tissues, cells and cellular components to enhance physical attributes of plants. Silicon may provide mechanical protection in the epidermal root cells acting as a

### **GUARANTEED ANALYSIS**

Silicon (Si) ......3.0%

barrier against pathogen and parasitic invasion. Silicon associates with calcium and pectin in the intercellular wall spaces in the roots providing rigidity and protecting against lodging so important in small grains. This also provides rigidity of leaves improving photosynthetic activity. It reinforces the walls of the vessel cells in the xylem, preventing compression under conditions of high transpiration thus improving sap circulation.

In trace amounts silicon forms silicon – enzyme complexes which function in metabolic roles in photosynthesis and respiratory processes. It has important roles in the formation of new leaves, pollination, fruit formation and fruit storage. Especially in rice and sugarcane significant yield increases have been shown by the addition of silicon.

Baicor silicon 3% has added natural components including amino acids and Ascophyllum nodosum enhancing uptake, translocation and effectiveness. It also provides elicitor and positive growth regulation.

Summary of Beneficial effects of Baicor's phyto plus Silicon 3%

### **Physical Action**

- Reduced water loss due to cuticular processes.
- Resistance to fungal attack.
- Increased resistance to lodging and pest.
- Structure rigidity.

### Metabolic & Physiological Roles

- Elicitor action against stresses.
- Enzyme Si complexes that enhances photosynthetic and respiratory processes.
- Leaf formation.
- Pollination and fruit set.
- Increased fruit quality and storage.
- Reduces leaching of phosphorus in sandy soil.
- Plant tolerance to high levels of Mn and Fe.

### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR Fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 quarts per acre.

**SPRINKLER IRRIGATION:** Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration 1 qts/acre
Beginning Deficiency 2 qts/acre
Severe Deficiency 3 qts/acre

### Sulfur 22%

**SULFUR** is a component of essential amino acids and proteins in the plant. It provides the sulfur for amino acids and other compounds that are necessary for many reactions that occur in plant metabolism that increase normal growth and development. Sulfur helps to make nitrogen utilization more efficient. It is also a component that gives certain food crops a distinctive flavor and aroma.

### **GUARANTEED ANALYSIS**

Total Nitrogen (N)11.0%
10.0% Ammoniacal Nitrogen
1.0% Urea Nitrogen
Sulfur (S)22.0%

Organic and amino acids are added to make this product more effective as a sulfur source.

Sulfur is required in high amounts by plants and this complexed sulfur is soluble and available for immediate use.

#### COMPLEXED SULFUR 11-0-0 22.0%

- Promotes growth and maturity
- Flavor component
- Makes nitrogen more efficient
- Amino acid component



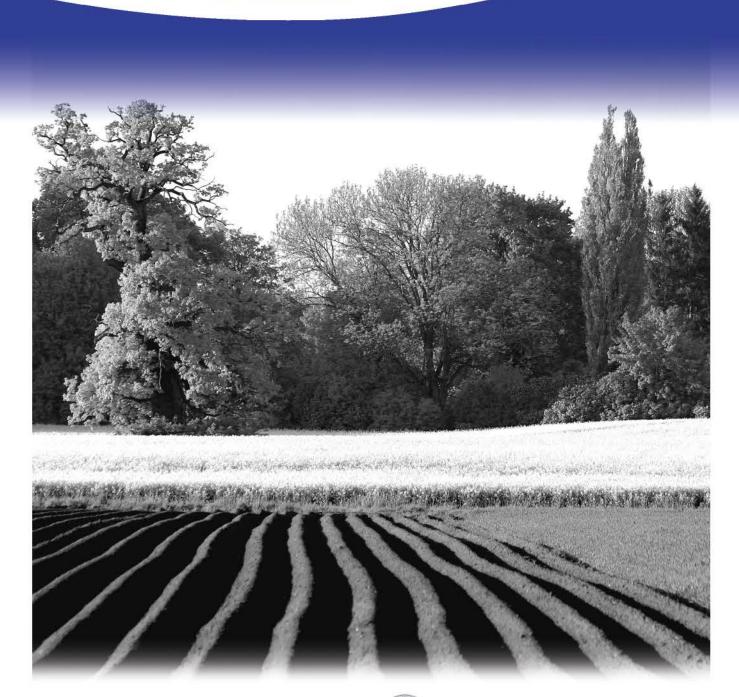
### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**SPRINKLER IRRIGATION:** Apply 1 – 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration Beginning Deficiency Severe Deficiency





P.O. Box 725 • Logan, Utah 84323 P: 435.752.2475 • F: 435.752.8336 www.baicor.com





