

# Ultra-Precision™





What Is Ultra-Precision™?



# HUMA GRO® IMPROVES CROP YIELD APPLYING MUCH LESS FERTILIZER



## • BACKGROUND:

- Greenhouse pepper crop (2x2000 m2).

HUMA GRO	Total Lts
Super Potassium®	23
Super Nitro®	6
Super Phos®	10
Max Pak®	6

STANDARD	Total Kg
Potass Nit.	60
Ammonium Nit.	60
Phos Acid	35
Micros	20
20-5-20	50
25-5-5	25
15-5-30	25
Algae Extract	5

	N	P	K	Euros (€)
HUMA GRO®	12	90	157	353
STANDARD	47	23	46	406
			Savings	15%

	Tradicional		Huma Gro®	
Fecha	28/07/2014	Fruto de buena calidad, color y forma	Fecha	29/07/2014
Kg	2.800		Kg	3.200
Kg/m <sup>2</sup>	1,27		Kg/m <sup>2</sup>	1,39

**10% more production**  
**15% savings**  
**280 kg vs. 45 liters HG**





	Daily input in:			330
	A	B	Acids	Unit
SUPER NITRO® (30-0-0)		25.41		L
SULFUR (8-0-0+10s)	0.00			L
PHOS-MAX™ (0-50-0)		1.37		L
SUPER K™ (0-0-40 )		7.08		L
CALCIUM (8-0-0+10 Ca)	27.67			L
44 MAG® (0-0-0+5Mg+5.5S)	15.44			L
IRON (12-0-0 +4S+6Fe)	7.12			L
MANGANESE (5Mn+2.5S)	3.53			L
Z MAX® (8ZN+5S+2Mn+0.5Cu)	1.16			L
COPPER (4S + 5%Cu)	0.00			L
BORON (5B)	0.13			L
COMOL (0-5-0+1Co+3Mo)	0.17			L
HNO3	0.00		42.85	L
	55.21	33.86	42.85	

L/Day	89.08
LITERS/MONTH	1781.54



## Conventional Fertilizer

	Daily input in:			330
	A	B	Acids	Unit
Calcium Nitrate 26% CaO	206	0	0	k
Fe-EDDHA 6%	11438	0	0	g
Mn-EDTA 13%	0	3797	0	g
Zn-EDTA 15%	0	1418	0	g
Cu-EDTA 15%	0	825	0	g
Potassium Nitrate 46% K2O	27	110	0	k
Magnesium Sulphate 16% MgO	0	128	0	k
Borax 11.3%	0	105	0	g
Ammonium Molybdate 56.5%	0	293	0	g
Nitric Acid 68%	0.00	0.00	42.9	l
URFOS 44% P2O5 + 17% N	0	32	0	k
	244.44	244.47	59.99	k/l

K/DAY	488.91
KILOGRAMS/MONTH	9778.16





*K product/Ha/day*

Calcium Nitrate	10.80
Fe-EDDHA	0.57
Potassium Nitrate	3.04
Ammonium	
Molybdate	0.01



*K product/Ha/day*

Nitric Acid	1.19
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BIO HUMA NETIC  
yurakuma

*K product/Ha/day*

Mn-EDTA	0.26
Zn-EDTA	0.13
Cu-EDTA	0.11
Potassium Nitrate	3.04
Monopotassium Phosphate	2.37
Magnesium Sulphate	10.28
Borax	0.07

*L product/Ha/day*

CALCIUM	> 1,0	1.58
COMOL	1.5	0.01
SULFUR	1.6	0.00
IRON	2.5 - 30.5	0.22
Z MAX	2.5 - 3.5	0.19
COPPER	2.8	0.00
MANGANESE	3.5 - 4.5	0.07
44 MAG	5.0 - 5.5	0.66
BORON	6.5 - 7.5	0.05



*L product/Ha/day*

PHOS MAX	< 1.5	0.24
SUPER NITRO	7.5 - 8.0	1.58
SUPER K	12.5 - 13.5	0.42
NITRIC ACID	< 1.5	1.19

+ BHN WORLD CONFERENCE 2018











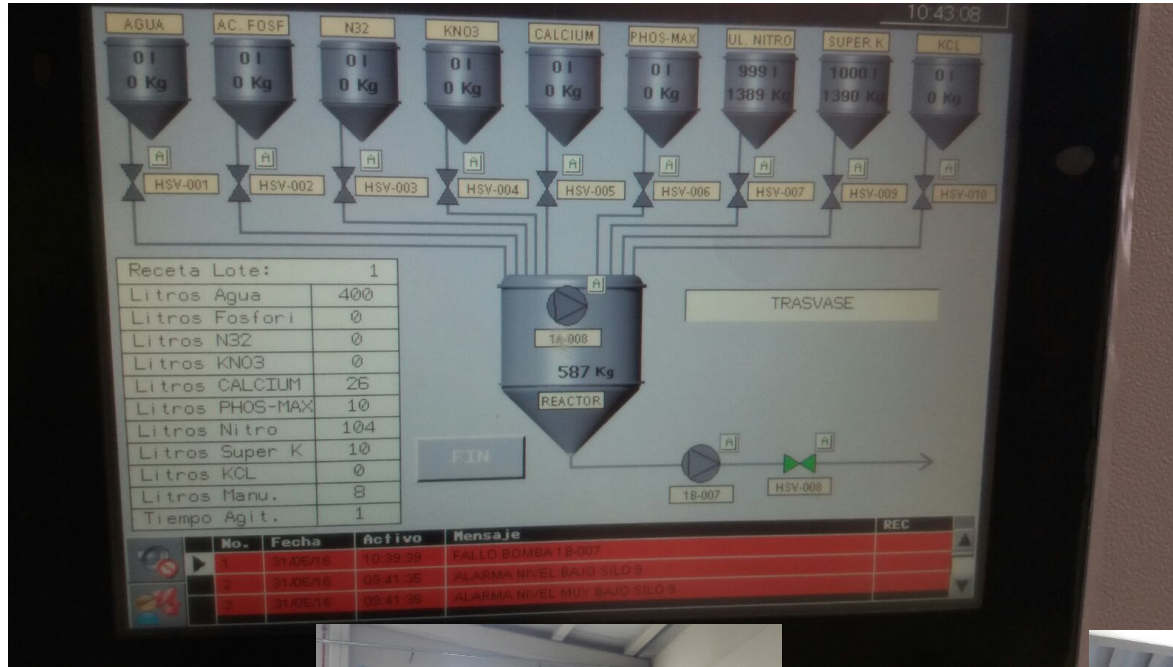
## PRODUCT pH (Acidic to Basic)

CALCIUM	≤ 1.0	Z-MAX®	4.0–5.0
SUPER PHOS® (PHOS-MAX™)	≤ 1.0	ZAP®	4.0–5.0
GOLDEN PRO®	≤ 1.0	PROUD 3®	4.5–5.5
C-PHOS™	≤ 1.0	FERTIL HUMUS®	5.0–6.0
SULFUR	1.0–1.5	PROMAX®	5.5–6.5
D-FEND®	1.0–2.0	AN-MAX™	6.0–7.0
NICKEL	1.0–2.0	ENCAPSALT®	6.0–7.0
ACTIVOL®	1.0–2.0	KLEENUP™	6.5–6.7
COMOL™	1.0–2.0	2-16-16™	6.5–7.5
MAX PAK®	1.1–2.0	38 SPECIAL®	6.5–7.5
MANGANESE	1.5–2.0	SUPER NITRO®	7.0–8.5
FULVI PRO®	1.5–2.5	START-L™	7.5–8.5
44-MAG®	1.5–2.5	BORO-PRO®	7.6–8.6
BREAKOUT®	1.5–2.5	BUFFER K®	8.0–9.0
VITOL® II	1.5–2.5	HUMA PRO®	8.0–9.0
VITOL®	1.5–2.5	FERTIL SOIL®	8.0–9.0
IRO-MAX®	1.5–2.5	X-TEND®	8.0–9.0
CROP-GARD®	1.6–2.6	X-TEND® B	8.25–9.25
COPPER	2.0–3.0	MOLYBDENUM	8.5–9.5
COBALT	2.5–3.5	SILI-MAX®	11.0–12.0
PUR CAL™	2.5–3.5	SIL-K®	≥ 14.0
LUCKY 7®	3.5–4.5	JACKPOT® (YIELD-MAX™)	≥ 14.0
SURF-MAX®	4.0–5.0	SUPER POTASSIUM®	≥ 14.0





# Ultra-Precision™ - Modern Day Origin



ULTRA-  
PRECISION

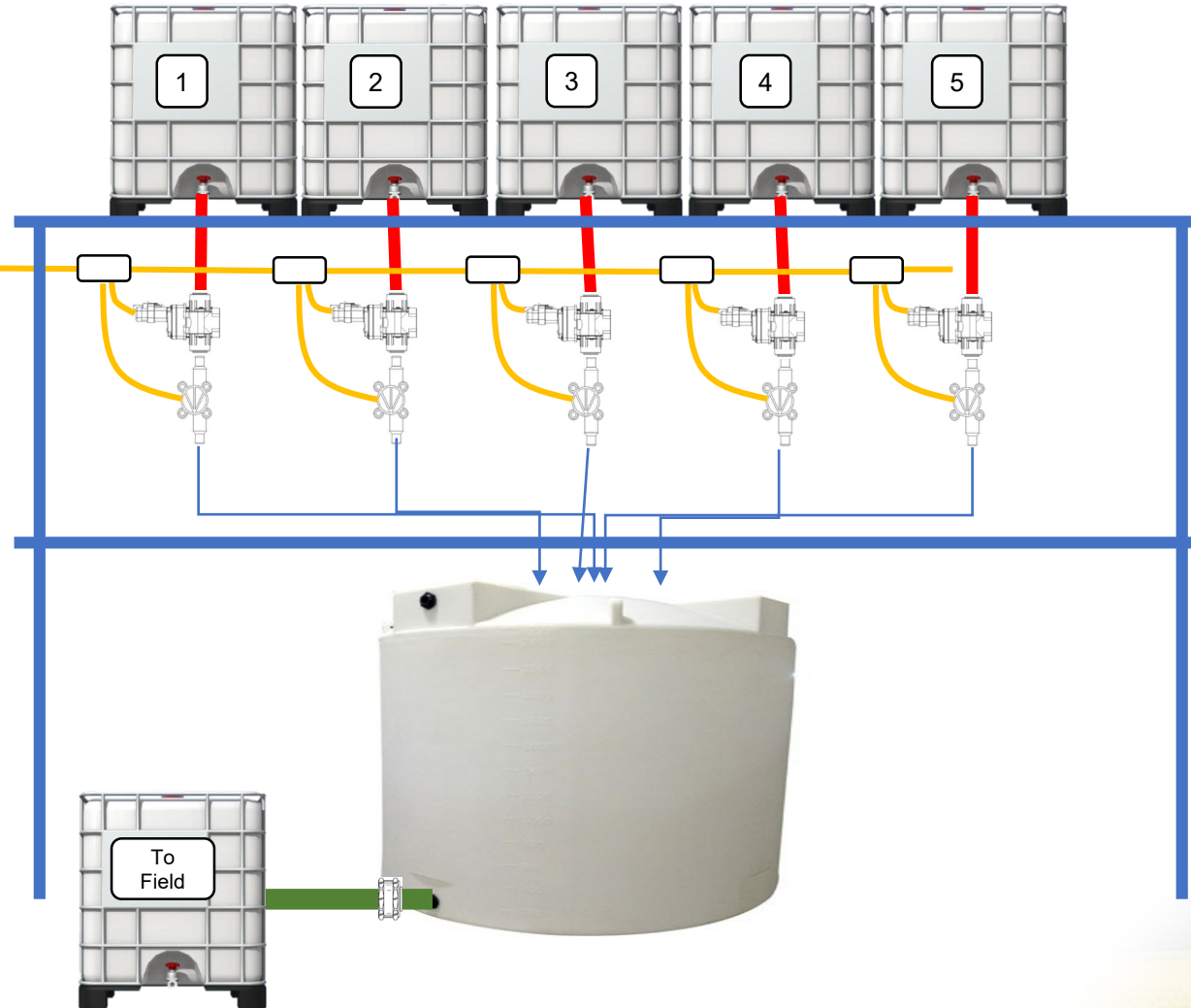




# Ultra Precision-Blending™ Plant-Concept

Tote 1: 250 oz.  
Tote 2: 800 oz.  
Tote 3: 250 oz.  
Tote 4: 300 oz.  
Tote 5: 400 oz.

Controller



Custom Products For Specific:

- CROP
- SOIL
- WATER
- GROWTH STAGE
- NUTRIENT DEMANDS
- KEY CHALLENGES





**ULTRA-PRECISION™**  
**— BLENDING —**







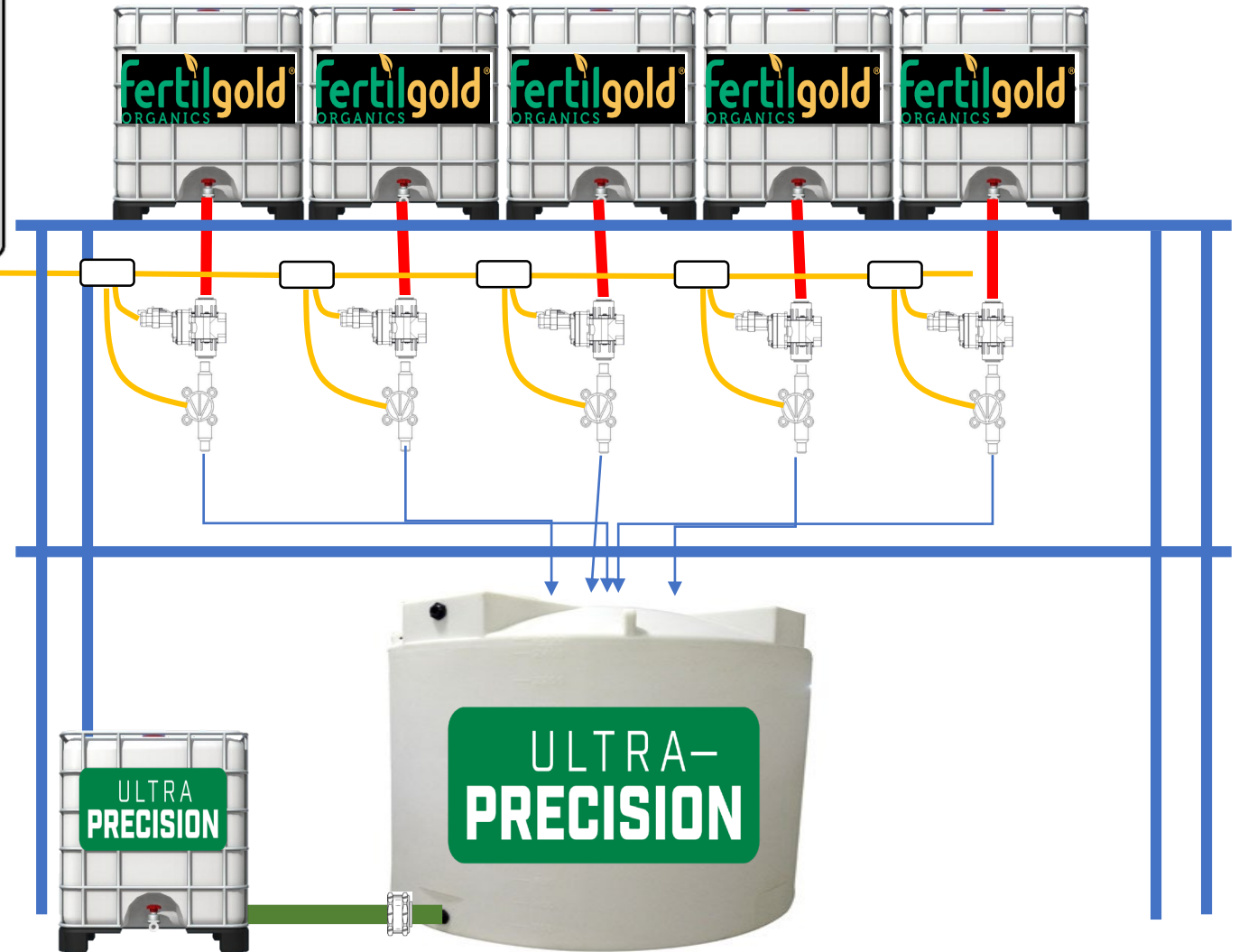
# ULTRA-PRECISION™ Integration

## Purpose:

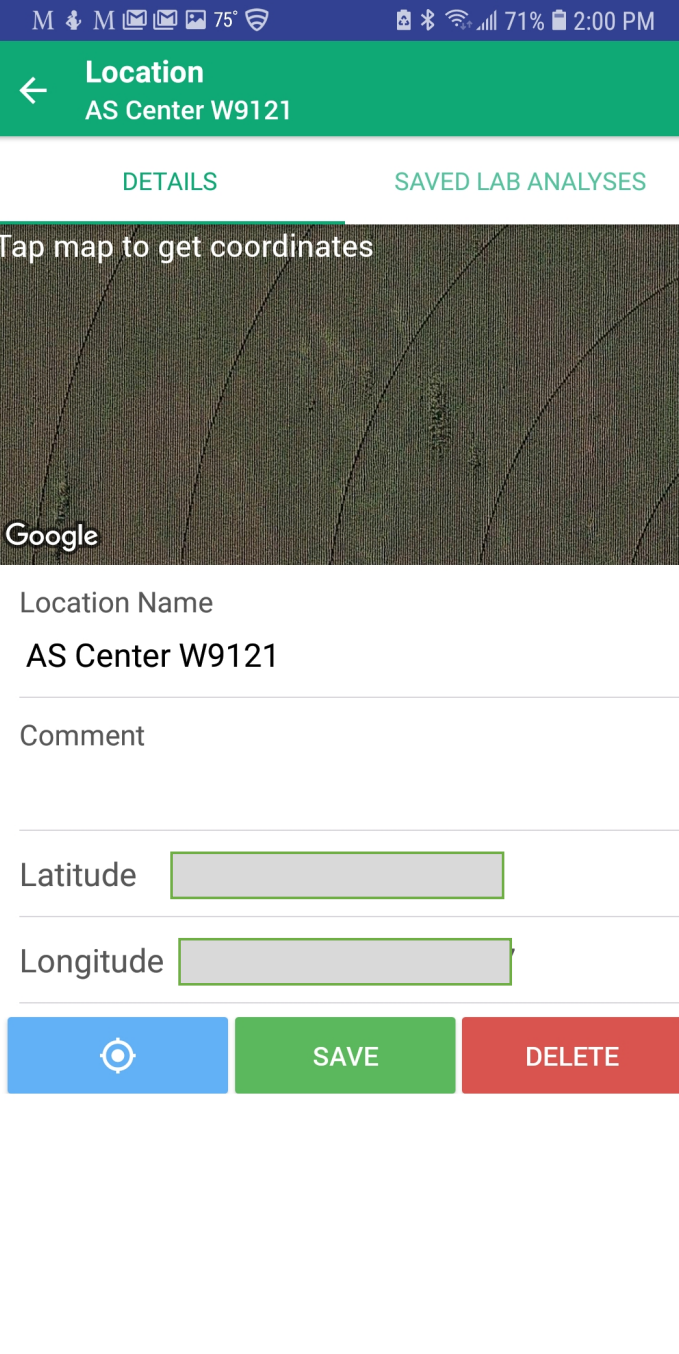
- Listen
- Develop
- Implement
- Improve

## Systems:

- BHN ERP
- Huma Gro® App
- Fertilgold® App
- Other Sensing / Imaging









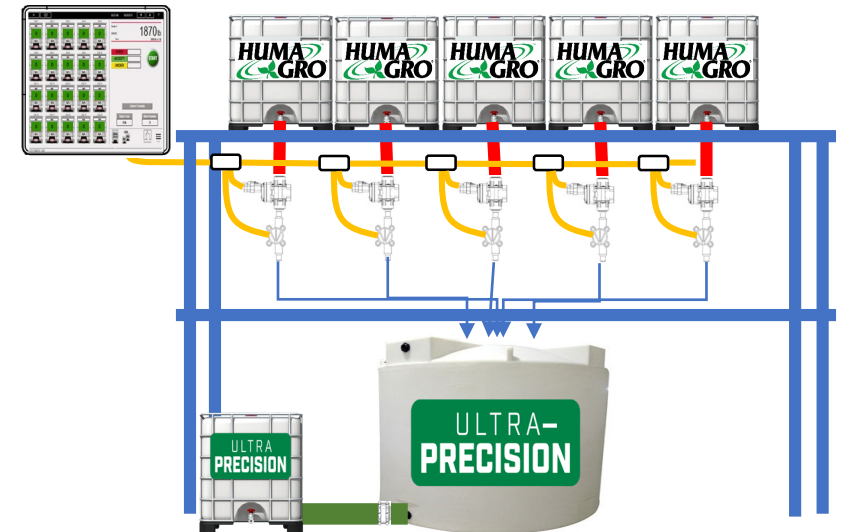


# First Ultra-Precision™ Plant

## -BHN Mexico



ULTRA-  
PRECISION



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Why Ultra-Precision™?



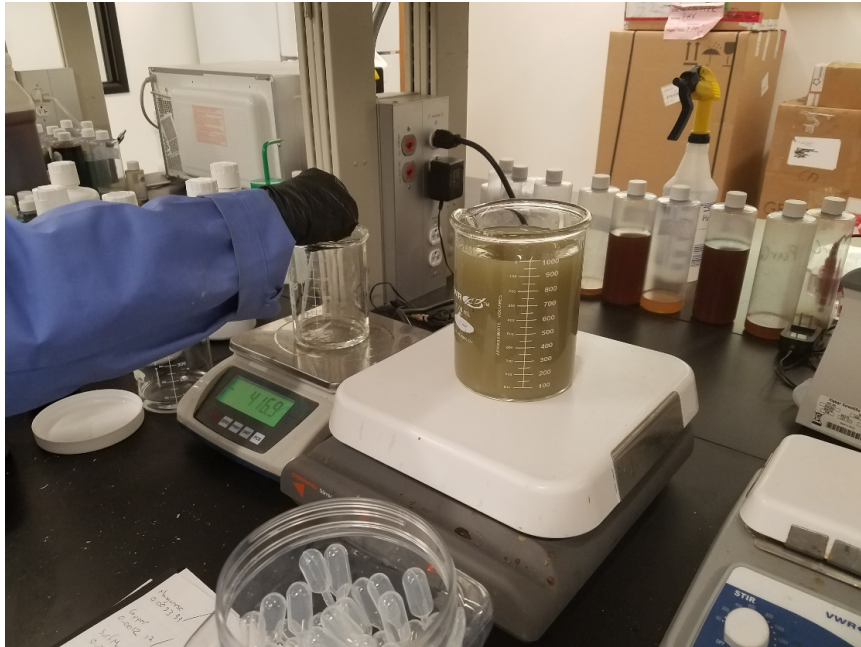
## BENEFITS OF

# ULTRA- PRECISION

- Ready To Use Complete Formulations (No mixing/dilution needed)
- Reduce Human Error In Product Application
- Customized Formulas For Specific Crop, Soil, Water, Climate and Crop Stage
- Modified As Needed Based on Analysis
- Adaptable To Grower's Budget
- True Precision Nutrition Conserves Finite Natural Resources, Reduces Pesticide Usage, and Improves Water Usage Efficiency
- Low EC, High Carbon Formulas Reduce Soil Salinity, Stimulate Beneficial Microbes, and Restore Soil Fertility



# First Ultra-Precision™ Formulation For Customer in Mexico



**SUPER POTASSIUM®** **IRO-MAX®**  
**X-TEND®** **MANGANESE**  
**SILI-MAX®** **COPPER**  
**BORO-PRO®** **SURF-MAX®**  
**Z-MAX®** **BREAKOUT®**  
**MOLYBDENUM** **FERTIL SOIL®**  
**SUPER PHOS®** **ACTIVOL®**  
**AN-MAX®** **CALCIUM**  
**44-MAG®**

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**ULTRA-  
PRECISION**

Custom Products For Specific:

- CROP
- SOIL
- WATER
- GROWTH STAGE
- NUTRIENT DEMANDS
- KEY CHALLENGES





**ULTRA-  
PRECISION**

# Guaymas, Mexico





# Florida Strawberries

**ULTRA-  
PRECISION**

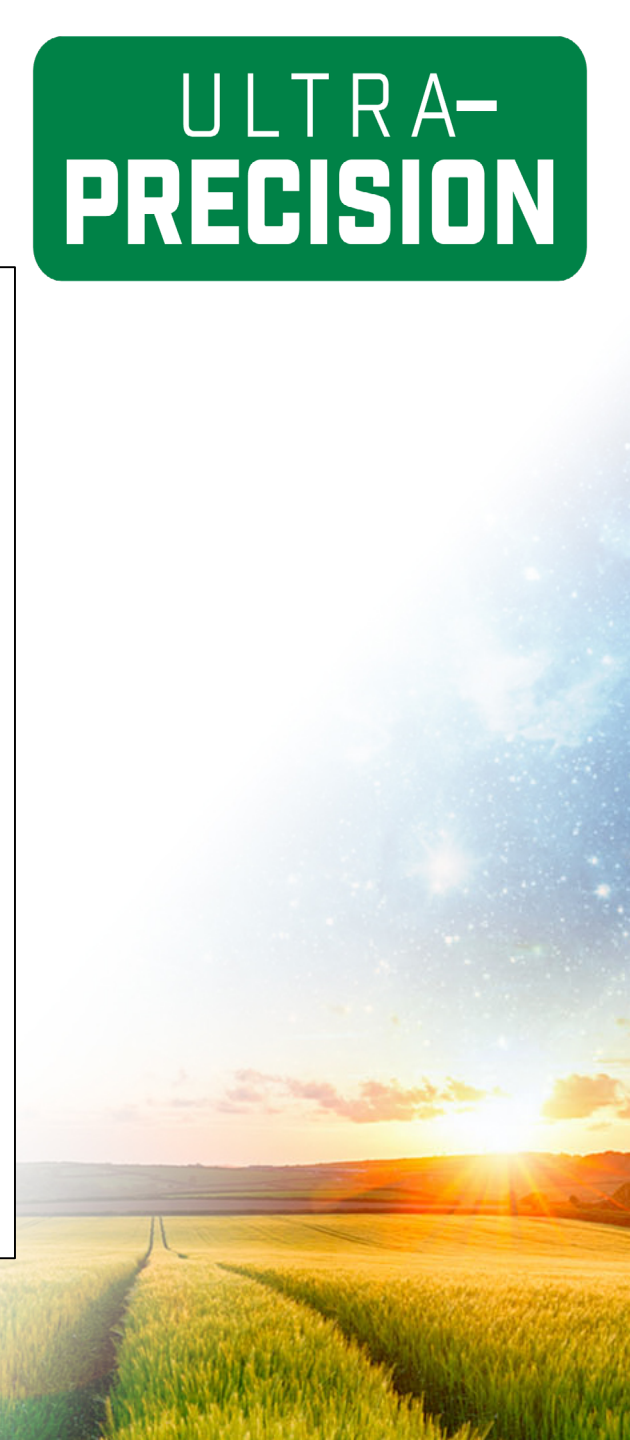
<b>Products</b>
Super Phos®
Super Potassium
Sili-Max®
X-Tend®
Fertil Soil®
Calcium
Fertil Humus®
An-Max™
Boro-Pro®
44-Mag®
Manganese
Z-Max®
Iro-Max®
Vitol®
Activol®
Breakout®
Sulfur
Comol™
Surf-Max®



## FANCY FARMS PRECISION BLEND MIX

Total Nitrogen (N) .....	5.28%
Available Phosphate (P <sub>2</sub> O <sub>5</sub> ) .....	0.48%
Soluble Potash (K <sub>2</sub> O) .....	1.14%
Boron (B) .....	0.09%

**Specific Gravity = 1.11**  
**pH = <1**



ULTRA-  
PRECISION

Planting: 9/22/18  
Picture: 10/5/18





ULTRA-  
PRECISION



Planting: 9/22/18  
Picture: 10/19/18



ULTRA-  
PRECISION



Planting: 9/22  
Picture: 10/26



Planting: 9/22  
Picture: 11/7

ULTRA-  
PRECISION





# ULTRA- PRECISION

GS  
+  
fume

UP  
+  
promax

GS  
+  
promax



ULTRA-  
PRECISION

G.S.  
+  
Fume

UP.  
+  
Fume



ULTRA-  
PRECISION







*THANK YOU!*