PRESENTATION

Huma Gro® Latin America

M.C. Luis Eduardo Sánchez Gómez
Sr. Director Huma Gro® Latin America Sales





Huma Gro® Presence in Latin America

agro Innova

BIO EXPORT S.A.

agroQuintana
"Programando tu cultivo hacia el exito"

30 años FORMUNICA
Creciendo con Nuestra Agricultura

Agrosa
Insumos Agrícolas

Agro Micro BioTech
Soluciones Impulsadas de la mano con la Naturaleza

Agromilenio
Tecnología en Agricultura

Innovación Agrícola
de Agroindustrias del Norte

Velzagro S.A.S

SIXCOM
POLIETILENO AGRO - INDUSTRIA

BIO HUMA NETICS™ Incorporated

HUMA GRO™

Fertilgold® ORGANICS

Probiotic SOLUTIONS®

HUMA GRO® TURF

HUMA GRO® ULTRA-PRECISION

MESA VERDE™ HUMATES

AlphaSynectics™ LABORATORIES

VELOCITY

OPUS PRIME®

México Regions

Northwest

Commissioners
Dealers
Direct sales

Sinaloa y North

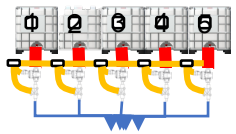
Commissioners
Dealers
Direct sales

Bajío

Commissioners
Dealers
Direct sales

Development of Huma Gro® Image
Creation of a Portal in Spanish
Assistance to exhibitions
Digital advertising in social networks and top specialized magazines.

Northwest Zone



Nogales, Son.

Areas: Mexicali, Ensenada, San Quintin, Caborca, Hermosillo, Guaymas, Obregón and Navojoa.

Crops: Table Grape, Vineyard, Strawberries, Berries, Walnut, Tomato, Cucumber, Asparagus, Citrus, Chilli, Peppers, Cotton

Strategy: specialized nutritional solutions per client, general formulas for crops by sector.

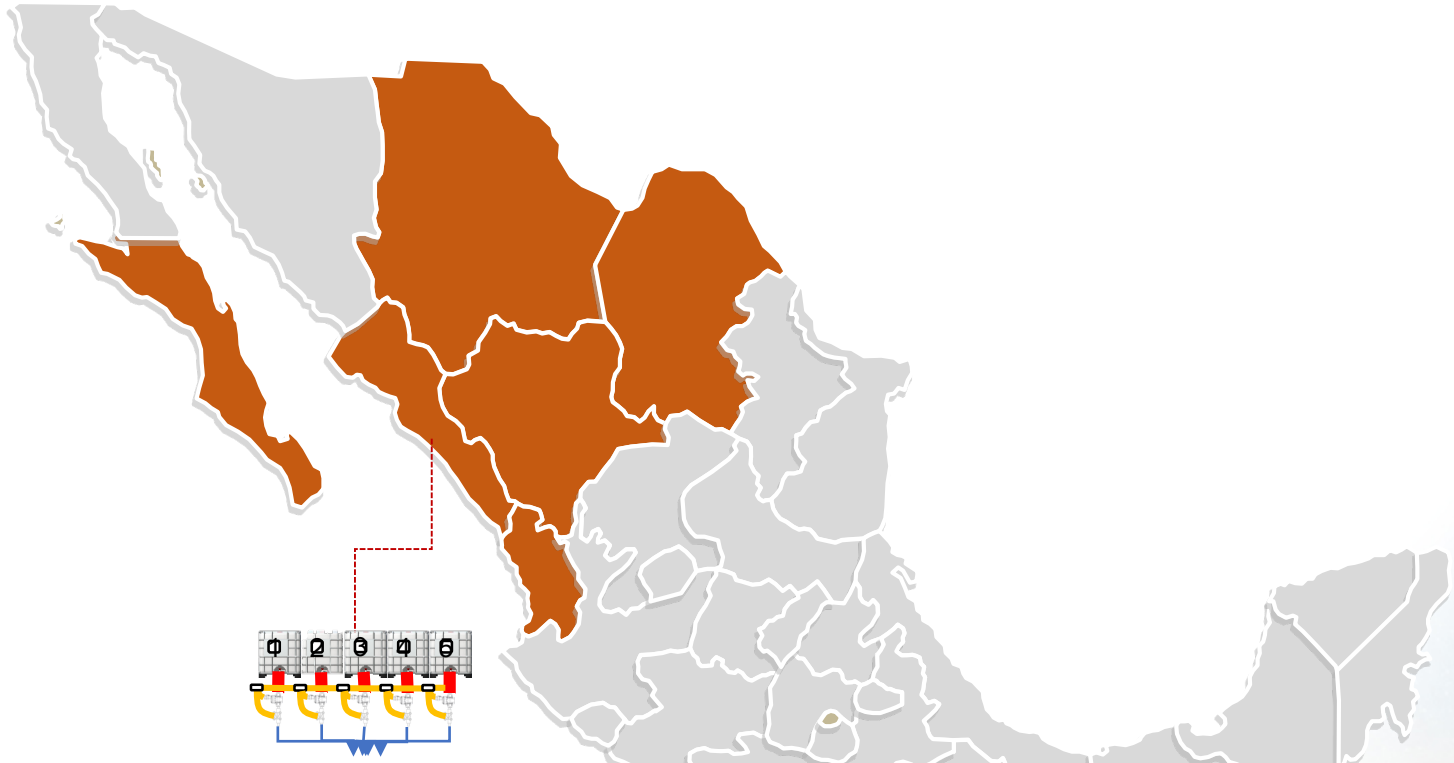
Mixing Plant: ready

Culiacan and North Zone

Areas: Los Mochis, Guasave, Culiacán, Southern Sinaloa, Nayarit, B.C. S. Durango, Chihuahua and Coahuila.

Crops: Strawberries, Berries, Tomato, Cucumbers, Peppers, Potato, Mango, Corn, Beans, Grabanzo, Apples, Asparagus

Strategy: installation of Mixing plant for march 2019. specialized nutritional solutions per client, general formulas for crops by sector.

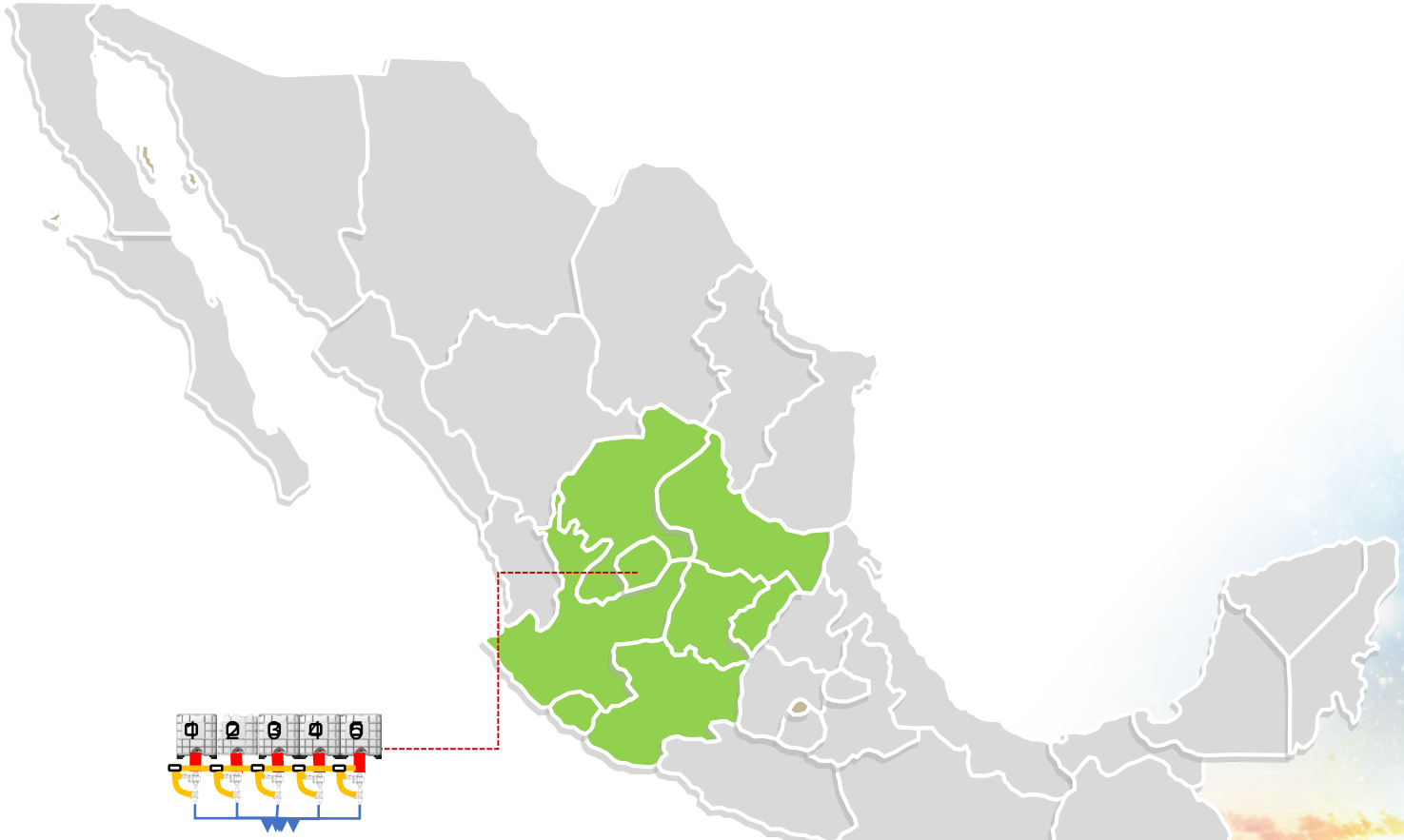


Bajío Zone

Areas: Jalisco, Michoacan, Guanajuato, Colima, Queretaro, Zacatecas, San Luis Potosi and Aguascalientes.

Crops: Strawberries, Berries, Lettuce, Broccoli, Tomato, Cucumber, Potatoes, Peppers,

Strategy: Installation of Mixing Plant for August 2019, specialized nutritional solutions per client, general formulas for crops by sector.

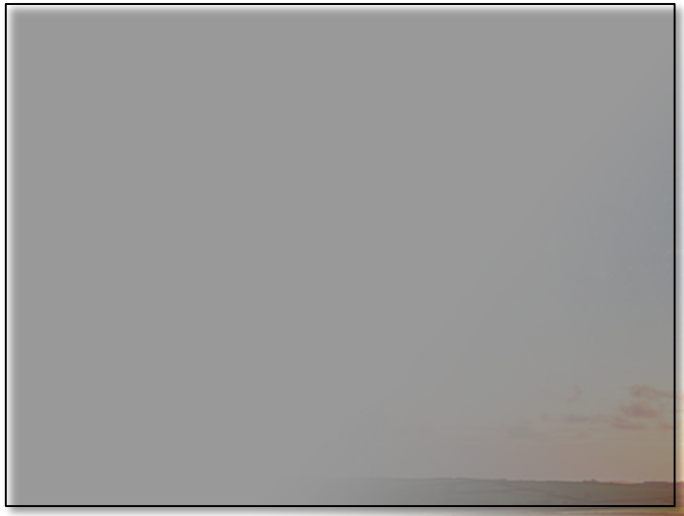


BIO HUMA NETICS® Incorporated

VEGETATIVE DEVELOPMENT
BLUE CRANBERRY
Vaccinium corimbosum L.

Driven to ENHANCE the Quality of LIFE.

Vaccinium angustifolium. Canadá



Courtesy: Marc Maerten, Canadá

BIO HUMA NETICS® Incorporated

FRUIT DEVELOPMENT
BLUE CRANBERRY
Vaccinium corimbosum L.

Driven to ENHANCE the Quality of LIFE.

DEVELOPMENT OF INFLORESCENCE

PRODUCTS APPLIED PER CUBIC METER OF WATER	PRODUCTS APPLIED IN THE SYSTEM DRIPPING BY HA. PER WEEK	PRODUCTS APPLIED PER CUBIC METER OF WATER	PRODUCTS APPLIED IN THE SYSTEM DRIPPING BY HA. PER WEEK	PRODUCTS APPLIED TO FOLIAGE BY HA. AT 7 DAYS INTERVALS
Super Nitro: 58 ml	Super Nitro: 10 Lt.	Encapsalt: 18 ml	Encapsalt: 3 Lt.	Breakout: 2 Lt.
Phos-Max: 25 ml	Phos-Max: 4 Lt	Vitol o Breakout: 12 ml	Vitol o Breakout: 2 Lt	Z-Max: 0.5 Lt
Super K: 29 ml	Super K: 5 Lt	X-Tend: 18 ml	X-Tend: 3 Lt	Iron: 0.5 Lt
44 Mag: 45 ml	44 Mag: 8 Lt			
Calcium: 40 ml	Calcium: 7 Lt			
Iron-Max: 12 ml	Iron-Max: 2 Lt			
Boro-Pro: 1.5 ml	Boro-Pro: 0.25 Lt			
Sili-Max: 15 ml	Sili-Max: 2.50 Lt			
Comol: 1.5 ml	Comol: 0.25 Lt			
Z-Max: 11.5 ml	Z-Max: 2 Lt			

PRODUCTS APPLIED TO FOLIAGE BY HA. AT 7 DAYS INTERVALS
Miro F: 2 Lt.
Z-Max: 0.5 Lt
Iron: 0.5 Lt

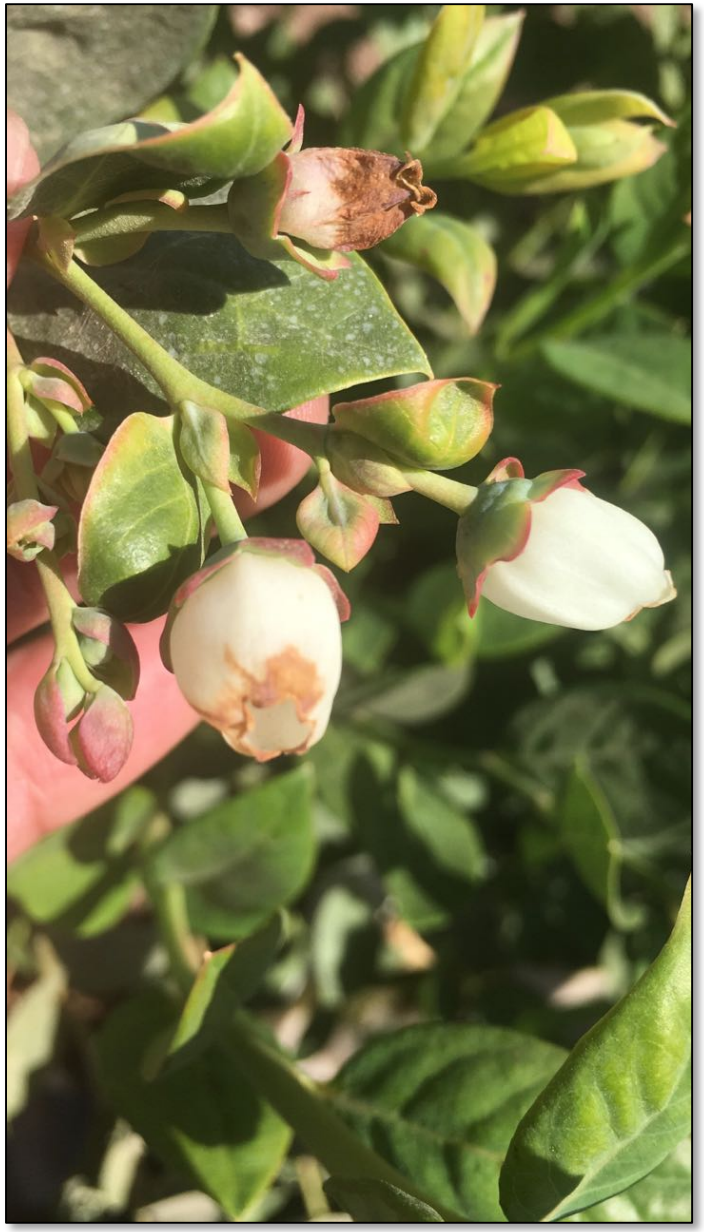
BLUE CRANBERRY DISEASES

Vaccinium corimbosum L.

Driven to ENHANCE the Quality of LIFE.

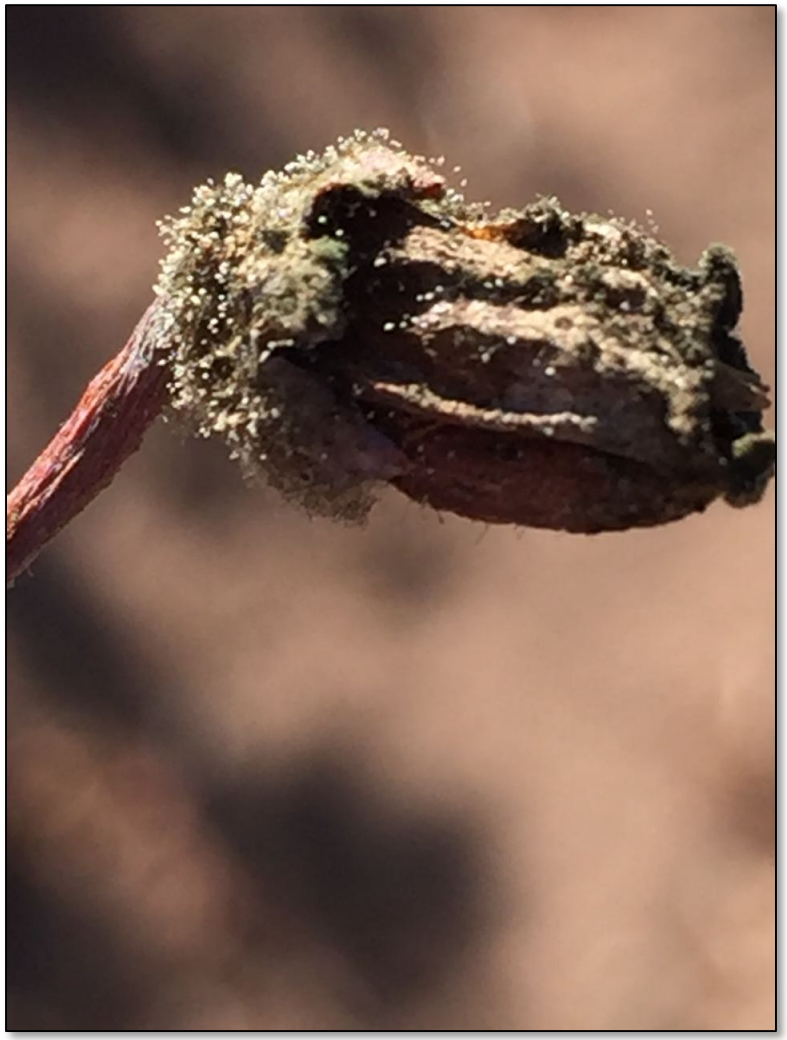
Botrytis
Botrytis cinerea

Proud 3®
10 ml / l of water
directed to the inflorescence, repeat after 5 days.



Botrytis

Botrytis cinerea



Alternaria

Alternaria spp.

Proud 3®

10 ml / l of water directed to the foliage, repeat after 5 days.

Cranberry rust
Pucciniastrum vaccinii

Proud 3®
10 ml / l of water directed to the underside of the sheet, repeat after 5 days.

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Development of the bush

Achievements obtained:

- ✓ Shrub formation in 3 months after pruning
- ✓ Healthy shrubs, free of pests and diseases
- ✓ Lignified stems
- ✓ More stems per plant
- ✓ A balance is maintained between the production of foliage and fruit

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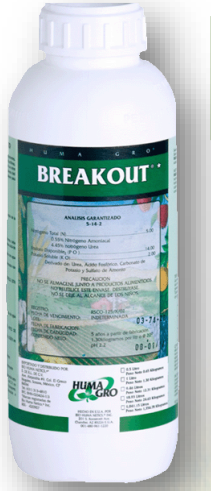
Sprouting

Achievements obtained:

- ✓ Homogeneous sprouting
- ✓ Plants with more resistance to pests and diseases
- ✓ Greater number of buds with shorter internodes
- ✓ Lignified and thick stems



+ 2 ML TDZ

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Flowering

Achievements obtained:

- ✓ Healthy flowering, free of deformations
- ✓ Respect for fauna

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Production

Achievements obtained:

- ✓ Homogeneous size of the fruit
- ✓ Fruit consistency
- ✓ Longer shelf life
- ✓ Greater caliber and weight of the fruit

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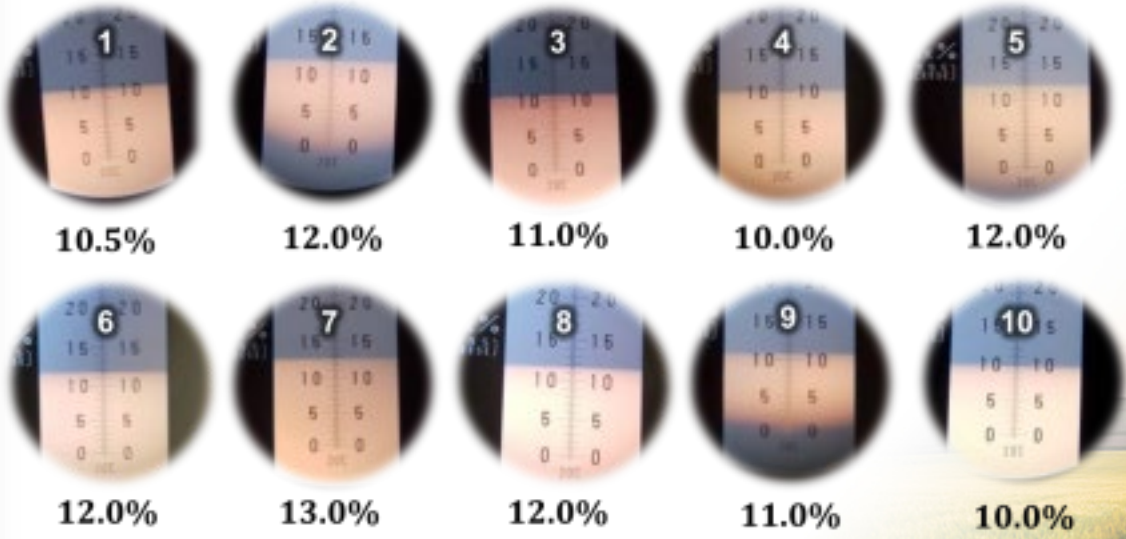
Production: Brix

Achievements obtained:

Increase of brix (flavor of the fruit)
Color and homogeneous size
Consistency and longer shelf life
Keep the blue in all the fruit for your harvest



Promedio	11.35 %

Bush formation and branching

1st Month of Applications

2nd Month of Applications

3rd Month of Applications

Bud induction

4th Month of Applications

Floral differentiation

5th Month of Applications

Flowering

6th Month of Applications

Flowering

7th Month of Applications

Green fruit set

8th Month of Applications

Production

9th Month of Applications

10th Month of Applications

Production

11th Month of Applications

12th Month of Applications


HUMAGRO
Danke
KEEP CALM
AND
USE
Micro Carbon
Technology ®
Thank you
Gracias!
AgroQuintana
"Programando tu cultivo hacia el exito"
Ing. Lupita Quintana
Merci
Obrigada

Optimal Management of Avocado Crop

AgroQuintana
"Programando tu cultivo hacia el exito"

AgroQuintana

"Programando tu cultivo hacia el exito"

Avocado Crop

Cosechando la ciencia con la Tecnología de Micro Carbono ™ para un aumento de eficiencia y absorción de nutrientes .

AgroQuintana te invita a experimentar los beneficios de nuestra amplia línea HUMA GRO ® de productos agrícolas basados en Tecnología Micro Carbono ™

Manejo óptimo del cultivo

Beneficios de HUMA GRO ®
Para la nutrición de tu cultivo

* Productos mas fáciles de usar y manejar.
* Cada producto puede ser aplicado al suelo o foliar sin fitotoxicidad.
* Menor volumen de nutrientes aplicados por hectárea con mayor efectividad.
* Disminución de residuos con impacto ambiental.
* Se mezcla bien con la mayoría de otras soluciones nutritivas, reguladores de crecimiento, plaguicidas y herbicidas.
* Aumenta el rendimiento y la calidad de los cultivos.
* Menores costos de insumos para la mejora de beneficios.

Anillo Hexagonal: Tecnología rica en carbono y basada en el anillo de benceno.

Agua Azul: Efectos sobre la limpieza de los sistemas de agua contaminada.

Hoja Verde: Utiliza el carbono como un vehículo de entrega de los elementos esenciales de las plantas.

Suelo Marrón: Mejora la salud del suelo, la fertilidad y la estructura física.

TECNOLOGÍA MICRO CARBONO™

AgroQuintana "Programando tu cultivo hacia el exito"
info@agroquintana.com
Tel. (423) 5930593 El Fresno
(354) 5428185 Los Reyes

AgroQuintana "Programando tu cultivo hacia el exito"

www.agroquintana.com

Amarre de flor | Calibre de la fruta | Control y/o prevención de plagas y enfermedades.

Aplicación Foliar: Para 1,000 Lt de agua		
Break Out	3	Lt
Bioaluminium OMRI	1	Lt
Calcium	2	Lt
Adhequin	1	Lt

Break Out: Expaneión y divieión celular, brotacion rápida y homogénea.

Bioaluminium: Bioestimulante natural, induce brotacion abundante de yemas.

Calcium: Incrementa la resistencia de talloe y reduce la caída de flor.

Aplicación Foliar: Para 1,000 Lt de agua		
Vitol	3	Lt
Calcium	2	Lt
Copper	3	Lt
Adhequin	1	Lt

Vitol: Elongación celular y desarrollo vertical. Aumenta tamaño del fruto.

Calcium: Aumenta la resistencia de los talloe de las plantas y reduce desordenes de embarque en la fruta.

Copper: Fuente de cobre, participa en la contracción y conversión de aminoácidos y proteínas

Aplicación Foliar: Para 1,000 Lt de agua		
Proud 3 OMRI	3	Lt
System Max OMRI	3	Lt
Bioaluminium OMRI	3	Lt
System Cu OMRI	3	Lt
Spider Max OMRI	3	Lt
Acceem	3	Lt
Promax OMRI	3	Lt

*** Incorporar productos, de acuerdo al monitoreo realizado.

Proud 3: Aceite de tomillo. Insecticida y acaricida de amplio espectro para control de gusanos, arañas, trips, y mosca de la fruta.

System Max: Fungicida y bactericida sistémico para control de roña y antracnosis.

Bioaluminium: Fungicida sistémico para prevención de enfermedades vasculares.

System Cu: Fungicida y bactericida sistémico para control de enfermedades vasculares.

Spider Max: Insecticida, acaricida y larvicida para insectos de cuerpo blando.

Acceem: Insecticida y acaricida para insectos de cuerpo blando.

Promax: Fungicida y nematicida. Promueve el crecimiento de raíces y previene infecciones en el sistema radicular.

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"Programando tu cultivo hacia el exito"

Nursery
"Development of the plant"

HUMA GRO

VITOL *

HUMA GRO

SUPER NITRO *

HUMA GRO

MICRO – F *

HUMA GRO

PHOSMAX *

AgroQuintana
"Programando tu cultivo hacia el exito"

Nursery
"Criolla plant graft"

HUMA GRO
BREAKOUT*

HUMA GRO
CALCIUM*

HUMA GRO
Z- MAX*

HUMA GRO
PROMAX*

AgroQuintana
"Programando tu cultivo hacia el exito"

"Bloom"

HUMA GRO
BREAKOUT*

HUMA GRO
CALCIUM*

HUMA GRO
BORON*

AgroQuintana
"Programando tu cultivo hacia el exito"

"Production"

HUMA GRO*
VITOL*

HUMA GRO*
CALCIUM*

PROUD 3


“Creo que el mundo es incomprensiblemente hermoso: una perspectiva infinita de magia y maravilla”...
"I think the world is incomprehensibly beautiful: an infinite perspective of magic and wonder" ...
Uruapan Michoacan, Mexico

Huma Gro Brazil

Facilities in Brazil

Current Status in Brazil

Currently there are 4 people.
Julio Carneiro, Commercial Director
Paulo Schiavon, Technical
Rubens Biseli, Administrator
Karla Anoni, Logistic

- ✓ We have registered the company as a marketer, importer, and formulator.
- ✓ Registration of 10 products already to market. (X-Tend® B, X-Tend ®, Pho-Max ®, Carboterra, Carbofol, Vitol ®, Calcium, Copper, Zap ®, Activol ®)
- ✓ We have development work in various crops with PhDs and Universities.
- ✓ Distribution network and formulators for private brand.
- ✓ The first container was sent to market in Brazil.

Sugar Cane

Today the cane is planted in 8,500,000 has.

Coffe

With an area planted with 2,300,000 has.

Citrus

1,300,000 has.

Soy bean, Corn, Cotton, etc.

In Brasil 25,000,000 has.

Bio Huma Netics Brazil

- ADDITIVE OF MICROCARBON X-TEND® B ADDED TO FERTILIZER NPK IN SOYBEANS

Location: Federal University of Santa Maria, RS

Prof. Dr. Thomas Martin

Summer, 2017

Curiosity: RS is the second largest state in planted area of soybeans in Brazil (14 M acres)

Paulo Schiavon
Tecnichal Manager
paulo@bhn.us

ADDITIVE OF MICROCARBON ADDED TO FERTILIZER NPK

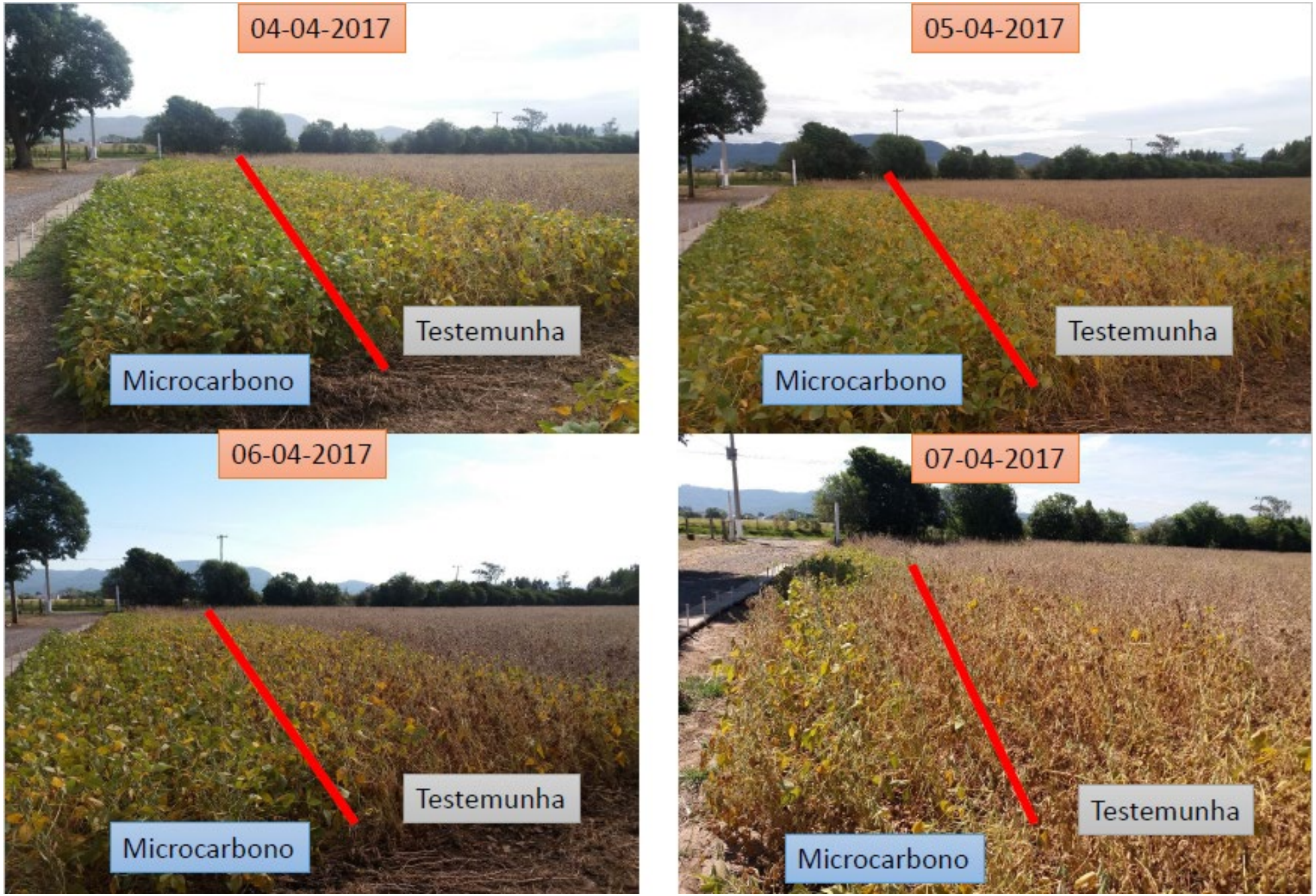
Objective of the study :

- **Verify agronomic efficiency of microcarbon added to NPK fertilizer**

Materials and Methods:

- Treatment 1 (Witness) = 350 kg /ha (142 kg/ac) 5-20-20 (N-P-K) **Without** additive.
- Treatment 2 (Micro Carbon) = 350 kg /ha (142 kg/ac) 5-20-20 (N-P-K) **With** additive.

- Additive used: **XTEND® B 2 lt/ 1.000 kg** of fertilizer
- Design of random blocks, two treatments and five repetitions.
- Experimental Unit = 10 rows spaced 0.5m, with 7.75 meters in length, totaling an area of 15.50 m²


04-04-2017
Testemunha
Microcarbono
05-04-2017
Testemunha
Microcarbono
06-04-2017
Testemunha
Microcarbono
07-04-2017
Testemunha
Microcarbono

It can be seen from the figures that the plant remained photosynthetically more active in the microcarbon treatment. It is verified that the number of leaves was greater as well as the duration of the area foliar was higher in microcarbon treatments.

The number of days of grain filling was 4 to 5 days under the conditions of this experiment. This was due to the longer duration of the leaf area, the longer leaf life.

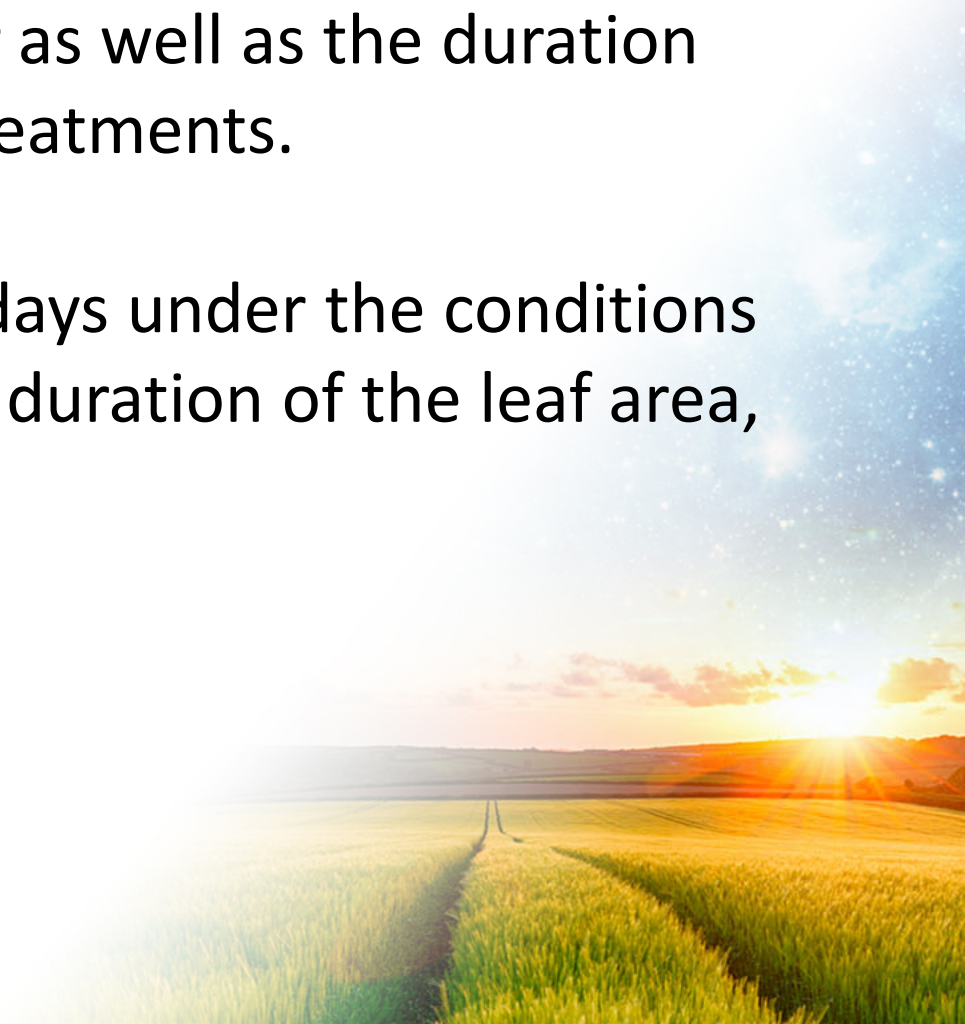


TABLE 1 – PRODUCTION

TREATMENTS	PRODUCTION KG/há (10,000 m2)	PRODUCTION bags 60 kg/ha (10,000 m2)	PRODUCTION KG/AC (2,420 m2)	PRODUCTION bsh/ac (2,420 m2)
Fertilizer WITHOUT Xtend® B	2,683	44.71	649.28	39.88
Fertilizer WITH Xtend® B	3,370 **(+25.6%)**	56.16 **(+25.6%)**	815.54 **(+25.6%)**	50.10 **(+25.6%)**

TABLE 2

TREATMENTS	HEIGHT (cm)	WEIGHT OF 1000 GRAINS	NUMBER OF LEAVES	NUMBER OF PODS
Fertilizer WITHOUT Xtend® B	105.8	144 gr	14.5	45.6
Fertilizer WITH Xtend® B	**107.8**	**141 gr**	**17.6 (+21.4%)**	**63 (+38.1 %)**

TABLE 3

	Production (há)	Weight 1000 grains	Number of grains	Plants/ mt	Spacem. Between rows	Plants/ha	Grains /plant
WITH X TEND® B	3.370 kg	0,141 kg	23,9 M	12.5	0,5 mt	250.000	**95.6 (+21 = +28 %)**
WITHOUT XTEND® B	2,683 kg	0,144 kg	18,6 M	12.5	0,5 mt	250.000	**74.5**

Conclusions :

The application of the X-Tend® B additive in fertilizer generates a number of benefits, including:

- The creation of a nutrient adsorption site, leaving them readily available for absorption by plants.
- Absorption and translocation of nutrients within the plant with high efficiency (MCT).
- Availability of the nutrients inside the plant, when required in the main metabolic processes, optimizing cell division and filling of grains.
- Presence of secondary metabolites such as gibberellins and auxins, directly influencing cell division, which implied a greater number of leaves, pods and grains in the plant (MCT).

Results

MUNICIPALITY:	Támesis
FINCA:	La Cristalina
CULTIVATION:	Naranja Valencia
LOTS:	La Playa/ La Mina
NUMBER OF TREES:	464 / 285
OPERATORS:	Frudelca/AgroHumagro
TECHNOLOGY :	Microcarbono
DATE :	Mayo 18
DURATION:	8 Meses

EVOLUTION IN IMAGES

1st Applications

2nd Applications

3rd Applications

4th Applications

5th Applications

6th Applications

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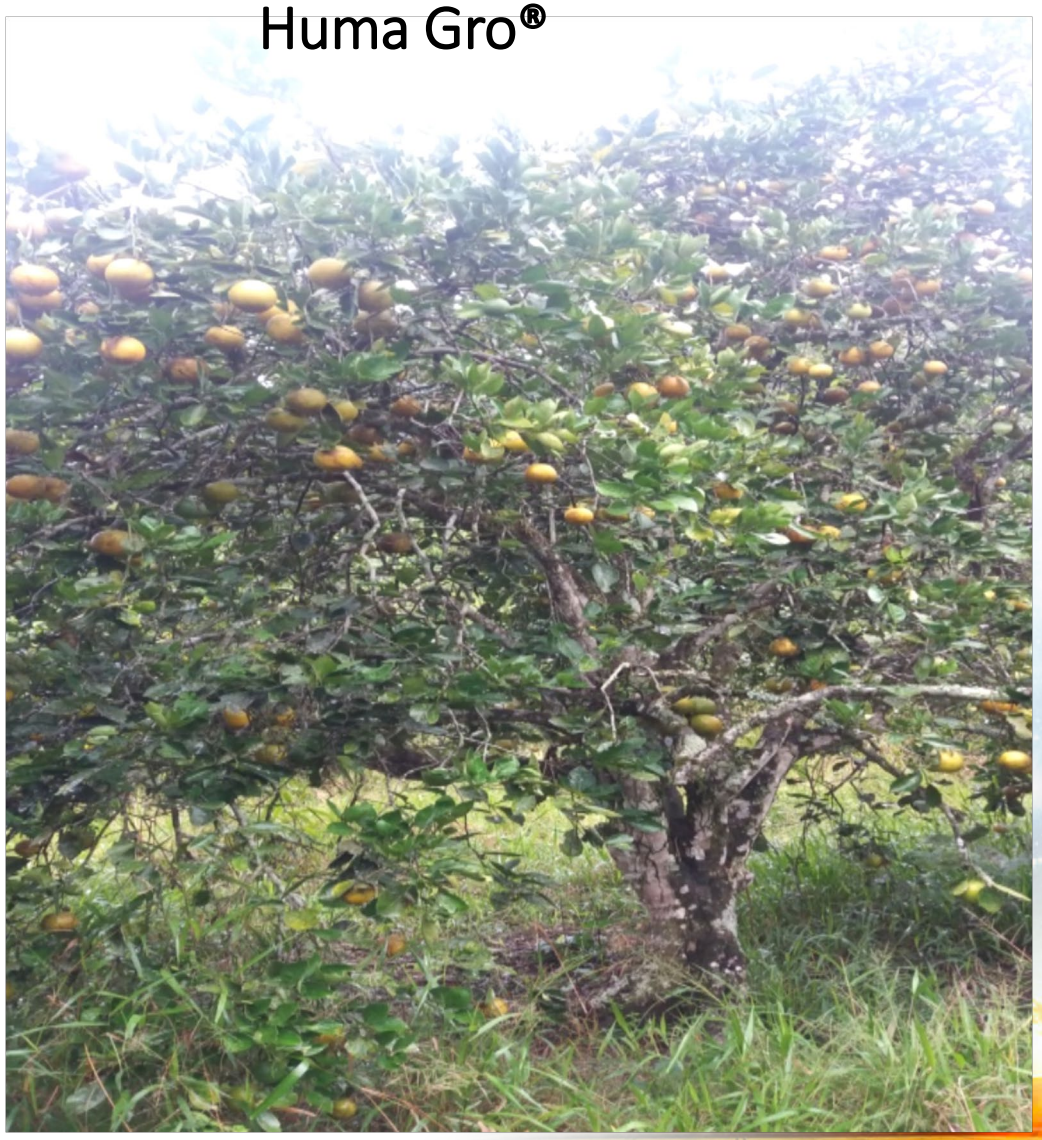
Control

Huma Gro®



Evaluation parameters

Testigo la Playa									
Calibración		Titulación		Ph	Rendimiento			Producción	
Alto	Ancho	G brix	Acidez		Peso en gr	Vol. en ml	%	N° Cajas	Peso
91	93	9,2	0,96	3,56	447,0	235			
82	81	8,3	0,52	4,08	301,5	160			
61	70	9,4	1,79	2,93	176,6	90			
76	77	8,8	0,83	3,80	259,5	150,5			
69	69	8,7	0,99	3,37	247,5	135,5			
72	79	11,1	1,19	3,42	266,0	145,5			
104	106	10,9	0,32	4,45	651,5	166			
75	76	10,9	0,66	3,86	251,5	120			
75	74	9,1	1,15	3,25	236,5	120			
72	74	10,4	1,40	3,74	237,0	110			
77,7	***79,9***	***9,68***	***0,981***	***3,646***	***307,5***	***143,25***	***46,59***	***134***	***2.686***

TRATAMIENTO la Playa									
Calibración		Titulación		Ph	Rendimiento			Producción	
Alto	Ancho	G brix	Acidez		Peso en gr	Vol. en ml	%	N° Cajas	Peso
72	74	10,0	1,45	3,50	227,0	120,5			
74	80	10,0	0,56	3,92	274,5	162,0			
70	71	9,8	0,57	3,75	202,6	112,0			
70	67	10,1	1,85	3,04	177,9	78,0			
84	82	8,6	0,54	3,25	379,0	154,0			
67	70	10,4	0,99	3,44	187,2	96,5			
76	77	12,0	0,97	3,47	268,5	136,5			
68	69	11,0	1,12	3,28	194,2	102,5			
79	89	10,3	1,20	3,29	268,5	146,0			
76	75	9,6	1,18	3,10	242,5	116,0			
73,6	***75,4***	***10,2***	***1,043***	***3,40***	***242,2***	***122,4***	***50,54***	***293***	***5.834***

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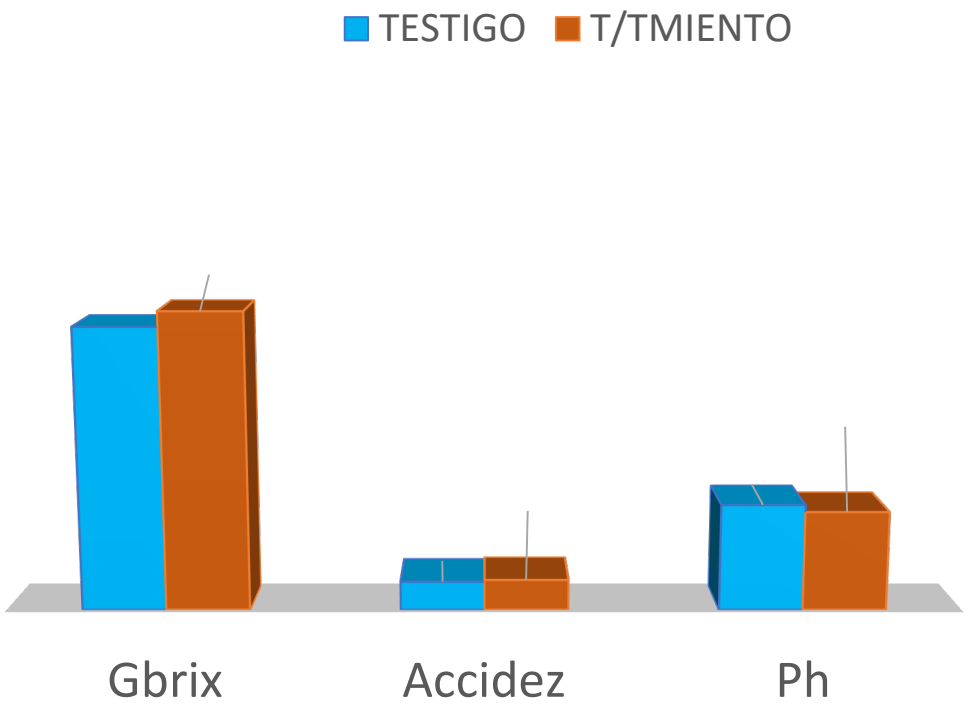
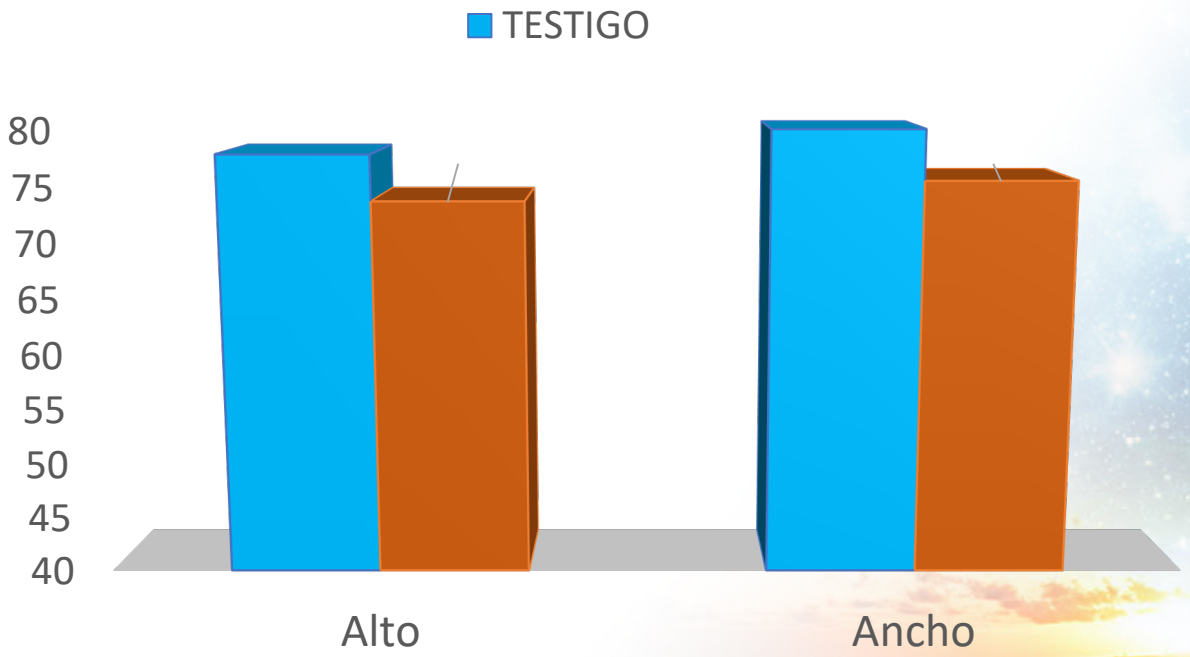
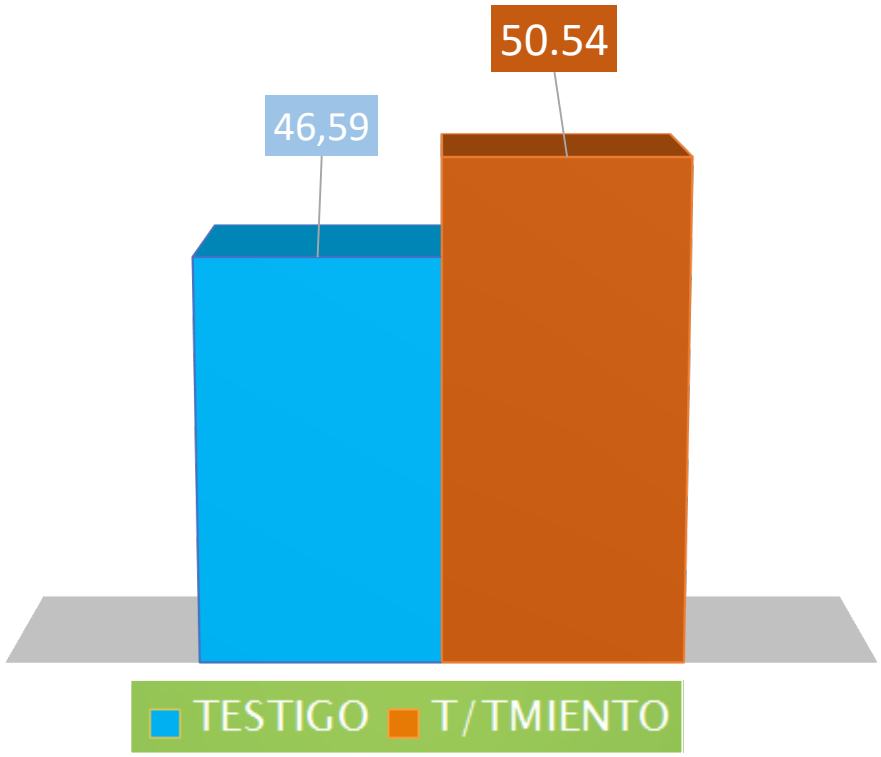
Comparative TITULATIONS



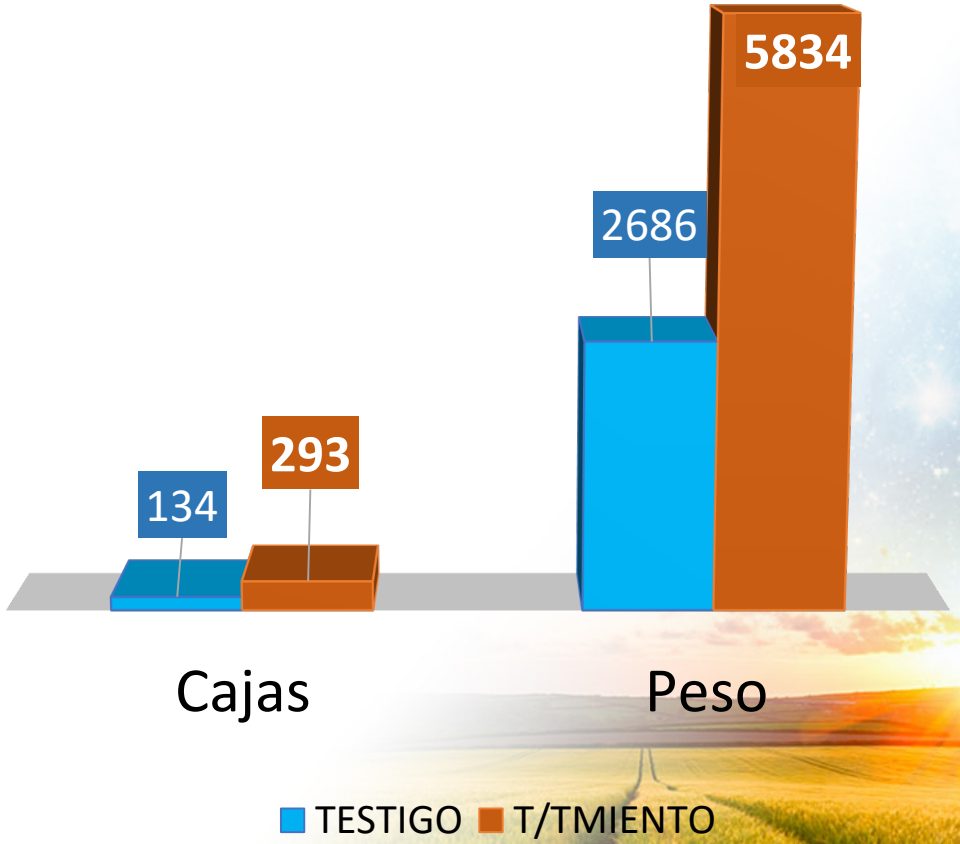
Comparative calibration



Comparative PERFORMANCE

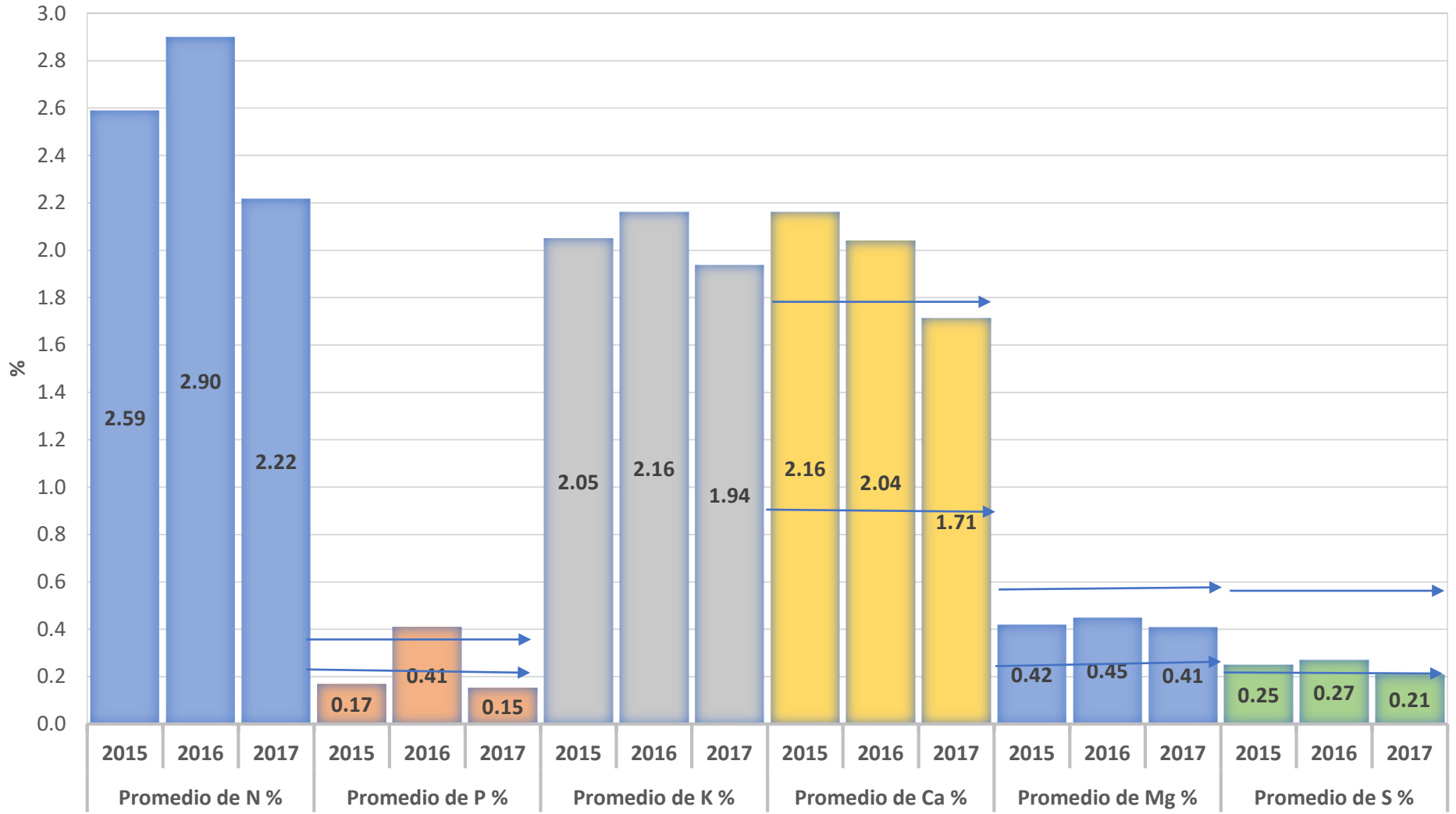


Comparative PRODUCTION



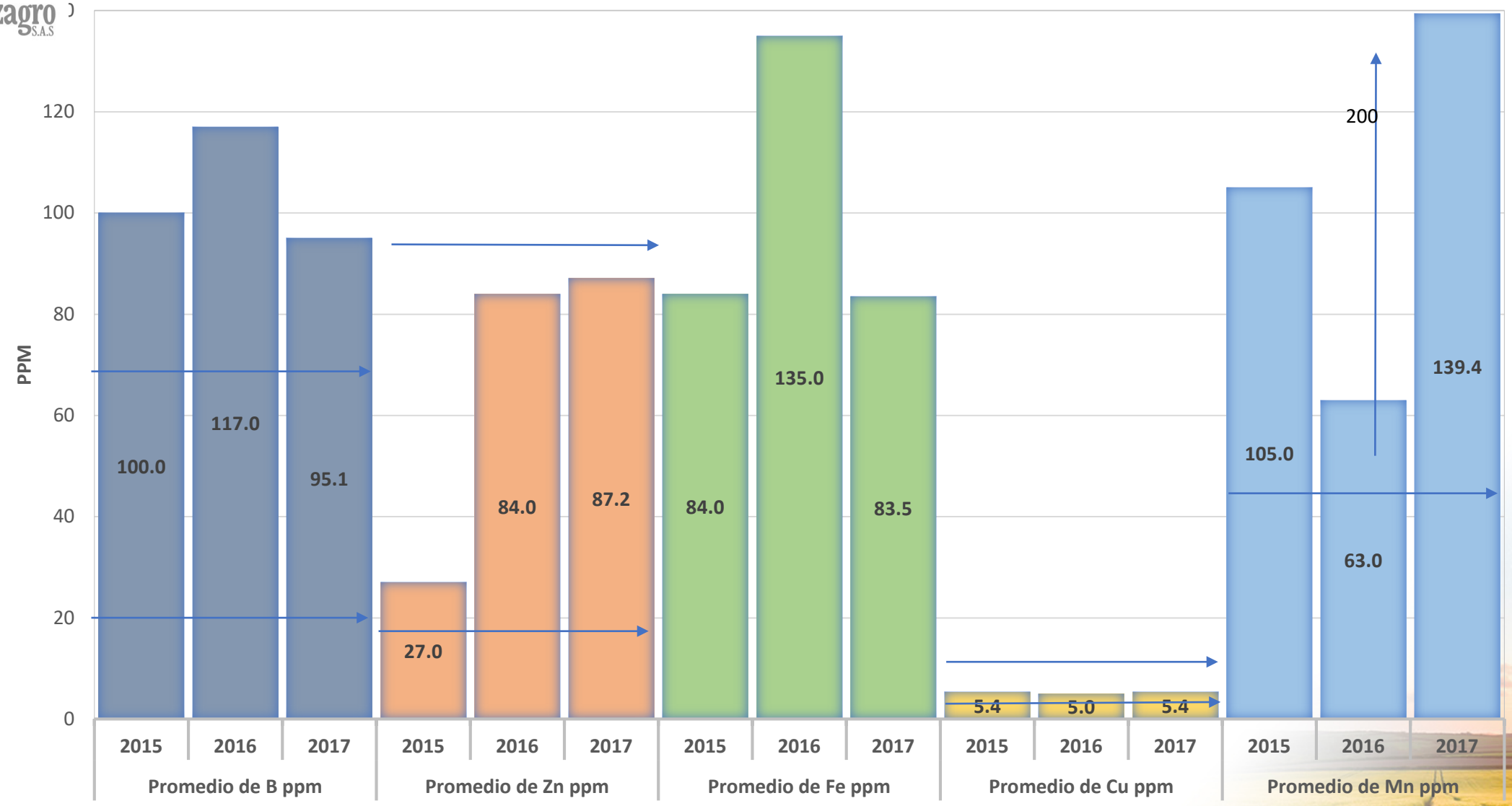
RESULTS OF USE OF HUMA GRO® AS A FERTILIZATION FORMULA

RESULTS OF FOLIAR ANALYSIS (%)

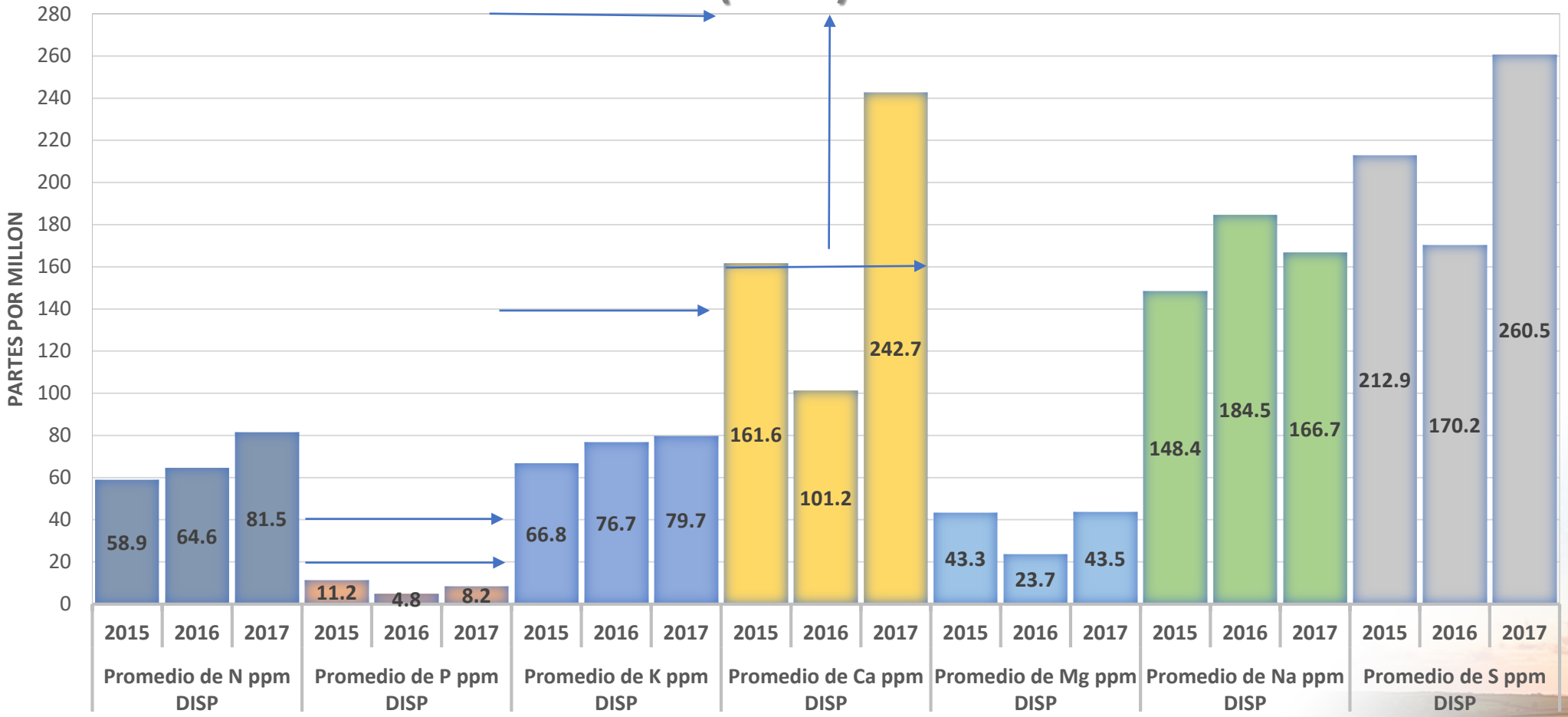


Rangos de nivel foliar dados por: *Contribución al conocimiento de la nutrición mineral del clavel miniatura Estudio de 5 variedades para ajuste de los niveles críticos, Calderón 2002*

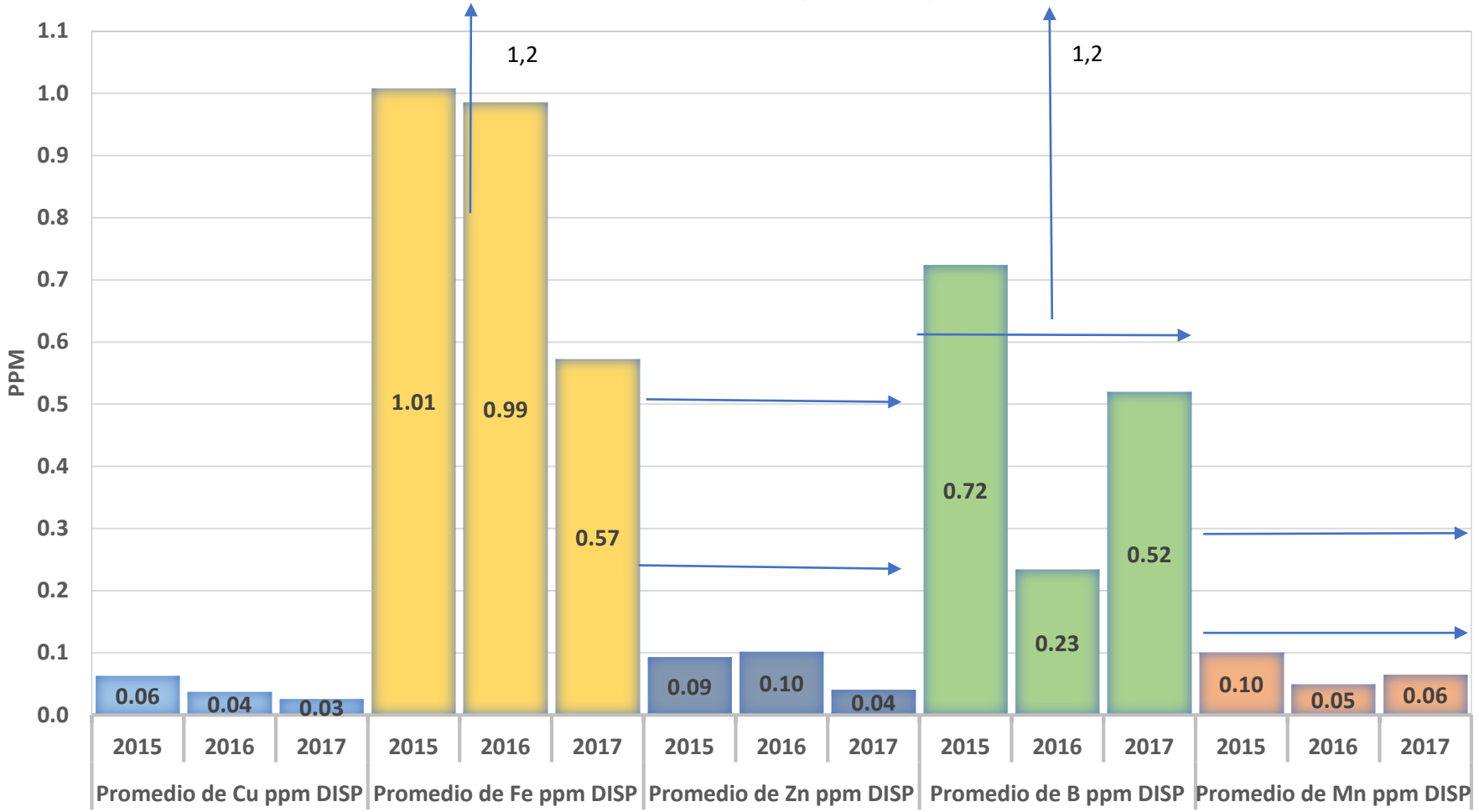
RESULTS OF FOLIAR ANALYSIS (PPM)



LARGER ELEMENTS AVAILABLE IN THE SOIL SOLUTION (PPM)

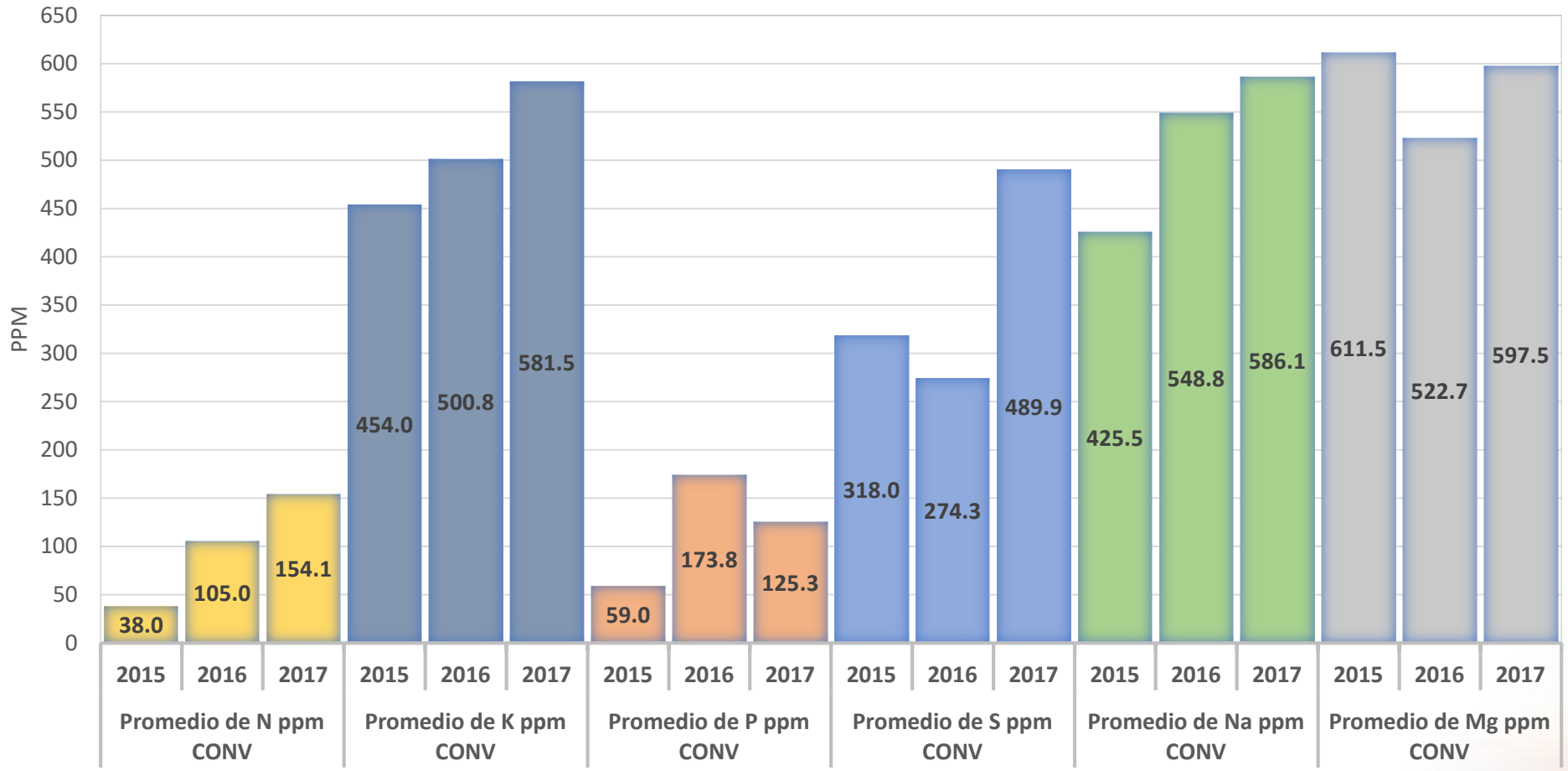


MOST ELEMENTS AVAILABLE IN THE SOIL SOLUTION (PPM)

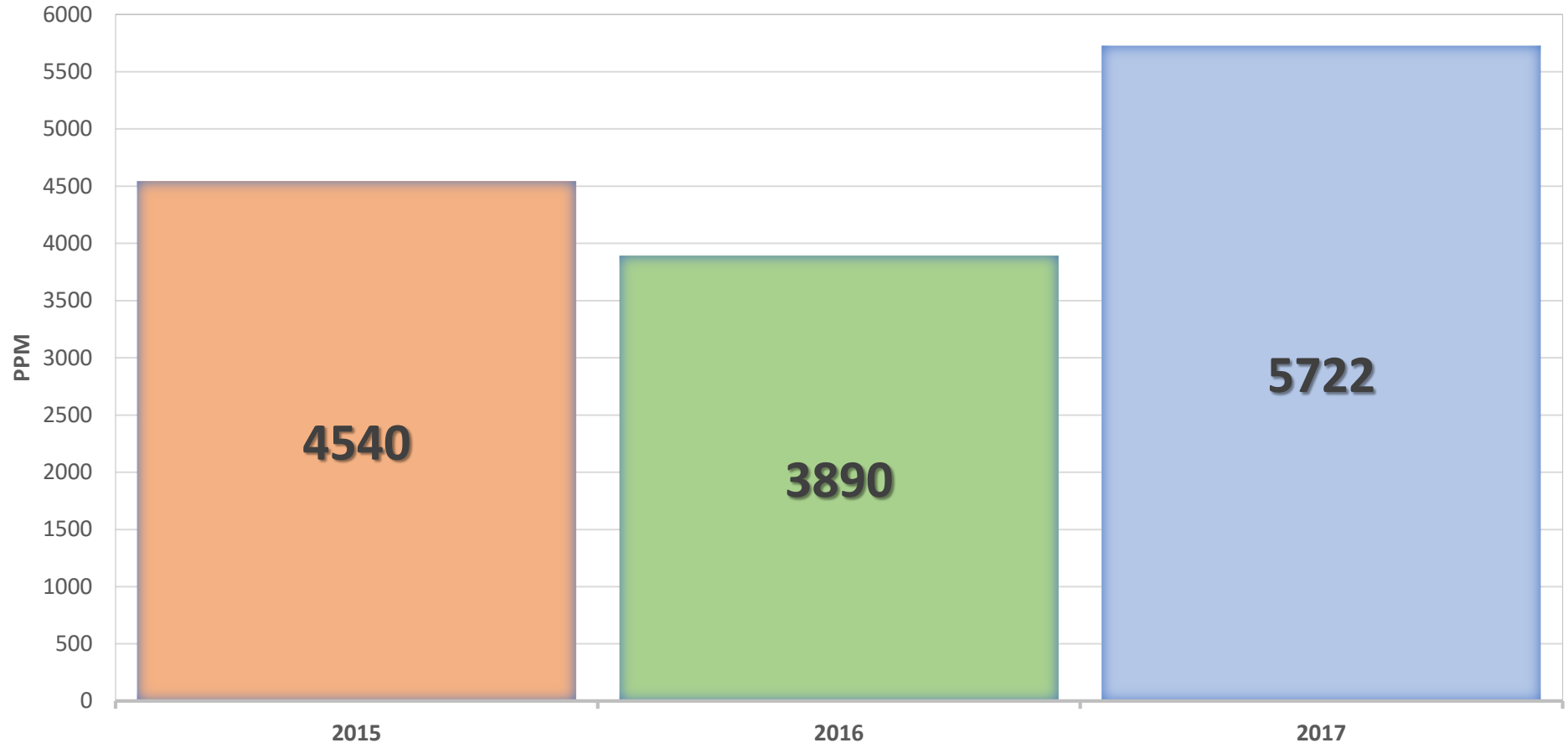


Velzagro S.A.S

CONVENTIONAL SOIL ANALYSIS (PPM)

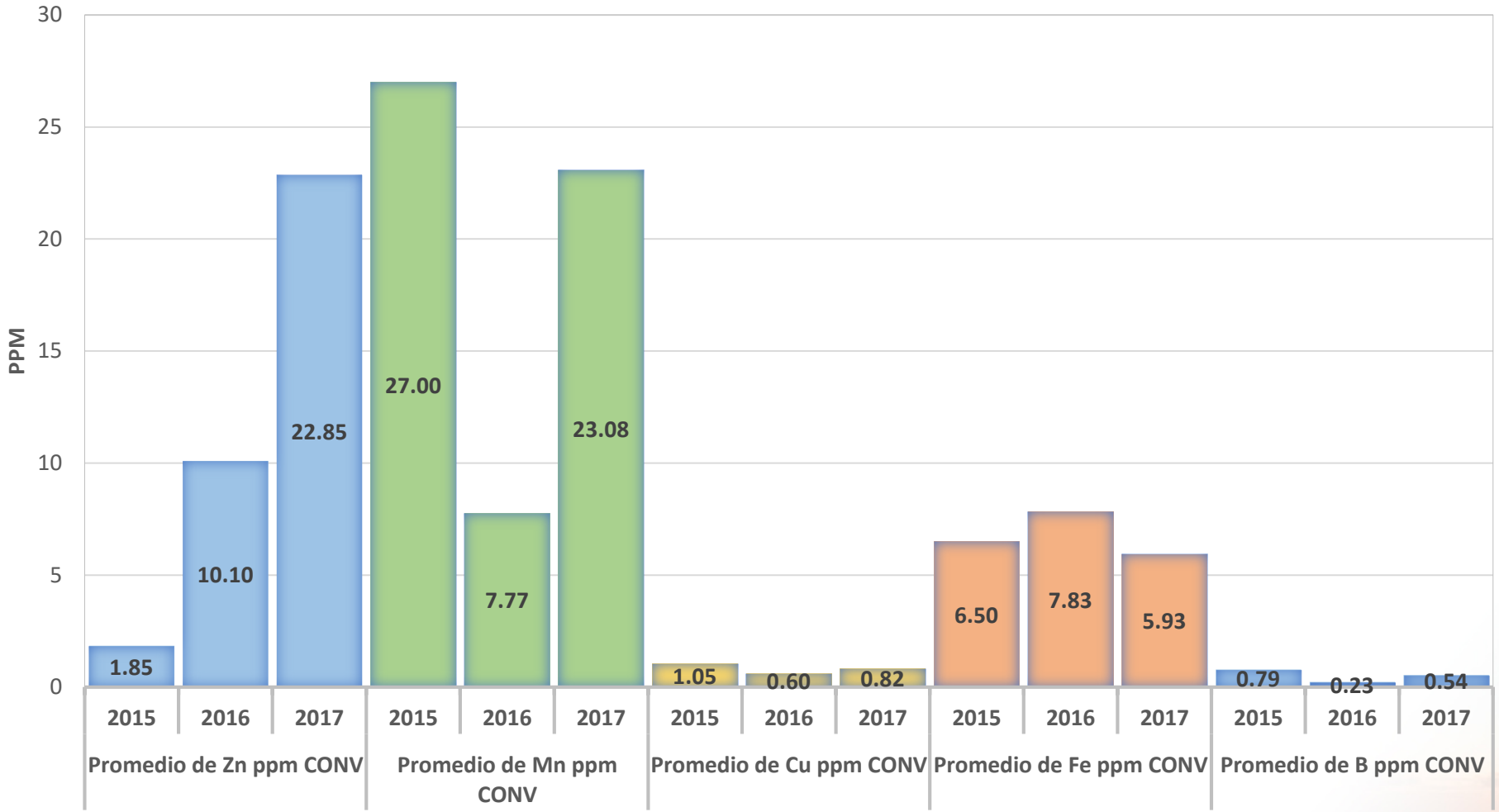


CONVENTIONAL SOIL ANALYSIS (CALCIUM PPM)



Velzagro S.A.S

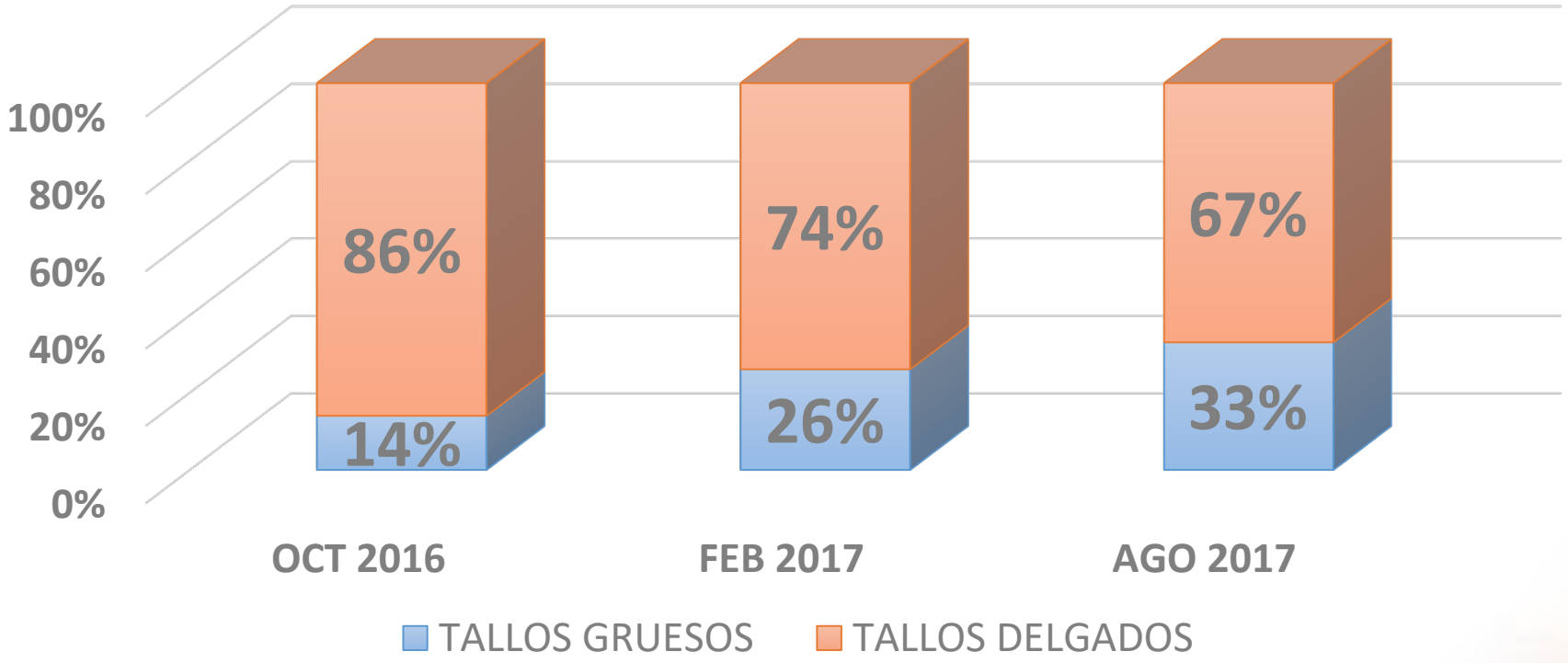
CONVENTIONAL SOIL ANALYSIS (PPM)



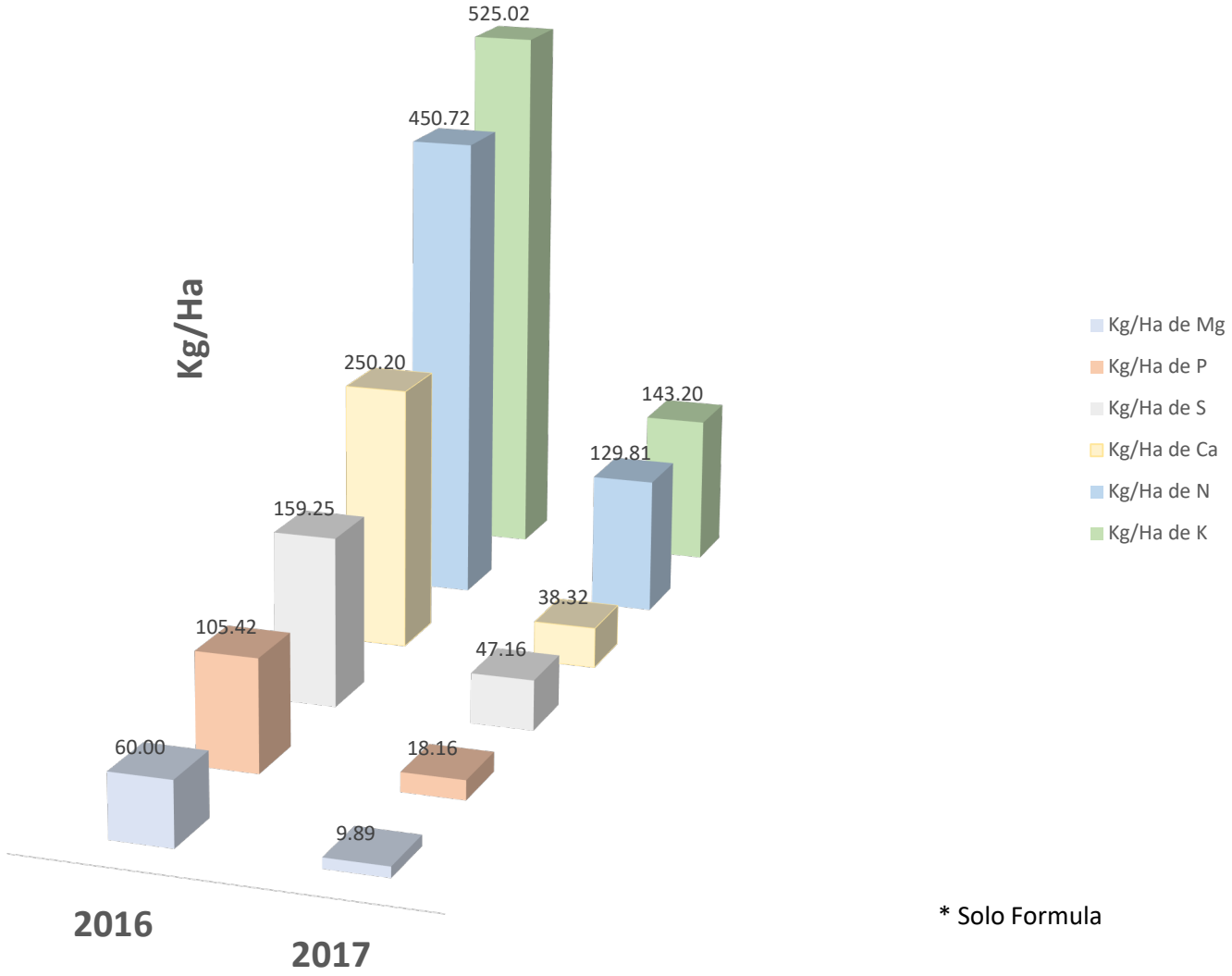
QUALITY DEGREES

CALIDAD	META 2017	ACUMULADO A DICIEMBRE			
		2.016		2.017	
SELECT	71,00%	66,1%	69,9%	69,5%	74,0%
FANCY		3,8%		4,5%	
UNICO	20,0%	20,6%		19,2%	
NAL+CAB	9,0%	9,5%		6,8%	

PERCENTAGE OF THICK AND THIN THICKNESSES (< 5.5 MM DIAMETER)



CONTRIBUTIONS OF ELEMENTS BY HECTARE



* Solo Formula

EVALUATION OF THE EFFECTS OF HUMA GRO®-BHN NUTRIMENTAL MANAGEMENT IN RICE CROP (Oryza sativa, spp.), Variety FERON / SFL11

Guayas – Ecuador
Septiembre – 2018

- *FREDDY LEON SOLANO*
  INVESTIGACION Y DESARROLLO
- *AGROBIOMAZ CIA.LTDA.*
  freddyl@bhn.ec

1. IDENTIFICATION

1.1) GENERAL DATA

Owner: Mr. Uber Barzola

Farm Name: Hcda. Ñauza

Contact person: Ing. Sergio Franco

1.2) GEOGRAPHICAL LOCATION

Province: Guayas

Canton: Jujan / City: Tres Postes / Precinct: Ñauza

Altitude: 10 m.s.n.m. Average T: 25 oC

1.3) AGRICULTURAL CHARACTERISTICS

Age of the crop: 120 days.

Current farm productivity: 56 sacks / block (1 sack = 102 lbs - 1 block = 7056 m2)
3.68 ton / ha

Test area: 10 blocks

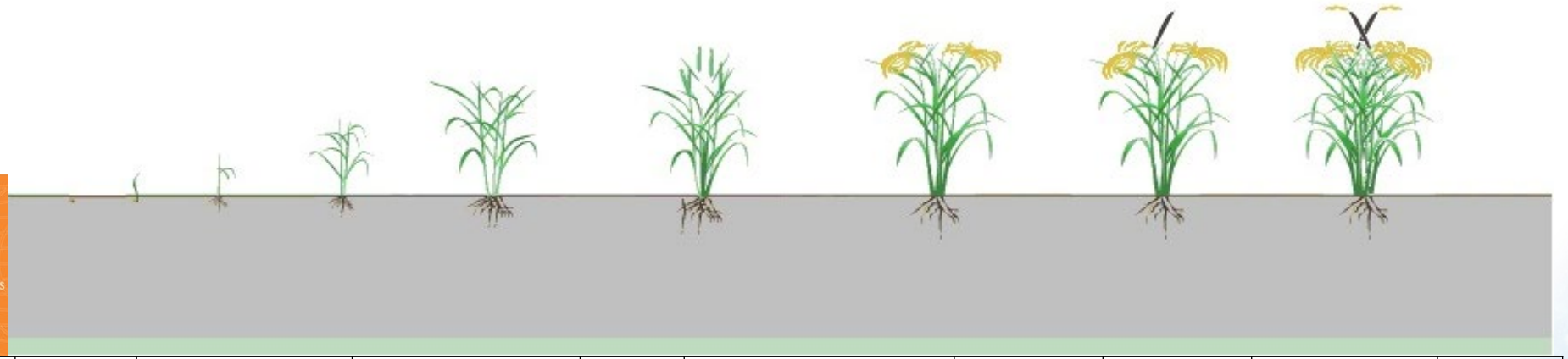
1.4) TECHNICAL RESPONSIBLE

PRODUCER: ING. SERGE FRANCO

AGROBIOMAZ: ING. FREDDY LEON

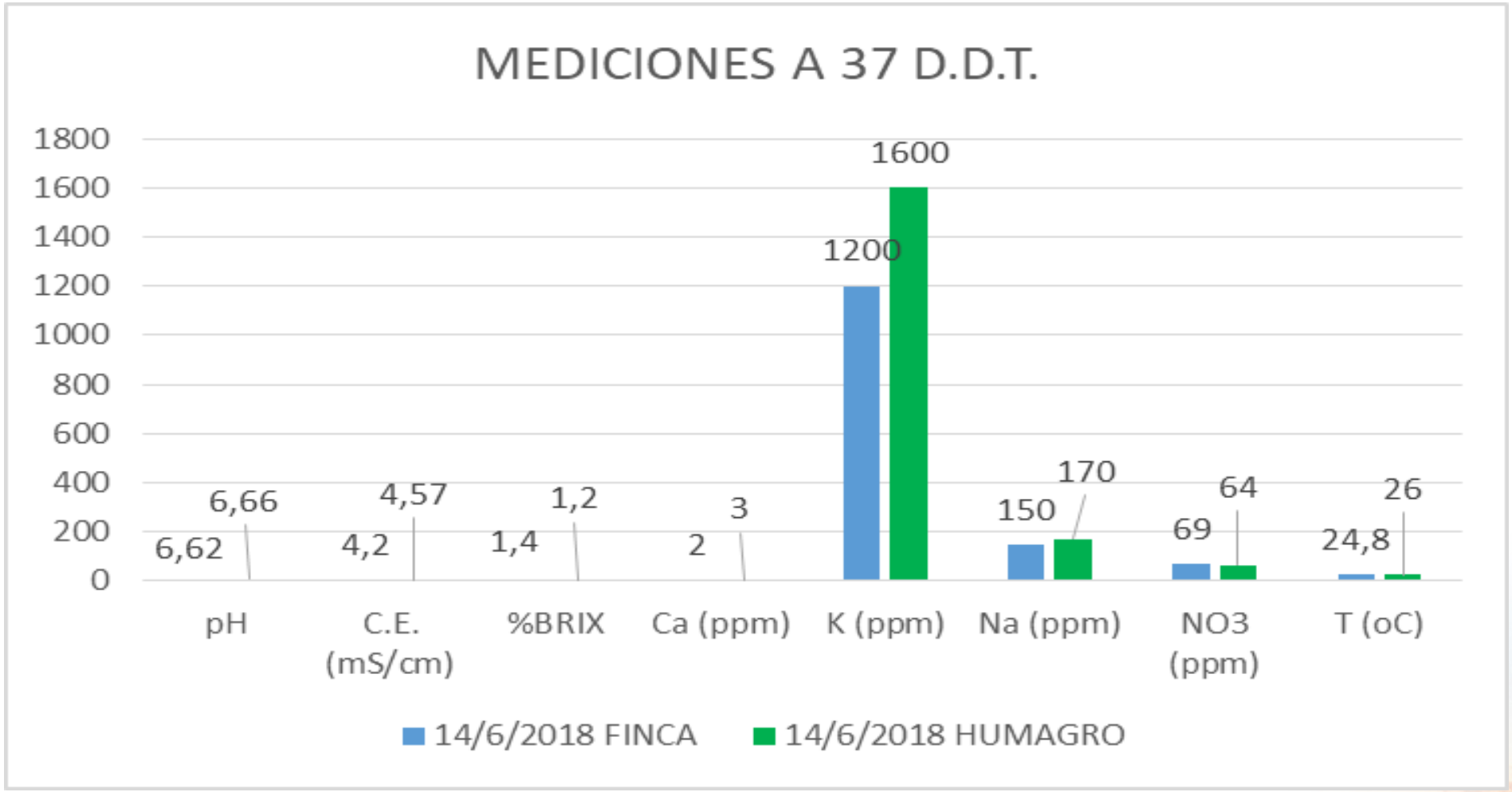
GOLDAGRO: ING. ALONSO MORA

HUMA GRO® NUTRITION PROGRAM FOR HIGH PRODUCTION RICE



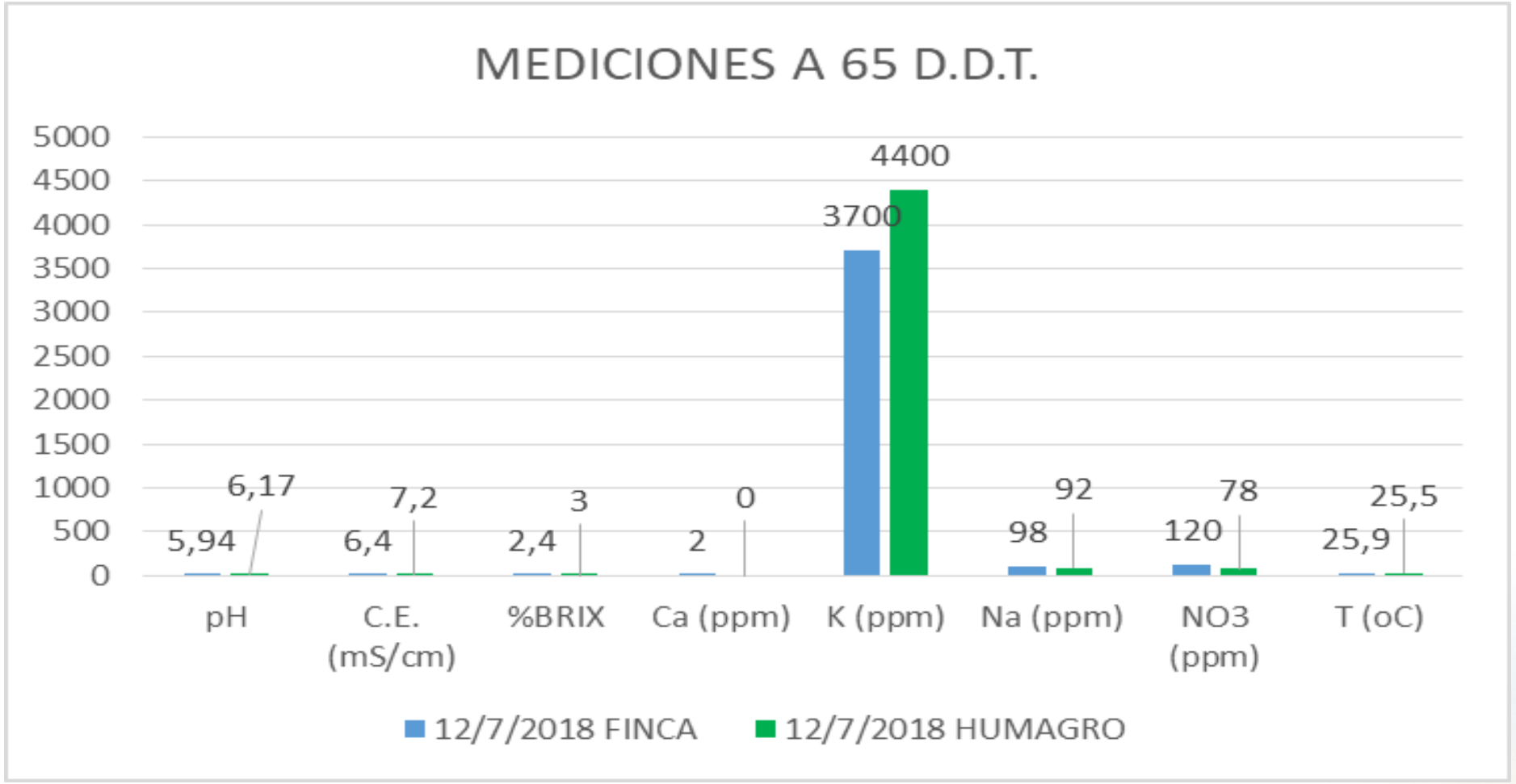
DÍA	1	10	24	35	40	85	100	120	>120
FASE DE CULTIVO	Semilla	Germ./Traspl.	Macollaje		Desarrollo Flor	Floración	Llenado	Engrose	Cosecha
ETAPA FENOLÓGICA		VEGETATIVA			REPRODUCTIVA			MADURACIÓN	
PRODUCTO 1 (ORDEN MEZCLA)		X-TEND	Z-MAX		YIELD-MAX		HUMA GRO		
Dosis Prod. 1 (litros/cuadra)		0,5	0,5		0,5				
PRODUCTO 2 (ORDEN MEZCLA)		SOIL-MAX	VITOL		SIL-K		Cosechando la ciencia de la Naturaleza		
Dosis Prod. 2 (litros/cuadra)		0,5	0,5		0,5				
PRODUCTO 3 (ORDEN MEZCLA)		C-PHOS	BREAKOUT		MAXPAK		AgroBioMaz Cia. Ltda.		
Dosis Prod.3 (litros/cuadra)		0,5	0,5		0,5				
PRODUCTO 4 (ORDEN MEZCLA)					CALCIUM		Distribuidor Autorizado para Ecuador		
Dosis Prod. 4 (litros/cuadra)					0,5				

Measurements 35 D.A.T



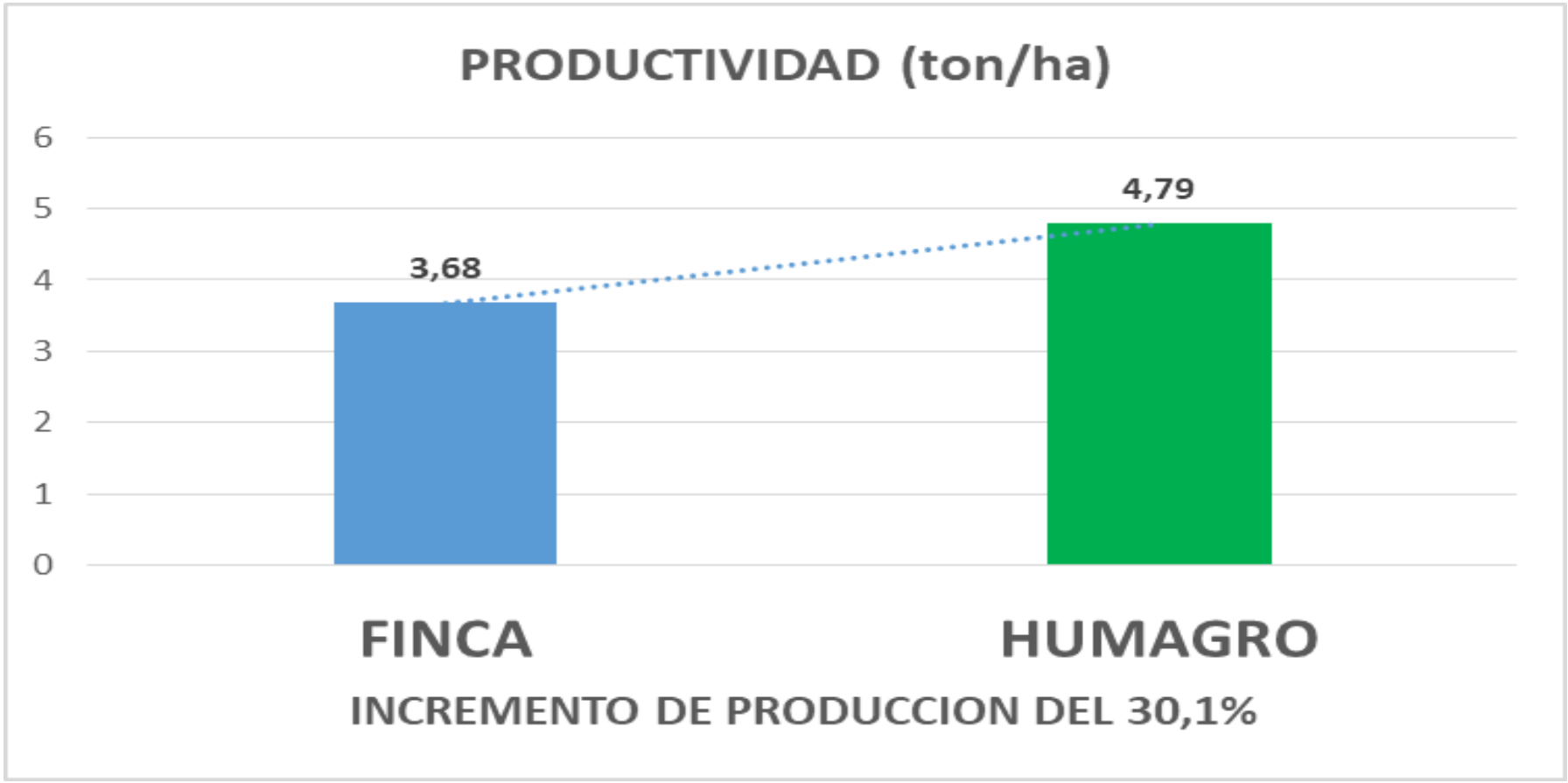
FECHA	TRATAMIENTO	pH	C.E. (mS/cm)	%BRIX	Ca (ppm)	K (ppm)	Na (ppm)	NO3 (ppm)	T (oC)
14/6/2018	FINCA	6,62	4,2	1,4	2	1200	150	69	24,8
14/6/2018	HUMAGRO	6,66	4,57	1,2	3	1600	170	64	26

Measurements 65 D.A.T



FECHA	TRATAMIENTO	pH	C.E. (mS/cm)	%BRIX	Ca (ppm)	K (ppm)	Na (ppm)	NO3 (ppm)	T (oC)
12/7/2018	FINCA	5,94	6,4	2,4	2	3700	98	120	25,9
12/7/2018	HUMAGRO	6,17	7,2	3	0	4400	92	78	25,5

PRODUCTION



TRATAMIENTO	PRODUCTIVIDAD (sacas/cuadra)	PRODUCTIVIDAD (ton/ha)
FINCA	56	3,68
HUMAGRO	73	4,79

+ BHN WORLD CONFERENCE 2018

ROOTING IN BANANA CROP (*Mussa*, sp) WITH HUMA GRO®-BHN PRODUCTS

Kavendish variety

Ecuador

Septiembre – 2018

APPLICATION PRODUCTS HUMA GRO® IN DRENCH (BANANA ROOTS)

DRENCH ENRAIZAMIENTO	PRODUCTO HUMAGRO	
PRODUCTO 1 (ORDEN DE MEZCLA)	**X-TEND**	HUMA GRO™
Dosis Producto 1 (litros/ha)	**0,5**	
PRODUCTO 2 (ORDEN DE MEZCLA)	**SOILMAX**	Cosechando la ciencia de la Naturaleza
Dosis Producto 2 (litros/ha)	**0,5**	
PRODUCTO 3 (ORDEN DE MEZCLA)	**BREAKOUT**	**AgroBioMaz Cia. Ltda.**
Dosis Producto 2 (litros/ha)	**0,5**	
PRODUCTO 4 (ORDEN DE MEZCLA)	**PHOSMAX**	Distribuidor Autorizado para el Ecuador
Dosis Producto 4 (litros/ha)	**0,5**	

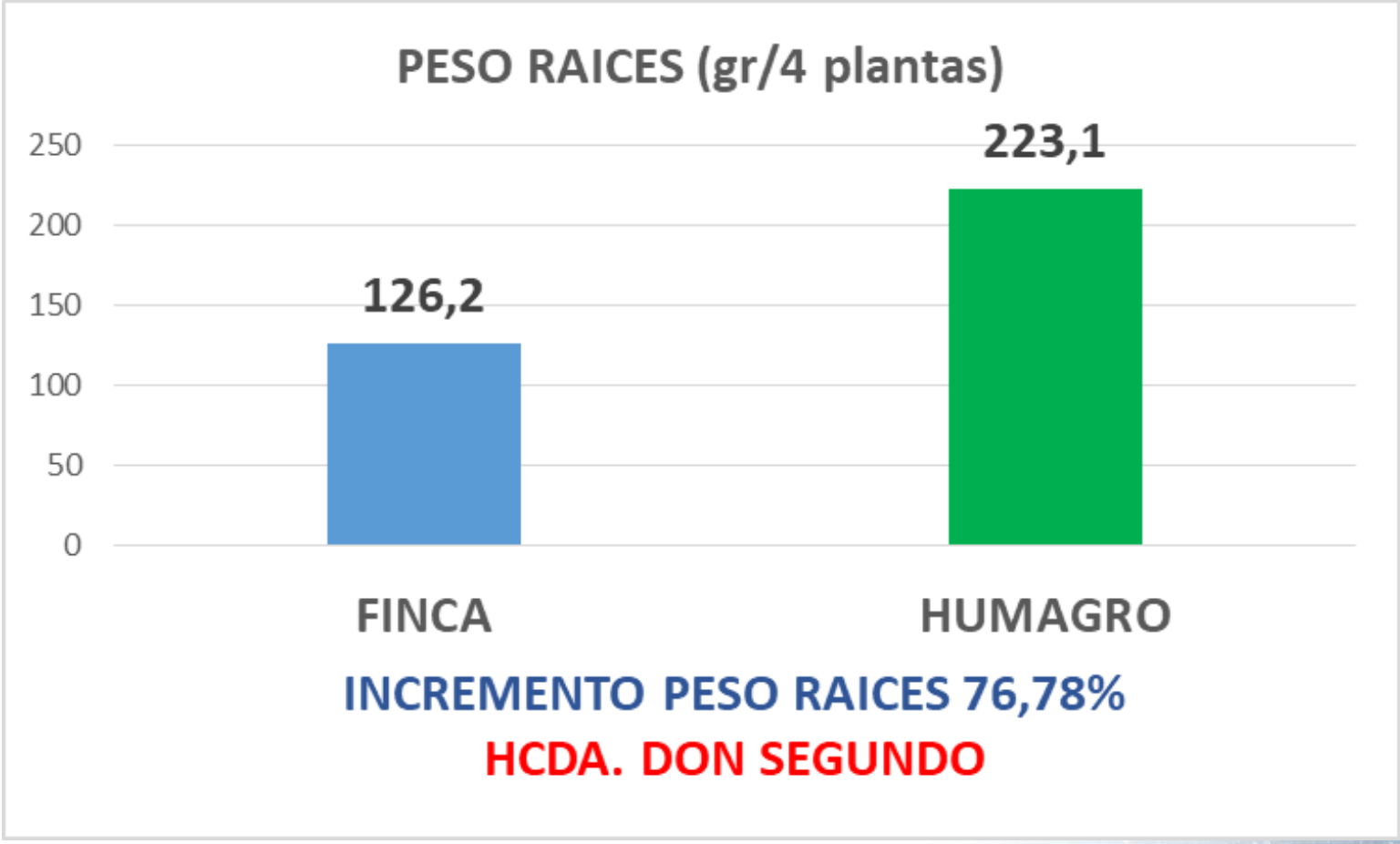
CASE 1
1. IDENTIFICATION

1.1) GENERAL DATA
Owner: Ing. Javier Cordero
Farm Name: Hcda. Don Segundo
Contact person: Ing. Bosco Pinargote

1.2) GEOGRAPHICAL LOCATION
Province: Guayas
Canton: Yaguachi / Precinct: Virgin of Fatima
Altitude: 10 m.s.n.m. Average T: 25 oC

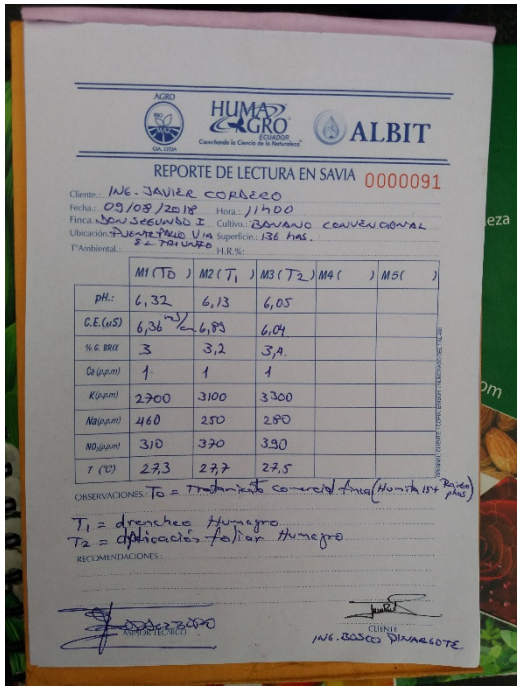
1.3) AGRICULTURAL CHARACTERISTICS
Crop age: 3 years (in production)
Test area: 1 ha

1.4) TECHNICAL RESPONSIBLE
PRODUCER: ING. BOSCO PINARGOTE
AGROBIOMAZ: ING. FREDDY LEON



FECHA	TRATAMIENTO	pH	C.E. (mS/cm)	%BRIX	Ca (ppm)	K (ppm)	Na (ppm)	NO3 (ppm)	T (oC)
9/8/2018	FINCA	6,32	6,36	3	1	2700	460	310	27,3
9/8/2018	HUMAGRO	6,13	6,89	3,2	1	3100	250	370	27,7

DON SEGUNDO	PESO RAICES (gr/4 plantas)
FINCA	126,2
HUMAGRO	223,1



AGRO HUMAGRO ECUADOR ALBIT

REPORTE DE LECTURA EN SAVIA 0000091

Cliente: ING. JAVIER CORREO
Fecha: 09/08/2018 Hora: 11:00
Finca: SAN SEGUNDO I Cultivo: BANANO CONVENCIONAL
Ubicación: PUENTE PIEDRA, VIA Superficie: 136 HAS.
T°Ambiental: H.R.%:

	M1 (To)	M2 (T1)	M3 (T2)	M4 ( )	M5 ( )
pH.:	6,32	6,13	6,05		
C.E.(uS)	6,36	6,89	6,04		
% G. BRIX	3	3,2	3,4		
Ca (ppm)	1	1	1		
K (ppm)	2700	3100	3300		
Na (ppm)	460	250	280		
NO3 (ppm)	310	370	390		
T (°C)	27,3	27,7	27,5		

OBSERVACIONES: To = Tratamiento comercial Area (Humitech + Bayer plus)
T1 = drenchee Humagro
T2 = aplicación foliar Humagro
RECOMENDACIONES:

ASESOR TECNICO
CLIENTE
ING. BOSCO PINARGOTE

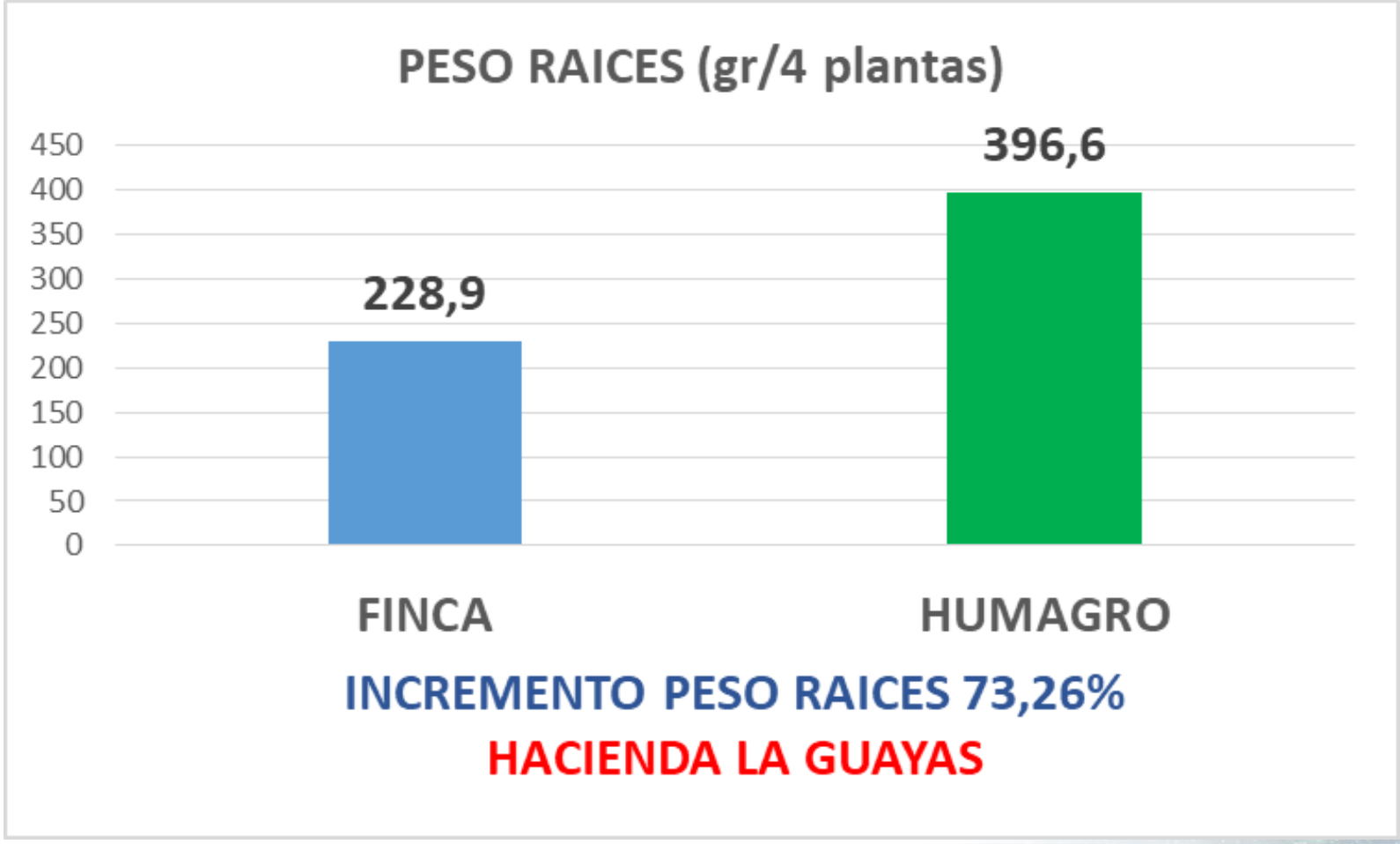
CASE 2
2. IDENTIFICATION

2.1) GENERAL DATA
Owner: Association "La Guayas"
Farm Name: Hcda. The Bolivar
Contact person: Ing. Galo Medina

2.2) GEOGRAPHICAL LOCATION
Province: El Oro
Canton: El Guabo Campus: La Iberia
Altitude: 20 m.s.n.m. Average T: 27 oC

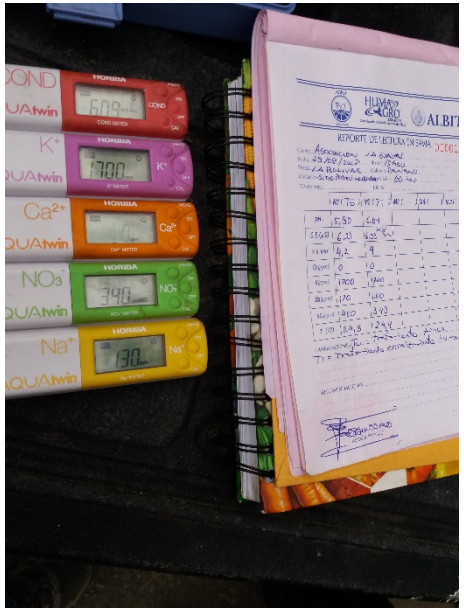
2.3) AGRICULTURAL CHARACTERISTICS
Crop age: 10 years (in production)
Test area: 1 ha

2.4) TECHNICAL RESPONSIBLE
PRODUCER: ING. GALO MEDINA
AGROBIOMAZ: ING. FREDDY LEON



FECHA	TRATAMIENTO	pH	C.E. (mS/cm)	%BRIX	Ca (ppm)	K (ppm)	Na (ppm)	NO3 (ppm)	T (oC)
29/8/2018	FINCA	5,9	6,21	4,2	0	1700	120	450	24,9
29/8/2018	HUMAGRO	6,04	6,09	4	0	1700	130	340	24,4

LA GUAYAS	PESO RAICES (gr/4 plantas)
FINCA	228.9
HUMAGRO	396.6


HORIBA
COND
K+
Ca2+
NO3
Na+
QUAtwin


TOP-600
2289
Capacity:600g
Graduation:0.1g
weigh gram
TARE
MODE
ON
OFF


TOP-600
396.6
Capacity:600g
Graduation:0.1g
weigh gram
TARE
MODE
ON
OFF
HUMAX AGRO

CONCLUSION

The validation of rooting with the use of the nutritional line of Huma Gro® (Phos-Max® - X-Tend® - Breakout® - Soil-Max™ 250 cc / ha each) in the cultivation of banana, influenced the root development (weight roots) in 75% on average in two locations, from two provinces of the Ecuadorian Coast. This suggests that the Huma Gro® nutrients, used in drench, helped to strengthen the root system and increase the weight of the roots, compared to the applications of rooting used by farmers.

The drained applications were made 15 days before the data collection, that is, the response to the applications was prompt.

GRACIAS POR SU ATENCION...

• *Email: freddyl@bhn.ec*

Cultivation Roses
1201 days
3 years 3 months

Fertiriego
100%
Huma Gro®

año	Freedom	Pink Floyd
	Tallos/planta/mes	Tallos/planta/mes
2015 Convencional	0,74	0,46
2016 TMC	0,73	0,65
2017 TMC	0,74	0,83
2018 TMC	0,86	0,91

Fertiriego

100%

Huma Gro®

23-oct-2015

205 days

24-jul-2018

1201 days

HUMA GRO
Harvesting Nature's Science™

	Tanque 100 lt	
	A	Unidad
SUPER NITRO® (30-0-0)	317,34	cc
PHOS-MAX® (0-50-0)	48,64	cc
SUPER K™ (0-0-40)	132,3	cc
CALCIUM (8-0-0+10 Ca)	449,97	cc
44 MAG® (0-0-0+5Mg+5,5S)	141,12	cc
IRON (12-0-0 +4S+6Fe)	121,26	cc
MANGANESE (5Mn+2,5S)	47,88	cc
Z-MAX® (8ZN+5S+2Mn+0,5Cu)	16,44	cc
BORON (5B)	20,06	cc
HNO3	132.3	cc
		cc

g/tanque 100 lt	**1427**

TMC en acción

Fertilizante Convencional

	Tanque 100 lt			
	A	B	Acidos	Unidad
Nitrato de Calcio 26% CaO	2155			g
Nitrato de Amonio (34,5%)	44			g
Fe-EDDHA 6%		140.3		g
Mn-EDTA 13%		30		g
Zn-EDTA 15%		15		g
Cu-EDTA 15%		14		g
Nitrato de Potasio 46% K2O		907		g
Sulfato de Magnesio 16% MgO		415		g
Fosfato Monopotásico (51%)		675		g
Sulfato de Amoonio (21%)		225		g
Sulfato de Portasio (16%) K2O		28		g
Molibdato de Amonio	3			
HNO3			604	cc
	2199	2469	604	g

g/tanque 100 lt	**5272**

Fertigation 100% HUMA GRO®

Crop: Roses

Fertigation start 2016

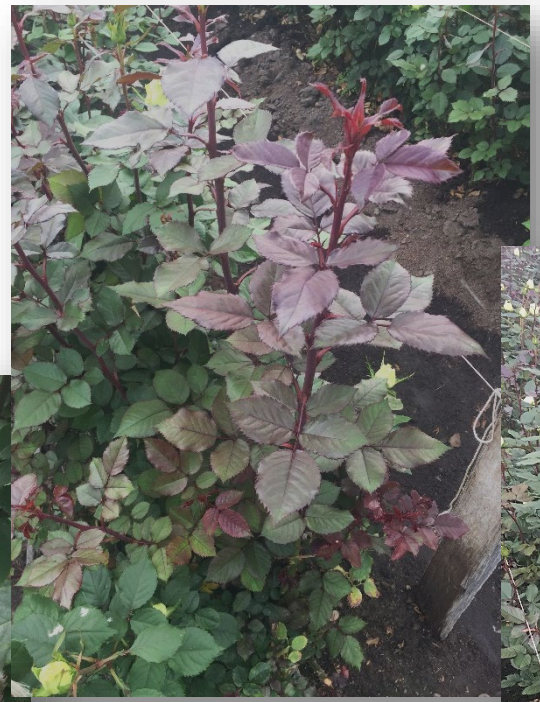
Lasso-Ecuador

Agrosa Insumos Agrícolas

Yurakuna tikay

Marked chlorosis

Low production 2000 stems in 4 Ha



Healthier and more vigorous buds

19-OCt-2017
44 dda

Thicker stems,
larger leaves

Production increase 12000 stems in 4 Ha

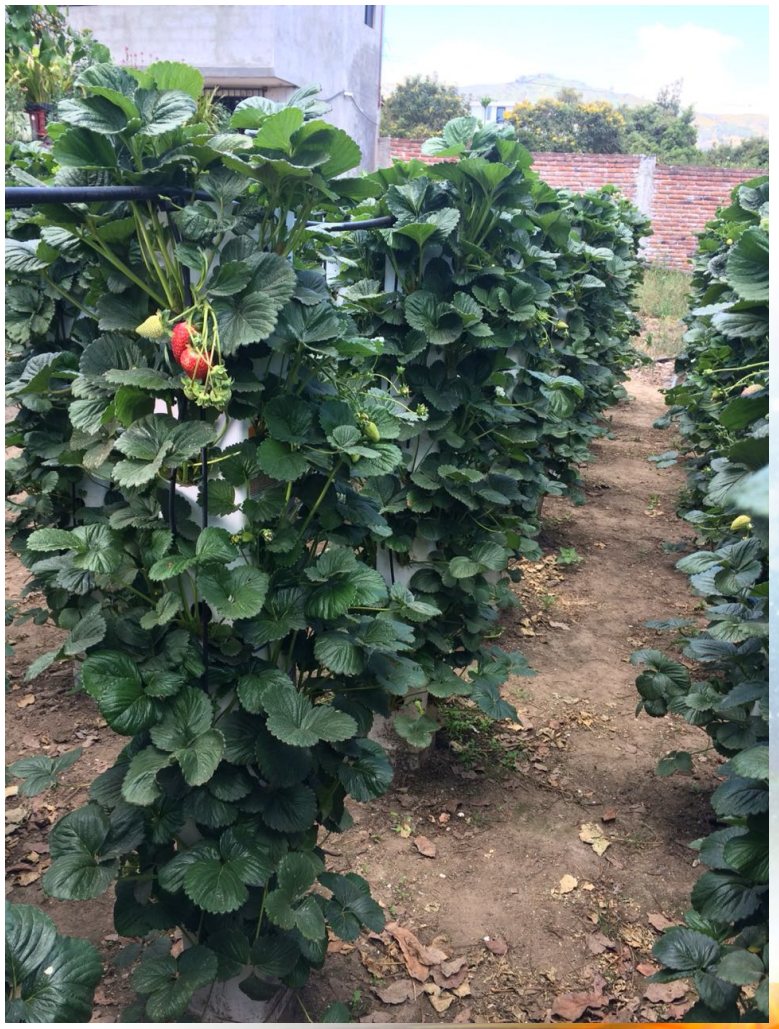
Hydroponic Strawberry in Vertical with nutritious solution 100% Huma Gro® with recycled materials In Ecuador

Agrosa
Insumos Agrícolas

Program

Para 1000 LTS.
Super k.....63
Silk.....0.5
Phosmax……15
Ácido cítrico…….83
Calcium.....84
44 Mag.....36
Borón.....3
Breakout.....10
Iron.....5
Manganesse.....2
Z max.....2
Cooper.....1.5
Completa.....0.8
Xtend.....2

Agrosa
Insumos Agrícolas



Agrosa
Insumos Agrícolas

Substitution of phosphorus and potassium sources in the fertilization of the pineapple crop (*Ananas comosus*) with Huma Gro® products in San Carlos, Costa Rica.

OBJECTIVES:

- Substitute in a fertilization program of the pineapple mono ammonium phosphate culture as the main source of phosphorus, with Phos-Max®.

- Substitute soluble potassium chloride as the main source of potassium in a pineapple fertilization program with Super K™.

- To evaluate the contribution of the X-TEND® B CON product as nutrient complexer, decreasing 20% of UREA, AMMONIUM NITRATE and MAGNESIUM SULFATE in foliar applications.

Variables to be evaluated

Measure the concentration of nutrients comparatively by means of leaf D samples.

Measure the fresh and dry weight of stems and leaves of pineapple plants at the time of flower induction.

Pineapple cultivation fertilization program.

DDS	Ciclo de fertilización	Urea	Nitrato de Amonio	Cloruro de Potasio	Fosfato monoamonico	Nitrato de Calcio	Sulfato de Magnesio	Ácido Bórico	Sulfato de hierro	Sulfato de Zinc	Molibdeno
45	Fertilización foliar 1	24	22	22			40		6	2	0,5
60	Fertilización foliar 2	24	22	27	25	15		2			
75	Fertilización foliar 3	36	34	32			40		6	4	0,5
90	Fertilización foliar 4	42	38	37	35	20		2			
105	Fertilización foliar 5	42	38	45			50		6	4	0,5
120	Fertilización foliar 6	42	38	50	35	20		2,5			
135	Fertilización foliar 7	48	46	58			60		8	6	0,5
150	Fertilización foliar 8	48	46	62	45	25		5,5			
165	Fertilización foliar 9	48	46	65			65		8	6	0,5
180	Fertilización foliar 10	48	46	66	45	25		3			
195	Fertilización foliar 11	48	46	67			70		8	6	0,5
210	Fertilización foliar 12	48	46	66	50	25		3			
225	Fertilización foliar 13	48	46	65			70		8	6	0,5
240	Fertilización foliar 14	48	46	65	50	25		3			
		594	560	727	285	155	395	21	50	34	3,5

DDS	Ciclo de fertilización	Urea	Nitrato de Amonio	Super K	Phosmax	Nitrato de Calcio	Sulfato de Magnesio	Ácido Bórico	Sulfato de hierro	Sulfato de Zinc	Molibdeno	Xtend Bcom
45	Fertilización foliar 1	24	22	1,2	1		40		6	2	0,5	
60	Fertilización foliar 2	24	22	1,2	1	15		2				
75	Fertilización foliar 3	36	34	1,2	1		40		6	4	0,5	
90	Fertilización foliar 4	42	38	2,2	2	20		2				
105	Fertilización foliar 5	42	38	2,2	2		50		6	4	0,5	2,5
120	Fertilización foliar 6	42	38	3,2	3	20		2,5				2,5
135	Fertilización foliar 7	48	46	2,2	2		60		8	6	0,5	2,5
150	Fertilización foliar 8	48	46	3,7	3,5	25		5,5				2,5
165	Fertilización foliar 9	48	46	2,2	2		65		8	6	0,5	2,5
180	Fertilización foliar 10	48	46	3,1	3	25		3				2,5
195	Fertilización foliar 11	48	46	3,1	3		70		8	6	0,5	2,5
210	Fertilización foliar 12	48	46	3,1	3	25		3				2,5
225	Fertilización foliar 13	48	46	3,1	3		70		8	6	0,5	2,5
240	Fertilización foliar 14	48	46	3,3	3	25		3				2,5
		594	560	35	32,5	155	395	21	50	34	3,5	25

Program

Control

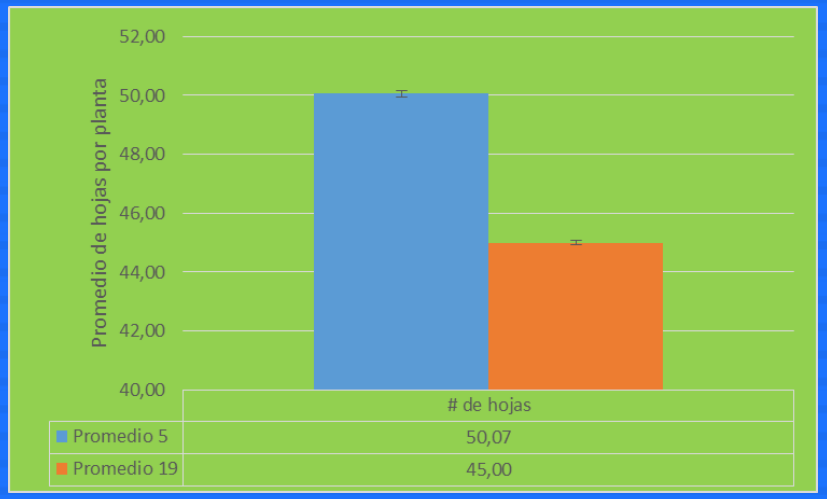
Aporte (Kg)	Elemento
519,07	N
173,85	P2O5
439,84	K2O
40,30	CaO
64,65	MgO
67,03	SO3
3,68	B
334,42	Cl
0,00	Cu
9,00	Fe
0,03	Mn
0,14	Mo
7,48	Zn

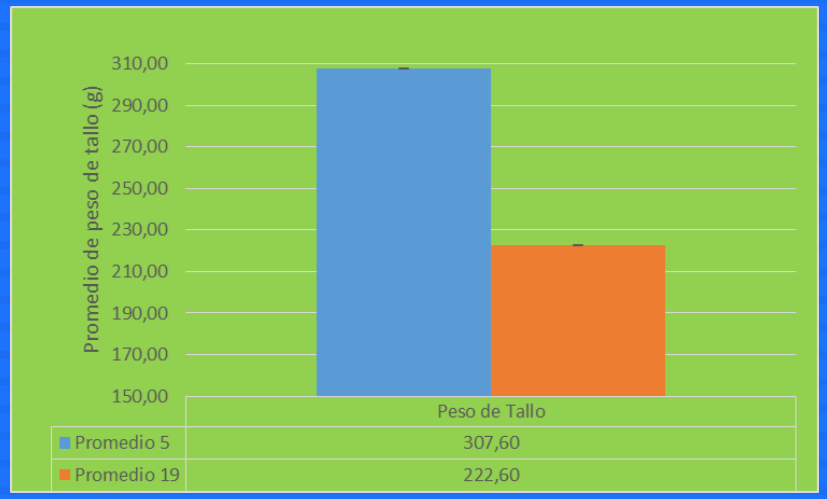
Huma Gro®

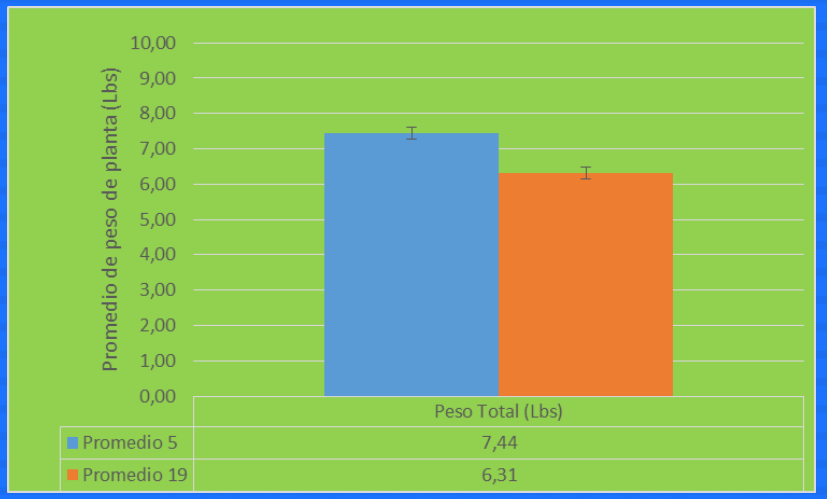
Aporte (Kg)	Elemento
486,37	N
16,75	P2O6
14,00	K2O
40,30	CaO
63,20	MgO
64,85	SO4
3,68	B
0,00	Cl
0,00	Cu
9,00	Fe
0,03	Mn
0,14	Mo
7,48	Zn

Concentration of nutrients in sheet D.

Material	Sección	N Total	K	Ca	Mg	P	Cu	Mn	Fe	Zn
Slip	5	1,97	3,9	0,31	0,28	0,17	19	1052	130	70
Slip	5	1,89	3,12	0,44	0,39	0,21	31	1074	214	27
Slip	5	1,73	4,82	0,42	0,24	0,21	33	721	195	20
Slip	5	1,54	2,57	0,4	0,34	0,17	20	402	99	14
Promedio		1,78	3,60	0,39	0,31	0,19	25,75	812,25	159,50	32,75
Desvest		0,19	0,98	0,06	0,07	0,02	7,27	317,61	54,04	25,40
Slip	19	2,16	3,8	0,2	0,25	0,16	18	1002	103	35
Slip	19	2,12	3,4	0,3	0,34	0,21	22	1114	526	31
Slip	19	1,82	4,2	0,29	0,34	0,18	26	966	131	19
Slip	19	1,65	3	0,32	0,36	0,19	22	542	126	21
Promedio		1,94	3,60	0,28	0,32	0,19	22,00	906,00	221,50	26,50
Desvest		0,24	0,52	0,05	0,05	0,02	3,27	250,72	203,37	7,72

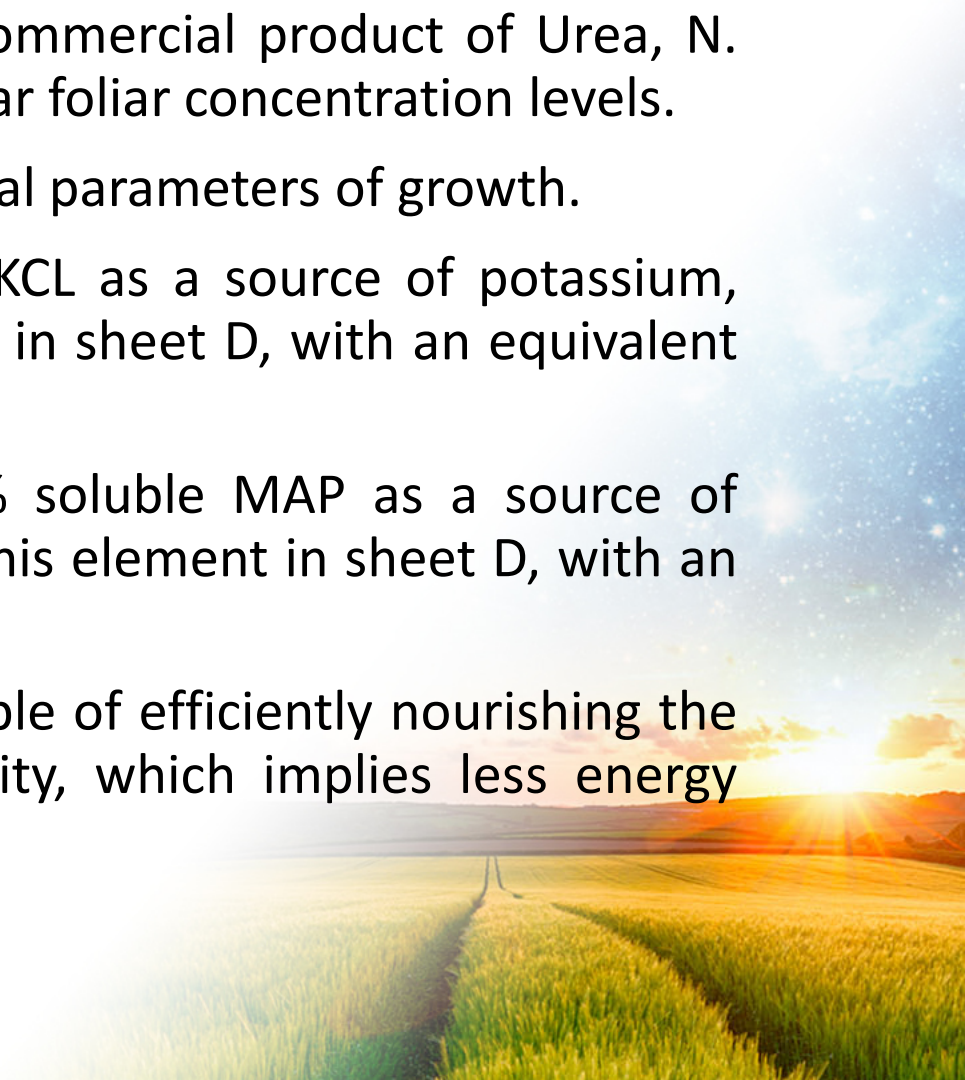






CONCLUSIONS

- The use of X-Tend® B Con allows the use of 20% less commercial product of Urea, N. Ammonium, Magnesium Sulphate, allowing to reach similar foliar concentration levels.
- The X-Tend® B Con guarantees an increase in morphological parameters of growth.
- The use of SUPER K™ allows the substitution of 100% KCL as a source of potassium, obtaining adequate foliar concentrations for this element in sheet D, with an equivalent cost.
- The use of Phos-Max® allows the substitution of 100% soluble MAP as a source of phosphorus, obtaining adequate leaf concentrations for this element in sheet D, with an equivalent cost.
- The HUMA GRO® foliar products have a technology capable of efficiently nourishing the plant, as well as providing a lower electrical conductivity, which implies less energy expenditure to take advantage of the nutrients.



Comparative Cost Analysis

Testigo				
	Urea	**Nitrato de Amonio**	**KCL**	**MAP Soluble**
Consumo (Kg)	594	560	727	285
Costo ($)/ Kg	$0,38	$0,36	$0,37	$1,02
Costo Total ($)	$225,72	$201,60	$268,99	$290,70
Comercial				
	Urea	**Nitrato de Amonio**	**Super K**	**Phosmax**
Consumo (Kg)	500	471	33,5	31
Costo ($)/ Kg	$0,38	$0,36	$8,00	$9,25
Costo Total ($)	$190,00	$169,56	$268,00	$286,75

THANKS.


Agritek de Costa Rica
Acori S.A
L: 9
S: 4
PL: 8917
A:
F.S: 11 03 17
H: C
P:


HUMA GRO
X-TEND® B-CON
ANALISIS GARANTIZADO
6-2-0
SUPER K™
Fertilizante Foliar y al Suelo
ANALISIS GARANTIZADO
0-0-40
PHOSMAX™
Fertilizante Foliar y al Suelo
ANALISIS GARANTIZADO
0-50-0
HUMA GRO

EXPERIENCE IN TOBACCO SEEDLINGS

Evaluation of nutritive solutions with the Huma Gro® Line in Tabaco nurseries (Nicotiana tabacum L), Perdomo Cigars Tabacalera, Estelí, summer 2016.

Estate: Perdomo Cigars.

Owner: Mr. Nicks Perdomo.

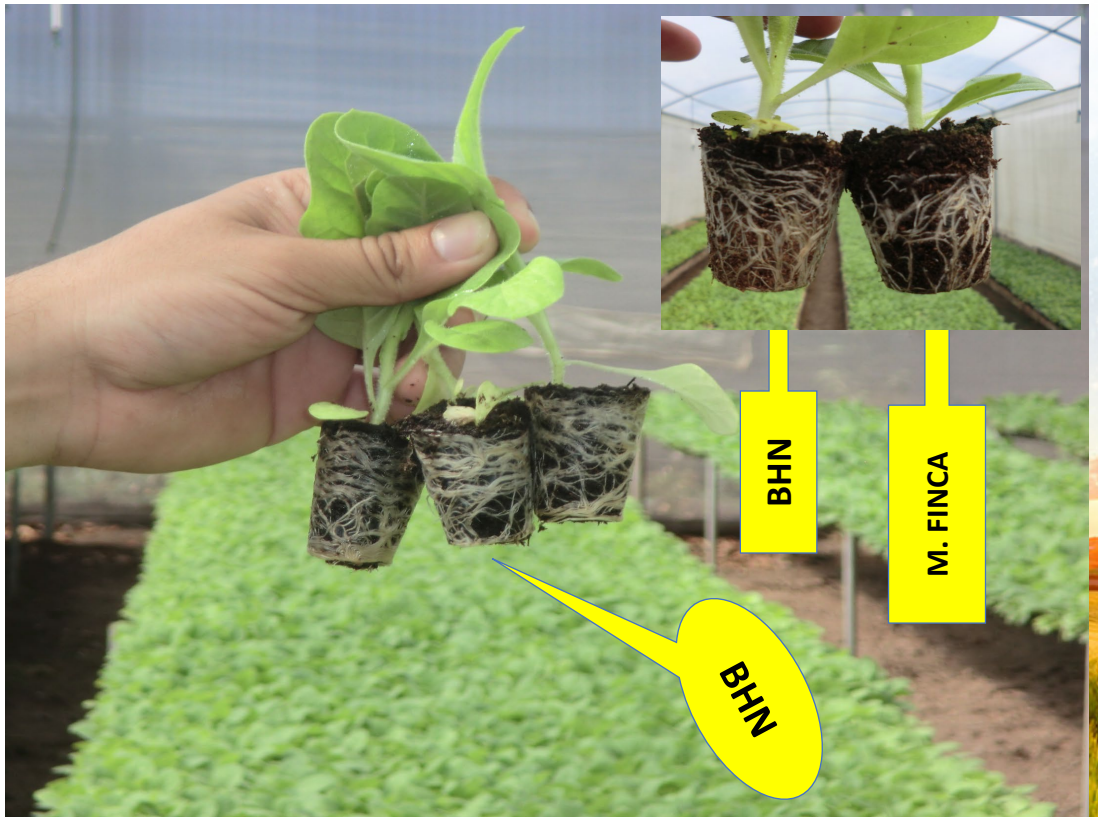
Property Manager: Ing. Oscar Herrera.

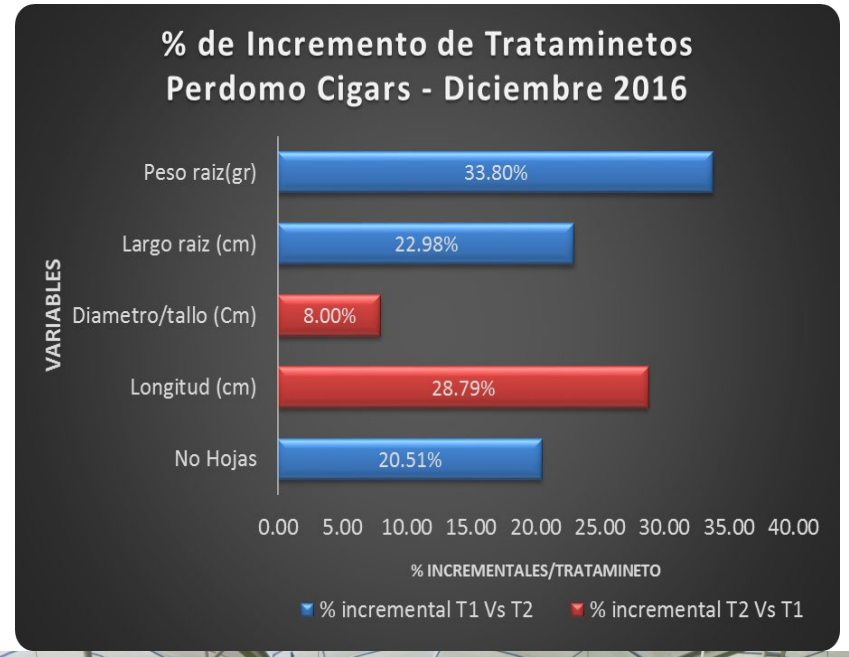
Nursery: Fabrica - Esteli.

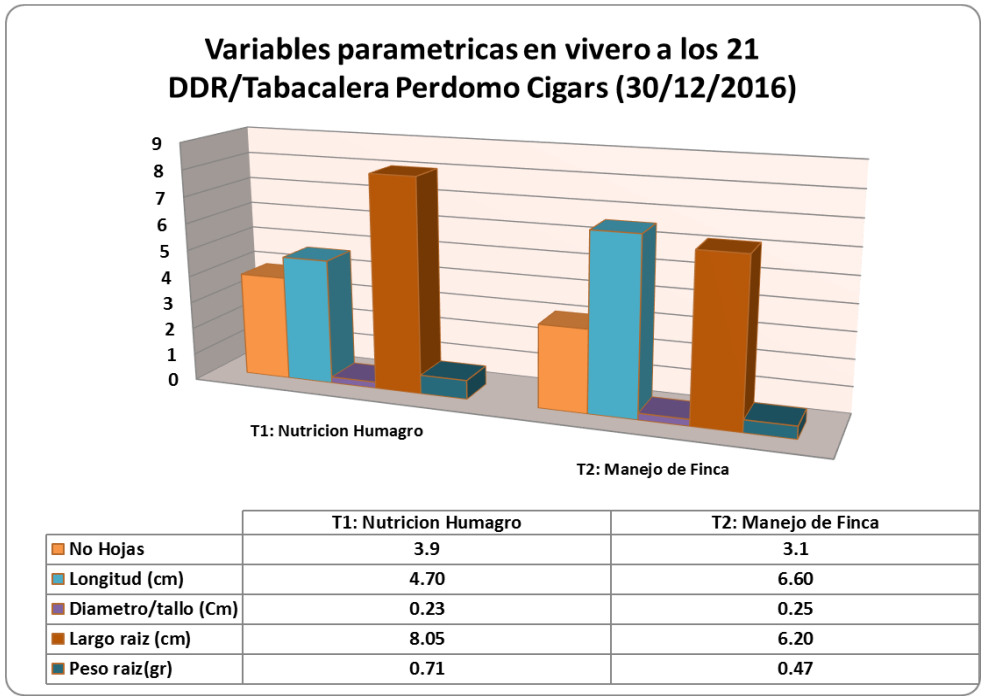
Cultivar: Improved habano.

Nursery system: Aerial and trays.

(DCA / 3 Repeticiones)



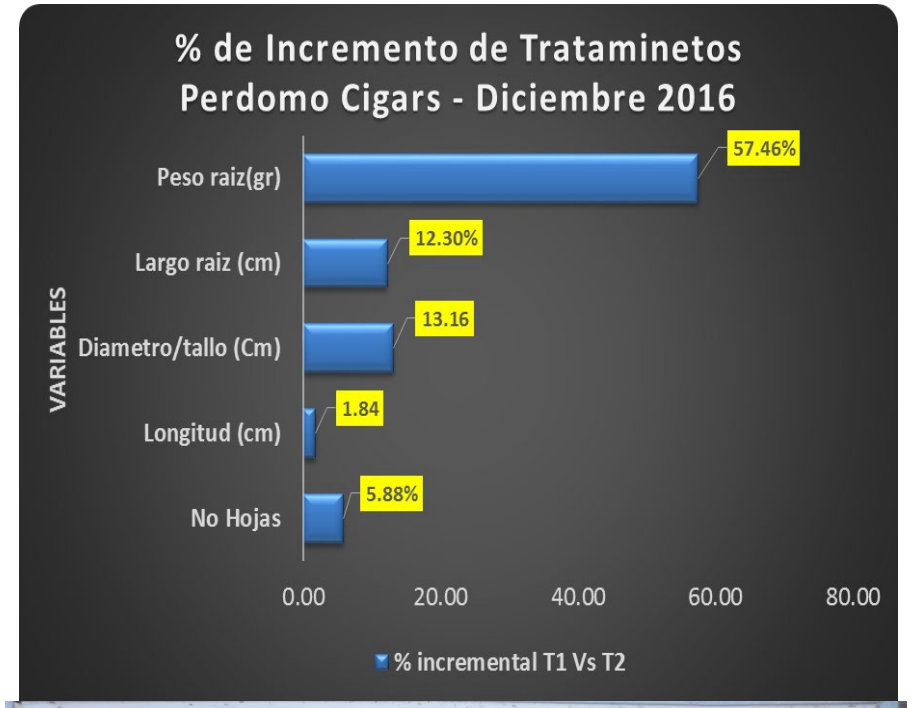


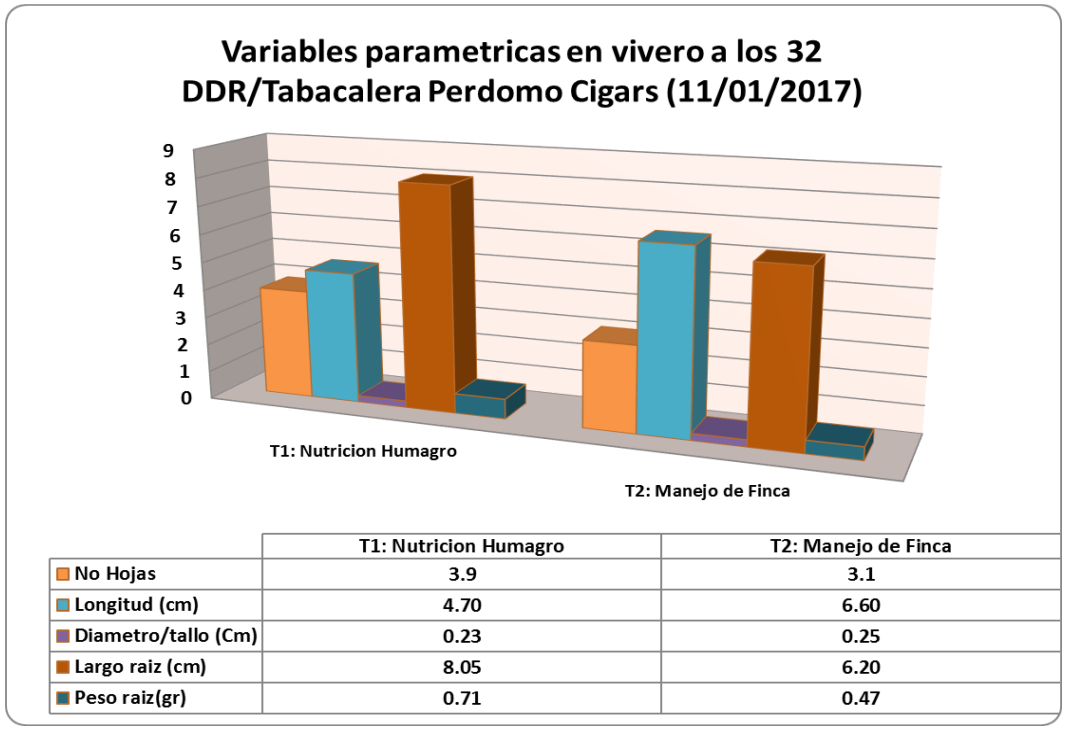


	T1: Nutricion Humagro	T2: Manejo de Finca
No Hojas	3.9	3.1
Longitud (cm)	4.70	6.60
Diametro/tallo (Cm)	0.23	0.25
Largo raiz (cm)	8.05	6.20
Peso raiz(gr)	0.71	0.47

Si apreciamos los resultados de variables paramétricas a los 21 ddr, el T1: Programa Huma Gro® supera en tres variables al T2: Manejo de la finca las cuales son: Nº de hojas/planta con 20.51%, largo de raíz con 22.98% y peso de raíz con 31.80%. Por el contrario el T2: Manejo de finca supero en dos variables al T1: Programa Huma Gro, las cuales fueron: Longitud de planta con 28.79%, diámetro de tallo 8%.

Es evidente el incremento en el sistema radicular de plántulas con la tecnología Huma Gro, no así el desarrollo vegetativo en esta etapa.





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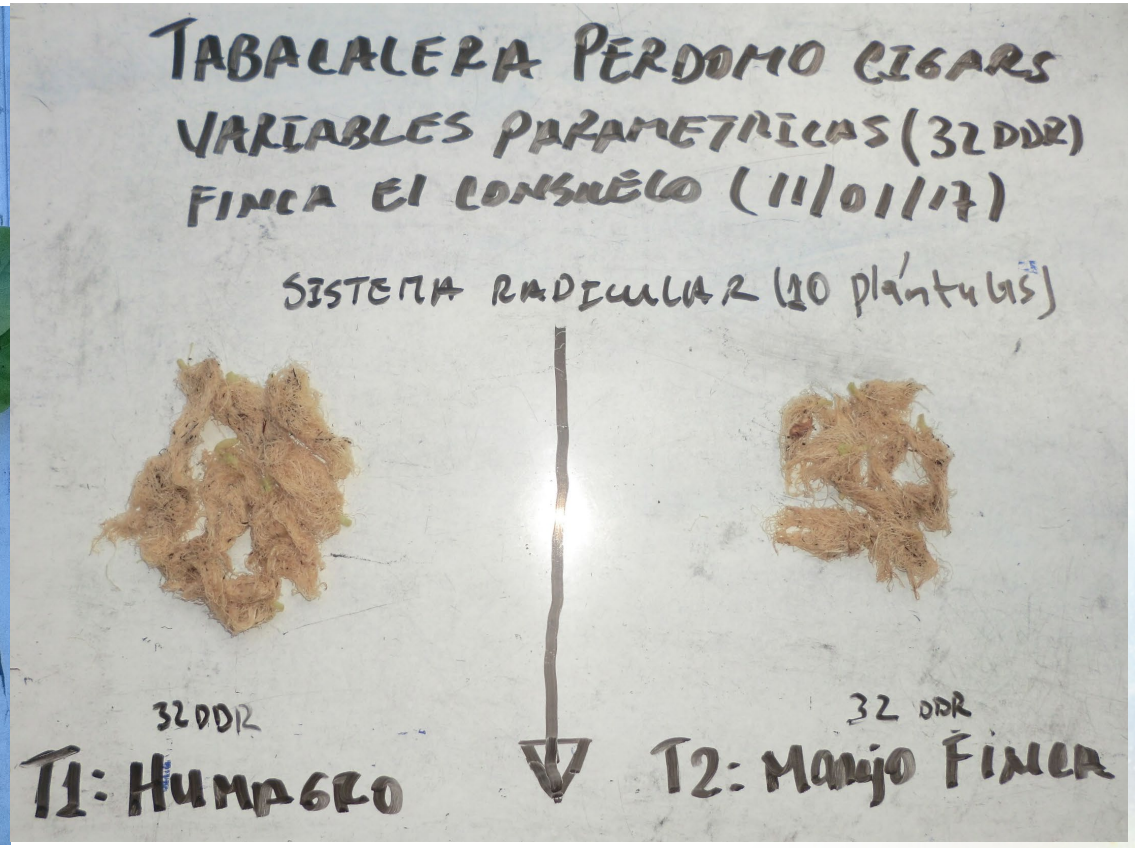
Diametro/tallo (Cm)	0.23	0.25
Largo raiz (cm)	8.05	6.20
Peso raiz(gr)	0.71	0.47

32 días después de repique (ddr) sin duda el T1: Programa Huma Gro® supera en todas las variables paramétricas al T2: Manejo de finca con 5.88% en Nº de hojas/planta, Longitud de tallo/planta con 1.84, diámetro de tallo con 13.16%, largo de raíz con 12.30% y peso de raíz con 57.46.

Sin duda en el sistema radicular se marca la diferencia de la tecnología BHN Vs el Manejo de la finca, de igual manera al final de la etapa fenológica se logro obtener mayor área foliar.


TABACALERA PERDOMO CIGARS
VARIABLES PARAMETRICAS (32 DDR)
FINCA EL CONSUELO (11/01/17)
32 DDR
T1: HUMAGRO
32 DDR
T2: MANJO FINCA


TABACALERA PERDOMO CIGARS
VARIABLES PARAMETRICAS (32 DDR)
FINCA EL CONSUELO (11/01/17)
SISTEMA RADICULAR (10 plántulas)
32 DDR
T1: HUMAGRO
32 DDR
T2: MANJO FINCA

Difusión de Tecnología Huma Gro

Evaluación de soluciones nutritiva con la Línea Huma Gro® en campos de Tabaco (*Nicotiana tabacum L*), Tabacalera Perdomo Cigars, Finca El Consuelo – Estelí, verano 2017 - 2018.

- ***Elaborado por: Ing. Abrahan Alberto Parrilla Torres***
- ***Promotor Huma Gro. DSTC***
- ***Nicaragua***

- **Estelí; octubre 2018**

		Niveles Foliares Tabacalera Perdomo area 1,24 Ha Variedad H60 20 DDT											
	Elementos	N	P	K	Ca	Mg	S	B	Cu	Fe	Mn	Zn	Na
	Rangos	2_5	0.22-0.40	2.5-7.5	2_5	0.24-1.8	0.15-0.65	20-50		68-140	33-156	25-50	
Huma Gro	Niveles	4,99	0,34	1,52	2,22	0,54	0,29	39,75	14,54	46,65	45,35	32,09	0,03

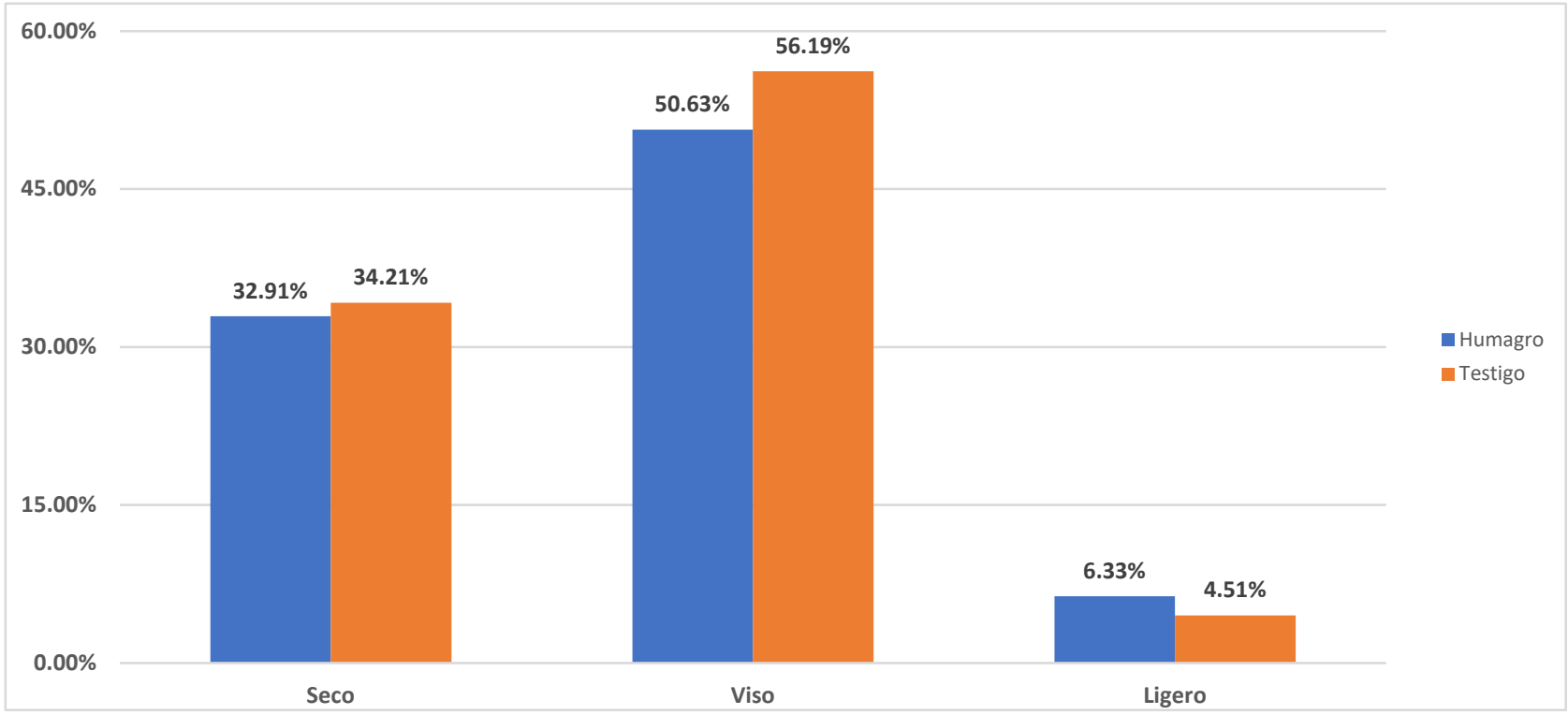
		Niveles Foliares Tabacalera Perdomo area 1,24 Ha Variedad H60 40 DDT											
	Elementos	N	P	K	Ca	Mg	S	B	Cu	Fe	Mn	Zn	Na
	Rangos	2_5	0.22-0.40	2.5-7.5	2_5	0.24-1.8	0.15-0.65	20-50		68-140	33-156	25-50	
Huma Gro	Niveles	4,99	0,34	1,52	2,22	0,54	0,49	26,18	19,29	199,14	75,34	36,01	0,02

		Niveles Foliares Tabacalera Perdomo area 1,24 Ha Variedad H60 70 DDT											
	Elementos	N	P	K	Ca	Mg	S	B	Cu	Fe	Mn	Zn	Na
	Rangos	2_5	0.22-0.40	2.5-7.5	2_5	0.24-1.8	0.15-0.65	20-50		68-140	33-156	25-50	
Huma Gro	Niveles	4,19	0,29	2,9	4,65	0,63	0,34	36,03	24,44	85,85	52,26	45,87	0,02
Testigo	Niveles	4,84	0,29	2,74	4,09	0,75	0,34	35,62	23,54	129,26	63,35	64,64	0,02

Nota: color verde (adecuado), color rojo (por debajodel rango), color azul (por arriba del rango)

Aporte nutricional cultivo de Tabaco sol Kg /Ha					
N	P2O5	K2O	SO4	Zn	Bo
192.13	84.51	231.04	47.83	2.11	2.11
Aporte edáfico Kg/Ha					
72.13	48.41	93.62	27.4	1.21	0.15
Fórmula Base 14.90 – 10 - 19.34 – 5.66 S – 0.25Zn - 0.3B					
Aporte soluble Kg /Ha					
120	36.1	137.44	20.43	0.9	1.96

Tobacco Classification in Pylons



Curing house

FIELD EXPERIENCE
TOBACCO TAPADO CONNETICUM

Results Samples Huma Gro® Lot No 5 Tobacco Connecticut.

Niveles Foliares Tabacalera Fernández.

20 DDT

Elementos	N	P	K	Ca	Mg	S	B	Cu	Fe	Mn	Zn	Na
Rangos	(2 - 5)	(0.22-0.40)	(2.5-7.5)	(2 - 5)	(0.24 - 1.8)	(0.15-0.65)	(20-50)		(68-140)	(33-156)	(25-50)	
BHN	5.02	0.39	4.11	2.63	0.54	0.65	44.03	16.51	162.09	44.82	97.51	0.02
TAFENIC	5.45	0.37	4.15	2.8	1.14	0.62	48.81	17.04	210.13	40.31	110.75	0.02

40 DDT

Elementos	N	P	K	Ca	Mg	S	B	Cu	Fe	Mn	Zn	Na
Rangos	(2 - 5)	(0.22-0.40)	(2.5-7.5)	(2 - 5)	(0.24 - 1.8)	(0.15-0.65)	(20-50)		(68-140)	(33-156)	(25-50)	
BHN	4.66	0.27	4.02	2.32	0.81	0.55	25.71	11.28	56.19	140.58	34.31	0.02
TAFENIC	5.33	0.32	4.3	2.04	0.88	0.53	31.1	8.39	24.37	102.64	21.75	0.02

63 DDT

Elementos	N	P	K	Ca	Mg	S	B	Cu	Fe	Mn	Zn	Na
Rangos	(2 - 5)	(0.22-0.40)	(2.5-7.5)	(2 - 5)	(0.24 - 1.8)	(0.15-0.65)	(20-50)		(68-140)	(33-156)	(25-50)	
BHN	4.6	0.3	3.03	2.29	0.65	0.47	42.21	10.59	137.01	55.65	102.62	0.02
TAFENIC	4.79	0.29	3.41	2.41	0.77	0.44	37.95	10.22	126.82	26.61	94.11	0.02

Blanco : Niveles Adecuados
Azul : Niveles Altos
Rojo : Niveles Bajos

Cantidad de Hojas : 877		
Categorias	**# de hojas**	**%**
Capa 1	156	17,7
Capa 2	317	36,1
Capa XL 1	98	11,1
Capa XL 2	110	12,5
Tripa oscura	32	3,6
Capa mediana	84	9,6
Banda	80	9,1
Total de capa		**77,4**
Total de tripa oscura		3,6
Total de capa mediana		9,6
Total de banda		9,1

Experiencia en Maní

T1: Fertilizantes foliares HUMAGRO

Aplicaciones	Productos (Dosis/Mz)	Fecha	DDS
1	Vitol (0.5 L)	7/8/2017	26 DDS
	Breakout (0.5 L)		
	Boron (0.3 L)		
	Z-max (0.4 L)		
2	Vitol (0.5 L)	21/8/2017	40 DDS
	Breakout (0.5 L)		
	Boron (0.3 L)		
	Z-max (0.4 L)		
3	44-MAG (0.4 L)	29/8/2017	48 DDS
	Calcium (0.4 L)		
	Boron (0.3 L)		
4	44-MAG (0.4 L)	12/9/2017	62 DDS
	Calcium (0.4 L)		
	Manganese (0.5 L)		
	Super K (0.5 L)		
5	Manganese (0.5 L)	26/9/2017	76 DDS
	Boron (0.4 L)		
	Super K (0.5 L)		

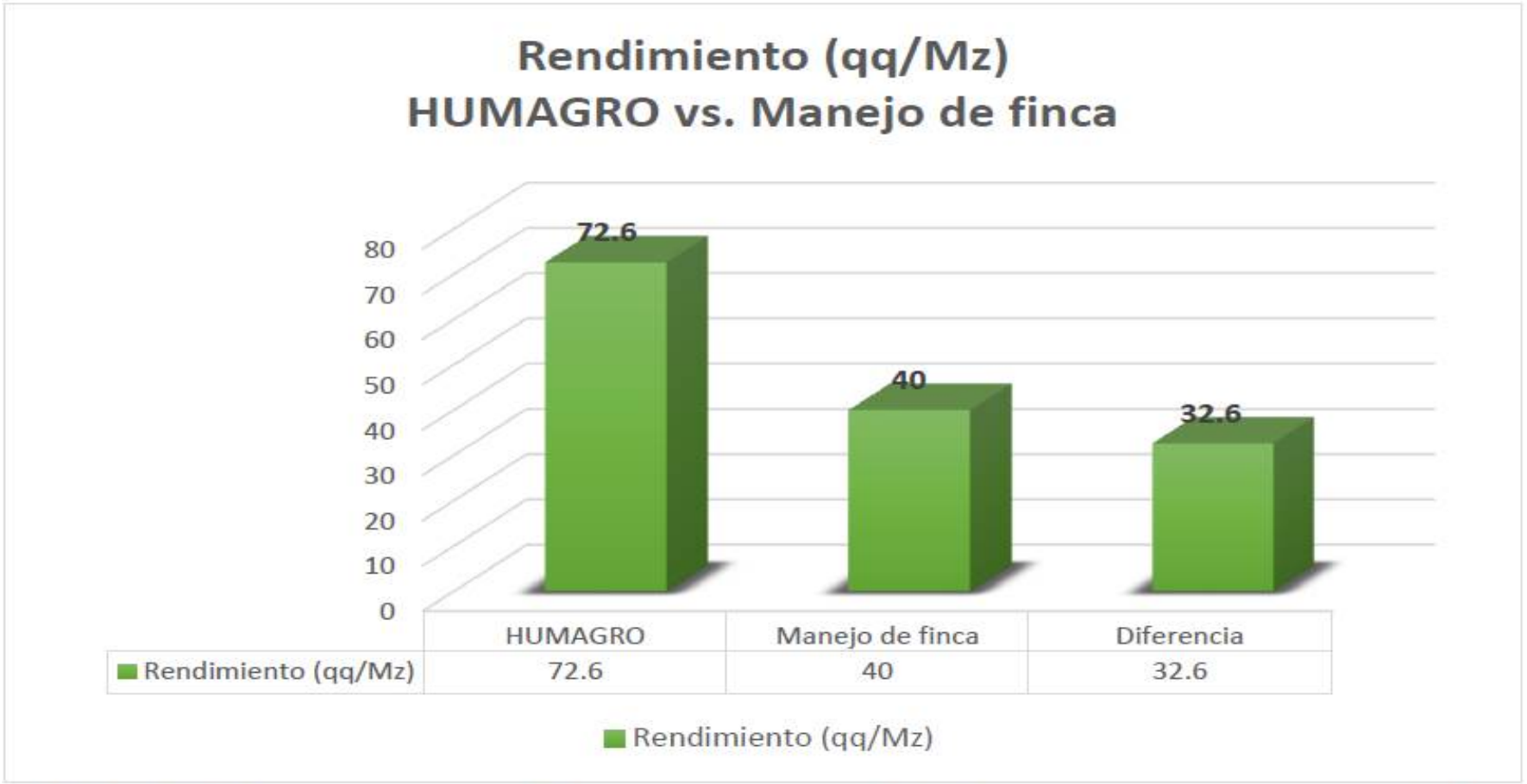


Gráfico 8. Rendimiento en quintales por manzana (qq/Mz) de los tratamientos en estudio. Lote Lorenzo, Momotombo, León.

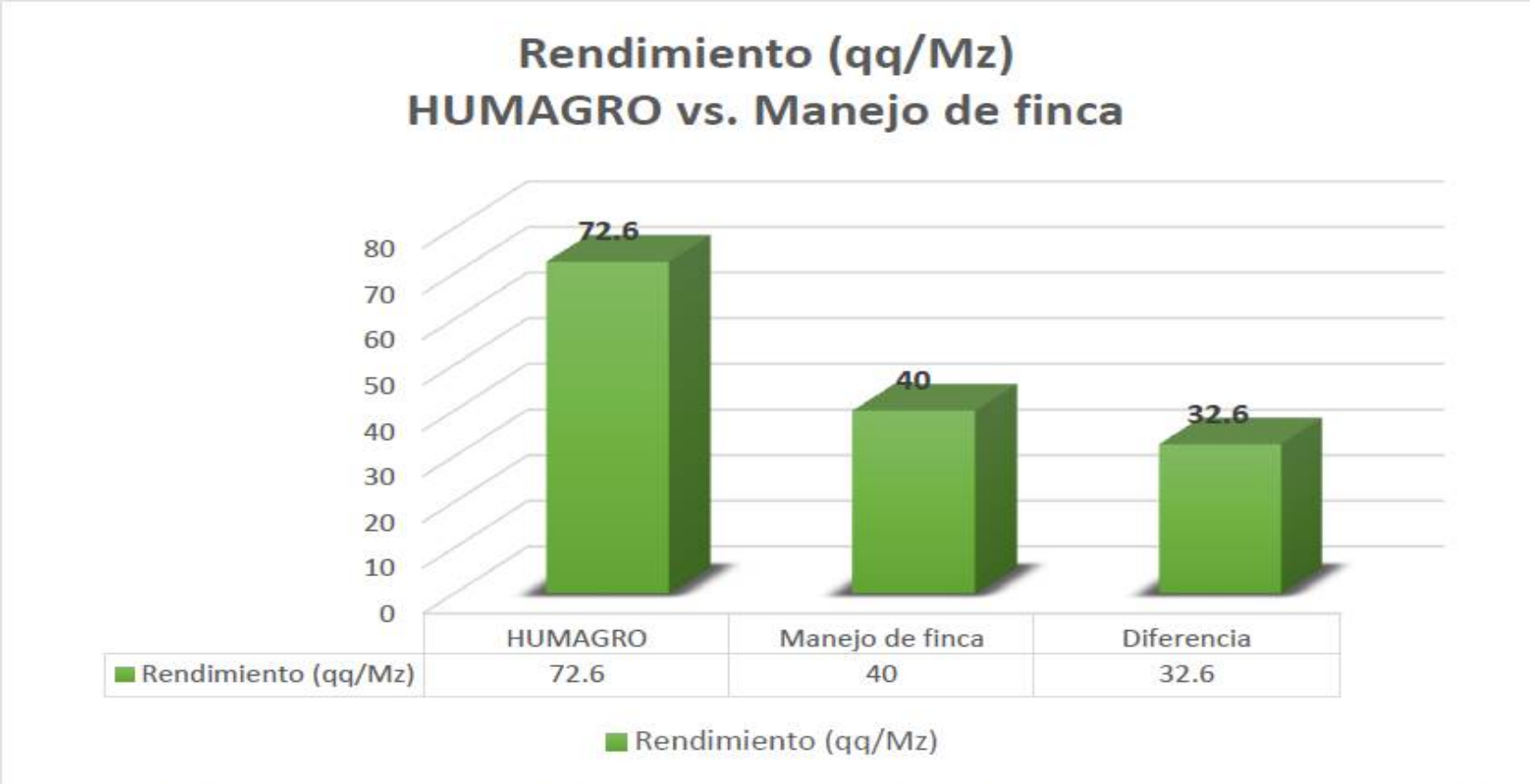


Gráfico 8. Rendimiento en quintales por manzana (qq/Mz) de los tratamientos en estudio. Lote Lorenzo, Momotombo, León.

Análisis económico de los tratamientos evaluados

Descripción	T1 HUMAGRO	T2 Manejo de finca
Rendimiento (qq/Mz)	72.60	40
Costo promedio (U$/qq)	23	23
Costo de foliares (U$/Mz)	72.08	50
Diferencia de HUMAGRO (U$)	22.08	-
Diferencia en qq	32.6	-
Ganancia bruta en U$	749.80	-
Punto de equilibrio del programa foliar	3.13	-
Ganancia neta	677.81	-
Relación Costo/Beneficio U$	10.40	

Thanks

PIONEERS in post harvest protection with Proud 3®

BANANA

➢ Pre-Packing Washing in Immersion:

➢ Sample applied with Proud 3®, two boxes with 16 fruit hands.

➢ Dosage of Proud 3®, at a rate of 10 ml. x Lit. of water.

➢ Brush does not apply.

➢ Packing:

➢ For USA, perforated bag.

➢ Unclassified fruit, from the reception stack.

Methodology Evaluation 2:

➢ <u>Empaque</u>:

- ❖ Para Europa, bolsa cerrada al vacio.
- ❖ Fruta sin clasificar, de la pila de recepción.
- ❖ Tiempo calculado de la evaluación 30 días.

- ✓ Cicatrización de color acaramelado.
- ✓ Corona firme al tacto, al hacer presión.
- ✓ **NO** se utiliza ningún otro producto de acompañamiento.
- ✓ Se acuerda dejar la fruta observación por mas días. (tiempo total a alcanzar)

Scarring with PROUD 3®
Test # 2

OBSERVACION:
Tiempo total de protección; hasta la maduración, **44 Días**

BIO EXPORT S.A.

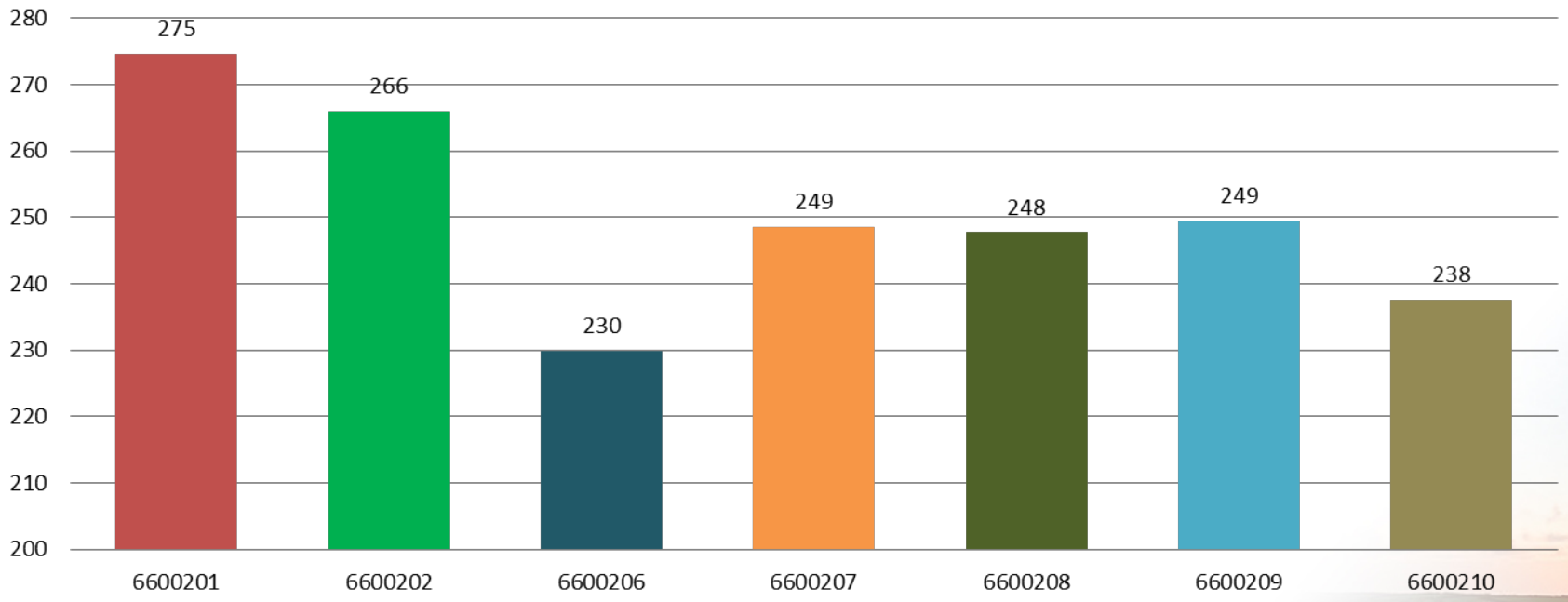
SUGAR CANE CULTIVATION

			FERTILIZACION (Kg/Ha)						PRODUCTOS ADICIONALES			PROD. Y REND.	
	LOTE	FINCA	NITROGENO	FOSFORO	BORO	ZINC	POTASIO	AZUFRE	PRODUCTO	DOSIS	U.M	Ton/Ha Zafra 13-14	RPB Zafra 13-14
Eslovaquia	660-0201	9.53	136		1	7	40	22	Phosmax	6	Lts.	160	275
	660-0202	9.53	136		1	7	40	22	Phosmax	6	Lts.	147	266
	660-0206	21.22	136	80	1	7	40	22	Root Feed Dry	50	Lts.	155	230
	660-0207	15.87	136		1	7	40	22	Testigo DPM (0-46-0)	3.8	qq	152	249
	660-0208	20.21	136	80	1	7	40	22	Alga Mar Plus	5	Lts.	144	248
	660-0209	22.06	136		1	7	40	22	Testigo (0-46-0)	3.8	qq	139	249
	660-0210	17.16	136		1	7	40	22	Testigo DPM (0-46-0)	3.8	qq	122	238
Total		116										145	251

PHOS-MAX®

Rend./Lote 2013-2014

RPB Finca 660: Eslovaquia II



DIFFERENT WAYS TO APPLY HUMA GRO® IN CAÑA

BIO EXPORT S.A.

DRONES CONCENTRATION OF SUGAR IN 5 WEEKS OF 14 DEGREES BRIX WE ARRIVE AT 23 DEGREES BRIX

COMPLETE PROGRAM HUMA GRO® MICROS ON MAY 52018
400ML X-TEN B, 1 Lt BORON, 1 Lt 44-MAG, 1 Lt Z-MAX X Ha.

BIO EXPORT S.A.

COMPLETE PROGRAM HUMA GRO® REVISION ON JUNE 21 2018

BIO EXPORT S.A.

COMPLETE PROGRAM HUMA GRO® REVISION ON OCTOBER 16, 2018

BIO EXPORT S.A.

X-TEND® B

Producto formulado y fabricado en Estados Unidos de América, por:

HUMA GRO™

Fertilidad en suelos y cultivos de manera sostenible.

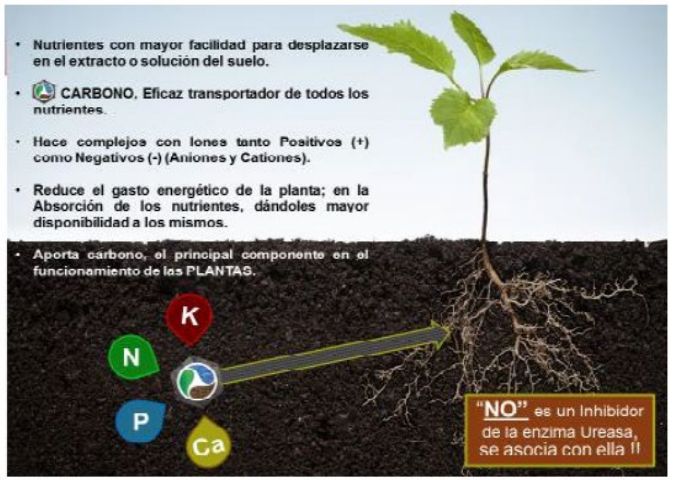
La Solución para Mejorar la Eficiencia de los Fertilizantes

Huma Gro X-TEND®

Con Tecnología Micro Carbono, TMC® :

Tecnología que aporta Carbono en alta concentración.....

Bondades y beneficios al mezclarse con "TODO TIPO" de Fertilizantes:



BIO EXPORT S.A.

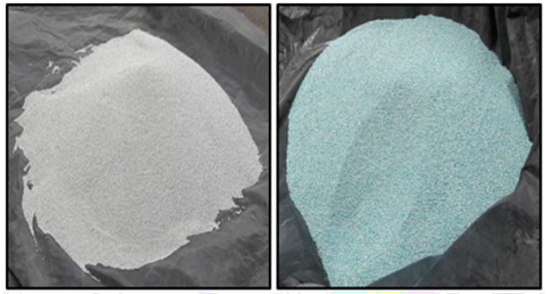
Diferentes Fórmulas de Fertilizantes Mezclados con :

Huma Gro X-TEND®

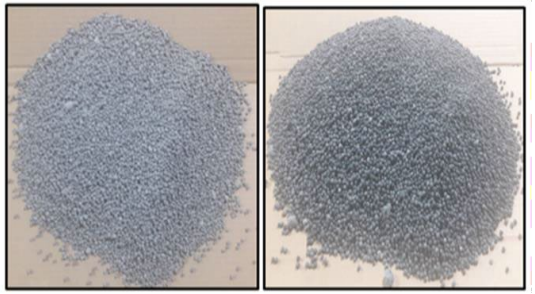
Sulfato de Amonio 33-00-00 24 S. (Moreno)

Urea 46% Nitrogenados

Formula 15-15-15 Quimico.



Formula 20-20-00 Quimico.



Otras Formulas.....

- ✓ Nitrato de Amonio / 32-00-00
- ✓ UAN 32 / 32-00-00
- ✓ Urea Azufrada / 70% Urea + 30% S. Amonio.
  / 60% Urea + 40% S. Amonio.
- ✓ DAP / Formula 18-46-00
- ✓ MAP / Formula 10-50-00
- ✓ MOP / Formula 00-00-60
- ✓ KCL / Formula 00-00-60
- ✓ Mezclas Físicas a Pedido / TODAS.

POTENTIALIZING EFFECT OF HUMA GRO X-TEND® B

GRUPO HAME RESULTADO EN SABIA

Tratamientos	ppm		
	NO_3^{-1}	K	Na
T - 5 - 250 %	610	5100	66
T -4 - 200 %	610	4500	95
T - 3 - 150 %	640	2600	78
T - 2 - 100 %	730	2900	93
T - 1 - 0%	760	870	85
T-6 Testigo	500	200	80

BIO EXPORT S.A.

GRUPO HAME FIRST RESULT OF SOIL ON 20 / MARCH / 18

Rangos de Suficiencia →		5.5 – 6.5	10 - 30	0.2 - 0.6	4 - 10	1 - 5	10 - 100	< 1.5	1 - 7	40 - 250	10 - 250	2 - 25	3 - 6
			mg/Kg	Cmol/Kg			mg/Kg	Cmol/Kg	mg/Kg				%
TRATAMIENTO	No. Lab	pH	P	K	Ca	Mg	S	*A.I.	Cu	Fe	Mn	Zn	**M. O.
T - 5 - 250 % S/planta	4012-18	4.73	86.03	2.99	4.80	2.39	233.21	0.40	6.95	318.48	231.59	3.77	2.09
T - 4 - 200 % S/planta	4013-18	4.54	111.21	3.69	5.13	2.55	141.82	0.52	6.55	334.23	212.29	3.64	2.08
T - 3 - 150 % S/planta	4014-18	4.49	128.01	4.55	4.97	2.42	115.68	0.52	7.22	367.52	250.73	4.45	2.21
T - 2 - 100 % S/planta	4015-18	4.57	97.94	2.82	4.59	2.21	174.67	0.54	6.57	346.69	209.26	3.08	2.12
T - 1- 0 % S/planta	4016-18	4.95	26.15	2.13	5.89	2.61	81.11	0.14	6.41	297.61	148.77	2.30	2.06
T - 6 Testigo S/planta	4017-18	6.63	25.24	0.35	6.30	2.83	50.64	0.02	7.12	249.25	96.10	3.69	2.03

* A.I. = Acidez Intercambiable (Aluminio + Hidrógeno) **M.O. = Materia Orgánica

GRUPO HAME SECOND RESULT OF SOIL ON 12 / MAY / 18

Rangos de Suficiencia →		5.5 – 6.5	10 - 30	0.2 - 0.6	4 - 10	1 - 5	10 - 100	< 1.5	1 - 7	40 - 250	10 - 250	2 - 25	3 - 6
			mg/Kg	Cmol/Kg			mg/Kg	Cmol/Kg	mg/Kg				%
TRATAMIENTO	No. Lab	pH	P	K	Ca	Mg	S	*A.I.	Cu	Fe	Mn	Zn	**M. O.
T - 6 Testigo Sin planta	5718-18	6.81	5	0.53	6.11	3.20	28.93	0.01	7.37	236	90	3.69	2.20
T - 1- 0 % Sin planta	5719-18	5.04	328	3.37	5.30	3.15	126.58	0.66	5.93	451	212	4.53	2.25
T - 2 - 100 % Sin planta	5720-18	4.80	1057	5.43	4.51	2.55	253.47	0.68	5.44	519	254	6.08	2.28
T - 3 - 150 % Sin planta	5721-18	4.72	399	5.99	2.90	1.52	254.37	1.01	6.49	446	202	4.57	2.19
T - 4 - 200 % Sin planta	5722-8	4.92	792	5.96	4.62	2.50	264.01	0.90	6.20	493	244	5.65	2.23
T - 5 - 250 % Sin planta	5723-18	4.85	945	6.65	4.05	2.22	367.81	0.85	6.57	499	221	6.31	2.15

* A.I. = Acidez Intercambiable (Aluminio + Hidrógeno) **M.O. = Materia Orgánica

GRUPO HAME ROOT IN FIELD

CON X-TEND

TESTIGO

BIO EXPORT S.A.

HUMAGRO

GRUPO HAME ROOT IN ITS LABORATORY

BIO EXPORT S.A.

GRUPO HAME RESULT WEIGHT OF ROOT

Tratamientos	No. Lab.	Resultados (%)						Resultados (mg/Kg)				
		N	P	K	Ca	Mg	S	Cu	Fe	Mn	Zn	B
T - 6 Testigo	5736/38 - 18	0.79	0.09	1.36	0.21	0.13	0.25	23	2207	156	16	13
T - 1 - 0 %	5739/41 - 18	1.03	0.06	1.29	0.23	0.16	0.17	10	1987	179	8	10
T - 2 - 100 %	5742/44 - 18	1.06	0.06	1.32	0.25	0.17	0.26	11	2361	221	9	10
T - 3 - 150 %	5745/47 - 18	1.15	0.09	1.63	0.26	0.18	0.34	18	2673	221	12	10
T - 4 - 200 %	5748/50 - 18	1.15	0.07	1.12	0.28	0.17	0.34	12	2423	258	7	8
T - 5 - 250 %	5751/53 - 18	1.27	0.08	1.41	0.33	0.22	0.46	16	2722	229	10	10

Tratamientos	gramos	
	Peso Húmedo	Peso Seco
5736/38 - 18	166	37
5739/41 - 18	521	198
5742/44 - 18	794	369
5745/47 - 18	747	380
5748/50 - 18	716	328
5751/53 - 18	921	416

EFFECTS OF FERTILIZATION WITH HUMA GRO® PHOS-MAX® AND HUMA GRO® SUPER K™ IN SUGAR CANE COMPARED WITH CONVENTIONAL FERTILIZATION

Objective of the test: Comparison of yields of sugar and ethanol from sugarcane

Agro Micro BioTech®
Soluciones Impulsadas de la mano con la Naturaleza

General data of the test

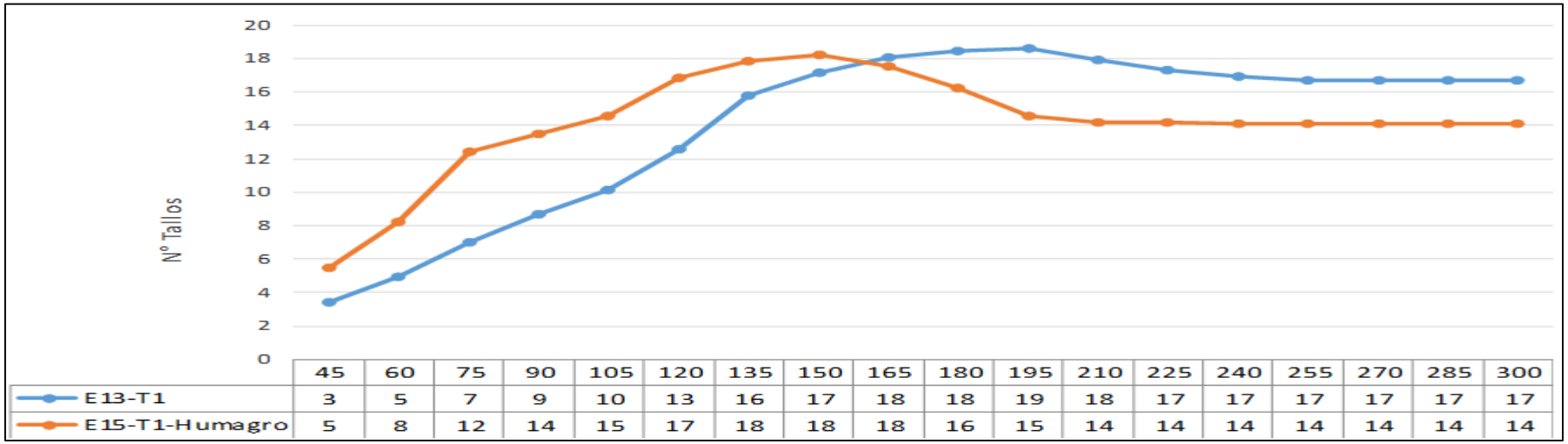
TRATAMIENTO	FERTILIZANTE	CANTIDAD/HA	UND
Huma Gro	Phosmax	3.5	L
	Super K	11.5	L
Convencional	Fosfato ferroso	87.21	Kg
	Sulfato de potasio	150	Kg

Biometric analysis of treatments

TRATAMIENTO	EDAD (DIAS)	TALLOS/M	LONGITUD (CM)	TASA DE CRECIMIENTO (CM/DIA)	DIAMETRO (CM)
Huma Gro	300	14.1	205	0.47	2.7
Convencional	300	16.7	195	0.38	2.6

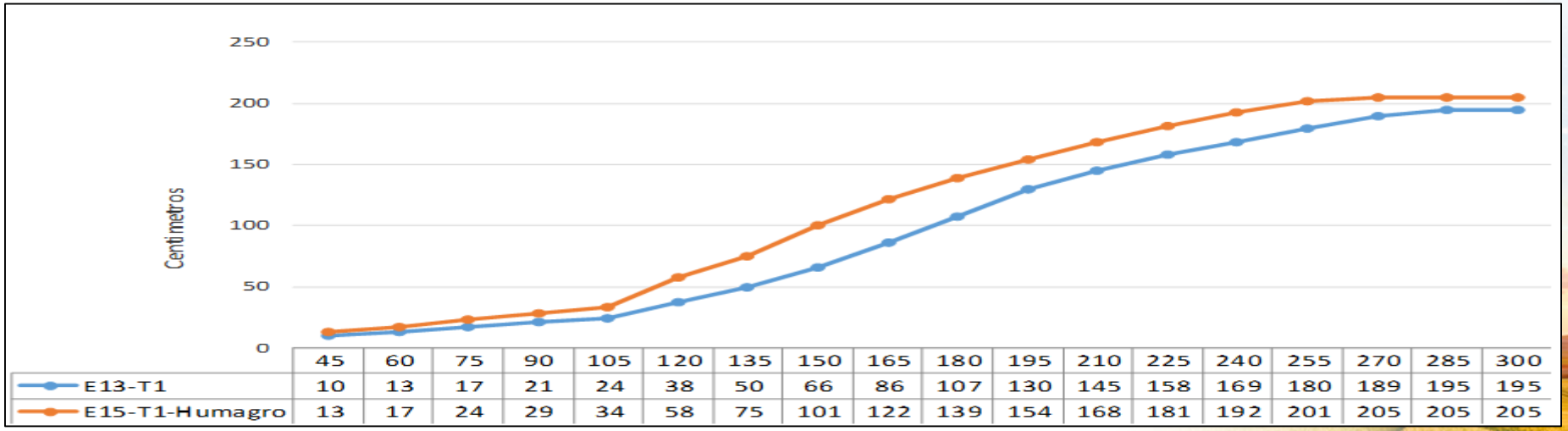
Agro Micro BioTech®
Soluciones Impulsadas de la mano con la Naturaleza

Comparison: Number of stems per linear meter



	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300
E13-T1	3	5	7	9	10	13	16	17	18	18	19	18	17	17	17	17	17	17
E15-T1-Humagro	5	8	12	14	15	17	18	18	18	16	15	14	14	14	14	14	14	14

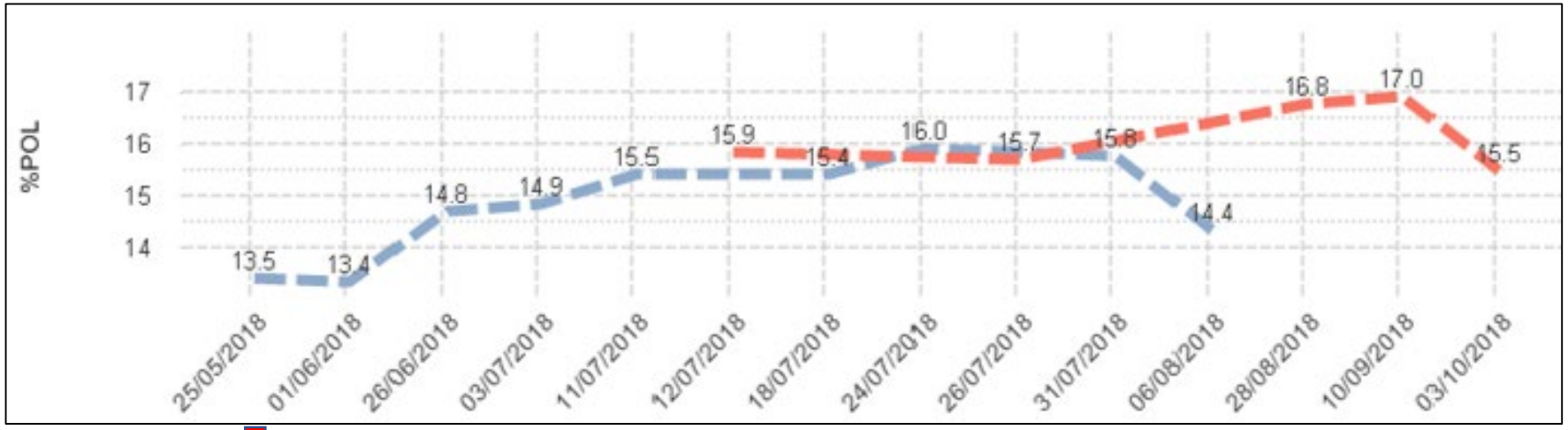
Comparison: Longitud



	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300
E13-T1	10	13	17	21	24	38	50	66	86	107	130	145	158	169	180	189	195	195
E15-T1-Humagro	13	17	24	29	34	58	75	101	122	139	154	168	181	192	201	205	205	205

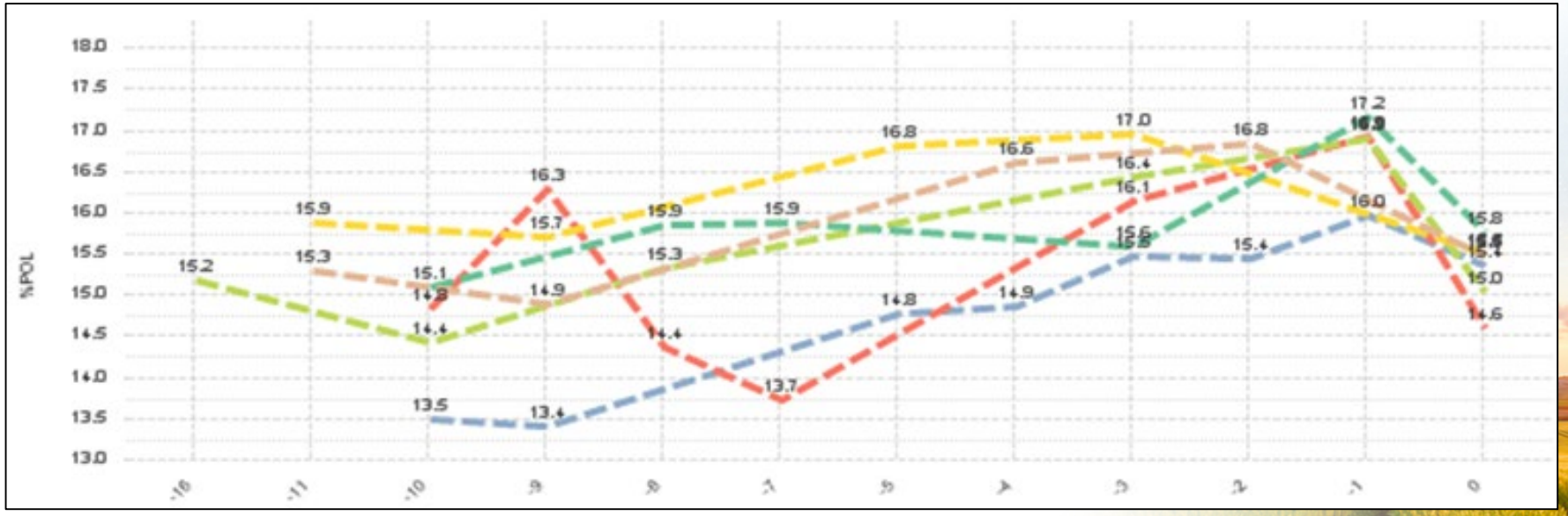
Agro Micro BioTech
Soluciones Impulsadas de la mano con la Naturaleza

Comparison: % Pol (sucrose in cane juice)



Huma Gro
Convencional

Comparison: % Pol in different batches harvested the same month



Agro Micro BioTech
Soluciones Impulsadas de la mano con la Naturaleza

+ BHN WORLD CONFERENCE 2018

Results

Tratamiento	% Pol Pre Cosecha	% Pol Post Cosecha	Ton Caña/ha Anualizado	Kg Azucar	Litros Etanol
Huma Gro	17.0	15.5	128	20,586	12,414
Testigo	15.8	14.4	130	18,433	11,170

Conclusions

- Huma Gro: 2,100 Kg more of sugar
- Huma Gro: 1,300 L more than ethonol.

THANK YOU