Pantaleon Sugar Group

Evaluation of Harvest Harmonics' Crop Booster ™ in sugarcane cultivation

- August 2024
- Analysis and comments by Harvest Harmonics Science Team, Dec. 2024
- Sugarcane yield boost 29.3%
- Evidence of OMG – Organically Managed Genetics

Aim

- Evaluation of the use of Harvest Harmonics' Crop Booster *

™

* *In this document, **KPCB** stands for Kyminasi Plants – Crop Booster* ™

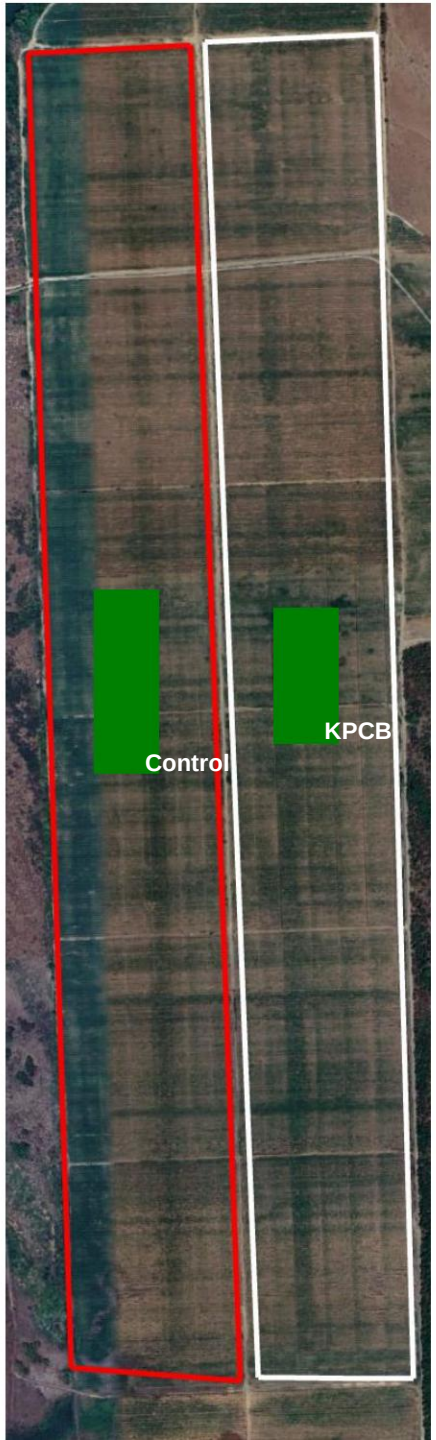
Trial Information

- Date of planting: 10-03-24
- Location: Veracruz, Mexico
- Area of each plot:
  - ÿ KPCB: ~65 ha
  - ÿ Control ~65 ha
- Soil: clay loam/clayey •

Cycle: Perennial •

Variety: CP72-2086

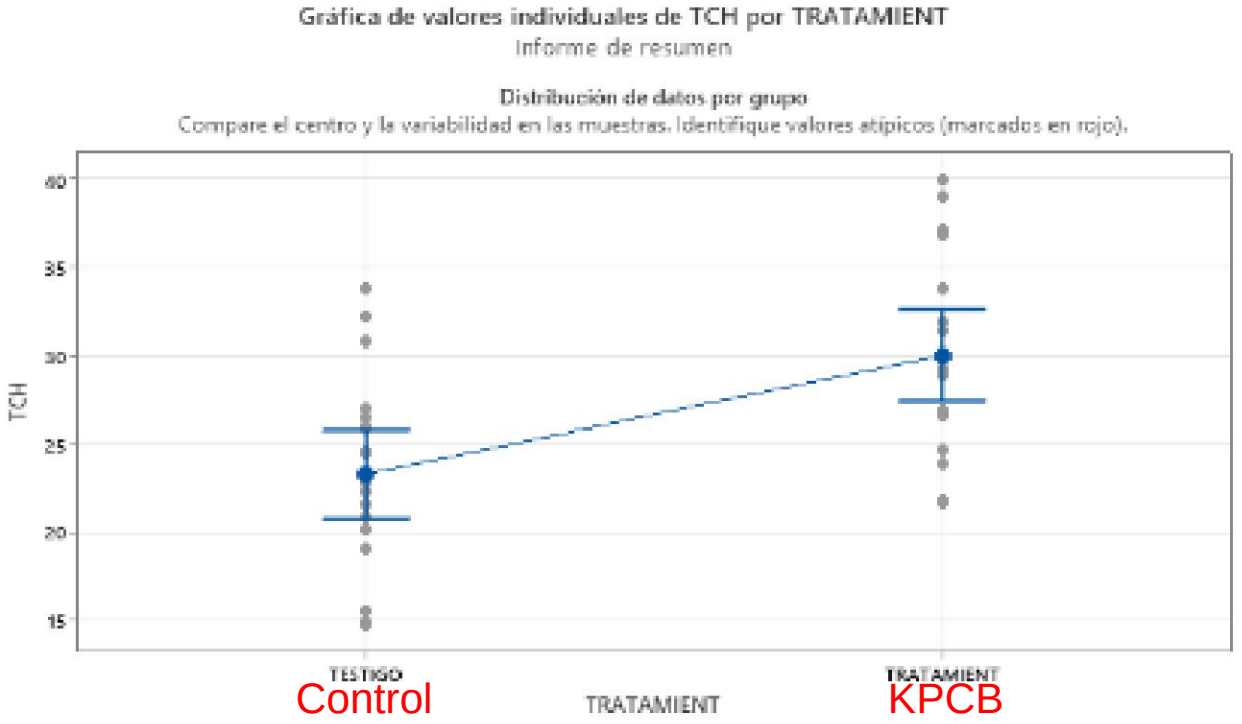
- Irrigation type: Frontal Advance (parallel displacement)



TCH* estimate at 5th month

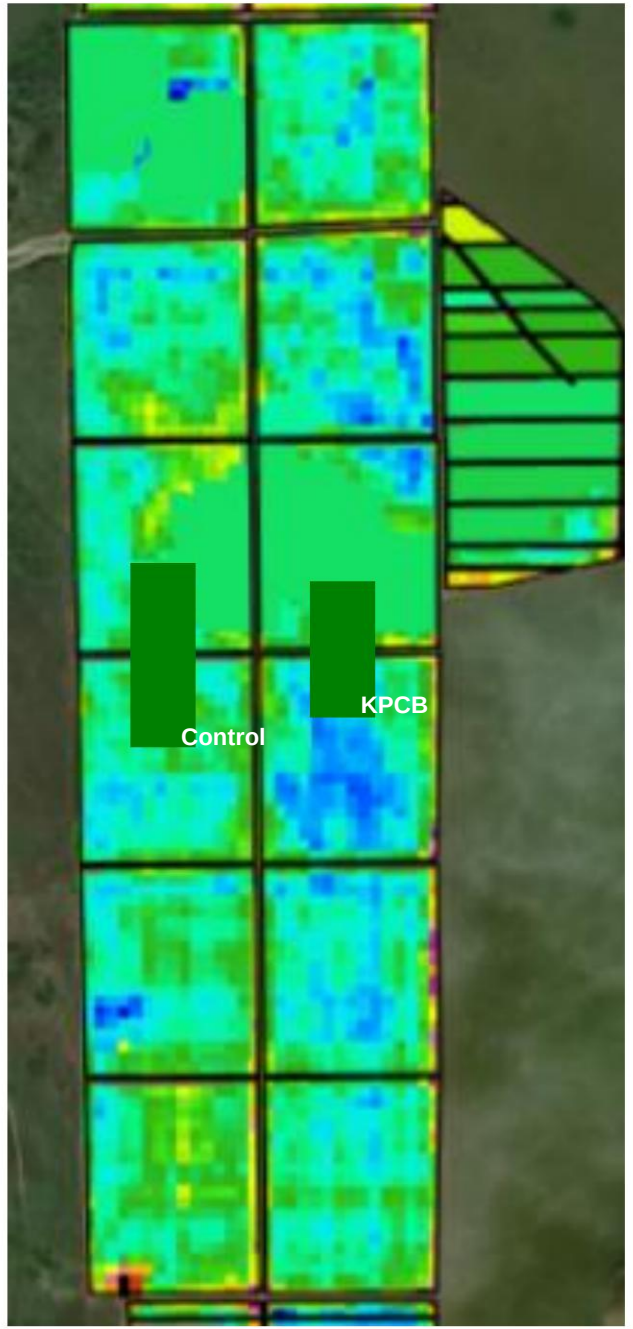
Sampling was carried out at month five of development to measure the estimated TCH* at that time, obtaining an average of 23 tons for the control vs. an average of 30 tons for the harmonics treatment. *+29.3% tons/ha*

*** TCH : Tons of (sugar) Cane per Hectare**



Estadísticas	TESTIGO	TRATAMIENT
N	22	19
Media	23.295	30.044
Desv.Est.	5.3601	5.4229
Mínimo	14.709	21.630
Máximo	33.818	39.994

ÿ *+29.3% higher average with KPCB*

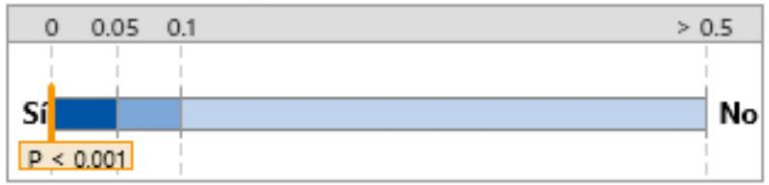


TCH Testing Parameters

Prueba t de 2 muestras para TCH por TRATAMIENTO

Informe de resumen

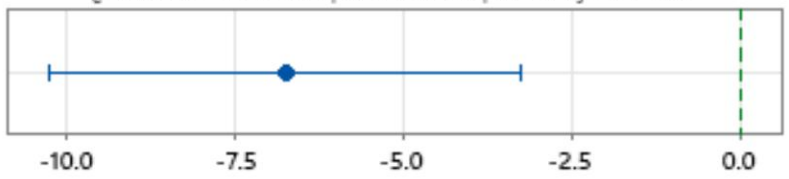
¿Difieren las medias?



La media de TESTIGO es significativamente diferente de la media de TRATAMIENTO (p < 0.05).

IC de 95% para la diferencia

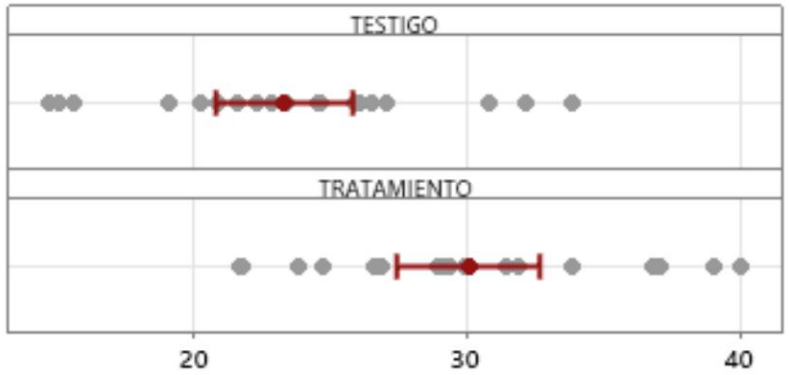
¿Está todo el intervalo por encima o por debajo de cero?



Data Distribution

Distribución de los datos

Compare los datos y las medias de las muestras.



Individual Samples

Muestras individuales

Estadísticas	TESTIGO	TRATAMIENTO
Tamaño de la muestra	20	19
Media	23.295	30.044
IC de 95%	(20.79, 25.80)	(27.430, 32.657)
Desviación estándar	5.3601	5.4229

Diferencia entre muestras

Estadísticas	*Diferencia
Diferencia	-6.7489
IC de 95%	(-10.252, -3.2454)

*Diferencia = TESTIGO - TRATAMIENTO

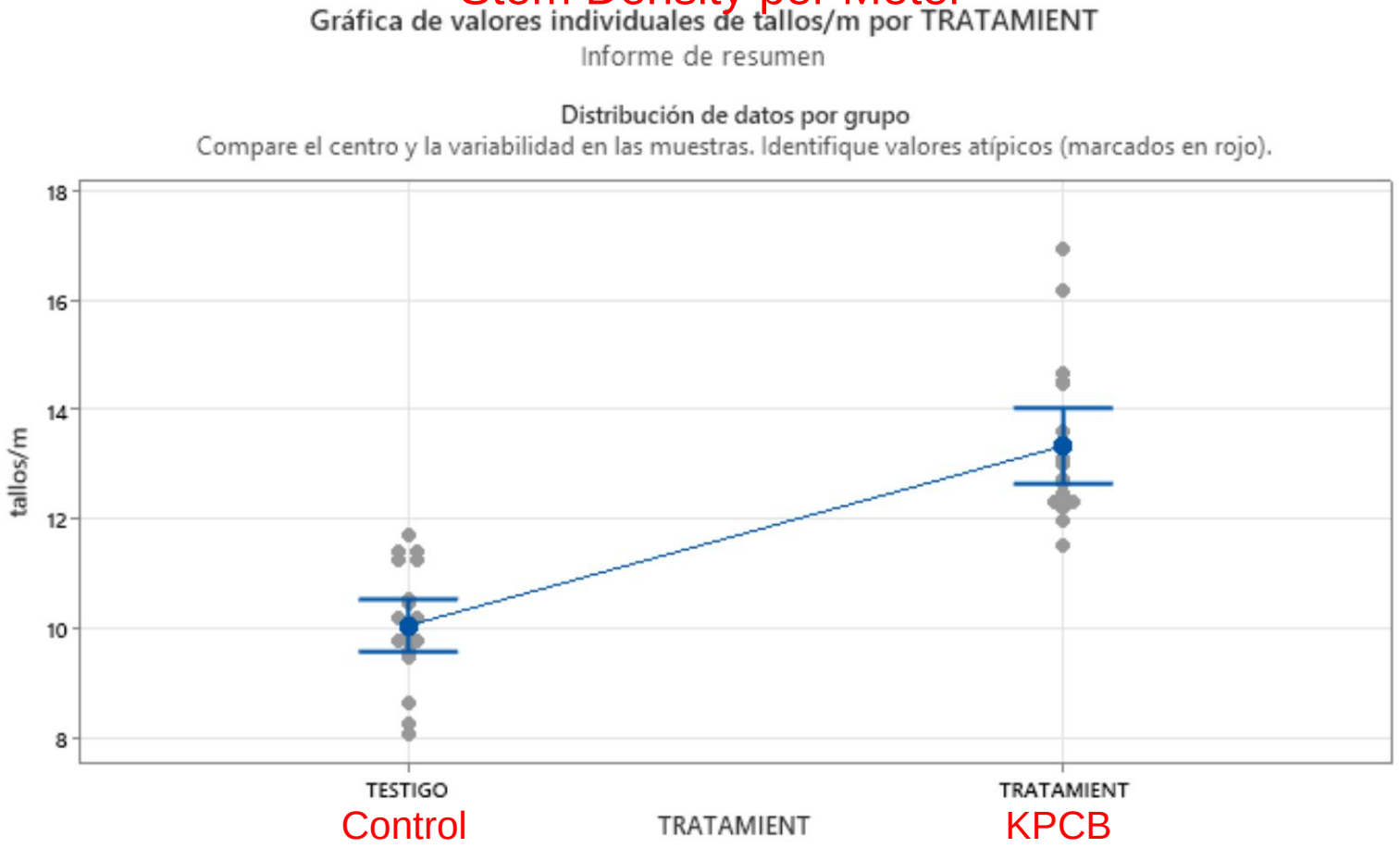
Comentarios

- Prueba: Usted puede concluir que las medias difieren en el nivel de significancia de 0.05.
- IC: Cuantifica la incertidumbre asociada a la estimación de la diferencia en las medias a partir de los datos de las muestras. Usted puede tener una seguridad de 95% de que la diferencia verdadera se encuentra entre -10.252 y -3.2454.
- Distribución de datos: Compare la ubicación y las medias de las muestras. Busque datos poco comunes antes de interpretar los resultados de la prueba.

Growth Parameters

The components of the estimate were compared, and differences were found in the population. The weights and heights are similar.

Stem Density per Meter

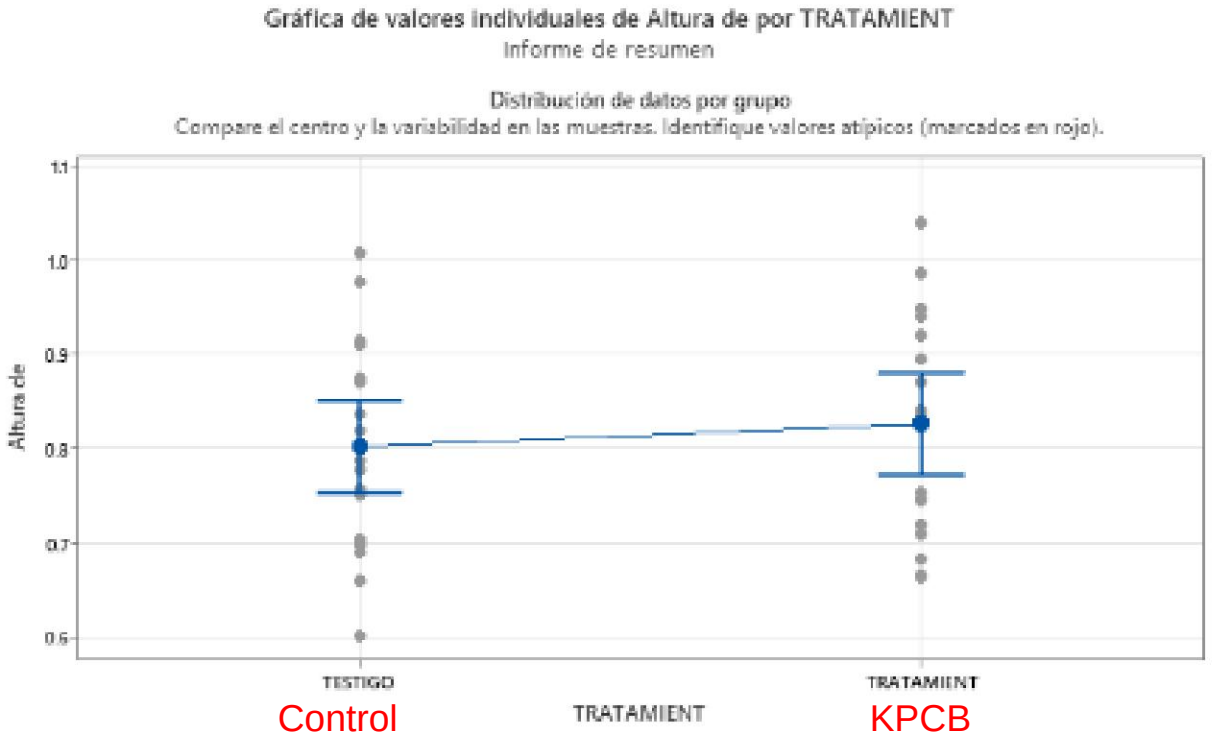


Control KPCB

Estadísticas	TESTIGO	TRATAMIENT
N	20	19
Media	10.067	13.347
Desv.Est.	1.0251	1.4279
Mínimo	8.0667	11.533
Máximo	11.733	16.933

ÿ *+32.6% density in # of stems/meter*

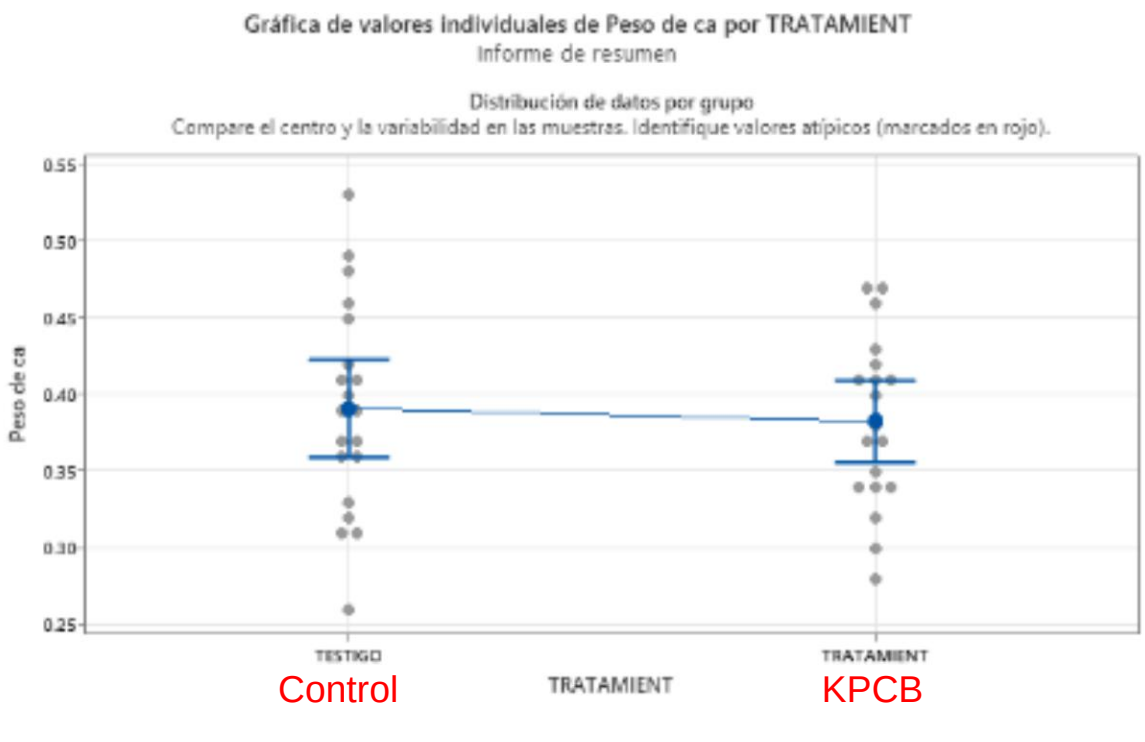
Stem Height



Control KPCB

Estadísticas	TESTIGO	TRATAMIENT
N	20	19
Media	0.8021	0.82642
Desv.Est.	0.15031	0.11170
Mínimo	0.002	0.664
Máximo	1.008	1.04

Stem Weight



Control KPCB

Estadísticas	TESTIGO	TRATAMIENT
N	20	19
Media	0.391	0.38263
Desv.Est.	0.068357	0.055562
Mínimo	0.26	0.28
Máximo	0.53	0.47

These results are ***not*** low – see conclusions on next page

Conclusions

[Harvest Harmonics' comments in red]

***29.3% more yield** came from 32.6% denser population* • Data at 5 months shows a larger population on the Harmonics treatment.

- The height and weight per stem show no difference in the 5th month of development.

  [This shows a smart move by the sugarcane's genetics. The natural judgment of the sugarcane was to enlarge stem DENSITY by 32.6% rather than each stem's SIZE. The 29.3% jump in yield shows that the plant's genetic strategy was right. This is exactly how Crop Booster technology is supposed to work – it works WITH the genetics of the plant (Organically Managed Genetics – OMG) rather than GMO (Genetically Modified Organisms) in which ARTIFICIAL genetics is enforced on the plant – with unpredictable results that are unnatural by definition.]

- No final harvest data were obtained.

- It is suggested to continue the trial for one more cycle to obtain real TCH data. *[Good idea, please continue!]*