

TRIAL ON WATERMELON GUANACASTE, COSTA RICA

KTS® is a clear, chloride-free solution that features the highest liquid potassium and sulfur content available on the market.

CaTs® is a clear liquid fertilizer containing calcium and sulfur that reduces the harmful effects of salt, such as sodium, in the soil, and it can work as a soil amendment.

Year: 2018-2019

Type of application: drip irrigation

Parameters measured: foliar and fruit nutrient contents, gross and net production, waste.

Variety: Crispy Delight

Goal:

Evaluate the effect of the application of CaTs and KTS on fruit quality and total yield on watermelon crops.

TREATMENT

The crop fertilization program was based on the application of water soluble fertilizers through the fertigation system. The liquid fertilizers (CaTs and KTS) that have been added throughout the crop cycle are shown below:

T1. Control. Farm practice. No applications of CaTs.

T2. Complementary applications (drip irrigation) of:

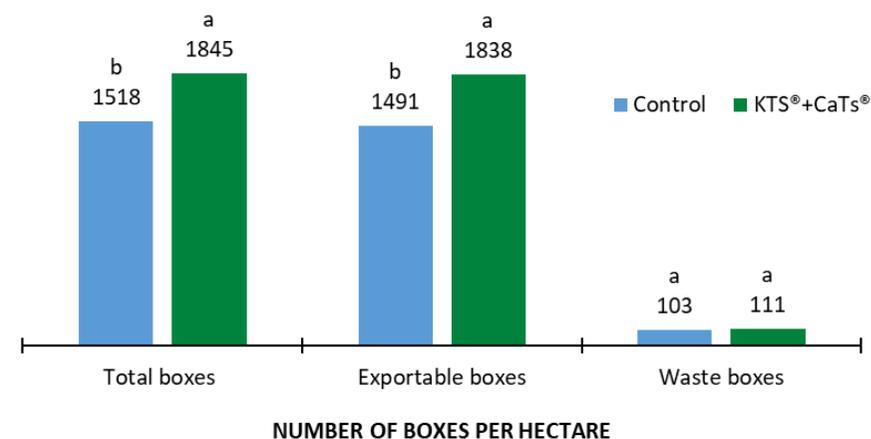
- CaTs: 3 l/ha/application at 21, 25, 28, 31 and 34 days after transplanting.
- KTS: 3 l/ha/application at 31, 37, 43, 56 and 62 days after transplanting.

RESULTS

- CaTs price given to the grower by the distributor: 2.55 USD/l of product. Total liters applied: 15 ha. Total cost of product: 38.25 USD/ha.
- KTS price given to the grower by the distributor: 3.20 USD/l of product. Total liters applied: 15 ha. Total cost of product: 48 USD/ha.

| Treatment | Exportable boxes/ha | Box Price | Total Profit/ha | Dif. total profit Control vs. KTS + CaTs | Total cost/ha of KTS + CaTs | Break-even point | Net profit/ha with KTS + CaTs applications |
|-----------|---------------------|-----------|-----------------|--|-----------------------------|------------------|--|
| Control | 1 491 | 10 USD | 14 910 USD | + 3 470 USD | 86.25 USD | 9 boxes more | + 3,383.75 USD |

GROSS AND NET YIELD AND WASTE



Means with a common letter are not significantly different ($p > 0.05$)

CONCLUSION

KTS + CaTs applications increased the net yield of exportable boxes by 23.27%. The complementary applications of KTS + CaTs to increase the yield and the marketability of the fruit. Break-even point: 9 more boxes and with KTS + CaTs, 347 additional boxes were produced.



Our experts are familiar with your region and crops.
Their support includes:

- Agronomic advice
- Providing technical information
- Carrying out field studies that are specific to your issues
- Providing application and storage tips

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