

Guarantee® Hi K

Seaweed Extract

Improves Yield in Sugar Beets

STUDY OBJECTIVE

To evaluate the effect of Ocean Organics **Guarantee® Hi K** seaweed extract on sugar beet percent sugar, root yield, RWST, and RWSA.

LOCATION/SCIENTISTS

Location: Dewitt, MI

Investigator: Robert Schafer,
Mid-Michigan Agronomy

Study Director: Sarah Williams,
Ph.D., Ocean Organics

CROP

Crop Name: Sugar Beet

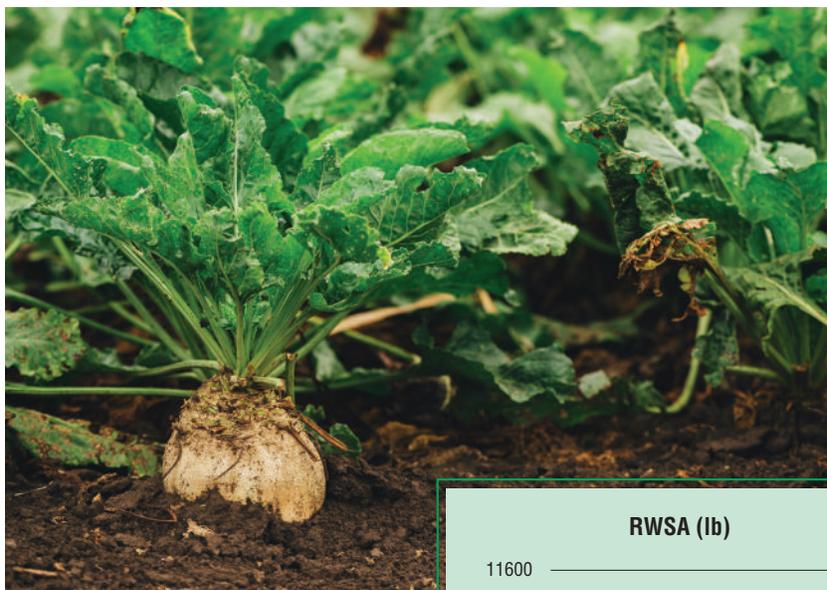
Crop Scientific Name: *Beta vulgaris*

Variety: SX1264

RESULTS

Guarantee® Hi K increased the percent sugar, root yield, RWST (Raw Weight of Sugar per Ton of Beets Harvested), and RWSA (Raw Weight of Sugar per Acre) as shown in Figure 1 and Table 1.

Increasing these measurements leads to increased returns for sugar beet growers. A previous field trial several years prior also showed increased percent sugar (6%) and yield per acre (9%) in plots treated with Ocean Organics seaweed extract, indicating a positive trend.



Guarantee® Hi K produces increase in sugar beet:

- **Percent Sugar**
- **Root Yield**
- **RWST**
(Raw Weight of Sugar per Ton of Beets Harvested)
- **RWSA**
(Raw Weight of Sugar per Acre)

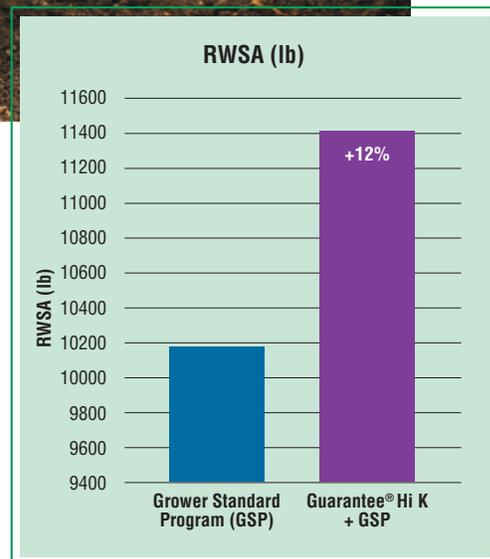


Figure 1: Guarantee® Hi K increased the RWSA (Raw Weight of Sugar per Acre) by 12% compared to the Grower Standard Program.

Table 1: Guarantee Hi K increased percent sugar and yield in sugar beets (August 28).

Treatment Name	Root % Sugar	Root Yield (lbs)	Root Yield (T-US)	RWST (lb)	RWSA (lb)
Grower Standard Program (GSP)	21.68 ab	110.1	32	317.4 ab	10186.3
Guarantee® Hi K + GSP	22.22 a	121.7	35.4	326.2 a	11412.0

* Means followed by same letter or symbol do not significantly differ (P=.10, LSD).

* RWST = Raw weight of sugar per ton of beets harvested

* RWSA = Raw weight of sugar per acre

METHODS

This field trial took place in Dewitt, Michigan. Days After First/Last Application was 135 and 105, respectively. The rating date was August 28, 2025. **Guarantee® Hi K** was applied at the rate and timings shown in Table 2.

CONCLUSION

This field trial showed that **Guarantee® Hi K** increased yield based on several different measurements. **Guarantee® Hi K** increased the percent sugar, root yield, RWST (Raw Weight of Sugar per Ton of Beets Harvested), and RWSA (Raw Weight of Sugar per Acre) as shown in Figure 1 and Table 2. A previous trial several years prior also showed increased percent sugar (6%) and yield per acre (9%) as described in a separate research summary. These data indicate that **Guarantee® Hi K** can be an effective addition to a grower program to increase percent sugar and yield.



Table 2: Guarantee Hi K was applied at the following rate and timings.

Treatment Name	Application Rate	Application Code	Application Timing	Application Amount	Amount Unit
Grower Standard Program (GSP) Guarantee® Hi K	1 qt/a	A	In Furrow	5	GAL/AC
		B	14 day after A	20	GAL/AC
		C	14 day after B	20	GAL/AC

Founded in 1977, Ocean Organics is the developer and manufacturer of high performance, scientifically proven seaplant-extract based biostimulants, plant growth materials and granular fertilizers. Our state-of-the-art products contain unique and proprietary constituents. Our materials have been tested in over 35 universities and independent laboratories.



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Waldoboro, Maine • 888-312-0106

Administration

Ann Arbor, Michigan

www.oceanorganics.com