



TRANSFORMER® AND THE REMEDIATION OF SOIL SALINITY

TARGET	Soil Salinity	CROP	Harper melons	LOCATION	Yuma, AZ
TRIAL DATE	July – December 2014	RESEARCHER	Nordely Wright, Oro Agri		

TRIAL GOAL

To evaluate the effect of TRANSFORMER applications on the movement of salts in a sub-surface drip irrigated field.

KEY FINDINGS

TRANSFORMER soil conditioner can significantly reduce the concentration of sodium salts in the soil to depths down to 18 inches and horizontally out to the edge of the drip zone.

APPLICATION

Two applications of TRANSFORMER, at 2 quarts/acre, were made to large blocks of a 19 acre commercial melon field through sub-surface drip irrigation. The first application was made at planting and the second was done one month after planting. The salinity of the soil was monitored by taking samples one month after the second application at different depths and also at two positions from the drip irrigation line– in the wetting zone and on the edge of the wetting zone. The depths sampled were, 2-6, 6-12 and 12-18 inches. Yield for each of the blocks was measured by the grower.

RESULTS

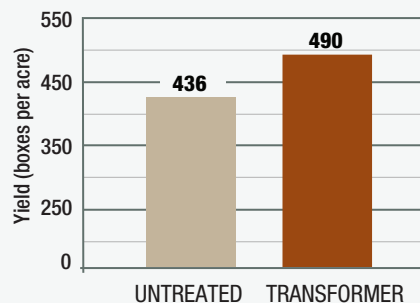
1 SOIL REMEDIATION

Soil sampling was replicated four times for the 3 depths ranges and 2 distances from the irrigation drip line. Laboratory analysis showed the TRANSFORMER-treated soil had reduced the Sodium Absorption Ratio (SAR), Electrical Conductivity (EC) and Sodium (Na) levels compared to the untreated soil.

See page 2 for detailed results.

2 YIELD

The yield for each of the treated and untreated blocks was provided by the grower. The block treated with TRANSFORMER had a 12.6% increase in yield, 490 boxes per acre versus 436 boxes per acre for the untreated.



3 ROI OF TRANSFORMER APPLICATION

- \$50 for TRANSFORMER application per acre
- \$10-\$12 revenue per box of melons
- Number of boxes per acre increase in treated versus untreated plots = 54
- Incremental Revenue per acre = \$594.00 (54 boxes x \$11.00/box)
- ROI per acre = \$544 (\$594-\$50)
- ROI for total treated acres = \$10,227.20 (\$544 x 18.8 acres)

TRANSFORMER SOIL REMEDIATION RESULTS

■ UNTREATED ■ TRANSFORMER

