

Increased Yield of Cotton grown at Rovey Farms in Glendale, Arizona.

ABSTRACT

Arizona Cotton has been a staple for many farms over years of time. However, nutrient deficiencies, soil salt, and irrigation water electrical conductivity (EC). High soil salt retards nutrient uptake by plants. High EC causes degraded soil structure, soil crusting, and reduced water penetration. The Cotton grown here required neutralized salt, reduced EC, and correct nutrition. The answer was a program combining Soil Plus® to enhance the natural soil fertility and FolaCrop™, an 8-16-4 foliar applied fertilizer with Biofeed ACT.

BACKGROUND

The Biofeed® team was used to determine plant needs and create a fertilizer program. The irrigation water has a naturally elevated EC level. As in the past, water from SRP was applied to the field through irrigation canals. Biofeed keeps a large database of results spanning several years of data. An application of Ammonium Phosphate at the rate of 3-gallons per acre was applied throughout the field on both the treated half and the untreated half.

TREATMENT

Fertilizer programs vary for different crops based on discovered nutrient deficiencies. This method provides the information to set the right fertilizer crop plan in place for each crop type and season. A Biofeed technician worked closely with the spray tech at Rovey farms and it was decided that they would combine FolaCrop™ at a rate of 1-Quart per acre with a whitefly insecticide due to compatibility and this treatment would be applied every 30 days followed by a water-run application of 1- Quart of Soil-Plus® per acre to keep the application costs to a minimum. This same treatment regimen was repeated every month for a period of 7 months until the production cycle was completed.

RESULTS

The results between the two areas were markedly different. The untreated eastern half of the field produced 2.75 modules of Cotton. The treated western half of the field produced 7.5 modules of Cotton!

- Locked up nutrients in the soil made available for plant uptake.
- Total fertilizer spending was reduced.
- Neutralized salt in the soil was reduced or eliminated.
- Cotton productivity dramatically increased to near record levels.

ACT® is biologically generated using specific organic compounds which are transformed into unique, water-soluble amino acids, enzymes and other beneficial organic compounds through a proprietary process of biological transformation.