

**Powered by Acti-Cell Technology® (ACT)****SOIL-PLUS® and Biofeed CROP™ Increase Profits in Cotton Production (Arizona)****ABSTRACT**

Rayner and Sons Farms of Ehrenberg, Arizona conducted a test of Biofeed's Prebiotic Cotton program on 100 acres of DELTA/PINE 5415 Cotton, planted in 30" rows. The test field is one of four in which soil types are the same, and insect control, watering and nitrogen fertilization are equal in all aspects.

**APPLICATION**

The test field was fertilized with ammonium phosphate (10-34-0) which was blended with one quart of Biofeed SOIL-PLUS® and knifed in at a rate of seven (7) gallons per acre into the seedbed. This treatment was followed by flood irrigation, in which one (1) quart of SOIL-PLUS® was drip fed into the treated field.

Three weeks later at the 3-5 leaf stage, a foliar treatment consisting of one (1) quart of Biofeed CROP™, blended in ten (10) gallons of water per acre was spray applied. On the next day, the cotton was irrigated again, and one (1) quart of SOIL-PLUS® per acre was dripped into the water for application to the treated field.

Thirty days later, [Biofeed CROP™](#) was foliar applied and [SOIL-PLUS®](#) was drip fed via irrigation in addition to eight (8) gallons of UAN 32 (32-0-0) to supplement nitrogen requirements.

Foliar and soil treatments were repeated two (2) additional times at thirty (30) day intervals prior to defoliation and picking.



[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.

**OBSERVATIONS**

The treated plots showed no signs of heat stress, had broad healthy leaf structure and color. Also, the treated plots continued to produce bolls to the top of the plant throughout the complete crop cycle to defoliation. As a result of detoxification of salts and other chemical residues, the cotton plants in test field showed significant tap root development. At the 3-5 leaf stage the cotton plants tap root depth averaged 8" inches, while the un-treated plants had little to no tap root development or penetration.

**YIELD RESULTS**

The NON-test plots averaged 2.7 bales per acre, while the treated test plots averaged 3.4 bales per acre with an extremely high lint quality. Yields increased by 375 pounds of cotton per acre. Cost of treatments combined, totaled \$38.00 per acre, and were more than paid for by an increased profit totaling \$258.75 per acre above un-treated fields.

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