

Effects of ESN® on Cotton Yields in Southwest Georgia



STUDY DESCRIPTION

A Georgia study demonstrates how ESN can increase yields in irrigated cotton production. ESN protects nitrogen (N) from loss inside its unique protective coating and supplies N to the crop when it is needed. The result is increased cotton yields and improved N-use efficiency.

Cotton plants need N throughout the growing season. Most N uptake by a cotton plant takes place in the period of about 40-80 days after planting and continues up to 140 days after planting. ESN may be used to meet this long season demand.

In this Georgia study, ESN applied to the surface of the soil at lay-by yielded higher than UAN solution injected into the soil.

RESULTS SUMMARY

- ESN produced numerically higher yields compared to a corresponding rate of 28-0-0-5
- When averaged across rates, ESN yielded 80 lbs. lint/acre more than 28-0-0-5

TRIAL DETAIL

- *Conducted in Shellman, GA by Dr. Ron Sorenson, USDA-ARS*
- *Soil Type = Sandy loam*
- *Previous Crop = Corn*
- *Three Replications/treatment*
- *All plots received 30 lbs. N at planting*
- *Fertilizer Applications made at 4th leaf*
- *Rates for ESN and 28-0-0-5 were 30, 50, and 70 lbs. N/ac*



Want To Know More?

To make ESN a part of your fertilization program, contact an authorized retailer or representative.

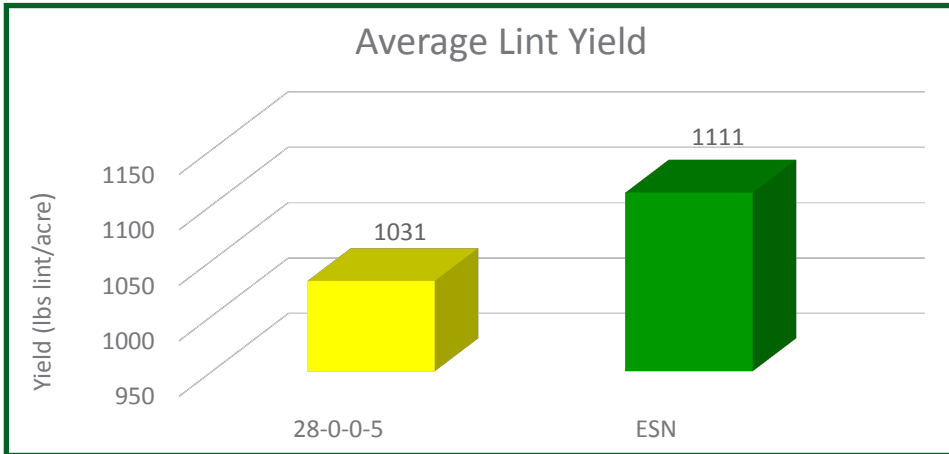
www.SmartNitrogen.com

FERTILIZER TREATMENTS

Fertilizer Treatment	Comments
ESN 100%	100% ESN
28-0-0-5	UAN Solution

ESN = Environmentally Smart Nitrogen (44-0-0)

SUPPORTING DATA



2013 study conducted by Dr. Ron Sorenson, USDA-ARS, Shellman, GA. ESN and 28-0-0-5 was applied at lay-by. Results shown are averaged across 3 rates.

ESN[®]

ESN Technology Goes Beyond Traditional Nitrogen

- Enhances N use efficiency
- Improves crop yield and quality
- Provides convenience through ease of use
- Environmentally responsible

How ESN Technology Works

ESN technology uses a flexible polymer coating to encapsulate a nitrogen (N) granule. The coating protects the N from loss mechanisms, releasing it when the crop needs it most.

Nitrogen release thru the polymer coating is controlled by two of the factors in crop growth: soil moisture and temperature. Moisture creates an N solution inside the coating, and the solution moves through the coating at a rate controlled by soil temperature. Nitrogen supply is, therefore, more closely matched with crop demand.

ESN is backed by over 600 crop years of testing by independent, third party researchers. The data is proof of performance for a unique product.

ESN[®]
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