

## EVALUATION OF BULLDOG SODA AS A SIDE DRESS APPLICATION OF NITROGEN FOR COTTON

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**ABSTRACT:** Nitrogen evaluation of Bulldog Soda and Ammonia Nitrate for cotton was conducted on a bottomland soil in Tippah county. Bulldog Soda was spin broadcast at 200 lbs per acre (32%N) and 400 lbs (64%N). Ammonia Nitrate was broadcast at 200 lbs per acre. Soil and environmental conditions for 2001 were excellent for cotton production. Heavy rains in the latter part of August caused excessive lodging in the plants. There was no significant difference in yield between the Bulldog Soda at the 200 and 400 level and the Ammonia Nitrate at the 200 level.

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**KEYWORDS:** Ammonia Nitrate, Nitrate of Soda, Nitrogen, Cotton

**MATERIALS AND METHODS:** The study area was located on bottomland moderately well drained soil similar to Collins in Tippah county. The area was a transition area between Loess soils and Coastal Plain soils. The soils had an excellent yield potential. Stalks were shred in the fall of 2000 after cotton harvest. Land preparation began in the spring of 2001 with chiseling followed by hipping. Phosphorus and potash were broadcast over the entire area according to soil test recommendations prior to hipping. Cotton was planted the first week of May. Terrachlor Super X 18.8G (Pentachloronitrobenzene) 1.5 lb ai/ac + Temik 15G (aldicarb) 0.75 lb ai/ac were applied in furrow at planting. Cotoran (fluometuron) at 1.0 lb ai/ac was banded behind the sprayer. Bladex (cyanazine) at 0.75 lb ai/ac was used as a layby treatment. Nitrogen was spread with a tandem rotary spin spreader by a custom applicator covering eight rows. Cotton was harvested using a plot picker.

**RESULTS AND DISCUSSION:** Cotton stands were excellent in the study. Rainfall was average or above average for the growing season. Heat units in DD60's were normal for North Mississippi. Heavy rains in the latter part of August resulted in excessive growth and lodging of plants. There was no height difference between nitrogen treatment. Data is presented in Table 1.

**Table 1.** Comparison of Bulldog Soda and Ammonia Nitrate as a nitrogen source for cotton.

<u>Treatment</u>	<u>lbs of Nitrogen</u>	<u>lbs of Material</u>	<u>Yield in lint/acre</u>
Bulldog Soda	68	200	1277
Ammonia Nitrate	16	200	1436
Bulldog Soda	64	400	1420
Ammonia Nitrate	68	200	1468
LSD 0.05			NS
CV			19%