

# Technical Data Report

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## Effects of NUTRIPLANT™ AG on Sorghum Production

### Objective

The objective of this study was to determine the effects of Nutriplant AG on production of sorghum.

### Materials and Methods

Field trials were conducted on sorghum (*Sorghum bicolor* (L.) Moench) at a commercial farm located in Leon, Nicaragua. Early sorghum variety SR 360 was planted on 20 May. Two fields of similar conditions were selected for the trial. The experimental plot consisted of 20 hectares (49 acres).

Two treatments were evaluated:

- 1) Control which used grower's standard foliar program based on salts.
- 2) Treatment with Nutriplant AG consisting of two foliar applications:
  - a) 14 days after germination: Nutriplant AG at 1500 ml/ha (20 fl oz/acre), Nutri-Zinc at 500 ml/ha (7 fl oz/acre) and Nutri-Boron at 500 ml/ha (7 fl oz/acre).
  - b) 30 days after germination: Nutriplant AG at 1500 ml/ha (20 fl oz/acre), Nutri-NPK at 750 ml/ha (10 fl oz/acre) and Nutri-Boron at 500 ml/ha (7 fl oz/acre).

Cultural practices including fertilization and pest management followed local practices and were the same for treated and untreated plots. Sorghum plots were harvested on August 30. At harvest sorghum yields were determined after grain was dried and cleaned.

### Results

The application of Nutriplant AG improved sorghum yield compared to the control consisting of standard program used by the grower (Table 1). The treatment applied at 14 and 30 days after germination increased sorghum yields by 1,904 kg/ha (17 ctw/acre).

Table 1. Influence of Nutriplant AG, Nutri-Zinc, Nutri-Boron, and Nutri-NPK treatment on sorghum grain yield production in Leon, Nicaragua.

Treatment	Sorghum yield		Difference		Difference
	(kg/ha)	(ctw/acre)	(kg/ha)	(ctw/acre)	(%)
Control	9,520	85	-	-	-
Treatment	11,424	102	1,904	17	20.0

Producer reported that field treated with Nutriplant AG had fewer disease problems (less attack of fungi and bacteria) than in previous year and the grain had better color than the control plot.

### Conclusions

Compared to standard grower's program, Nutriplant AG increased sorghum grain yields by 20%, reduced disease problem and improved grain color.