



**Agriculture and Natural Resources** 



# GRAIN SORGHUM CLUMP PLANTING VS. CONVENTIONAL PLANTING

# **Texas AgriLife Extension Service**Nueces County

Cooperator: David Ocker

**Authors:** Jeffrey R. Stapper, County Extension Agent – Ag/NR J.R. Cantu, Demonstration Assistant-Nueces County

## **Summary**

This test was located on the Ocker Farm south of Corpus Christi off CR 18. Rainfall during the growing season was below normal. There was not a significant difference between the clump vs. conventional planting methods, although there was a numeric difference as the clump sorghum yield was 3,683 pounds per acre while the conventional sorghum yield was 3,545 pounds per acre.

# **Objective**

To evaluate planting of grain sorghum in clumps vs. conventional seed drop method, while at the same time keeping the same plant population per acre.

#### **Materials and Methods**

Traditional sorghum seeding plates were altered by closing holes so that seed would be dropped in clumps rather than traditional even spacing. Grain sorghum was planted in clumps (5 to 6 plants per clump, with clumps spaced about 23 inches apart) within rows and conventionally in a randomized complete block design. Seed was planted with a 24-row planter in which half of the planter (12-rows) planted clumps and the other half planted seed the traditional method, with seed spaced uniformly. Seeding rates in both cases was 61,256 seed per acre. Row space was 30-inches.

Table 1: Agronomic data for grain sorghum clump/conventional planting, Ocker Farm, Nueces County, Texas, 2011.

Planting Date: 3/1/2011	Rows/Plot: 12 -5 replicates	Row Width: 30 inch		
Fertility: 241.6# 24-8-0 2S 1 gal/ac Penngreen	<b>Herbicide:</b> 13.5 oz/ac Outlook	Sorghum Hybrid: Pioneer 84G62		
Planting Rate: 61,256 plt/ac	Soil Type: Victoria clay	Previous Crop: Grain Sorghum		
<b>Rainfall:</b> March = 0, April = 0, May = $1.63$ , June = $0.59$				

## **Results and Discussion**

Plots were machine harvested on July 5, 2011 and weighed with an electronic weigh-wagon. Results from each plot are recorded in Table 2.

Table 2, Comparison of plant population, % moisture, and yield per acre between treatments, Ocker Farm, Nucces County, 2011.

Treatment	Plant Population/Ac	% Moisture	Yield/Acre <sup>1</sup>
Clump	45,765 a	13.2	3,683 a
Solid/Conventional	46,999 a	13.2	3,545 a

<sup>&</sup>lt;sup>1</sup>Yield per acre is reported in pounds per acre and adjusted to 14% moisture. Means followed by same letter do not significantly differ (P=.05, LSD).

#### **Conclusions**

Results from this study suggest that there was not a real difference between treatments (i.e. clump planting vs. conventional planting) as the clump planting average yield was 3,683 pounds per acre, while the yield for the conventional planting was 3,545 pounds per acre. Rainfall during the growing season was below normal.

#### Acknowledgements

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