GRAIN SORGHUM HYBRIDS GROWN FULL SEASON AT THE SAFFORD AGRICULTURAL CENTER, 1984

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Abstract

Ten commercial hybrid grain sorghums grown full season with optimum water and fertilizer ranged in yield from 6,830 pounds per acre down to 4,755pounds per acre. The grain yield capability of these sorghums compares very favorably with corn hybrids grown for grain next to this test.

Introduction and Objectives

Field performance evaluations of currently available commercial hybrid grain sorghums are desirable for grower information. The objective of this test was to evaluate a number of grain sorghum hybrids under full season conditions.

Materials and Methods

Ten commercial hybrid grain sorghum entries were planted in moisture on May 25, 1984, on the Safford Agricultural Center in a replicated small plot yield test. The plot size was two rows, 25 feet long on a 40 inch row spacing. There were three replications. The seeding rate was six seeds per foot. The crop received irrigations as needed with no stress for moisture. The total amounts of effective rainfall, irrigation water and fertilizers applied are given in Table 1.

Table 1. Water and fertilizer inputs into a full season field test of sorghums on the University of Arizona Safford Agricultural Center. 1984.

24 May 1984 Planting

Irrigation water	:	36.00 inches
Effective rainfall	:	8.08 inches
Total moisture	:	44.08 inches
Fertilizer	:	80 lbs. N
		100 lbs. P

Results and Conclusions

The May 25 full season planting was hand harvested on October 2, air dried and run through a small-plot combine on January 8, 1985. The grain yields, grain test weights, and plant heights are given in Table 2.

The grain yields ranged from a high of 6830 down to 4755 pounds per acre. This grain yield range compares very favorably of that for a corn hybrid test grown for grain in the same field. No dates of bloom for maturity ratings were made due to inability to visit this test as frequently as desired.

Table 2. Grain yield and other agronomic data from a yield test of ten sorghum hybrids grown full season at the Safford Agricultural Center. 1984.

Hybrid[1/]	Ht. in. inches	Test wt. lbs/bu.	Grain yield[2/] lbs/acre
FERRYMORSE GT 565	45	59.8	6830
ASGROW DOUBLE TX	57	58.2	6819
ASGROW TOPAZ	50	61.3	6176
TAYLOR EVANS TEY 77	49	60.8	6029
SEED TEC WAC 715 DR	53	60.2	5998
ASGROW COLT	49	60.8	5793
RINGAROUND 1805	52	58.8	5667
DEKALB BR64	53	61.3	5663
PIONEER 8680	45	60.9	5453
FUNK HW 5449	50	60.6	4755

1/ Planted in moisture on May 25, 1984.
2/ Heads harvested by hand on October 2, 1984, air dried and run through plot combine on Jan. 8, 1985.