

DURUM WHEAT QUALITY EVALUATION - PERRYVILLE, MARICOPA COUNTY, 1984

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Quality is an important factor to consider when choosing a durum wheat variety. Wheat may be discounted if quality standards are not met or a premium may be paid for exceeding quality standards. Durum wheat quality is influenced by the variety and by the growing conditions during the season.

Durum wheat varieties were grown in Perryville, Maricopa County, in 1984. Crop history and yield are listed below. At harvest, samples of each variety were sent for analysis to the Spring and Durum Wheat Quality Research Laboratory in Fargo, North Dakota. The quality data are listed below. Refer to "Durum Wheat Quality Standards" in the 1985 Forage and Grain Report for an explanation of the symbols used in the quality data report and for a discussion of the standards set for durum wheat quality.

Aldura had a minor deficiency in 1,000 kernel weight and a major deficiency in semolina speck counts. The semolina dust color score was a minor deficiency in Mexicali C75 and a major deficiency in Yavaros C79. Westbred 881 was not deficient in any quality category. Test weight was a minor deficiency and semolina dust color was a major deficiency in 1000 D. Westbred 881 was the highest quality durum wheat under the conditions of this test followed by Aldura.

Crop History

Planted: December 23, 1983
 Harvested: June 5, 1984
 Plot Size: 18 x 860 feet
 Previous Crop: cotton
 Field Location: Perryville, RID.
 Fertilizer:

<u>Source</u>	<u>Method of Application</u>	<u>Time of Application</u>	<u>lbs N/A</u>
Urea	Drill	During planting	69
NH 3	In irrigation water	First irrigation	33
TRI-N	In irrigation water		30
TRI-N	In irrigation water		20
TRI-N	In irrigation water	Pre-boot	20
Total lbs N/Acre			172

Yield:

Entry	Yield ^{1/} ^{2/} (lbs/A)
NK Aldura	8120 a
Yavaros C79	7890 ab
Mexicali C75	7570 bc
WPB 1000 D	7340 cd
WPB 881	7020 d

^{1/} All yields have been adjusted to a 10% moisture content.
^{2/} Yields followed by the same letter are not significantly different at the .05 level by the DMR test.

QUALITY DATA OF DURUM SAMPLES 1984 CROP

STATE=ARIZONA STATION=MARICOPA CO. NURSERY=FIELD PLOT

TABLE 11

VARIETY	STD	TW	.1000 KWT	LG	SM	WHT PRC	TOI EXT	SEMO EXT	DUS	MX	SPK	SEMC MIN	FALL NO	SEMO PRO	VI	FTRM	RES	VALU	TW	KW	SM	WP	TX	SX	DU	SK	SP	VI	FR			
ALDURA	S	63.7	51.5	83	1	13.3	82.0	62.3	100	2	87	0.67	400	12.3	9.5	6.59	6.8	3														
MEXICALI	S	62.6	59.5	82	2	12.8	80.9	64.0	80	6	27	0.68	400	11.7	8.5	7.04	5.9	2														
WESTBRED 881		63.3	60.2	92	1	14.1	80.1	61.9	95	7	57	0.64	400	12.9	9.5	8.75	6.7	4														
YAVAROS		64.5	62.1	88	1	12.9	80.3	61.4	70	3	50	0.62	400	11.6	8.0	7.95	7.7	1														
1000 D		60.9	55.2	82	1	13.8	81.8	61.7	70	5	57	0.63	400	12.8	8.5	7.54	6.5	1														

DEFICIENCIES
 AVG OF STANDARDS 63.1 55.5 2 13.0 81.4 63.1 90 67 11.5 8.0 6.81
 MINOR FAULTING VALUES 60.9 53.4 7 12.5 78.9 60.1 80 67 11.5 8.0 5.31
 MAJOR FAULTING VALUES 60.0 50.4 12 11.5 77.9 59.1 75 72 11.0 7.5 4.56
 **EVALUATION 1=NO PROMISE, 2=LITTLE PROMISE, 3=SOME PROMISE, 4=GOOD PROMISE