

Comparisons of Small Grain Varieties

The University of Arizona Yuma Valley Farm  
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Planting date: December 12, 1980

Irrigation: December 19, 1980, January 22, 1981, and March 13, 1981

Rainfall:

January 11 and 12	.60 inch
January 28	.10 "
February 9	.20 "
March 1-5	.93 "

Fertilizer:

Preplant ammonium nitrate	75 lb N/acre
January 22, ammonium nitrate in the irrigation water	50 lb N/acre
March 13, ammonium nitrate in the irrigation water	75 lb N/acre

Experimental design:

Triticale: Randomized complete blocks with 3 replicates.  
Wheats and barley: Randomized complete blocks with 4 replicates.

Plot size:

Triticale: 8 feet x 3.5 feet  
Wheats: 20 feet x 3.5 feet  
Barley: 26 feet x 3.5 feet

Durum Wheats

Entry	Heading date	Flowering date	Maturity date <sup>1/</sup>	Plant height (inches)	Hard vitreous (%)	Test weight lb/bu	Yield lb/acre
Bittern "S"	3-30	4- 6	4-30	28	96	63.5	8435a <sup>2/</sup>
WDE 8-8-13	3-15	3-20	4-30	32	98	56.9	8321a
Rokel "S"	3-15	3-25	4-21	34	100	60.0	8312a
G 5003	3- 9	3-25	5-15	34	94	60.4	8110a
WDE 8-103	3- 9	3-20	5-15	34	96	60.5	8071a
Yavaros C-79	3-30	4- 6	4-30	28	95	63.3	7936ab
Aldura	3-30	4- 6	4-30	28	100	61.0	7878abc
WDE 8-17-9	3- 9	3-20	5-15	34	96	61.0	7654abcd
Westbred 881	3- 9	3-15	4-21	36	100	58.8	7489abcd
1000 D	3- 9	3-15	4-21	34	100	57.7	7461abcd
Produra	3-15	3-20	4-21	32	100	62.3	7402abcd
Mexi "S"	3-15	3-25	4-21	36	100	60.0	7383abcd
Jori 69	3-27	4- 6	5-15	32	100	61.5	6920 bcde
Mexicali 75	3-15	3-20	4-21	36	97	62.0	6784 cde
Cando	3-27	4- 6	4-21	32	100	58.0	6749 de
UC 304	3- 9	3-25	4-21	36	98	59.1	6261 e
Waid	3-20	3-25	5-15	30	98	56.5	5913 e

<sup>1/</sup> Hard dough stage

<sup>2/</sup> Yields followed by the same letter are not significantly different at the .05 level.

## Triticale

Entry	Origin	Heading date	Flowering date	Maturity date <sup>1/</sup>	Plant height (inches)	Test weight (lb/bu)	Yield (lb/acre)
Nacozari 76	Mexico	3-25	3-30	4-24	42	60.0	6694a <sup>2/</sup>
Yecora Rojo	Mexico	3- 9	3-20	4-24	42	61.0	6383ab
M <sub>2</sub> A	Ecuador	3-12	3-20	4-24	42	54.3	6285abc
PFT 7717	Brazil	3- 6	3-12	4-20	48	52.5	6119abc
Coorong	Australia	3-16	3-20	4-20	42	49.7	5647abcd
Yavaros	Mexico	3-20	3-20	4-24	40	61.0	5549abcde
Beagle	Mexico	3-18	3-25	4-24	40	51.0	5523abcde
Veery	Mexico	3-25	3-30	4-24	40	57.3	5518abcde
M <sub>2</sub> A <sup>2</sup>	Ecuador	3- 9	3-20	4-24	34	51.3	5503abcde
Ram "S"	Mexico	3-16	3-20	4-24	30	48.5	5434abcdef
Welsh	Canada	3-18	3-25	4-20	36	48.7	5310abcdefg
Mizar	Italy	3-23	3-27	4-24	48	50.7	5300abcdefg
Juanillo 97	Mexico	3-16	3-20	4-24	40	52.7	5337abcdefg
M <sub>2</sub> A-M <sub>1</sub> A=Tigre "S"	Mexico	3-16	3-20	4-24	30	53.0	5076 bcdefg
Manigero	Spain	3- 9	3-20	4-24	36	50.7	4994 bcdefg
Caborca 79	Mexico	3-18	3-25	4-24	38	50.8	4978 bcdefg
T 74	Kenya	3-23	3-27	4-24	40	48.3	4865 bcdefg
TR 37	Yugoslavia	3-23	3-27	4-24	46	51.7	4858 bcdefg
M <sub>2</sub> A-IA	Ecuador	3-12	3-20	4-24	42	51.5	4792 cdefg
Cananea 79	Mexico	3- 9	3-20	4-20	42	48.3	4781 cdefg
PFT 765	Brazil	3-18	3-25	4-24	36	54.5	4414 defg
Impala "S"	Mexico	3-25	3-30	4-24	34	45.7	4165 defg
IRA-Bgl=Muskay "S" Mex.		3-23	3-27	4-24	38	53.3	4029 efg
Bonito "S"	Mexico	3-20	3-25	4-24	38	51.7	3916 fg
T 65	Kenya	3-18	3-25	4-20	40	48.7	3749 g

<sup>1/</sup> Hard dough stage

<sup>2/</sup> Yields followed by the same letter are not significantly different at the .05 level

## Barleys

Entry	Heading date	Flowering date	Maturity date <sup>1/</sup>	Plant height (inches)	Test weight (lb/bu)	Yield (lb/acre)
78-40	3-23	3-30	4-30	30	46.5	6128a <sup>a/</sup>
Prato	3-20	4- 2	4-20	30	48.1	5779ab
76-15-1	3-30	4-10	5-15	30	49.6	5294abc
Y-7767	3-25	4- 8	5-20	30	47.5	5215abcce
Signal	3-28	4- 6	4-30	30	49.5	5135abcde
Gus	3-28	4- 6	5- 2	30	45.8	5012abcdef
78-29	3-23	4- 6	4-30	34	48.9	4905 bcdef
78-20	3-20	3-28	5- 2	36	46.8	4869 bcdef
78-77	3-23	4- 8	5- 2	26	44.2	4794 bcdef
78-78	3-30	4- 6	4-30	30	48.3	4625 cdef
78-58	3-20	3-27	4-30	30	45.8	4549 cdef
Sunbar 409	3-24	3-28	4-30	32	46.7	4390 cdef
CM-72	4- 1	4- 6	4-30	24	46.0	4261 cdef
X-1275	3-25	4-10	4-30	32	46.1	4095 def
Y-7901	3-20	3-25	4-21	36	48.4	4033 ef
X-1248	3-23	3-30	4-30	30	44.5	3983 f

<sup>1/</sup> Hard dough stage

<sup>2/</sup> Yields followed by the same letter are not significantly different at the .05 level