



CROP WATCH

Tables for the May 9, 2003 CropWatch

Table 1. Yield and yield components of dryland grain sorghum as influenced by plant population at Mead (Clegg et al.).

<i>Actual Plants/A</i>	<i>Yield bu/A</i>	<i>Seeds/Head</i>	<i>Seed Weight g/1000</i>
26,500	111 a ¹	2780 a	24.8 a
53,000	109 a	2390 b	23.5 b
79,500	110 a	1950 c	22.3 c

¹Means followed by the same letter in the same column are not significantly different.

Table 2. Effect of plant population on yield and days to bloom, on dryland grain sorghum at Mead (Clegg et al.)

<i>Actual Plants/A bu/A</i>	<i>Yield</i>	<i>Days to Bloom</i>
30,000	96 a ¹	68 b
91,000	91 b	69 a
152,000	85 c	69 a

¹Means followed by the same letter in the same column are not significantly different.

Table 3. Irrigated grain sorghum population studies at Mead.

<i>Researchers</i>	<i>Actual Plants/A X 1000</i>	<i>Yield Year</i>		
		<i>1</i>	<i>2</i>	<i>3</i>
		<i>---- bu/A ----</i>		
Clegg et al. (16 hybrids)	67.0 112.0 156.0	57 b ¹ 66 a 69 a		
Clegg et al. (4 hybrids) (4 row widths)	87.0 131.0 174.0	94 a 95 a 95 a	126 a 127 a 125 a	113 a 111 a 113 a
Schultz and	9.4	64		

Table 4. 1995 and 1996 average grain sorghum yields for three plant populations at Belleville and Manhattan, Ks.

<i>Plant Population (Plants/acre)</i>	<i>Grain Yield</i>	
	<i>Belleville</i>	<i>Manhattan</i>
<i>----(bu/acre) ----</i>		
30,000	101	117
60,000	106	122
90,000	107	120
LSD (0.05)	ns	ns

Table 5. Yield goal, planting rates, harvest populations and seed spacings in various row widths for sorghum.

<i>Yield Goal</i>	<i>Row Width (inches between seeds)</i>				<i>Planting Rate</i>	<i>Harvest Population</i>
	15	20	30	36		
40	13.1	9.8	6.5	5.4	32,000	22,400
50	10.5	7.8	5.2	4.4	40,000	28,000
60	8.7	6.5	4.4	3.6	48,000	33,600
70	7.5	5.6	3.7	3.1	56,000	39,200
80	6.5	4.9	3.3	2.7	64,000	44,800
90	5.8	4.4	2.9	2.4	72,000	50,400
100	5.2	3.9	2.6	2.2	80,000	56,000
110	4.8	3.6	2.4	2.0	88,000	61,600
120	4.4	3.3	2.2	1.8	96,000	67,200
130	4.0	3.0	2.0	1.7	104,000	72,800
140	3.7	2.8	1.9	1.6	112,000	78,400

Water storage in Nebraska reservoirs, as of May 5, 2003.

Lake/Reservoir	Reservoir Storage (acre-feet)	Reservoir Active Conservation Pool % Full	Planned Delivery or Availability (in inches)
Box Butte Reservoir	13,227	42.6%	4
Calamus Dam	132,590	100%	18
Enders Dam	13,617	30.6%	No release
Harlan County Dam	253,347	80.4%	6
Harry Strunk Lake	28,426	79.6%	7
Hugh Butler Lake	16,227	43.0%	No release
Lake McConaughy	824,700	47.3%	18 to Central Irrigation customers
Merritt Dam	75,694	100%	16.5
Sherman Dam	59,296	85.0%	12
Swanson Lake	31,931	28.5%	No release

	Conservation Storage Capacity (acre-feet)	In Storage* End of April (acre-feet)	% Full	% Average
Lake Minatare	50,891	7,900	13	22
Lake Alice	11,000			
Little Lake Alice	1,149	17		
Winters Creek	2,821	262		

*46,5000 acre-feet of water is to be released for these lakes, with a delivery efficiency of 60-70% expected.

Seven reservoirs in Wyoming

Conservation storage capacity - 2,787, 800 acre-feet
 In storage - 1,203,200 acre-feet
 This is 43% of capacity and 62% of average storage.