Texas High Plains Grain Sorghum Seeding Rate Calculator (Draft)

Based on soil moisture, median growing season rainfall (capped at 6"), and target irrigation level.

Results are for estimation purposes only, but should aid in ensuring that maximum seeding levels do not exceed moisture capacity.

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Available Soil Profile Moisture to ~4' Depth at Planting (inches)	Texas High Plains Approx. Median Growing Season Rainfall	Target Irrigation Level (in.)	Total Water Available	Mid-range seeding rate (seeds/Ac)	Water Differential versus Dryland with Full Water Profile	Seeding Rate Differential versus Dryland with Full Water Profile	Water to Reach Initial Yield (inches)†	Possible Yield @ 400 lbs./in after Initial
6	6	0	12	32,000	0	0	5.0	2,800
6	6	4	16	44,000	4	12,000	5.5	4,200
6	6	8	20	56,000	8	24,000	6.0	5,600
6	6	12	24	68,000	12	36,000	6.5	7,000
6	6	16	28	80,000	16	48,000	7.0	8,400
2	6	0	8	20,000	-4	-12,000	4.5	1,400
2	6	4	12	32,000	0	0	5.0	2,800
2	6	8	16	44,000	4	12,000	5.5	4,200
2	6	12	20	56,000	8	24,000	6.0	5,600
2	6	16	24	68,000	12	36,000	6.5	7,000

Target Seeding Rate Calculator--Sample Calculation

A	B	C	D	
2	6	8	16	44,000
			Equals A + B + C	Equals 32,000 + (D-12)*3,000

Set values > 80,000 equal to 80,000

Incremental water above 12" calculated at 3,000 seeds per projected 1" of water.

If 2,000 emerge, and there is an average of 1 tiller per plant
then this is 4,000 heads, and with potential approximate
yield potential of 0.1 lb./head, then that's 400 lbs. grain per 1"

†This is the approximate amount of water required to reach the point of producing grain; it increases as plant population increases.