Supplementary table S2. Growing season rainfall, optimum growing season rainfall, minimum water loss, water use efficiency and growing season water requirement to obtain maximum yield estimated for each county in Kansas State

County	Mean GSR (mm)	Optimum GSR (mm)	Minimum water loss	Water loss %	WUE ($kg^{-1}ha^{-1}mm^{-1}$)	GS water requirement (mm)	GS water requirement (%)
BARBER	585	523	90	15	35	-62	-10.6
BARTON	554	709	186	34	35	155	28.0
CLOUD	594	521	187	32	59	-73	-12.3
COFFEY	795	872	278	35	31	77	9.7
DECATUR	587	538	144	24	49	-48	-8.3
DICKINSON	668	727	208	31	37	58	8.8
ELLSWORTH	607	633	228	38	38	26	4.3
JEWELL	553	652	211	38	42	99	17.9
KINGMAN	676	758	246	36	32	82	12.1
LINCOLN	597	545	111	19	31	-51	-8.6
MARION	710	744	263	37	33	33	4.7
MCPHERSON	667	734	202	30	30	67	10.1
NORTON	528	654	138	26	32	126	23.9
OTTAWA	644	641	156	24	28	-3	-0.5
PHILLIPS	515	619	168	33	44	104	20.3
POTTAWATOMIE	683	673	235	34	32	-10	-1.5
RENO	618	602	159	26	39	-16	-2.6
REPUBLIC	620	720	188	30	29	100	16.2
RICE	604	656	216	36	39	51	8.5
ROOKS	524	463	204	39	69	-61	-11.6
SEDGWICK	730	826	105	14	25	96	13.2
SMITH	536	620	194	36	33	84	15.8
SUMNER	730	798	171	23	23	68	9.3
WASHINGTON	643	712	221	34	31	68	10.6
Mean	**624**	**664**	**188**	**30**	**36**	-16	**7**