

**Table S1: Weather data of the growing seasons of 2010-11 and 2011-12**

Month	2010-11				2011-12			
	Min Temp (°C)	Max Temp (°C)	R.H (%)	Total rainfall (mm)	Min Temp (°C)	Max Temp (°C)	R.H (%)	Total rainfall (mm)
November	10.9	28.2	62.9	0.0	12.0	26.0	60.7	0.0
December	5.3	21.6	66.5	0.0	4.5	21.0	54.1	0.0
January	5.2	17.4	66.7	0.0	4.1	18.9	68.3	0.0
February	10.0	21.4	68.0	29.5	11.1	22.3	70.2	22.1
March	13.9	28.7	58.0	6.7	14.1	28.0	54.3	4.3
April	18.2	34.2	45.0	30.5	19.1	33.7	44.6	25.7

**Table S2. Analysis of variance for effect of different seed priming techniques on yield and related components, harvest index and water use efficiency of wheat genotypes grown at different row spacings under vegetative drought stress taking year taken as a factor**

Source of variation	Productive tillers	Grains per spike	TGW**	Grain yield	Biological yield	Harvest index	WUE***
<b>Y</b>	170660.56*	120.59*	27.87*	5594867.48*	15851015.11*	49.69*	0.129*
<b>W</b>	407627.97*	737.21*	463.93*	64187025.32*	142814450.25*	887.79*	0.306*
<b>V</b>	159383.92*	899.31*	267.07*	9412197.89*	69419446.69*	22.21*	0.905*
<b>P</b>	26350.75*	199.28*	197.10*	6613969.50*	6041354.34*	125.37*	0.621*
<b>S</b>	676879.78*	477.20*	486.58*	46792618.96*	89420793.71*	694.78*	4.446*
<b>Y × W</b>	23651.62*	20.35*	131.43*	247575.35*	4883731.67*	3.51	0.010*
<b>Y × V</b>	16018.06*	9.54*	57.77*	162017.43*	5439390.06*	57.60*	0.023*
<b>Y × P</b>	324.150	14.52*	14.79*	540204.58*	1258510.03*	5.74	0.044*
<b>Y × S</b>	4942.08*	24.52*	1.35	3242907.16*	3303268.02*	59.15*	0.295*
<b>W × V</b>	8229.36*	0.47	9.56*	222928.25*	4163980.34*	4.39	0.001
<b>W × P</b>	279.75	5.58	19.86*	202187.62*	137888.44	1.26	0.002
<b>W × S</b>	25005.57*	0.45	3.18	749434.55*	2219708.89*	21.41*	0.003
<b>V × P</b>	22687.64	16.78*	0.03	655672.57*	12247.11	24.16*	0.067*
<b>V × S</b>	564.25	45.51*	6.87*	252715.02*	290984.98	4.79	0.021*
<b>P × S</b>	2050.90	15.18*	15.31*	137162.71	8109641.63*	9.45	0.014
<b>Y × W × V</b>	818.96	14.83*	6.36*	6603.82	1601912.11*	3.52	0.002
<b>Y × W × P</b>	12013.80*	15.29*	0.01	13094.35	5923950.34*	13.15*	.00
<b>Y × W × S</b>	3686.48	5.21	7.06*	398579.23*	719718.71	35.68*	0.067*
<b>Y × V × P</b>	1317.02	8.53	0.71	23049.14	1201764.06*	8.65*	0.002
<b>Y × V × S</b>	14120.25*	57.20*	12.69*	58443.00	2507402.70*	8.77	0.006
<b>Y × P × S</b>	6140.56*	19.72*	0.81	86294.33	594496.11	3.82	0.012
<b>W × V × P</b>	20014.93*	24.24*	4.65*	10030.58	29155.56	0.76	0.004
<b>W × V × S</b>	3315.02	4.26	0.95	118754.59	2844705.67*	19.07*	0.008
<b>W × P × S</b>	1668.57	0.44	0.38	12184.42	561618.19	4.93	0.002
<b>V × P × S</b>	2901.22	10.38	3.64	9086.82	1900465.23*	4.35	0.001
<b>Y × W × V × P</b>	6476.091*	12.02*	6.96*	20908.36	1606556.25*	7.47	0.001
<b>Y × W × V × S</b>	4626.54*	0.58	7.50*	13761.64	4086450.15*	9.29	0.001
<b>Y × W × P × S</b>	939.54	6.03	5.26	293327.90*	1237789.30	3.80	0.032*
<b>Y × V × P × S</b>	4749.84*	18.98*	0.44	88749.26	2213391.78	3.94	0.009
<b>W × V × P × S</b>	2557.61	2.82	5.33	23378.45	257627.53	1.28	0.002
<b>Y × W × V × P × S</b>	470.06	6.67	1.24	14494.85	3049083.51*	6.05	0.002
<b>Error</b>	69524.774	225.14	88.21	2777483.69	21829291.50	184.81	0.241
<b>Total</b>	35523265.660	241929.69	236216.68	3025515783.03	36355429811	115629.42	282.631

The sum of squares with and without \* are significant and non-significant respectively at 5% probability level

\*\* 1000-grain weight

\*\*\* Water use efficiency

Y = Year; W = Water stress; V = Wheat cultivars; P = Seed priming and S = Row spacing

**Table S3: Analysis of variance for effect of different seed priming techniques on productive tillers, grains per spike and 1000-grain weight of wheat genotypes grown at different row spacings under vegetative drought stress for two experimental years**

Source of variation	Productive tillers		Grains per spike		1000-grain weight	
	2010-11	2011-12	2010-11	2011-12	2010-11	2011-12
<b>W</b>	313828.71*	117450.89*	256.28*	501.27*	50.75*	544.60*
<b>V</b>	138228.44*	37173.56*	547.03*	361.80*	38.21*	286.64*
<b>P</b>	10414.85*	16260.06*	160.68*	53.11*	159.94*	51.95*
<b>S</b>	377336.84*	304485.03*	299.99*	201.73*	249.51*	238.42*
<b>W × V</b>	1928.10	7120.22*	10.29	5.01*	15.76*	.16
<b>W × P</b>	4313.50*	7980.06*	19.67*	1.19	10.33*	9.53*
<b>W × S</b>	4745.19	23946.86*	1.32	4.34	3.67	6.58*
<b>V × P</b>	17468.61*	6536.06*	24.61*	.69	.23	.51
<b>V × S</b>	9679.65*	5004.86*	78.91*	23.78*	16.25*	3.31
<b>P × S</b>	1450.27	6741.19*	34.67*	.22	11.30*	4.82*
<b>W × V × P</b>	24630.53*	1860.50	35.19*	1.01	.12	11.49*
<b>W × V × S</b>	3340.21	4601.36*	3.54	1.29	2.22	6.23*
<b>W × P × S</b>	83.09	2525.03	4.72	1.75	2.75	2.89
<b>V × P × S</b>	3487.37	4163.69*	26.20*	3.16	.87	3.22
<b>W × V × P × S</b>	1217.92*	1809.75*	7.62*	1.86*	1.73*	5.84*
<b>Error</b>	40423.44	29101.33	171.33	53.79	45.54	42.66
<b>Total</b>	20352101.66	15171164.00	126565.47	115364.21	120358	115858

The sum of squares with and without \* are significant and non-significant respectively at 5% probability level  
Y = Year; W = Water stress; V = Wheat cultivars; P = Seed priming and S = Row spacing

**Table S4: Analysis of variance for effect of different seed priming techniques on grain and biological yields, harvest index, and water use efficiency of wheat genotypes grown at different row spacings under vegetative drought stress for two experimental years**

Source of variation	Grain yield		Biological yield		Harvest index		Water use efficiency	
	2010-11	2011-12	2010-11	2011-12	2010-11	2011-12	2010-11	2011-12
<b>W</b>	36203668*	28230933*	100258700*	47439482*	389.80*	501.50*	.214*	.102*
<b>V</b>	3552223*	6021992*	56861337*	17997500*	4.14	75.66*	.321*	.607*
<b>P</b>	5467298*	1686876*	6407305*	892559	92.37*	38.74*	.498*	.167*
<b>S</b>	37316758*	12718768*	63448825*	29275236*	579.51*	174.42*	3.514*	1.228*
<b>W × V</b>	153135	76397*	5465645*	300248	7.88	.02	.003	.000
<b>W × P</b>	159095	56187	3934714*	2127125*	3.13	11.28*	.002	.001
<b>W × S</b>	40460	1107554*	378615	2560812*	5.58	51.51*	.029*	.041*
<b>V × P</b>	216427*	462295*	485687	728324	1.95	30.86*	.022*	.047*
<b>V × S</b>	149804	161354*	1724081*	1074307	1.49	12.07*	.012	.015
<b>P × S</b>	211644*	11813	4021833*	4682305*	2.84	10.43	.025*	.001
<b>W × V × P</b>	29951	988	601430	1034282	6.50*	1.73	.005	.000
<b>W × V × S</b>	103301	29215*	317643	6613513*	1.03	27.33*	.008	.002
<b>W × P × S</b>	20012	105385	281457*	1517950	6.77	1.97	.024*	.011
<b>V × P × S</b>	21383*	76453	173764	3940093*	2.14	6.14	.002	.008*
<b>W × V × P × S</b>	37323*	551*	794541*	2512170*	1.49*	5.85*	.004*	.000
<b>Error</b>	2034333	743151	7358037	14471255	103.38	81.43	.165	.076
<b>Total</b>	1656955085	1368560697	18990267179	173651626	60277	55352	148.54	134.082

The sum of squares with and without \* are significant and non-significant respectively at 5% probability level  
Y = Year; W = Water stress; V = Wheat cultivars; P = Seed priming and S = Row spacing

**Table S5: Details of fixed and variable cost of different wheat cultivars grown with different rowspacing and seed priming under ealy season drought stress**

Treatments	Variable Cost (US\$ ha <sup>-1</sup> )							Fixed Cost (US\$ ha <sup>-1</sup> )														
	Irrigation	Seed priming	Total variable cost		Land rent	Seedbed preparatin	Seed	Fertilizers	Labor	Harvesting	Thershing	Total Fixed Cost										
	*	**																				
W <sub>1</sub> V <sub>1</sub> P <sub>1</sub> S <sub>1</sub>	71.19	76.27	40.68	42.71	111.87	118.99	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>1</sub> V <sub>1</sub> P <sub>1</sub> S <sub>2</sub>	71.19	76.27	40.68	42.71	111.87	118.99	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>1</sub> V <sub>1</sub> P <sub>1</sub> S <sub>3</sub>	71.19	76.27	40.68	42.71	111.87	118.99	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>1</sub> V <sub>1</sub> P <sub>2</sub> S <sub>1</sub>	71.19	76.27	66.10	69.15	137.29	145.43	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>1</sub> V <sub>1</sub> P <sub>2</sub> S <sub>2</sub>	71.19	76.27	66.10	69.15	137.29	145.43	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>1</sub> V <sub>1</sub> P <sub>2</sub> S <sub>3</sub>	71.19	76.27	66.10	69.15	137.29	145.43	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>1</sub> V <sub>2</sub> P <sub>1</sub> S <sub>1</sub>	71.19	76.27	40.68	42.71	111.87	118.99	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>1</sub> V <sub>2</sub> P <sub>1</sub> S <sub>2</sub>	71.19	76.27	40.68	42.71	111.87	118.99	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>1</sub> V <sub>2</sub> P <sub>1</sub> S <sub>3</sub>	71.19	76.27	40.68	42.71	111.87	118.99	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>1</sub> V <sub>2</sub> P <sub>2</sub> S <sub>1</sub>	71.19	76.27	66.10	69.15	137.29	145.43	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>1</sub> V <sub>2</sub> P <sub>2</sub> S <sub>2</sub>	71.19	76.27	66.10	69.15	137.29	145.43	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>1</sub> V <sub>2</sub> P <sub>2</sub> S <sub>3</sub>	71.19	76.27	66.10	69.15	137.29	145.43	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>1</sub> P <sub>1</sub> S <sub>1</sub>	49.83	51.87	40.68	42.71	90.51	94.58	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>1</sub> P <sub>1</sub> S <sub>2</sub>	49.83	51.87	40.68	42.71	90.51	94.58	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>1</sub> P <sub>1</sub> S <sub>3</sub>	49.83	51.87	40.68	42.71	90.51	94.58	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>1</sub> P <sub>2</sub> S <sub>1</sub>	49.83	51.87	66.10	69.15	115.94	121.02	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>1</sub> P <sub>2</sub> S <sub>2</sub>	49.83	51.87	66.10	69.15	115.94	121.02	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>1</sub> P <sub>2</sub> S <sub>3</sub>	49.83	51.87	66.10	69.15	115.94	121.02	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>2</sub> P <sub>1</sub> S <sub>1</sub>	49.83	51.87	40.68	42.71	90.51	94.58	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>2</sub> P <sub>1</sub> S <sub>2</sub>	49.83	51.87	40.68	42.71	90.51	94.58	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>2</sub> P <sub>1</sub> S <sub>3</sub>	49.83	51.87	40.68	42.71	90.51	94.58	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>2</sub> P <sub>2</sub> S <sub>1</sub>	49.83	51.87	66.10	69.15	115.94	121.02	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>2</sub> P <sub>2</sub> S <sub>2</sub>	49.83	51.87	66.10	69.15	115.94	121.02	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02
W <sub>2</sub> V <sub>2</sub> P <sub>2</sub> S <sub>3</sub>	49.83	51.87	66.10	69.15	115.94	121.02	203.40	203.40	61.02	66.10	38.14	42.71	183.06	183.06	30.51	30.51	61.02	66.10	38.14	38.14	615.28	630.02

W<sub>1</sub> = Well Watered; W<sub>2</sub> = Vegetative drought; V<sub>1</sub> = LS-2008; V<sub>2</sub> = TD-1; P<sub>1</sub> = Hydropriming; P<sub>2</sub> = Osmopriming, S<sub>1</sub> = 20 cm; S<sub>2</sub> = 25 cm and S<sub>3</sub> = 30 cm

\*First column represents cost of 2010-11 while\*\* 2<sup>nd</sup> column for 2011-12. There were slight changes in the fixed and variable cost of two years due to change in the input cost