

Table S1. Effect of hydro, Mg(NO₃)₂, ZnSO₄, Mg(NO₃)₂+ ZnSO₄ primed and non-primed (control) seed treatments on plant height (cm) of wheat varieties, grown in the year 2018-19.

Plant height (cm)									
Days after sowing (DAS)									
Treatment	35			45			60		
	V ₁	V ₂	Mean	V ₁	V ₂	Mean	V ₁	V ₂	Mean
T ₁	26.46±1.56c	26.19±1.53c	26.33	39.01±0.27a	36.01±3.34a	37.51	61.23±1.37a	52.73±2.24a	56.98
T ₂	27.41±1.76bc	27.00±0.47bc	27.20	39.88±1.72a	37.01±1.36a	38.44	62.40±1.85a	53.93±1.63a	58.17
T ₃	29.51±0.48bc	29.35±0.66ab	29.43	40.53±2.52a	39.70±0.92a	40.11	63.55±2.20a	54.98±2.19a	59.26
T ₄	30.20±2.17ab	29.98±1.83a	30.09	41.98±1.90a	40.17±2.40a	41.07	64.56±0.82a	56.53±1.45a	60.54
T ₅	32.94±1.54a	31.04±0.60a	31.99	43.72±1.31a	41.30±0.74a	42.51	65.99±0.98a	57.92±1.63a	61.96
Mean	29.31	28.71		41.02	38.84		63.55	55.22	
Factors	35 DAS			45 DAS			60 DAS		
	CD	±SEm		CD	±SEm		CD	±SEm	
	Factor A	NS	0.43	1.68	0.56		1.66	0.55	
	Factor B	2.02	0.67	2.66	0.89		2.62	0.87	
	Factor A×B	NS	0.95	NS	1.26		NS	1.24	

Table S2. Effect of hydro, Mg(NO₃)₂, ZnSO₄, Mg(NO₃)₂ + ZnSO₄ primed and non-primed (control) seed treatments on Leaf Area (cm²) of wheat varieties, grown in the year 2018-19.

Leaf Area (cm ²)									
Days after sowing (DAS)									
Treatment	35			45			60		
	V ₁	V ₂	Mean	V ₁	V ₂	Mean	V ₁	V ₂	Mean
T ₁	171.80±12.88c	270.59±14.53b	221.19	276.73±20.34a	297.24±9.20c	286.98	792.61±22.10c	937.98±42.51a	865.29
T ₂	214.85±22.94bc	277.59±12.54b	246.22	291.55±36.98a	300.54±16.70c	296.04	836.3±20.74c	1,083.94±109.79a	960.12
T ₃	248.99±14.97ab	284.15±28.70b	266.57	313.57±46.82a	367.94±9.72b	340.75	994.18±55.44b	1,178.51±274.67a	1,086.34
T ₄	269.03±33.06ab	294.44±16.07ab	281.73	328.88±31.96a	396.21±27.60b	362.55	1,093.69±47.07ab	1,259.43±84.10a	1,176.56
T ₅	282.41±25.84a	313.51±23.33a	297.96	367.06±20.78a	453.73±26.48a	410.39	1,159.84±63.79a	1,387.88±72.29a	1,273.86
Mean	237.42	288.06		315.56	363.13		975.32	1,169.55	
Factors	35 DAS			45 DAS			60 DAS		
	CD	±SEm		CD	±SEm		CD	±SEm	
Factor A	19.21	6.41		23.14	7.73		93.23	31.14	
Factor B	30.37	10.14		36.59	12.22		147.40	49.23	
Factor A×B	NS	14.34		NS	17.28		NS	69.62	

Table S3. Effect of hydro, Mg(NO₃)₂, ZnSO₄, Mg(NO₃)₂+ ZnSO₄ primed and non-primed (control) seed treatments on Nitrate reductase activity of leaves (n mol g⁻¹ h⁻¹ fresh weight) of wheat varieties, grown in the year 2018-19.

Nitrate reductase (n mol g ⁻¹ h ⁻¹ fresh weight)												
Treatm ent	35 DAS				45 DAS				60 DAS			
	V1	V2	Mea	Percenta	V1	V2	Mea	Percenta	V1	V2	Mean	Percenta
			n	ge Increase			n	ge Increase				ge Increase
T ₁	206.39±18.5	249.72±30.3	228.	0.0	340.57±35.2	451.28±32.85	395.	0.0	731.06±34.8	903.27±57.97	817.16	0.0
	0d	0c	05		3d	c	92		8c	d		
T ₂	244.18±20.4	280.77±27.0	262.	15.09	404.29±15.3	517.76±27.94	461.	16.44	876.81±94.3	990.18±11.92	933.49	14.23
	3cd	7c	47		8cd	c	02		4b	cd		
T ₃	279.79±21.8	349.02±28.3	314.	37.86	447.97±41.9	626.90±62.10	537.	35.74	1,005.48±30.	1,092.43±43.5	1,048.	28.36
	7bc	0b	40		7bc	bc	44		09a	3bc	96	
T ₄	304.83±5.56	402.32±11.5	353.	55.04	511.52±11.5	791.22±142.5	651.	64.52	1,061.31±56.	1,169.01±65.5	1,115.	36.46
	ab	8ab	58		8ab	3ab	37		55a	5b	16	
T ₅	325.53±29.3	446.57±22.7	386.	69.28	582.77±22.7	915.12±30.23	748.	89.16	1,120.21±27.	1,304.83±33.9	1,212.	48.38
	5a	8a	05		8a	a	94		53a	1a	52	
Mean	272.14	345.68			457.42	660.46			958.97	1,091.95		
		35 DAS				45 DAS				60 DAS		
	CD		±SEm		CD		±SEm		CD		±SEm	

Factors						
Factor A	21.32	7.12	56.21	18.77	47.94	16.01
Factor B	33.72	11.26	88.87	29.68	75.79	25.31
Factor A×B	NS	15.92	NS	41.976	NS	35.79

Table S4. Effect of hydro, Mg(NO₃)₂, ZnSO₄, Mg(NO₃)₂ + ZnSO₄ primed and non-primed (control) seed treatments on Protein content (mg g⁻¹) of leaves of wheat varieties, grown in the year 2018-19.

Treatment	Protein content (mg g ⁻¹)											
	Days after sowing (DAS)											
	35				45				60			
	V1	V2	Mean	Percentage Increase	V1	V2	Mean	Percentage Increase	V1	V2	Mean	Percentage Increase
T ₁	129.41±1.74 d	139.59±2.4 3c	134.50	0.0	160.55±1. 96b	168.06±1.77 c	164.30	0.0	164.10±1. 70d	172.65±4. 52a	168.38	0.0
T ₂	135.96±3.70 c	146.86±3.0 1bc	141.41	5.14	162.73±2. 53b	170.19±3.15 bc	166.46	1.31	166.06±1. 53cd	174.02±7. 32a	170.04	0.98
T ₃	143.68±3.32 b	154.02±3.4 4b	148.85	10.67	169.58±0. 78a	177.72±1.81 abc	173.65	5.69	174.07±3. 97bc	189.98±6. 32a	182.02	8.10
T ₄	147.25±5.07 ab	163.31±3.5 2a	155.28	15.45	171.81±1. 86a	174.87±3.33 ab	173.34	5.50	178.97±3. 81ab	186.47±7. 56a	182.72	8.52
T ₅	152.13±2.28 a	166.33±4.3 7a	159.23	18.39	173.14±3. 54a	181.18±4.82 a	177.16	7.83	183.67±4. 48a	192.52±4. 40a	188.09	11.70

Mean	141.68	154.02	167.56	174.40	173.38	183.13
	35 DAS		45 DAS		60 DAS	
	CD	±SEm	CD	±SEm	CD	±SEm
Factors						
Factor A	3.24	1.08	2.69	0.9	4.83	1.61
Factor B	5.13	1.71	4.26	1.42	7.64	2.55
Factor A×B	N/S	2.42	N/S	2.01	N/S	3.61

Abbreviations used in supplementary tables: T1; nonprimed (control), T2; hydro primed, T3; Mg(NO₃)₂ primed with 7.5 mM solution, T4; ZnSO₄ primed with 50 ppm solution, T5; Mg(NO₃)₂ + ZnSO₄ primed with 7.5 mM + 50 ppm solution, V1; HUW-234, V2; BHU-3, NS; non-significant, CD; critical difference, ± SEm: standard error of mean. Lowercase alphabetical letters (a,b,c) represents the significant differences between the different seed priming treatments (Tukey test; $p < 0.05$).