

Appendix-I (A&B): ANOVA for Plant Height of HD-3226 and HI-1620 wheat genotypes in control and water stress environment in Rabi season 2020-21.

A. HD-3226

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	2.007			
Factor A	7	708.163	101.166	23.132	0
Factor B	1	32.156	32.156	7.353	0.01097
Interaction A X B	7	259.644	37.092	8.481	0.00001
Error	30	131.203	4.373		
Total	47	1,133.17			

B. HI-1620

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	28.045			
Factor A	7	133.756	19.108	1.499	0.002
Factor B	1	349.417	349.417	27.416	0.00001
Interaction A X B	7	369.379	52.768	4.14	0.00271
Error	30	382.344	12.745		
Total	47	1,262.94			

Appendix-II (A&B): ANOVA for Number of Tiller per plants of HD-3226 and HI-1620 wheat genotypes in control and water stress environment in Rabi season 2020-21.

A. HD-3226

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	0.108			
Factor A	7	9.54	1.363	6.391	0.00012
Factor B	1	4.326	4.326	20.286	0.00009
Interaction A X B	7	1.273	0.182	0.853	0.55389
Error	30	6.397	0.213		
Total	47	21.643			

B. HI-1620

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	0.584			
Factor A	7	18.288	2.613	26.817	0

Factor B	1	0.143	0.143	1.47	0.00475
Interaction A X B	7	4.014	0.573	5.886	0.00023
Error	30	2.923	0.097		
Total	47	25.952			

Appendix-III (A&B): ANOVA for spike length (cm) of HD-3226 and HI-1620 wheat genotypes in control and water stress environment in Rabi season 2020-21 (M₁).

A. HD-3226

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	0.015			
Factor A	7	8.045	1.149	11.881	0
Factor B	1	0.981	0.981	10.141	0.00337
Interaction A X B	7	2.147	0.307	3.171	0.01241
Error	30	2.902	0.097		
Total	47	14.09			

B. HI-1620

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	0.222			
Factor A	7	13.031	1.862	20.128	0
Factor B	1	1.118	1.118	12.084	0.00157
Interaction A X B	7	1.189	0.17	1.837	0.0011
Error	30	2.775	0.092		
Total	47	18.334			

Appendix-VI (A&B): ANOVA for 50 % Days of Heading of HD-3226 and HI-1620 wheat genotypes in control and water stress environment in Rabi season 2020-21 (M₁).

A. HD-3226

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	10.944			
Factor A	7	472.889	67.556	5.047	0.00072
Factor B	1	175.436	175.436	13.107	0.00107
Interaction A X B	7	19.695	2.814	0.21	0.0098
Error	30	401.554	13.385		
Total	47	1,080.52			

B. HI-1620

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	3.616			

Factor A	7	1,453.73	207.676	86.269	0
Factor B	1	22.315	22.315	9.27	0.00482
Interaction A X B	7	53.98	7.711	3.203	0.01178
Error	30	72.219	2.407		
Total	47	1,605.86			

Appendix-V (A&B): ANOVA for 50 % Days of Anthesis of HD-3226 and HI-1620 wheat genotypes in control and water stress environment in Rabi season 2020-21 (M₁).

A. HD-3226

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	4.433			
Factor A	7	331.368	47.338	15.074	0
Factor B	1	48.782	48.782	15.534	0.00045
Interaction A X B	7	45.83	6.547	2.085	0.07642
Error	30	94.21	3.14		
Total	47	524.623			

B. HI-1620

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	10.07			
Factor A	7	1,044.75	149.25	23.948	0
Factor B	1	0.083	0.083	0.013	0.0099
Interaction A X B	7	92.175	13.168	2.113	0.07286
Error	30	186.964	6.232		
Total	47	1,334.04			

Appendix-VI (A&B): ANOVA for 50 % Days of Maturity of HD-3226 and HI-1620 wheat genotypes in control and water stress environment in Rabi season 2020-21 (M₁).

A. HD-3226

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	8.55			
Factor A	7	248.589	35.513	16.742	0
Factor B	1	5.649	5.649	2.663	0.11315
Interaction A X B	7	35.621	5.089	2.399	0.04481
Error	30	63.634	2.121		
Total	47	362.043			

B. HI-1620

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	0.449			
Factor A	7	403.5	57.643	32.466	0
Factor B	1	4.941	4.941	2.783	0.10569

Interaction A X B	7	29.563	4.223	2.379	0.04638
Error	30	53.265	1.776		
Total	47	491.718			

Appendix-VII (A&B): ANOVA for spikelet's per spike of HD-3226 and HI-1620 wheat genotypes in control and water stress environment in Rabi season 2020-21 (M₁).

A. HD-3226

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	0.523			
Factor A	7	40.552	5.793	26.404	0
Factor B	1	7.862	7.862	35.833	0
Interaction A X B	7	4.103	0.586	2.672	0.02831
Error	30	6.582	0.219		
Total	47	59.621			

B. HI-1620

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	0.575			
Factor A	7	65.41	9.344	42.965	0
Factor B	1	0.06	0.06	0.278	0.602
Interaction A X B	7	14.076	2.011	9.246	0
Error	30	6.525	0.217		
Total	47	86.646			

Appendix-VIII (A&B): ANOVA for 1000 grain weight or test weight of HD-3226 and HI-1620 wheat genotypes in control and water stress environment in Rabi season 2020-21 (M₁).

A. HD-3226

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	0.741			
Factor A	7	51.924	7.418	4.955	0.00082
Factor B	1	7.844	7.844	5.24	0.02929
Interaction A X B	7	25.988	3.713	2.48	0.03907
Error	30	44.911	1.497		
Total	47	131.408			

B. HI-1620

Source of Variation	DF	Sum of Squares	Mean Squares	F-Calculated	Significance
Replication	2	1.239			
Factor A	7	47.01	6.716	20.251	0
Factor B	1	0.856	0.856	2.582	0.00859

Interaction A X B	7	6.194	0.885	2.668	0.02848
Error	30	9.949	0.332		
Total	47	65.247			