

Table 2.1.North Western Plains Zone			IR-TAS-DOS		Pooled		2019-20	
Genotypes	Date of sowing				Mean	Rk		
	Normal	Rk	Late	Rk			Very late	Rk
Yield,q/ha								
HD3298	55.79	4	46.89	3	36.48	4	46.39	4
WH1124(c)	54.73	5	43.56	5	35.40	5	44.56	5
WH1021(c)	50.32	6	42.64	6	33.31	6	42.09	6
HD3059 (c)	57.50	2	47.47	1	39.29	1	48.09	1
DBW173(c)	56.71	3	46.61	4	37.55	3	46.96	3
PBW771(c)	58.04	1	47.28	2	38.09	2	47.80	2
MEAN	55.52		45.74		36.69		45.98	
CD (0.05)	Sowing (A)		Genotypes (B)		B within A		A within B	
	0.70		0.87		1.50		1.54	
Earhead/sqm								
HD3298	414	4	366	4	337	2	372	3
WH1124(c)	423	2	379	2	339	1	380	1
WH1021(c)	426	1	381	1	330	5	379	2
HD3059 (c)	402	6	354	6	319	6	359	6
DBW173(c)	417	3	362	5	333	4	371	5
PBW771(c)	411	5	369	3	335	3	371	4
MEAN	415		368		332		372	
CD (0.05)	Sowing (A)		Genotypes (B)		B within A		A within B	
	7.11		8.01		NS		NS	
Grains/earhead								
HD3298	36.77	4	48.46	4	56.81	4	47.35	4
WH1124(c)	34.29	5	39.94	5	62.09	2	45.44	5
WH1021(c)	30.82	6	35.67	6	59.67	3	42.05	6
HD3059 (c)	38.90	1	50.00	3	75.23	1	54.71	1
DBW173(c)	37.58	2	61.00	1	55.97	5	51.52	2
PBW771(c)	37.26	3	50.80	2	54.46	6	47.50	3
MEAN	35.94		47.65		60.70		48.10	
CD (0.05)	Sowing (A)		Genotypes (B)		B within A		A within B	
	1.17		3.56		6.17		5.70	
1000 Grains Weight, g								
HD3298	32.31	5	33.36	3	31.61	6	32.43	6
WH1124(c)	33.35	4	31.63	6	33.50	4	32.83	4
WH1021(c)	32.23	6	32.34	5	33.62	3	32.73	5
HD3059 (c)	36.45	1	35.47	2	37.81	1	36.58	1
DBW173(c)	36.39	2	35.59	1	33.76	2	35.24	2
PBW771(c)	35.16	3	33.18	4	33.31	5	33.89	3
MEAN	34.31		33.59		33.94		33.95	
CD (0.05)	Sowing (A)		Genotypes (B)		B within A		A within B	
	0.76		1.13		1.96		1.94	

Centres: Agra, Delhi, Durgapura, Gurdaspur, Hisar, Jammu, Karnal, Ludhiana, Pantnagar and Sriganagar

Table 2.1.1. North Western Plains Zone			IR-TAS-DOS		Agra		2019-20	
Genotypes	Date of sowing				Mean	Rk		
	Normal	Rk	Late	Rk			Very late	Rk
Yield,q/ha								
HD3298	48.86	4	50.33	4	38.38	4	45.86	4
WH1124(c)	51.55	2	53.92	2	44.45	2	49.97	2
WH1021(c)	43.14	6	45.43	6	34.85	6	41.14	6
HD3059 (c)	52.51	1	57.47	1	46.02	1	52.00	1
DBW173(c)	47.14	5	48.68	5	36.20	5	44.01	5
PBW771(c)	50.95	3	52.95	3	41.77	3	48.56	3
MEAN	49.03		51.46		40.28		46.92	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.26		1.01		2.32	
Genotypes (B)	**		0.66		1.92		4.24	
B within A	N.S.		1.15		3.32			
A within B			1.08		3.12			
Earhead/sqm								
HD3298	247	4	248	4	238	4	244	4
WH1124(c)	251	2	253	2	243	2	249	2
WH1021(c)	241	6	243	6	238	6	241	6
HD3059 (c)	251	1	255	1	244	1	250	1
DBW173(c)	245	5	246	5	238	5	243	5
PBW771(c)	249	3	252	3	239	3	247	3
MEAN	247		250		240		246	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.66		2.59		1.14	
Genotypes (B)	**		1.22		3.52		1.49	
B within A	N.S.		2.11		6.10			
A within B			2.04		5.88			
Grains/earhead								
HD3298	49.56	1	49.86	2	44.53	4	47.98	2
WH1124(c)	46.96	5	45.99	6	47.34	3	46.76	5
WH1021(c)	46.94	6	49.06	3	44.14	6	46.71	6
HD3059 (c)	47.59	4	47.85	4	49.40	1	48.28	1
DBW173(c)	48.60	3	50.85	1	44.24	5	47.90	3
PBW771(c)	48.74	2	46.75	5	47.54	2	47.68	4
MEAN	48.07		48.39		46.20		47.55	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	N.S.		1.43		5.60		12.73	
Genotypes (B)	N.S.		2.12		6.11		13.35	
B within A	N.S.		3.67		10.58			
A within B			3.64		10.50			
1000 Grains Weight, g								
HD3298	40.10	4	40.90	4	36.33	4	39.11	4
WH1124(c)	43.89	2	46.32	2	39.00	2	43.07	2
WH1021(c)	38.72	6	39.12	6	34.00	6	37.28	6
HD3059 (c)	44.12	1	47.66	1	39.14	1	43.64	1
DBW173(c)	39.99	5	40.01	5	35.18	5	38.39	5
PBW771(c)	42.10	3	45.18	3	37.23	3	41.50	3
MEAN	41.49		43.20		36.81		40.50	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	*		1.18		4.62		12.32	
Genotypes (B)	N.S.		1.84		5.30		13.61	
B within A	N.S.		3.18		9.19			
A within B			3.13		9.05			
Date of Sowing:	08.11.2019		10.12.2019		01.01.2020			
Date of Harvesting:	26.03.2020		05.04.2020		14.04.2020			

Table 2.1.2. North Western Plains Zone IR-TAS-DOS Delhi 2019-20

Genotypes	Date of sowing				Mean	Rk		
	Normal	Rk	Late	Rk			Very late	Rk
Yield,q/ha								
HD3298	61.08	1	51.42	2	29.92	2	47.47	1
WH1124(c)	58.50	4	49.58	4	29.17	4	45.75	3
WH1021(c)	60.17	2	51.50	1	30.67	1	47.44	2
HD3059 (c)	57.50	6	49.25	5	28.33	5	45.03	6
DBW173(c)	58.75	3	50.42	3	26.92	6	45.36	5
PBW771(c)	57.92	5	49.00	6	29.50	3	45.47	4
MEAN	58.99		50.19		29.08		46.09	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.77		3.01		7.06	
Genotypes (B)	**		0.32		0.91		2.06	
B within A	N.S.		0.55		1.58			
A within B			0.92		2.64			
Earhead/sqm								
HD3298	483	4	362	5	267	4	371	4
WH1124(c)	510	3	483	1	336	1	443	2
WH1021(c)	588	1	448	2	298	3	444	1
HD3059 (c)	440	5	358	6	227	6	342	6
DBW173(c)	532	2	402	4	307	2	413	3
PBW771(c)	405	6	407	3	264	5	358	5
MEAN	493		410		283		395	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		11.08		43.49		11.89	
Genotypes (B)	**		16.11		46.53		12.23	
B within A	N.S.		27.91		80.59			
A within B			27.78		80.22			
Grains/earhead								
HD3298	30.31	3	37.96	2	37.95	4	35.41	3
WH1124(c)	29.45	4	29.06	6	30.70	5	29.74	6
WH1021(c)	27.21	6	33.75	5	38.61	3	33.19	4
HD3059 (c)	32.77	2	38.50	1	44.24	1	38.50	1
DBW173(c)	29.08	5	36.71	3	30.15	6	31.98	5
PBW771(c)	37.23	1	35.20	4	40.30	2	37.58	2
MEAN	31.01		35.20		36.99		34.40	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	*		1.21		4.76		14.97	
Genotypes (B)	*		1.85		5.35		16.15	
B within A	N.S.		3.21		9.26			
A within B			3.17		9.15			
1000 Grains Weight, g								
HD3298	41.76	1	37.84	1	29.54	2	36.38	1
WH1124(c)	38.96	3	35.67	3	28.80	4	34.47	3
WH1021(c)	37.68	6	34.38	6	28.02	6	33.36	6
HD3059 (c)	39.92	2	36.48	2	29.06	3	35.15	2
DBW173(c)	37.99	5	35.02	5	29.59	1	34.20	4
PBW771(c)	38.53	4	35.11	4	28.71	5	34.12	5
MEAN	39.14		35.75		28.95		34.61	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.47		1.84		5.73	
Genotypes (B)	**		0.43		1.24		3.73	
B within A	N.S.		0.75		2.15			
A within B			0.83		2.38			
Date of Sowing:	05.11.19		12.12.19		15.01.20			
Date of Harvesting:	15.04.20		20.04.20		22.04.20			

Table 2.1.3. North Western Plains Zone IR-TAS-DOS Durgapura 2019-20

Genotypes	Date of sowing		Date of sowing		Date of sowing		Mean	Rk
	Normal	Rk	Late	Rk	Very late	Rk		
Yield,q/ha								
HD3298	64.03	1	43.29	2	28.33	3	45.22	1
WH1124(c)	41.05	6	36.89	4	20.74	6	32.89	6
WH1021(c)	52.13	2	44.03	1	22.06	5	39.41	2
HD3059 (c)	46.36	4	33.62	6	24.00	4	34.66	5
DBW173(c)	43.14	5	35.48	5	28.99	2	35.87	4
PBW771(c)	47.80	3	37.73	3	29.30	1	38.27	3
MEAN	49.08		38.50		25.57		37.72	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.92		3.62		10.38	
Genotypes (B)	**		0.98		2.83		7.80	
B within A	**		1.70		4.91			
A within B			1.80		5.21			
Earhead/sqm								
HD3298	404	1	366	2	297	2	356	1
WH1124(c)	337	6	286	6	252	6	292	6
WH1021(c)	395	2	368	1	258	5	340	3
HD3059 (c)	378	4	305	5	268	4	317	5
DBW173(c)	359	5	308	4	293	3	320	4
PBW771(c)	389	3	364	3	302	1	352	2
MEAN	377		333		278		329	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		6.70		26.29		8.63	
Genotypes (B)	**		6.26		18.09		5.71	
B within A	*		10.85		31.33			
A within B			11.96		34.53			
Grains/earhead								
HD3298	37.37	1	28.59	5	24.19	3	30.05	2
WH1124(c)	32.22	2	35.00	1	23.80	4	30.34	1
WH1021(c)	31.79	3	30.80	2	22.70	6	28.43	3
HD3059 (c)	31.35	4	29.42	3	22.99	5	27.92	5
DBW173(c)	30.72	6	29.01	4	25.53	2	28.42	4
PBW771(c)	30.72	5	27.32	6	25.56	1	27.87	6
MEAN	32.36		30.02		24.13		28.84	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.54		2.11		7.91	
Genotypes (B)	**		0.55		1.58		5.68	
B within A	**		0.95		2.73			
A within B			1.02		2.94			
1000 Grains Weight, g								
HD3298	42.30	1	41.36	1	39.39	1	41.02	1
WH1124(c)	38.17	6	37.02	6	34.44	6	36.54	6
WH1021(c)	41.56	2	38.90	3	37.70	5	39.39	2
HD3059 (c)	39.23	4	37.53	5	38.99	2	38.59	5
DBW173(c)	39.15	5	39.70	2	38.63	3	39.16	3
PBW771(c)	40.07	3	38.10	4	38.04	4	38.73	4
MEAN	40.08		38.77		37.86		38.90	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	*		0.49		1.91		5.30	
Genotypes (B)	**		0.63		1.81		4.82	
B within A	N.S.		1.08		3.13			
A within B			1.10		3.18			
Date of Sowing:	07.11.2019		11.12.2019		06.01.2020			
Date of Harvesting:	18.03.2020		10.04.2020		26.04.2020			

Table 2.1.4. North Western Plains Zone IR-TAS-DOS Gurdaspur 2019-20

Genotypes	Date of sowing		Date of sowing		Date of sowing		Mean	Rk
	Normal	Rk	Late	Rk	Very late	Rk		
Yield,q/ha								
HD3298	47.49	5	38.13	3	34.86	3	40.16	4
WH1124(c)	62.79	3	30.52	5	29.45	5	40.92	3
WH1021(c)	45.97	6	31.05	4	29.68	4	35.57	6
HD3059 (c)	75.65	1	43.23	1	40.18	2	53.02	1
DBW173(c)	74.96	2	42.54	2	40.56	1	52.69	2
PBW771(c)	53.81	4	27.93	6	27.02	6	36.25	5
MEAN	60.11		35.57		33.63		43.10	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		1.26		4.94		12.38	
Genotypes (B)	**		1.83		5.27		12.71	
B within A	**		3.16		9.13			
A within B			3.15		9.09			
Earhead/sqm								
HD3298	318	4	339	4	336	3	331	5
WH1124(c)	351	1	373	1	354	2	359	1
WH1021(c)	304	6	365	2	355	1	341	2
HD3059 (c)	337	3	352	3	315	5	335	3
DBW173(c)	348	2	329	5	317	4	331	4
PBW771(c)	307	5	318	6	306	6	310	6
MEAN	328		346		331		335	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	N.S.		5.88		23.10		7.46	
Genotypes (B)	**		8.10		23.39		7.26	
B within A	N.S.		14.03		40.52			
A within B			14.09		40.70			
Grains/earhead								
HD3298	35.46	6	35.71	3	30.47	3	33.88	3
WH1124(c)	44.88	3	28.12	5	27.90	5	33.63	5
WH1021(c)	40.60	5	30.96	4	29.54	4	33.70	4
HD3059 (c)	59.65	1	38.77	1	38.67	2	45.69	1
DBW173(c)	57.64	2	38.24	2	40.00	1	45.29	2
PBW771(c)	42.65	4	26.51	6	27.10	6	32.09	6
MEAN	46.81		33.05		32.28		37.38	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		1.09		4.30		12.42	
Genotypes (B)	**		1.36		3.92		10.88	
B within A	**		2.35		6.78			
A within B			2.41		6.95			
1000 Grains Weight, g								
HD3298	42.23	1	31.54	4	34.22	1	35.99	1
WH1124(c)	39.89	3	29.11	5	29.51	5	32.84	5
WH1021(c)	37.50	5	27.59	6	28.86	6	31.32	6
HD3059 (c)	37.64	4	31.68	3	32.73	2	34.02	4
DBW173(c)	37.37	6	34.06	1	32.00	4	34.48	3
PBW771(c)	41.34	2	33.21	2	32.64	3	35.73	2
MEAN	39.33		31.20		31.66		34.06	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.30		1.19		3.77	
Genotypes (B)	**		0.45		1.30		3.95	
B within A	**		0.78		2.24			
A within B			0.77		2.23			
Date of Sowing:	06.11.19		10.12.19		01.01.2020			
Date of Harvesting:	07.05.20		17.05.20		17.05.20			

Table 2.1.5. North Western Plains Zone IR-TAS-DOS Hisar 2019-20

Genotypes	Date of sowing		Date of sowing		Date of sowing		Mean	Rk
	Normal	Rk	Late	Rk	Very late	Rk		
Yield,q/ha								
HD3298	48.25	5	43.89	4	29.01	6	40.38	6
WH1124(c)	57.96	2	46.83	3	34.29	4	46.36	3
WH1021(c)	52.62	3	38.53	6	32.94	5	41.36	5
HD3059 (c)	52.61	4	43.49	5	37.22	3	44.44	4
DBW173(c)	48.02	6	48.10	2	44.52	2	46.88	2
PBW771(c)	63.34	1	55.44	1	45.32	1	54.70	1
MEAN	53.80		46.04		37.22		45.69	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.73		2.88		6.81	
Genotypes (B)	**		0.87		2.50		5.70	
B within A	**		1.50		4.34			
A within B			1.56		4.49			
Earhead/sqm								
HD3298	468	6	433	6	410	5	437	6
WH1124(c)	495	2	452	3	425	3	457	3
WH1021(c)	482	3	442	4	410	5	444	4
HD3059 (c)	470	5	442	4	418	4	443	5
DBW173(c)	480	4	485	2	450	2	472	2
PBW771(c)	508	1	487	1	458	1	484	1
MEAN	484		457		429		456	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		5.70		22.36		5.30	
Genotypes (B)	**		6.24		18.01		4.10	
B within A	N.S.		10.80		31.20			
A within B			11.39		32.89			
Grains/earhead								
HD3298	22.18	6	24.58	6	18.02	6	21.59	6
WH1124(c)	29.29	3	27.55	3	28.37	3	28.41	3
WH1021(c)	30.67	2	28.06	2	27.15	4	28.63	2
HD3059 (c)	26.15	5	25.79	4	26.96	5	26.30	5
DBW173(c)	26.32	4	25.18	5	29.71	1	27.07	4
PBW771(c)	32.27	1	30.12	1	28.85	2	30.42	1
MEAN	27.81		26.88		26.51		27.07	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	N.S.		0.51		1.98		7.92	
Genotypes (B)	**		0.75		2.16		8.29	
B within A	*		1.30		3.74			
A within B			1.29		3.72			
1000 Grains Weight, g								
HD3298	46.48	1	41.29	1	39.28	1	42.35	1
WH1124(c)	40.03	3	37.64	5	28.47	6	35.38	5
WH1021(c)	35.60	6	31.46	6	29.58	5	32.21	6
HD3059 (c)	42.80	2	38.35	3	33.08	4	38.08	2
DBW173(c)	38.00	5	39.63	2	33.46	3	37.03	3
PBW771(c)	38.65	4	37.96	4	34.40	2	37.00	4
MEAN	40.26		37.72		33.04		37.01	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.26		1.03		3.01	
Genotypes (B)	**		0.47		1.35		3.79	
B within A	**		0.81		2.34			
A within B			0.78		2.27			
Date of Sowing:	9.11.2019		15.12.2019		5.1.2020			
Date of Harvesting:	18.4.2020		28.4.2020		4.5.2020			

Table 2.1.6. North Western Plains Zone IR-TAS-DOS Jammu 2019-20

Genotypes	Date of sowing				Mean	Rk
	Normal	Rk	Late	Rk		
Yield,q/ha						
HD3298	39.35	6	37.29	6	33.57	6
WH1124(c)	42.50	5	40.22	5	33.63	5
WH1021(c)	42.87	4	41.08	3	35.42	4
HD3059 (c)	44.53	3	43.14	1	37.76	2
DBW173(c)	45.54	2	42.98	2	38.43	1
PBW771(c)	46.00	1	40.73	4	36.82	3
MEAN	43.47		40.90		35.94	40.10
	F. Test		S.E.m		CD (0.05)	CV (%)
Date of sowing (A)	**		0.51		1.99	5.35
Genotypes (B)	**		0.69		1.98	5.14
B within A	N.S.		1.19		3.44	
A within B			1.20		3.46	
Earhead/sqm						
HD3298	435	3	393	1	360	2
WH1124(c)	433	4	372	5	357	3
WH1021(c)	436	2	382	2	325	6
HD3059 (c)	392	6	354	6	345	4
DBW173(c)	423	5	379	4	335	5
PBW771(c)	466	1	382	3	361	1
MEAN	431		377		347	385
	F. Test		S.E.m		CD (0.05)	CV (%)
Date of sowing (A)	**		4.40		17.26	4.84
Genotypes (B)	*		7.33		21.17	5.71
B within A	N.S.		12.70		36.67	
A within B			12.40		35.80	
Grains/earhead						
HD3298	23.22	6	25.81	6	25.46	6
WH1124(c)	26.43	4	28.10	4	26.48	5
WH1021(c)	25.89	5	28.63	3	30.44	3
HD3059 (c)	29.85	1	32.19	1	30.66	1
DBW173(c)	28.91	2	31.35	2	30.58	2
PBW771(c)	26.61	3	27.88	5	27.09	4
MEAN	26.82		29.00		28.45	28.09
	F. Test		S.E.m		CD (0.05)	CV (%)
Date of sowing (A)	*		0.62		2.43	9.33
Genotypes (B)	**		0.72		2.09	7.74
B within A	N.S.		1.25		3.62	
A within B			1.30		3.76	
1000 Grains Weight, g						
HD3298	39.08	1	36.95	5	36.82	3
WH1124(c)	37.27	5	38.72	1	35.90	4
WH1021(c)	38.15	2	37.63	4	35.82	5
HD3059 (c)	38.15	2	38.00	3	35.74	6
DBW173(c)	37.27	5	36.23	6	37.59	2
PBW771(c)	37.28	4	38.32	2	37.70	1
MEAN	37.87		37.64		36.59	37.37
	F. Test		S.E.m		CD (0.05)	CV (%)
Date of sowing (A)	N.S.		0.43		1.70	4.92
Genotypes (B)	N.S.		0.39		1.14	3.17
B within A	N.S.		0.68		1.98	
A within B			0.76		2.19	
Date of Sowing:	11.11.2019		16.12.2019		03.01.2020	
Date of Harvesting:	25.04.2020		04.05.2020		09.05.2020	

Table 2.1.7. North Western Plains Zone IR-TAS-DOS Karnal 2019-20

Genotypes	Date of sowing		Date of sowing		Date of sowing		Mean	Rk
	Normal	Rk	Late	Rk	Very late	Rk		
Yield,q/ha								
HD3298	44.47	5	46.32	2	42.79	2	44.53	4
WH1124(c)	50.33	3	37.87	6	36.15	6	41.45	5
WH1021(c)	37.73	6	44.22	4	38.73	5	40.23	6
HD3059 (c)	51.11	2	43.37	5	44.48	1	46.32	2
DBW173(c)	49.78	4	44.44	3	42.46	3	45.56	3
PBW771(c)	54.98	1	47.00	1	41.01	4	47.66	1
MEAN	48.07		43.87		40.94		44.29	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	*		1.18		4.62		11.27	
Genotypes (B)	**		1.15		3.31		7.77	
B within A	**		1.99		5.74			
A within B			2.16		6.25			
Earhead/sqm								
HD3298	423	4	368	3	488	1	427	1
WH1124(c)	438	1	397	1	417	5	417	2
WH1021(c)	425	3	360	4	422	3	402	4
HD3059 (c)	335	6	313	6	402	6	350	6
DBW173(c)	352	5	343	5	420	4	372	5
PBW771(c)	433	2	373	2	443	2	417	3
MEAN	401		359		432		397	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	*		10.14		39.82		10.83	
Genotypes (B)	**		13.31		38.43		10.05	
B within A	N.S.		23.05		66.57			
A within B			23.36		67.46			
Grains/earhead								
HD3298	25.80	6	30.33	5	25.01	6	27.05	6
WH1124(c)	31.04	4	24.64	6	26.71	4	27.46	5
WH1021(c)	25.86	5	32.57	2	30.11	2	29.51	4
HD3059 (c)	37.93	1	34.72	1	31.49	1	34.71	1
DBW173(c)	36.04	2	32.43	3	29.24	3	32.57	2
PBW771(c)	31.58	3	31.71	4	25.75	5	29.68	3
MEAN	31.38		31.07		28.05		30.17	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	*		0.89		3.51		12.59	
Genotypes (B)	**		1.29		3.73		12.86	
B within A	N.S.		2.24		6.47			
A within B			2.23		6.44			
1000 Grains Weight, g								
HD3298	41.63	1	41.57	1	35.07	4	39.43	1
WH1124(c)	37.17	5	38.71	5	32.44	5	36.11	5
WH1021(c)	34.49	6	38.47	6	30.50	6	34.49	6
HD3059 (c)	40.52	2	40.59	2	35.47	2	38.86	2
DBW173(c)	39.49	4	40.08	3	35.09	3	38.22	4
PBW771(c)	40.27	3	39.81	4	35.86	1	38.65	3
MEAN	38.93		39.87		34.07		37.63	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.55		2.15		6.16	
Genotypes (B)	**		0.42		1.21		3.33	
B within A	N.S.		0.72		2.09			
A within B			0.86		2.48			
Date of Sowing:	07.11.2019		10.12.2019		03.01.2020			
Date of Harvesting:	12.04.2020		30.04.2020					

Table 2.1.8. North Western Plains Zone IR-TAS-DOS Ludhiana 2019-20

Genotypes	Date of sowing		Date of sowing		Date of sowing		Mean	Rk
	Normal	Rk	Late	Rk	Very late	Rk		
	Yield,q/ha							
HD3298	71.88	1	46.35	2	45.05	2	54.43	2
WH1124(c)	65.21	5	44.53	4	41.41	3	50.38	4
WH1021(c)	61.77	6	45.26	3	35.26	6	47.43	6
HD3059 (c)	68.02	4	43.91	5	39.84	4	50.59	3
DBW173(c)	70.73	2	43.80	6	36.51	5	50.35	5
PBW771(c)	70.21	3	48.49	1	46.30	1	55.00	1
MEAN	67.97		45.39		40.73		51.36	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.72		2.83		5.95	
Genotypes (B)	**		1.01		2.92		5.91	
B within A	N.S.		1.75		5.06			
A within B			1.76		5.07			
	Earhead/sqm							
HD3298	381	4	363	2	349	3	364	2
WH1124(c)	374	5	354	4	353	2	361	4
WH1021(c)	399	2	338	6	343	4	360	5
HD3059 (c)	409	1	357	3	317	6	361	3
DBW173(c)	386	3	344	5	330	5	353	6
PBW771(c)	373	6	367	1	367	1	369	1
MEAN	387		354		343		361	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		4.59		18.04		5.39	
Genotypes (B)	N.S.		6.60		19.07		5.48	
B within A	N.S.		11.44		33.03			
A within B			11.41		32.95			
	Grains/earhead							
HD3298	36.98	4	26.23	5	28.53	1	30.58	2
WH1124(c)	34.64	6	27.74	2	28.22	2	30.20	4
WH1021(c)	35.06	5	28.53	1	25.58	4	29.72	5
HD3059 (c)	37.17	2	25.63	6	24.77	5	29.19	6
DBW173(c)	40.54	1	27.64	3	24.17	6	30.78	1
PBW771(c)	37.12	3	27.27	4	27.33	3	30.57	3
MEAN	36.92		27.17		26.43		30.18	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.57		2.23		7.99	
Genotypes (B)	N.S.		0.94		2.72		9.37	
B within A	N.S.		1.63		4.72			
A within B			1.60		4.61			
	1000 Grains Weight, g							
HD3298	51.06	1	48.69	2	45.52	4	48.42	2
WH1124(c)	50.57	3	45.30	6	41.83	5	45.90	4
WH1021(c)	44.46	6	46.94	4	40.35	6	43.92	6
HD3059 (c)	44.79	5	48.02	3	50.81	1	47.88	3
DBW173(c)	45.37	4	46.32	5	45.74	3	45.81	5
PBW771(c)	50.85	2	48.80	1	46.26	2	48.64	1
MEAN	47.85		47.35		45.08		46.76	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.22		0.85		1.96	
Genotypes (B)	**		0.58		1.66		3.70	
B within A	**		1.00		2.88			
A within B			0.94		2.70			
Date of Sowing:	5.11.2019		10.12.2019		1.1.2020			
Date of Harvesting:	15.04.2020		20.04.2020		22.04.2020			

Table 2.1.9. North Western Plains Zone IR-TAS-DOS Pantnagar 2019-20

Genotypes	Date of sowing				Mean	Rk		
	Normal	Rk	Late	Rk			Very late	Rk
Yield,q/ha								
HD3298	52.90	3	44.31	5	40.73	5	45.98	4
WH1124(c)	48.66	5	44.64	4	42.53	4	45.28	5
WH1021(c)	45.83	6	41.34	6	37.00	6	41.39	6
HD3059 (c)	49.01	4	55.38	1	48.21	2	50.87	2
DBW173(c)	54.04	2	50.53	3	46.67	3	50.41	3
PBW771(c)	56.03	1	54.43	2	50.40	1	53.62	1
MEAN	51.08		48.44		44.26		47.92	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.49		1.94		4.37	
Genotypes (B)	**		1.05		3.04		6.60	
B within A	N.S.		1.83		5.27			
A within B			1.74		5.02			
Earhead/sqm								
HD3298	436	5	415	6	413	5	421	6
WH1124(c)	481	1	459	3	439	1	460	1
WH1021(c)	418	6	473	2	429	3	440	4
HD3059 (c)	468	3	453	4	439	1	453	3
DBW173(c)	474	2	473	1	423	4	457	2
PBW771(c)	458	4	426	5	412	6	432	5
MEAN	456		450		426		444	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	N.S.		14.73		57.82		14.08	
Genotypes (B)	N.S.		10.58		30.54		7.15	
B within A	N.S.		18.32		52.90			
A within B			22.28		64.35			
Grains/earhead								
HD3298	25.45	4	26.04	4	25.17	6	25.55	6
WH1124(c)	24.30	5	30.10	2	33.41	2	29.27	2
WH1021(c)	27.40	3	25.35	5	28.25	4	27.00	4
HD3059 (c)	23.09	6	31.86	1	33.73	1	29.56	1
DBW173(c)	28.45	1	23.47	6	27.98	5	26.63	5
PBW771(c)	27.42	2	28.27	3	29.15	3	28.28	3
MEAN	26.02		27.52		29.62		27.72	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	*		0.61		2.40		9.36	
Genotypes (B)	N.S.		1.22		3.52		13.21	
B within A	N.S.		2.11		6.11			
A within B			2.02		5.85			
1000 Grains Weight, g								
HD3298	47.98	1	41.14	3	39.39	3	42.84	2
WH1124(c)	42.15	4	32.89	6	29.67	6	34.90	6
WH1021(c)	40.17	5	34.76	5	30.63	5	35.18	5
HD3059 (c)	45.46	3	39.06	4	32.74	4	39.09	4
DBW173(c)	40.08	6	46.61	1	39.90	2	42.19	3
PBW771(c)	46.10	2	45.52	2	42.02	1	44.55	1
MEAN	43.66		40.00		35.72		39.79	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.74		2.91		7.91	
Genotypes (B)	**		1.26		3.63		9.47	
B within A	N.S.		2.18		6.28			
A within B			2.12		6.12			
Date of Sowing:	6.11.2019		10.12.2019		1.1.2020			
Date of Harvesting:	18.4.2020		22.4.2020		25.4.2020			

Table 2.1.10. North Western Plains Zone IR-TAS-DOS Sriganaganagar 2019-20

Genotypes	Date of sowing		Date of sowing		Date of sowing		Mean	Rk
	Normal	Rk	Late	Rk	Very late	Rk		
Yield,q/ha								
HD3298	79.61	1	67.58	1	42.19	2	63.13	1
WH1124(c)	68.75	5	50.56	5	42.19	3	53.83	5
WH1021(c)	60.94	6	43.92	6	36.46	4	47.11	6
HD3059 (c)	77.74	3	61.84	2	46.83	1	62.13	2
DBW173(c)	75.05	4	59.14	3	34.24	5	56.14	4
PBW771(c)	79.33	2	59.07	4	33.48	6	57.29	3
MEAN	73.57		57.02		39.23		56.61	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.18		0.72		1.37	
Genotypes (B)	**		0.52		1.49		2.73	
B within A	**		0.89		2.58			
A within B			0.84		2.41			
Earhead/sqm								
HD3298	543	4	368	2	213	5	375	3
WH1124(c)	555	3	361	3	218	2	378	2
WH1021(c)	569	2	388	1	221	1	393	1
HD3059 (c)	539	5	357	4	216	3	371	4
DBW173(c)	575	1	307	6	214	4	366	5
PBW771(c)	517	6	315	5	198	6	343	6
MEAN	550		349		213		371	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		5.49		21.56		6.28	
Genotypes (B)	**		6.67		19.26		5.39	
B within A	*		11.55		33.35			
A within B			11.89		34.33			
Grains/earhead								
HD3298	36.77	4	48.46	4	56.81	4	47.35	4
WH1124(c)	34.29	5	39.94	5	62.09	2	45.44	5
WH1021(c)	30.82	6	35.67	6	59.67	3	42.05	6
HD3059 (c)	38.90	1	50.00	3	75.23	1	54.71	1
DBW173(c)	37.58	2	61.00	1	55.97	5	51.52	2
PBW771(c)	37.26	3	50.80	2	54.46	6	47.50	3
MEAN	35.94		47.65		60.70		48.10	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.30		1.17		2.63	
Genotypes (B)	**		1.23		3.56		7.70	
B within A	**		2.14		6.17			
A within B			1.97		5.70			
1000 Grains Weight, g								
HD3298	39.97	2	37.95	1	34.90	1	37.61	1
WH1124(c)	36.17	4	35.27	3	31.30	2	34.25	3
WH1021(c)	34.78	6	31.78	5	27.67	6	31.41	6
HD3059 (c)	37.12	3	34.67	4	28.79	4	33.52	4
DBW173(c)	34.79	5	31.60	6	28.76	5	31.72	5
PBW771(c)	41.22	1	37.00	2	31.12	3	36.45	2
MEAN	37.34		34.71		30.42		34.16	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Date of sowing (A)	**		0.10		0.39		1.23	
Genotypes (B)	**		0.16		0.47		1.43	
B within A	**		0.28		0.81			
A within B			0.28		0.79			
Date of Sowing:	11.11.2019		16.12.2019		06.01.2020			
Date of Harvesting:	19.04.2020		22.04.2020		30.04.2020			

Table 2.2. North Western Plains Zone

Genotypes	IR-ES-HYT				Pooled		2019-20	
	Nutrient management							
	Rec.NPK	Rk	RDF+ 15 t FYM	Rk	150% RDF + FYM+GR	Rk	Mean	Rk
	Yield,q/ha							
DBW327	60.93	8	62.87	6	71.13	1	64.98	4
HD3086 (C)	56.15	14	60.43	7	66.64	9	61.07	10
DBW332	63.56	2	63.84	2	70.54	2	65.98	2
DBW303*	60.80	9	63.30	5	69.62	4	64.57	5
HD2967 (C)	56.88	10	56.73	15	63.25	14	58.95	14
DBW187*	61.27	5	59.93	8	67.94	6	63.05	7
DBW329	64.75	1	65.71	1	68.68	5	66.38	1
WH1252	61.09	6	63.75	3	67.78	7	64.21	6
HD3378	56.75	11	57.82	13	64.07	12	59.55	13
WH1270*	56.37	12	57.10	14	60.94	15	58.14	15
DBW333	55.22	15	58.12	12	65.55	10	59.63	12
DBW330	56.35	13	59.12	11	63.44	13	59.64	11
DBW328	60.96	7	59.51	10	66.82	8	62.43	8
DBW331	62.10	4	59.92	9	65.09	11	62.37	9
DBW 222 (C)	63.30	3	63.64	4	70.09	3	65.68	3
MEAN	59.76		60.79		66.77		62.44	
	Nutrient (A)		Genotypes (B)		B within A		A within B	
CD (0.05)	0.92		1.39		2.41		2.50	
	Earhead/sqm							
DBW327	391	6	387	13	444	3	407	6
HD3086 (C)	410	1	403	4	448	1	420	2
DBW332	359	15	396	10	424	12	393	14
DBW303*	370	14	383	15	407	15	387	15
HD2967 (C)	399	5	400	5	439	5	412	3
DBW187*	381	11	387	14	440	4	403	10
DBW329	386	8	399	7	418	13	401	12
WH1252	409	2	425	1	445	2	426	1
HD3378	374	13	416	2	426	11	405	9
WH1270*	377	12	400	6	412	14	396	13
DBW333	384	10	392	11	432	8	403	11
DBW330	385	9	405	3	429	10	406	7
DBW328	405	3	389	12	432	9	409	5
DBW331	402	4	399	8	434	6	412	4
DBW 222 (C)	387	7	397	9	434	7	406	8
MEAN	388		398		431		406	
	Nutrient (A)		Genotypes (B)		B within A		A within B	
CD (0.05)	8.50		14.75		NS		NS	
	Grains/Earhead							
DBW327	32.43	15	32.56	13	32.98	15	32.66	15
HD3086 (C)	35.15	9	37.77	6	37.75	6	36.89	6
DBW332	42.21	1	40.25	2	42.83	2	41.76	2
DBW303*	41.74	2	40.41	1	43.48	1	41.88	1
HD2967 (C)	35.44	7	34.23	8	37.34	9	35.67	8
DBW187*	33.02	13	35.07	7	37.52	8	35.20	9
DBW329	38.51	4	38.92	3	40.66	3	39.36	3
WH1252	33.78	10	33.79	11	36.02	12	34.53	12
HD3378	35.41	8	32.18	15	37.52	7	35.04	10
WH1270*	35.51	6	34.13	9	37.91	5	35.85	7
DBW333	32.56	14	32.46	14	35.70	14	33.57	14
DBW330	33.67	11	32.98	12	35.77	13	34.14	13
DBW328	33.24	12	34.12	10	37.24	10	34.87	11
DBW331	39.88	3	38.02	5	37.21	11	38.37	5
DBW 222 (C)	38.21	5	38.33	4	39.81	4	38.78	4
MEAN	36.05		35.68		37.98		36.57	
	Nutrient (A)		Genotypes (B)		B within A		A within B	
CD (0.05)	1.10		1.74		NS		NS	

Table 2.2a. North Western Plains Zone			IR-ES-HYT		Pooled		2019-20	
Genotypes	Nutrient management							
	Rec.NPK	Rk	RDF+ 15 t FYM	Rk	150% RDF + FYM+GR	Rk	Mean	Rk
1000 Grains Weight, g								
DBW327	49.22	2	51.24	1	50.44	1	50.30	1
HD3086 (C)	41.04	14	41.43	15	40.64	12	41.03	15
DBW332	42.86	11	42.16	13	40.64	13	41.88	11
DBW303*	41.05	13	42.46	12	40.81	11	41.44	12
HD2967 (C)	41.16	12	42.94	11	39.85	15	41.32	14
DBW187*	49.27	1	45.10	6	42.95	5	45.77	2
DBW329	44.40	8	44.17	8	41.50	9	43.36	9
WH1252	45.72	4	46.64	4	44.25	2	45.54	4
HD3378	43.92	9	46.16	5	41.80	7	43.96	7
WH1270*	43.27	10	43.20	10	40.12	14	42.20	10
DBW333	45.05	5	46.96	2	43.83	3	45.28	5
DBW330	44.62	7	45.09	7	42.60	6	44.10	6
DBW328	46.99	3	46.77	3	43.06	4	45.61	3
DBW331	40.78	15	42.14	14	41.13	10	41.35	13
DBW 222 (C)	44.79	6	43.83	9	41.78	8	43.47	8
MEAN	44.28		44.69		42.36		43.77	
CD (0.05)	Nutrient (A)		Genotypes (B)		B within A		A within B	
	0.49		1.18		2.05		2.04	
Biomass, q/ha								
DBW327	156.82	7	160.85	6	172.91	3	163.52	3
HD3086 (C)	145.22	14	151.14	14	161.04	10	152.47	13
DBW332	149.81	11	154.08	11	164.59	6	156.16	9
DBW303*	157.12	6	161.40	5	163.69	7	160.74	6
HD2967 (C)	169.27	2	174.27	1	176.85	1	173.46	1
DBW187*	158.90	3	157.52	8	161.64	9	159.35	7
DBW329	157.63	5	163.21	3	165.93	4	162.25	4
WH1252	151.58	10	158.76	7	161.79	8	157.38	8
HD3378	158.68	4	162.56	4	165.43	5	162.22	5
WH1270*	147.11	13	151.39	13	153.48	14	150.66	14
DBW333	140.33	15	149.31	15	147.36	15	145.66	15
DBW330	149.17	12	153.84	12	155.86	11	152.96	12
DBW328	152.51	8	154.62	9	155.37	12	154.17	10
DBW331	152.36	9	154.57	10	154.82	13	153.92	11
DBW 222 (C)	170.29	1	169.74	2	176.83	2	172.29	2
MEAN	154.45		158.48		162.51		158.48	
CD (0.05)	Nutrient (A)		Genotypes (B)		B within A		A within B	
	2.22		3.44		5.95		6.15	
Plant Height, cm								
DBW327	95.28	14	98.58	14	85.70	12	93.19	14
HD3086 (C)	96.91	12	99.44	12	84.30	14	93.55	13
DBW332	96.58	13	98.85	13	87.33	10	94.25	11
DBW303*	100.97	8	102.39	8	89.73	8	97.70	7
HD2967 (C)	103.78	4	104.20	6	94.95	3	100.98	4
DBW187*	101.43	7	104.16	7	86.45	11	97.34	8
DBW329	98.71	10	101.19	9	89.86	7	96.59	10
WH1252	93.88	15	96.52	15	84.44	13	91.61	15
HD3378	109.26	1	107.54	1	98.05	1	104.95	1
WH1270*	102.64	5	104.49	5	89.59	9	98.91	6
DBW333	98.40	11	100.06	11	83.66	15	94.04	12
DBW330	102.40	6	104.61	4	91.56	5	99.52	5
DBW328	99.34	9	100.67	10	89.98	6	96.66	9
DBW331	104.98	3	104.86	2	94.63	4	101.49	3
DBW 222 (C)	106.41	2	104.75	3	96.78	2	102.65	2
MEAN	100.73		102.15		89.80		97.56	
CD (0.05)	Nutrient (A)		Genotypes (B)		B within A		A within B	
	1.33		1.55		2.68		2.90	

Centres: Bisa Ladowal, Gurdaspur, Hisar, Karnal, Ludhiana and Panrnagar

Table 2.2.1. North Western Plains Zone

IR-ES-HYT

BISA, Ladowal

2019-20

Genotypes	Nutrient management		Nutrient management		Nutrient management		Nutrient management	
	Rec.NPK	Rk	RDF+ 15 t FYM	Rk	150% RDF + FYM+GR	Rk	Mean	Rk
Yield,q/ha								
DBW327	63.48	3	58.54	4	67.29	2	63.11	3
HD3086 (C)	46.31	15	45.88	14	58.77	10	50.32	13
DBW332	63.78	2	61.24	3	61.16	7	62.06	4
DBW303*	61.16	4	62.73	2	72.75	1	65.55	1
HD2967 (C)	48.82	14	42.39	15	41.24	15	44.15	15
DBW187*	60.96	5	50.10	11	61.40	5	57.49	8
DBW329	57.37	8	55.34	7	60.85	8	57.85	6
WH1252	60.31	6	55.77	6	56.71	11	57.60	7
HD3378	49.62	13	51.23	9	49.62	14	50.16	14
WH1270*	51.09	11	50.46	10	51.90	13	51.15	12
DBW333	50.43	12	53.18	8	64.34	3	55.98	9
DBW330	51.77	10	48.36	13	61.29	6	53.80	10
DBW328	59.39	7	56.47	5	60.42	9	58.76	5
DBW331	53.12	9	49.02	12	55.21	12	52.45	11
DBW 222 (C)	65.06	1	64.39	1	62.13	4	63.86	2
MEAN	56.18		53.67		59.00		56.29	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		0.98		3.86		11.71	
Genotypes (B)	**		1.44		4.06		7.67	
B within A	**		2.49		7.03			
A within B			2.60		7.54			
Earhead/sqm								
DBW327	490	8	407	15	532	9	476	10
HD3086 (C)	577	1	480	7	542	7	533	1
DBW332	423	13	550	1	547	5	507	5
DBW303*	502	5	433	14	392	15	442	15
HD2967 (C)	500	6	475	8	543	6	506	6
DBW187*	413	15	448	13	578	2	480	9
DBW329	420	14	485	5	482	13	462	14
WH1252	513	4	482	6	585	1	527	3
HD3378	425	12	475	8	500	11	467	12
WH1270*	442	11	497	3	457	14	465	13
DBW333	475	9	455	11	552	4	494	8
DBW330	448	10	467	10	495	12	470	11
DBW328	563	2	452	12	578	2	531	2
DBW331	500	6	498	2	507	10	502	7
DBW 222 (C)	517	3	487	4	533	8	512	4
MEAN	481		473		521		492	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		14.01		55.00		19.12	
Genotypes (B)	N.S.		24.79		69.82		15.13	
B within A	N.S.		42.93		120.94			
A within B			43.78		126.79			
Grains/Earhead								
DBW327	29.09	9	29.45	6	27.05	12	28.53	11
HD3086 (C)	23.94	15	30.38	3	31.51	9	28.61	10
DBW332	38.47	1	27.88	9	29.16	10	31.84	5
DBW303*	32.07	6	41.68	1	50.19	1	41.31	1
HD2967 (C)	28.48	11	26.37	13	25.85	14	26.90	15
DBW187*	31.97	7	28.29	7	26.18	13	28.82	9
DBW329	36.48	2	30.14	4	39.03	2	35.21	3
WH1252	29.00	10	27.32	10	25.08	15	27.13	14
HD3378	32.98	4	26.65	12	31.64	8	30.42	6
WH1270*	35.00	3	26.69	11	36.53	3	32.74	4
DBW333	26.42	13	27.90	8	32.64	6	28.99	8
DBW330	27.07	12	24.71	15	32.84	5	28.21	12
DBW328	26.17	14	29.47	5	28.30	11	27.98	13
DBW331	32.08	5	25.58	14	32.27	7	29.98	7
DBW 222 (C)	30.95	8	40.53	2	34.27	4	35.25	2
MEAN	30.68		29.54		32.17		30.79	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	N.S.		1.46		5.74		31.82	
Genotypes (B)	**		1.87		5.27		18.22	
B within A	*		3.24		9.12			
A within B			3.45		10.00			

Table 2.2.1a. North Western Plains Zone

IR-ES-HYT

BISA, Ladawal

2019-20

Genotypes	Nutrient management		Nutrient management		Nutrient management		Nutrient management	
	Rec.NPK	Rk	RDF+ 15 t FYM	Rk	150% RDF + FYM+GR	Rk	Mean	Rk
1000 Grains Weight, g								
DBW327	44.63	2	49.67	1	46.90	1	47.07	1
HD3086 (C)	34.47	14	31.70	15	34.93	9	33.70	14
DBW332	39.37	8	40.53	8	38.47	4	39.46	7
DBW303*	39.20	9	35.57	13	37.40	6	37.39	8
HD2967 (C)	34.47	13	35.97	12	29.57	15	33.33	15
DBW187*	46.50	1	40.43	10	40.87	2	42.60	2
DBW329	37.60	10	40.53	9	32.83	12	36.99	9
WH1252	40.57	6	44.20	3	39.20	3	41.32	3
HD3378	35.40	11	42.73	4	32.73	13	36.96	10
WH1270*	33.37	15	38.53	11	31.27	14	34.39	13
DBW333	40.70	5	42.23	5	36.73	8	39.89	6
DBW330	43.03	3	42.10	6	38.33	5	41.16	4
DBW328	40.40	7	45.27	2	37.07	7	40.91	5
DBW331	34.77	12	41.47	7	34.53	11	36.92	11
DBW 222 (C)	41.57	4	33.40	14	34.70	10	36.56	12
MEAN	39.07		40.29		36.37		38.58	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		0.23		0.90		3.99	
Genotypes (B)	**		0.30		0.85		2.35	
B within A	**		0.52		1.48			
A within B			0.56		1.61			
Biomass, q/ha								
DBW327	168.64	4	163.20	8	172.59	4	168.14	6
HD3086 (C)	144.46	14	149.18	14	169.63	7	154.42	14
DBW332	161.77	10	164.66	6	181.90	1	169.44	4
DBW303*	170.75	3	166.19	5	170.82	5	169.25	5
HD2967 (C)	165.92	7	172.45	2	170.68	6	169.68	3
DBW187*	172.38	2	166.90	4	179.69	2	172.99	2
DBW329	166.22	6	163.88	7	164.39	11	164.83	7
WH1252	149.90	13	168.23	3	165.99	9	161.34	10
HD3378	155.99	12	161.56	9	163.67	13	160.41	12
WH1270*	162.96	8	157.82	11	163.71	12	161.50	9
DBW333	141.05	15	145.61	15	163.23	14	149.97	15
DBW330	159.83	11	159.22	10	164.52	10	161.19	11
DBW328	167.69	5	156.39	12	166.87	8	163.65	8
DBW331	162.24	9	151.39	13	157.07	15	156.90	13
DBW 222 (C)	184.56	1	182.35	1	179.32	3	182.07	1
MEAN	162.28		161.94		168.94		164.39	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		1.55		6.10		6.34	
Genotypes (B)	**		3.79		10.68		6.92	
B within A	N.S.		6.56		18.49			
A within B			6.53		18.91			
Plant Height, cm								
DBW327	103.33	13	107.67	13	96.17	12	102.39	13
HD3086 (C)	109.00	8	111.50	7	97.33	11	105.94	9
DBW332	105.67	11	107.83	12	100.67	9	104.72	10
DBW303*	108.33	9	110.67	8	100.33	10	106.44	8
HD2967 (C)	118.50	2	115.83	3	107.50	5	113.94	3
DBW187*	103.33	13	111.83	6	94.83	13	103.33	12
DBW329	110.67	7	107.33	14	101.67	8	106.56	7
WH1252	102.17	15	110.33	10	93.67	14	102.06	14
HD3378	124.00	1	118.83	1	116.17	1	119.67	1
WH1270*	113.50	6	115.00	4	104.50	6	111.00	6
DBW333	108.33	9	109.17	11	87.00	15	101.50	15
DBW330	114.17	5	114.00	5	107.57	4	111.91	4
DBW328	104.83	12	106.50	15	102.00	7	104.44	11
DBW331	115.67	4	116.17	2	110.33	2	114.06	2
DBW 222 (C)	116.67	3	110.67	8	108.33	3	111.89	5
MEAN	110.54		111.56		101.87		107.99	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		0.94		3.69		5.85	
Genotypes (B)	**		1.50		4.23		4.17	
B within A	*		2.60		7.32			
A within B			2.68		7.77			
Date of Sowing:	25.10.2019		Date of Harvesting:				27.04.2020	

Table 2.2.2. North Western Plains Zone

IR-ES-HYT

Gurdaspur

2019-20

Genotypes	Nutrient management		Nutrient management		Nutrient management		Mean	Rk
	Rec.NPK	Rk	RDF+ 15 t FYM	Rk	150% RDF + FYM+GR	Rk		
Yield,q/ha								
DBW327	54.11	13	72.60	5	76.90	7	67.87	9
HD3086 (C)	57.08	12	71.58	6	77.28	6	68.65	7
DBW332	70.85	2	77.09	3	81.32	4	76.42	2
DBW303*	59.44	9	63.77	12	73.55	9	65.59	12
HD2967 (C)	61.57	8	67.43	10	69.56	12	66.18	10
DBW187*	64.92	7	68.42	8	82.50	2	71.94	5
DBW329	76.56	1	78.54	1	83.18	1	79.43	1
WH1252	68.72	3	75.11	4	82.04	3	75.29	3
HD3378	58.45	10	64.31	11	75.72	8	66.16	11
WH1270*	57.91	11	60.50	13	62.71	14	60.38	13
DBW333	51.52	14	59.40	14	63.93	13	58.28	14
DBW330	50.68	15	58.18	15	60.81	15	56.56	15
DBW328	67.05	5	69.18	7	72.30	10	69.51	6
DBW331	66.59	6	68.26	9	69.86	11	68.24	8
DBW 222 (C)	67.96	4	77.44	2	78.31	5	74.57	4
MEAN	62.23		68.79		74.00		68.34	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		0.97		3.82		9.55	
Genotypes (B)	**		1.33		3.75		5.84	
B within A	**		2.31		6.50			
A within B			2.43		7.04			
Earhead/sqm								
DBW327	331	7	346	4	360	8	346	8
HD3086 (C)	318	13	325	13	406	1	349	6
DBW332	331	7	346	6	351	12	342	11
DBW303*	285	15	296	15	360	9	314	15
HD2967 (C)	342	3	346	5	362	7	350	5
DBW187*	337	4	345	7	355	11	346	9
DBW329	348	2	352	2	383	6	361	2
WH1252	348	1	352	1	384	4	362	1
HD3378	329	10	335	10	384	5	349	7
WH1270*	326	12	332	12	346	13	335	12
DBW333	317	14	324	14	340	14	327	14
DBW330	327	11	350	3	357	10	344	10
DBW328	332	6	333	11	336	15	334	13
DBW331	334	5	343	8	396	2	358	3
DBW 222 (C)	330	9	340	9	393	3	354	4
MEAN	329		338		368		345	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		2.29		8.98		4.45	
Genotypes (B)	**		5.63		15.85		4.90	
B within A	**		9.75		27.45			
A within B			9.69		28.06			
Grains/Earhead								
DBW327	36.83	13	43.16	11	42.95	13	40.98	13
HD3086 (C)	46.80	6	52.81	5	53.26	5	50.96	5
DBW332	48.83	5	58.23	1	58.30	1	55.12	1
DBW303*	54.00	1	54.20	4	53.61	4	53.93	3
HD2967 (C)	45.40	8	45.93	10	48.28	10	46.54	10
DBW187*	38.62	12	40.61	13	55.79	2	45.00	11
DBW329	51.72	2	56.83	2	54.40	3	54.32	2
WH1252	46.76	7	50.28	8	52.93	7	49.99	6
HD3378	45.02	9	49.49	9	53.26	6	49.26	7
WH1270*	41.11	11	42.74	12	44.18	12	42.68	12
DBW333	34.61	15	40.11	14	42.31	15	39.01	15
DBW330	36.03	14	38.73	15	44.49	11	39.75	14
DBW328	41.93	10	50.29	7	49.32	9	47.18	9
DBW331	50.79	3	52.33	6	42.78	14	48.63	8
DBW 222 (C)	49.93	4	54.91	3	52.10	8	52.31	4
MEAN	44.56		48.71		49.86		47.71	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		0.94		3.69		13.20	
Genotypes (B)	**		1.54		4.34		9.68	
B within A	N.S.		2.67		7.51			
A within B			2.74		7.94			

Table 2.2.2a. North Western Plains Zone

IR-ES-HYT

Gurdaspur

2019-20

Genotypes	Nutrient management		150% RDF + FYM+GR		Mean	Rk	
	Rec.NPK	Rk	RDF+ 15 t FYM	Rk			
1000 Grains Weight, g							
DBW327	44.44	4	48.78	2	49.90	1	
HD3086 (C)	38.68	15	41.85	8	35.92	15	
DBW332	44.13	5	38.63	14	39.81	10	
DBW303*	38.73	14	39.91	11	38.20	13	
HD2967 (C)	39.80	11	42.52	6	39.95	9	
DBW187*	49.94	1	49.01	1	41.69	4	
DBW329	42.64	8	39.54	12	40.74	7	
WH1252	42.54	9	42.40	7	40.57	8	
HD3378	39.61	12	38.91	13	37.20	14	
WH1270*	43.64	6	42.66	5	41.21	6	
DBW333	47.01	3	46.10	3	44.52	2	
DBW330	43.17	7	42.99	4	38.56	11	
DBW328	48.29	2	41.37	10	43.69	3	
DBW331	39.43	13	38.36	15	41.40	5	
DBW 222 (C)	41.52	10	41.71	9	38.31	12	
MEAN	42.90		42.32		40.78	42.00	
	F. Test		S.E.m		CD (0.05)	CV (%)	
Nutrients (A)	**		0.22		0.87	3.53	
Genotypes (B)	**		0.89		2.50	6.33	
B within A	**		1.53		4.32		
A within B			1.50		4.34		
Biomass, q/ha							
DBW327	163.62	8	175.04	8	201.67	5	
HD3086 (C)	156.01	14	171.23	10	190.26	8	
DBW332	163.62	8	175.04	8	186.45	9	
DBW303*	182.65	5	186.45	5	194.06	6	
HD2967 (C)	194.06	2	197.87	2	201.67	3	
DBW187*	190.26	3	194.06	4	201.67	3	
DBW329	186.45	4	197.87	2	216.89	2	
WH1252	159.82	12	167.43	13	178.84	11	
HD3378	178.84	6	186.45	5	194.06	6	
WH1270*	140.79	15	156.01	15	163.62	15	
DBW333	163.62	8	171.23	10	178.84	11	
DBW330	159.82	12	163.62	14	171.23	14	
DBW328	167.43	7	169.71	12	175.04	13	
DBW331	163.62	8	178.84	7	182.65	10	
DBW 222 (C)	205.48	1	220.70	1	224.51	1	
MEAN	171.74		180.77		190.77	181.09	
	F. Test		S.E.m		CD (0.05)	CV (%)	
Nutrients (A)	*		2.80		11.00	10.38	
Genotypes (B)	**		3.71		10.46	6.15	
B within A	N.S.		6.43		18.11		
A within B			6.81		19.73		
Plant Height, cm							
DBW327	86.53	11	86.73	12	73.27	15	
HD3086 (C)	85.53	14	85.67	14	73.47	14	
DBW332	86.33	13	86.60	13	78.33	10	
DBW303*	91.07	3	92.53	2	78.47	9	
HD2967 (C)	88.00	8	89.67	8	79.80	8	
DBW187*	91.20	2	91.80	3	76.53	12	
DBW329	86.67	10	88.07	10	82.47	6	
WH1252	83.40	15	84.20	15	77.73	11	
HD3378	93.73	1	94.33	1	89.67	1	
WH1270*	89.13	5	90.13	5	82.60	5	
DBW333	86.40	12	87.13	11	74.47	13	
DBW330	88.80	6	89.73	7	83.13	3	
DBW328	87.27	9	89.33	9	81.13	7	
DBW331	88.07	7	90.13	5	82.73	4	
DBW 222 (C)	89.53	4	90.33	4	86.40	2	
MEAN	88.11		89.09		80.01	85.74	
	F. Test		S.E.m		CD (0.05)	CV (%)	
Nutrients (A)	**		0.72		2.83	5.64	
Genotypes (B)	**		1.16		3.28	4.08	
B within A	N.S.		2.02		5.68		
A within B			2.08		6.02		
Date of Sowing:	22.10.2019			Date of Harvesting:		5.05.2020	

Table 2.2.3. North Western Plains Zone

IR-ES-HYT

Hisar

2019-20

Genotypes	Nutrient management		Nutrient management		Nutrient management		Mean	Rk
	Rec.NPK	Rk	RDF+ 15 t FYM	Rk	150% RDF + FYM+GR	Rk		
Yield,q/ha								
DBW327	65.07	2	66.46	1	81.02	1	70.85	1
HD3086 (C)	56.60	8	58.23	8	67.86	4	60.90	8
DBW332	55.75	10	56.80	12	62.69	11	58.41	12
DBW303*	58.47	6	63.64	2	64.80	7	62.30	5
HD2967 (C)	49.73	15	48.50	15	53.13	15	50.45	15
DBW187*	52.82	13	55.88	14	55.61	14	54.77	14
DBW329	61.09	3	60.61	5	64.52	9	62.07	6
WH1252	59.35	5	62.24	4	67.31	6	62.97	4
HD3378	56.36	9	58.23	9	62.38	12	58.99	10
WH1270*	51.02	14	56.60	13	61.43	13	56.35	13
DBW333	55.51	11	59.05	7	69.49	3	61.35	7
DBW330	55.10	12	56.90	11	64.73	8	58.91	11
DBW328	59.49	4	60.48	6	70.95	2	63.64	3
DBW331	65.58	1	63.27	3	67.69	5	65.51	2
DBW 222 (C)	57.41	7	58.23	9	64.35	10	60.00	9
MEAN	57.29		59.01		65.20		60.50	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		0.54		2.13		6.01	
Genotypes (B)	**		1.03		2.89		5.09	
B within A	**		1.78		5.01			
A within B			1.80		5.22			
Earhead/sqm								
DBW327	418	4	432	2	458	1	436	1
HD3086 (C)	397	10	417	7	442	7	418	7
DBW332	390	12	407	10	433	8	410	11
DBW303*	402	7	433	1	453	2	429	4
HD2967 (C)	387	13	395	14	427	12	403	14
DBW187*	380	14	387	15	425	13	397	15
DBW329	398	8	425	4	452	3	425	6
WH1252	420	3	420	6	445	5	428	5
HD3378	373	15	410	9	430	9	404	13
WH1270*	393	11	398	13	425	13	406	12
DBW333	405	6	402	11	428	11	412	10
DBW330	417	5	402	11	422	15	413	9
DBW328	427	2	425	4	448	4	433	2
DBW331	428	1	427	3	445	5	433	2
DBW 222 (C)	398	8	415	8	430	9	414	8
MEAN	402		413		438		418	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		3.21		12.62		5.16	
Genotypes (B)	**		8.09		22.80		5.81	
B within A	N.S.		14.02		39.49			
A within B			13.92		40.31			
Grains/Earhead								
DBW327	36.46	4	35.03	6	37.92	5	36.47	5
HD3086 (C)	38.17	1	37.09	1	37.57	6	37.61	1
DBW332	36.27	5	35.34	5	38.79	2	36.80	2
DBW303*	36.96	3	35.44	4	37.23	7	36.54	4
HD2967 (C)	31.83	14	28.87	15	30.02	15	30.24	15
DBW187*	33.73	10	34.34	8	35.08	13	34.38	10
DBW329	34.10	8	32.70	11	35.31	12	34.04	12
WH1252	32.87	13	35.99	2	36.42	9	35.09	8
HD3378	35.47	7	31.20	14	33.59	14	33.42	13
WH1270*	33.40	11	33.57	9	38.51	3	35.16	7
DBW333	30.51	15	32.29	12	37.17	8	33.32	14
DBW330	33.20	12	33.12	10	36.35	10	34.22	11
DBW328	33.84	9	31.61	13	38.19	4	34.55	9
DBW331	36.01	6	34.45	7	39.89	1	36.79	3
DBW 222 (C)	37.63	2	35.67	3	35.69	11	36.33	6
MEAN	34.70		33.78		36.51		35.00	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		0.56		2.21		10.80	
Genotypes (B)	**		1.04		2.93		8.91	
B within A	N.S.		1.80		5.07			
A within B			1.83		5.30			

Table 2.2.3a. North Western Plains Zone

IR-ES-HYT

Hisar

2019-20

Genotypes	Nutrient management		150% RDF + FYM+GR		Mean	Rk	
	Rec.NPK	Rk	RDF+ 15 t FYM	Rk			
1000 Grains Weight, g							
DBW327	42.82	5	44.15	4	46.72	1	
HD3086 (C)	37.51	15	37.67	15	41.01	9	
DBW332	39.43	12	39.56	14	37.41	15	
DBW303*	39.49	11	41.48	11	38.46	11	
HD2967 (C)	40.49	9	42.49	9	41.63	7	
DBW187*	41.41	7	42.17	10	37.43	14	
DBW329	45.01	2	43.93	5	40.68	10	
WH1252	43.04	3	41.26	12	41.64	6	
HD3378	42.98	4	45.58	2	43.17	3	
WH1270*	38.87	14	42.64	8	37.64	13	
DBW333	45.04	1	45.61	1	43.75	2	
DBW330	40.04	10	42.84	7	42.25	4	
DBW328	41.36	8	45.24	3	41.53	8	
DBW331	42.56	6	43.35	6	38.21	12	
DBW 222 (C)	38.94	13	39.75	13	42.03	5	
MEAN	41.27		42.51		40.90		
	F. Test		S.E.m		CD (0.05)	CV (%)	
Nutrients (A)	*		0.28		1.11	4.56	
Genotypes (B)	**		0.47		1.34	3.42	
B within A	**		0.82		2.31		
A within B			0.84		2.44		
Biomass, q/ha							
DBW327	183.67	1	198.64	1	212.93	1	
HD3086 (C)	162.93	10	177.21	8	185.37	4	
DBW332	158.16	13	166.67	14	172.11	12	
DBW303*	168.37	8	179.25	7	180.27	7	
HD2967 (C)	169.73	7	172.11	10	157.14	15	
DBW187*	161.56	11	171.77	11	165.31	13	
DBW329	183.33	2	182.65	4	177.21	9	
WH1252	171.77	6	179.93	6	183.33	5	
HD3378	178.57	3	188.10	2	186.39	3	
WH1270*	156.46	14	169.05	12	178.91	8	
DBW333	147.28	15	155.10	15	163.61	14	
DBW330	158.84	12	168.71	13	172.79	11	
DBW328	167.69	9	173.81	9	182.99	6	
DBW331	176.87	5	185.37	3	173.47	10	
DBW 222 (C)	177.89	4	182.31	5	194.56	2	
MEAN	168.21		176.71		179.09		
	F. Test		S.E.m		CD (0.05)	CV (%)	
Nutrients (A)	*		1.47		5.78	5.66	
Genotypes (B)	**		2.73		7.68	4.68	
B within A	*		4.72		13.30		
A within B			4.79		13.88		
Plant Height, cm							
DBW327	104.67	14	108.67	13	93.67	11	
HD3086 (C)	106.67	11	110.67	12	92.67	14	
DBW332	105.00	13	111.00	11	97.00	7	
DBW303*	113.00	6	112.33	9	98.33	5	
HD2967 (C)	106.33	12	108.67	13	99.33	3	
DBW187*	113.67	5	117.67	3	96.33	9	
DBW329	109.67	10	113.00	7	93.33	13	
WH1252	103.67	15	104.33	15	88.67	15	
HD3378	113.00	6	117.33	4	102.67	1	
WH1270*	115.33	1	118.33	1	97.00	7	
DBW333	114.00	3	112.67	8	93.67	11	
DBW330	112.00	9	117.00	5	95.67	10	
DBW328	113.00	6	112.00	10	98.00	6	
DBW331	115.33	1	115.67	6	99.33	3	
DBW 222 (C)	114.00	3	118.33	1	100.33	2	
MEAN	110.62		113.18		96.40		
	F. Test		S.E.m		CD (0.05)	CV (%)	
Nutrients (A)	**		0.34		1.35	2.16	
Genotypes (B)	**		0.88		2.48	2.47	
B within A	**		1.52		4.29		
A within B			1.51		4.37		
Date of Sowing:					Date of Harvesting:	16.04.2020	

Table 2.2.4. North Western Plains Zone

IR-ES-HYT

Karnal

2019-20

Genotypes	Nutrient management		Nutrient management		Nutrient management		Mean	Rk
	Rec.NPK	Rk	RDF+ 15 t FYM	Rk	150% RDF + FYM+GR	Rk		
Yield,q/ha								
DBW327	63.56	4	65.43	3	72.29	7	67.09	4
HD3086 (C)	61.05	10	64.49	4	74.83	2	66.79	5
DBW332	62.12	6	62.06	11	72.27	8	65.48	9
DBW303*	60.33	12	63.18	7	74.49	3	66.00	7
HD2967 (C)	60.38	11	60.08	15	68.43	12	62.96	13
DBW187*	66.90	1	64.44	5	75.86	1	69.07	1
DBW329	63.83	3	66.06	1	74.31	4	68.07	2
WH1252	59.11	13	61.06	12	66.81	14	62.33	15
HD3378	58.87	14	60.32	13	69.72	10	62.97	12
WH1270*	61.36	9	62.87	10	66.34	15	63.52	11
DBW333	58.83	15	60.23	14	68.33	13	62.46	14
DBW330	62.07	8	63.15	8	71.72	9	65.65	8
DBW328	62.11	7	63.66	6	72.82	5	66.20	6
DBW331	62.44	5	62.96	9	69.26	11	64.89	10
DBW 222 (C)	64.29	2	65.88	2	72.69	6	67.62	3
MEAN	61.82		63.06		71.34		65.41	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		0.55		2.14		5.59	
Genotypes (B)	**		0.95		2.68		4.36	
B within A	N.S.		1.65		4.64			
A within B			1.68		4.87			
Earhead/sqm								
DBW327	325	13	341	14	360	14	342	14
HD3086 (C)	377	3	393	1	424	1	398	1
DBW332	293	15	305	15	356	15	318	15
DBW303*	334	11	353	7	365	12	351	11
HD2967 (C)	392	1	367	5	420	2	393	2
DBW187*	378	2	364	6	419	3	387	3
DBW329	363	6	346	11	374	11	361	7
WH1252	360	7	378	2	392	6	376	6
HD3378	327	12	351	9	364	13	347	12
WH1270*	348	8	343	12	381	7	357	9
DBW333	348	8	352	8	376	10	358	8
DBW330	364	5	377	3	418	4	386	4
DBW328	337	10	347	10	379	8	354	10
DBW331	320	14	343	12	378	9	347	13
DBW 222 (C)	366	4	368	4	417	5	383	5
MEAN	349		355		388		364	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		6.21		24.37		11.44	
Genotypes (B)	**		11.38		32.05		9.38	
B within A	N.S.		19.71		55.51			
A within B			20.02		58.00			
Grains/Earhead								
DBW327	34.83	10	34.45	12	36.12	13	35.13	12
HD3086 (C)	34.48	11	36.46	8	38.42	9	36.45	9
DBW332	45.11	1	43.40	1	45.05	2	44.52	1
DBW303*	40.44	3	41.50	2	48.76	1	43.57	2
HD2967 (C)	36.08	8	38.04	7	39.91	6	38.01	8
DBW187*	33.79	13	33.99	13	36.89	12	34.89	13
DBW329	37.25	7	39.38	4	41.38	4	39.34	4
WH1252	33.11	15	32.84	15	35.47	14	33.80	15
HD3378	37.32	6	35.39	9	41.60	3	38.10	7
WH1270*	37.73	5	38.25	6	38.46	8	38.14	6
DBW333	34.46	12	34.81	11	38.15	10	35.81	11
DBW330	33.21	14	33.71	14	34.75	15	33.89	14
DBW328	34.89	9	35.36	10	37.19	11	35.81	10
DBW331	43.33	2	40.29	3	41.18	5	41.60	3
DBW 222 (C)	38.73	4	38.38	5	38.73	7	38.61	5
MEAN	36.98		37.08		39.47		37.85	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		0.40		1.58		7.13	
Genotypes (B)	**		1.20		3.39		9.53	
B within A	N.S.		2.08		5.87			
A within B			2.05		5.94			

Table 2.2.4a. North Western Plains Zone

IR-ES-HYT

Karnal

2019 -20

Genotypes	Nutrient management		Nutrient management		Nutrient management		Nutrient management	
	Rec.NPK	Rk	RDF+ 15 t FYM	Rk	150% RDF + FYM+GR	Rk	Mean	Rk
1000 Grains Weight, g								
DBW327	56.46	1	56.05	1	56.21	1	56.24	1
HD3086 (C)	47.10	11	45.36	13	46.17	8	46.21	11
DBW332	47.22	10	46.99	10	45.30	11	46.50	10
DBW303*	44.64	14	43.29	15	41.93	14	43.29	14
HD2967 (C)	43.14	15	43.37	14	41.42	15	42.64	15
DBW187*	52.30	3	52.08	3	49.19	4	51.19	3
DBW329	47.28	9	48.57	8	48.39	5	48.08	7
WH1252	49.86	6	49.58	5	48.28	6	49.24	5
HD3378	48.42	7	49.17	7	46.07	9	47.88	8
WH1270*	47.30	8	47.93	9	45.85	10	47.02	9
DBW333	50.11	5	49.46	6	47.87	7	49.15	6
DBW330	51.29	4	50.09	4	49.89	3	50.42	4
DBW328	52.93	2	52.15	2	51.66	2	52.25	2
DBW331	45.03	13	45.61	12	44.73	13	45.13	13
DBW 222 (C)	46.17	12	46.95	11	45.29	12	46.14	12
MEAN	48.62		48.44		47.22		48.09	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		0.38		1.51		5.35	
Genotypes (B)	**		0.42		1.17		2.59	
B within A	N.S.		0.72		2.03			
A within B			0.79		2.30			
Biomass, q/ha								
DBW327	168.35	5	174.08	3	176.50	5	172.98	4
HD3086 (C)	156.69	13	160.07	12	171.24	9	162.67	13
DBW332	153.28	14	153.52	14	166.20	13	157.67	14
DBW303*	169.95	4	166.07	6	173.15	8	169.72	6
HD2967 (C)	203.17	1	204.17	1	231.48	1	212.94	1
DBW187*	165.26	7	164.81	7	166.67	12	165.58	9
DBW329	163.03	9	163.43	8	175.46	6	167.31	7
WH1252	165.26	7	167.59	5	179.17	4	170.67	5
HD3378	178.40	3	174.07	4	188.19	2	180.22	3
WH1270*	166.67	6	161.57	10	171.06	10	166.44	8
DBW333	147.89	15	145.83	15	150.93	15	148.22	15
DBW330	160.09	11	159.26	13	173.90	7	164.42	10
DBW328	160.56	10	162.50	9	166.20	13	163.09	12
DBW331	160.09	11	160.65	11	169.44	11	163.40	11
DBW 222 (C)	180.80	2	175.93	2	187.50	3	181.41	2
MEAN	166.63		166.24		176.47		169.78	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		0.52		2.05		2.06	
Genotypes (B)	**		2.25		6.34		3.98	
B within A	N.S.		3.90		10.98			
A within B			3.80		11.01			
Plant Height, cm								
DBW327	102.07	12	103.27	12	93.67	11	99.67	12
HD3086 (C)	101.27	14	104.33	11	90.40	14	98.67	13
DBW332	102.27	11	101.93	14	95.33	9	99.84	11
DBW303*	108.47	8	111.20	3	97.27	5	105.64	5
HD2967 (C)	111.27	4	111.20	3	101.73	2	108.07	3
DBW187*	109.40	6	109.00	8	95.07	10	104.49	8
DBW329	105.40	10	107.00	10	96.97	7	103.12	10
WH1252	99.67	15	101.00	15	90.47	13	97.04	14
HD3378	116.60	1	116.13	1	100.27	3	111.00	1
WH1270*	111.40	3	111.87	2	93.60	12	105.62	6
DBW333	102.00	13	102.47	13	86.33	15	96.93	15
DBW330	109.07	7	110.87	5	98.11	4	106.02	4
DBW328	106.73	9	108.53	9	96.53	8	103.93	9
DBW331	110.53	5	109.07	7	97.27	5	105.62	6
DBW 222 (C)	112.27	2	110.53	6	104.07	1	108.96	2
MEAN	107.23		107.89		95.81		103.64	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		1.25		4.93		8.12	
Genotypes (B)	**		0.69		1.94		1.99	
B within A	**		1.19		3.36			
A within B			1.70		4.93			
Date of Sowing:	24.10.2019				Date of Harvesting:		12.04.2020	

Table 2.2.5. North Western Plains Zone			IR-ES-HYT		Ludhiana		2019-20	
Genotypes	Nutrient management		RDF+ 15 t FYM		150% RDF + FYM+GR		Mean	Rk
	Rec.NPK	Rk		Rk		Rk		
Yield,q/ha								
DBW327	60.28	14	61.11	11	64.73	13	62.04	14
HD3086 (C)	65.28	9	67.81	3	71.53	7	68.21	5
DBW332	70.28	3	67.48	4	77.09	1	71.62	1
DBW303*	65.84	8	63.37	7	69.73	10	66.31	10
HD2967 (C)	65.84	7	61.39	10	74.37	4	67.20	7
DBW187*	60.14	15	60.14	12	71.25	8	63.85	11
DBW329	73.06	1	73.20	1	66.31	12	70.86	2
WH1252	67.45	6	68.51	2	76.26	2	70.74	3
HD3378	64.53	10	55.84	15	68.63	11	63.00	13
WH1270*	72.78	2	64.10	6	72.09	5	69.66	4
DBW333	64.31	11	65.98	5	71.20	9	67.16	9
DBW330	62.42	12	63.25	8	64.38	15	63.35	12
DBW328	61.12	13	57.09	14	64.73	14	60.98	15
DBW331	67.78	5	61.95	9	71.84	6	67.19	8
DBW 222 (C)	69.45	4	59.17	13	75.17	3	67.93	6
MEAN	66.04		63.36		70.62		66.67	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		0.80		3.13		8.03	
Genotypes (B)	**		1.35		3.80		6.08	
B within A	**		2.34		6.59			
A within B			2.40		6.94			
Earhead/sqm								
DBW327	395	3	395	7	426	3	405	4
HD3086 (C)	403	1	406	2	424	4	411	1
DBW332	364	13	368	15	384	14	372	15
DBW303*	387	6	393	11	398	9	392	8
HD2967 (C)	392	4	404	4	407	7	401	6
DBW187*	383	10	393	9	408	6	394	7
DBW329	361	15	379	13	385	13	375	14
WH1252	398	2	405	3	413	5	405	4
HD3378	384	8	399	5	384	14	389	9
WH1270*	375	12	377	14	387	12	379	13
DBW333	387	6	407	1	428	2	407	3
DBW330	380	11	393	9	392	11	388	10
DBW328	383	9	388	12	393	10	388	11
DBW331	391	5	396	6	438	1	408	2
DBW 222 (C)	363	14	394	8	403	8	387	12
MEAN	383		393		405		394	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		2.63		10.32		4.48	
Genotypes (B)	*		8.98		25.29		6.84	
B within A	N.S.		15.55		43.81			
A within B			15.25		44.18			
Grains/Earhead								
DBW327	30.33	14	29.27	14	29.24	15	29.61	15
HD3086 (C)	38.99	8	43.82	3	39.06	12	40.62	7
DBW332	48.57	1	43.99	2	51.98	1	48.18	1
DBW303*	44.75	3	37.64	7	41.95	6	41.44	5
HD2967 (C)	37.71	9	38.58	5	47.55	2	41.28	6
DBW187*	29.73	15	36.67	8	43.28	5	36.56	10
DBW329	42.16	5	43.24	4	40.07	8	41.82	4
WH1252	36.00	10	33.68	11	39.12	11	36.27	11
HD3378	34.69	12	30.22	13	39.44	9	34.78	13
WH1270*	42.73	4	37.88	6	44.99	3	41.87	3
DBW333	35.95	11	36.21	10	35.25	14	35.80	12
DBW330	41.85	7	36.43	9	40.18	7	39.49	9
DBW328	32.35	13	28.98	15	39.17	10	33.50	14
DBW331	48.37	2	44.38	1	38.79	13	43.85	2
DBW 222 (C)	42.02	6	33.07	12	44.80	4	39.97	8
MEAN	39.08		36.94		40.99		39.00	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		0.78		3.05		13.37	
Genotypes (B)	**		2.04		5.76		15.72	
B within A	N.S.		3.54		9.97			
A within B			3.51		10.16			

Table 2.2.5a. North Western Plains Zone

IR-ES-HYT

Ludhiana

2019-20

Genotypes	Nutrient management		RDF+ 15 t FYM		150% RDF + FYM+GR		Mean	Rk
	Rec.NPK	Rk		Rk		Rk		
1000 Grains Weight, g								
DBW327	50.57	2	53.90	1	52.51	1	52.32	1
HD3086 (C)	42.52	11	38.51	14	43.96	5	41.67	11
DBW332	40.72	13	42.19	12	39.12	14	40.68	14
DBW303*	38.41	14	43.77	10	42.54	8	41.57	12
HD2967 (C)	45.11	10	39.68	13	39.00	15	41.27	13
DBW187*	53.51	1	43.58	11	40.52	13	45.87	6
DBW329	48.49	5	45.00	8	42.98	6	45.49	7
WH1252	47.61	6	50.40	3	47.86	3	48.62	2
HD3378	48.66	4	46.68	4	45.56	4	46.97	4
WH1270*	45.64	9	45.33	6	41.59	11	44.18	9
DBW333	46.65	7	45.20	7	48.31	2	46.72	5
DBW330	40.79	12	44.36	9	41.37	12	42.18	10
DBW328	49.95	3	51.45	2	42.31	9	47.90	3
DBW331	36.48	15	38.17	15	42.55	7	39.06	15
DBW 222 (C)	45.76	8	46.27	5	42.14	10	44.72	8
MEAN	45.39		44.96		43.49		44.62	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		0.42		1.64		6.28	
Genotypes (B)	**		1.85		5.21		12.44	
B within A	N.S.		3.20		9.03			
A within B			3.12		9.05			
Biomass, q/ha								
DBW327	134.73	9	137.79	14	147.23	2	139.92	8
HD3086 (C)	136.68	7	141.68	10	136.12	11	138.16	11
DBW332	146.40	2	150.29	4	142.79	4	146.49	3
DBW303*	133.90	10	151.40	3	142.79	3	142.70	6
HD2967 (C)	139.18	6	155.01	2	151.79	1	148.66	2
DBW187*	131.96	13	136.68	15	130.57	14	133.07	15
DBW329	130.57	15	147.90	7	137.79	9	138.75	9
WH1252	144.46	4	148.34	6	142.34	5	145.05	4
HD3378	136.12	8	139.45	11	137.23	10	137.60	12
WH1270*	148.64	1	157.79	1	142.23	6	149.55	1
DBW333	146.12	3	150.01	5	130.57	14	142.23	7
DBW330	131.96	13	143.01	9	139.79	8	138.25	10
DBW328	132.79	12	138.90	12	133.90	12	135.20	13
DBW331	133.62	11	138.45	13	133.34	13	135.14	14
DBW 222 (C)	144.46	4	144.46	8	141.68	7	143.53	5
MEAN	138.10		145.41		139.34		140.95	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		1.38		5.41		6.55	
Genotypes (B)	**		2.37		6.68		5.05	
B within A	N.S.		4.11		11.57			
A within B			4.20		12.17			
Plant Height, cm								
DBW327	87.25	11	90.33	13	80.58	9	86.06	11
HD3086 (C)	88.08	10	87.75	14	77.50	13	84.44	13
DBW332	88.33	9	90.92	12	72.33	15	83.86	14
DBW303*	89.25	6	97.33	4	81.58	8	89.39	5
HD2967 (C)	88.42	8	94.75	6	83.08	4	88.75	6
DBW187*	93.50	4	94.00	8	78.25	12	88.58	8
DBW329	80.75	15	94.92	5	80.17	11	85.28	12
WH1252	84.25	14	83.00	15	75.33	14	80.86	15
HD3378	96.83	3	99.83	2	87.58	3	94.75	2
WH1270*	90.58	5	93.50	9	82.08	7	88.72	7
DBW333	85.83	13	93.08	10	82.17	5	87.03	9
DBW330	89.25	6	97.42	3	82.17	5	89.61	4
DBW328	86.67	12	91.58	11	80.25	10	86.17	10
DBW331	99.67	2	94.50	7	89.08	2	94.42	3
DBW 222 (C)	104.92	1	101.08	1	91.08	1	99.03	1
MEAN	90.24		93.60		81.55		88.46	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		1.67		6.55		12.66	
Genotypes (B)	**		2.04		5.76		6.93	
B within A	N.S.		3.54		9.98			
A within B			3.81		11.03			
Date of Sowing:	4.11.2019			Date of Harvesting:			20.04.2020	

Table 2.2.6. North Western Plains Zone

IR-ES-HYT

Pantnagar

2019-20

Genotypes	Nutrient management				150% RDF + FYM+GR		Mean	Rk
	Rec.NPK	Rk	RDF+ 15 t FYM	Rk				
Yield,q/ha								
DBW327	59.08	3	53.07	12	64.56	4	58.90	8
HD3086 (C)	50.57	14	54.57	10	49.56	15	51.57	14
DBW332	58.58	4	58.37	7	68.70	2	61.88	2
DBW303*	59.59	2	63.09	2	62.39	6	61.69	3
HD2967 (C)	54.93	10	60.56	4	72.80	1	62.76	1
DBW187*	61.88	1	60.60	3	61.01	7	61.16	4
DBW329	56.58	6	60.53	5	62.89	5	60.00	6
WH1252	51.57	12	59.81	6	57.57	11	56.32	9
HD3378	52.65	11	57.01	8	58.33	9	56.00	10
WH1270*	44.06	15	48.07	15	51.14	14	47.76	15
DBW333	50.72	13	50.91	13	56.03	13	52.55	13
DBW330	56.08	8	64.89	1	57.68	10	59.55	7
DBW328	56.58	6	50.21	14	59.72	8	55.50	12
DBW331	57.07	5	54.07	11	56.71	12	55.95	11
DBW 222 (C)	55.63	9	56.75	9	67.91	3	60.09	5
MEAN	55.04		56.83		60.47		57.45	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		0.65		2.55		7.58	
Genotypes (B)	**		1.21		3.40		6.29	
B within A	**		2.09		5.88			
A within B			2.12		6.14			
Earhead/sqm								
DBW327	388	8	403	8	528	1	440	3
HD3086 (C)	389	6	397	10	449	12	412	11
DBW332	355	13	400	9	475	6	410	13
DBW303*	312	15	391	11	474	7	392	14
HD2967 (C)	380	9	411	6	475	5	422	8
DBW187*	398	5	386	13	456	10	413	10
DBW329	428	2	410	7	431	14	423	6
WH1252	412	3	514	2	450	11	459	2
HD3378	403	4	527	1	496	2	475	1
WH1270*	380	9	450	3	479	4	437	4
DBW333	374	12	413	5	469	8	419	9
DBW330	376	11	442	4	490	3	436	5
DBW328	389	6	388	12	457	9	411	12
DBW331	440	1	384	14	443	13	422	7
DBW 222 (C)	346	14	378	15	424	15	383	15
MEAN	385		420		466		424	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		6.93		27.19		10.97	
Genotypes (B)	**		9.93		27.98		7.04	
B within A	**		17.20		48.46			
A within B			18.01		52.15			
Grains/Earhead								
DBW327	27.06	12	23.99	12	24.60	15	25.21	12
HD3086 (C)	28.49	11	26.05	10	26.67	11	27.07	11
DBW332	36.00	2	32.67	2	33.73	2	34.13	2
DBW303*	42.24	1	31.98	3	29.16	6	34.46	1
HD2967 (C)	33.13	4	27.61	8	32.44	4	31.06	5
DBW187*	30.24	7	36.53	1	27.91	9	31.56	3
DBW329	29.34	9	31.26	4	33.78	1	31.46	4
WH1252	24.91	14	22.64	14	27.10	10	24.88	13
HD3378	27.00	13	20.15	15	25.60	13	24.25	15
WH1270*	23.06	15	25.69	11	24.80	14	24.52	14
DBW333	33.42	3	23.40	13	28.68	7	28.50	10
DBW330	30.66	5	31.17	5	26.03	12	29.29	9
DBW328	30.27	6	29.00	7	31.28	5	30.18	7
DBW331	28.67	10	31.08	6	28.37	8	29.38	8
DBW 222 (C)	29.98	8	27.40	9	33.26	3	30.21	6
MEAN	30.30		28.04		28.89		29.08	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	N.S.		0.99		3.89		22.87	
Genotypes (B)	**		1.25		3.52		12.91	
B within A	**		2.17		6.10			
A within B			2.32		6.71			

Table 2.2.6a. North Western Plains Zone

IR-ES-HYT

Pantnagar

2019-20

Genotypes	Nutrient management		RDF+ 15 t FYM		150% RDF + FYM+GR		Mean	Rk
	Rec.NPK	Rk		Rk		Rk		
1000 Grains Weight, g								
DBW327	56.42	1	54.92	1	50.41	1	53.92	1
HD3086 (C)	45.94	11	53.48	5	41.82	14	47.08	9
DBW332	46.30	10	45.04	13	43.71	10	45.02	15
DBW303*	45.85	12	50.72	8	46.32	6	47.63	7
HD2967 (C)	43.95	14	53.63	4	47.54	5	48.37	5
DBW187*	51.95	3	43.31	14	48.00	3	47.76	6
DBW329	45.36	13	47.48	10	43.39	11	45.41	12
WH1252	50.70	5	52.00	7	47.95	4	50.22	3
HD3378	48.45	8	53.88	3	46.04	7	49.45	4
WH1270*	50.80	4	42.14	15	43.19	12	45.38	13
DBW333	40.79	15	53.14	6	41.82	15	45.25	14
DBW330	49.38	6	48.16	9	45.18	9	47.57	8
DBW328	49.04	7	45.15	12	42.07	13	45.42	11
DBW331	46.41	9	45.89	11	45.34	8	45.88	10
DBW 222 (C)	54.79	2	54.90	2	48.22	2	52.64	2
MEAN	48.41		49.59		45.40		47.80	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	*		0.71		2.77		9.92	
Genotypes (B)	**		1.37		3.85		8.57	
B within A	**		2.37		6.66			
A within B			2.39		6.93			
Biomass, q/ha								
DBW327	121.90	6	116.33	9	126.53	4	121.59	7
HD3086 (C)	114.56	13	107.48	14	113.61	10	111.88	13
DBW332	115.65	12	114.29	10	138.10	2	122.68	5
DBW303*	117.11	10	119.05	8	121.02	9	119.06	10
HD2967 (C)	143.54	1	143.99	1	148.33	1	145.29	1
DBW187*	131.97	2	110.88	13	125.93	5	122.93	4
DBW329	116.18	11	123.51	6	123.81	6	121.17	8
WH1252	118.37	8	121.02	7	121.09	8	120.16	9
HD3378	124.15	5	125.71	5	123.05	7	124.30	3
WH1270*	107.15	14	106.12	15	101.36	14	104.88	15
DBW333	96.00	15	128.07	3	96.96	15	107.01	14
DBW330	124.49	4	129.25	2	112.93	11	122.22	6
DBW328	118.88	7	126.41	4	107.23	13	117.51	11
DBW331	117.69	9	112.73	11	112.93	11	114.45	12
DBW 222 (C)	128.57	3	112.71	12	133.41	3	124.90	2
MEAN	119.75		119.84		120.42		120.00	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	N.S.		2.49		9.77		13.92	
Genotypes (B)	**		3.01		8.48		7.52	
B within A	**		5.21		14.68			
A within B			5.62		16.27			
Plant Height, cm								
DBW327	87.83	15	94.83	13	76.83	14	86.50	15
HD3086 (C)	90.93	13	96.70	9	74.43	15	87.36	14
DBW332	91.87	12	94.83	13	80.30	10	89.00	13
DBW303*	95.70	10	90.27	15	82.40	7	89.46	10
HD2967 (C)	110.17	2	105.07	1	98.27	1	104.50	1
DBW187*	97.47	8	100.63	3	77.67	13	91.92	7
DBW329	99.13	6	96.80	8	84.57	5	93.50	6
WH1252	90.13	14	96.23	10	80.77	9	89.04	12
HD3378	111.40	1	98.80	4	91.93	2	100.71	2
WH1270*	95.90	9	98.10	6	77.73	12	90.58	9
DBW333	93.83	11	95.83	12	78.33	11	89.33	11
DBW330	101.10	3	98.63	5	82.70	6	94.14	5
DBW328	97.53	7	96.07	11	81.93	8	91.84	8
DBW331	100.63	5	103.63	2	89.03	4	97.77	3
DBW 222 (C)	101.07	4	97.57	7	90.43	3	96.36	4
MEAN	97.65		97.60		83.16		92.80	
	F. Test		S.E.m		CD (0.05)		CV (%)	
Nutrients (A)	**		1.27		5.00		9.20	
Genotypes (B)	**		1.48		4.17		4.79	
B within A	*		2.56		7.22			
A within B			2.78		8.07			
Date of Sowing:					Date of Harvesting:	16.4.2020		