

ADVANCE VARIETAL TRIALS

- I. Grain Appearance**
- II. Hectolitre Weight**
- III. Protein Content**
- IV. Sedimentation Value**
- V. Grain Hardness Index**
- VI. Phenol Test**
- VII. Yellow Pigment Content**
- VIII. Fe and Zn content**
- IX. High Molecular Weight Glutenin Subunits**

ADVANCE VARIETAL TRIALS

The traits recorded for different advanced trials were Grain Appearance Score, Hectolitre Weight, Grain Protein Content (on 12 % moisture basis), Grain Hardness Index, Sedimentation Value, Phenol test and Iron and Zinc content in both bread wheat and durum wheat and yellow pigment and yellow berry were additional traits recorded in durum wheat.

- The *T. aestivum* entries were tested under Irrigated Timely Sown (ITS), Rainfed Timely Sown (RTS) conditions in Northern Hills Zone (NHZ) and the data is given in tables 1-8.
- In North Western Plains Zone (NWPZ), the entries were tested under Irrigated Timely Sown (IRTS), Irrigated Late Sown (IRLS) and Restricted Irrigated Timely Sown (RITS) conditions and the data is given in tables 9-16.
- The trial was conducted under three conditions namely Irrigated Timely Sown (IRTS), Irrigated Late Sown (IRLS) and Restricted Irrigated Timely Sown (RITS) in North Eastern Plains Zone (NEPZ) and the data is given in tables 17-24.
- The *T. aestivum* and *T. durum* entries were tested under Irrigated Timely Sown (ITS), Irrigated Late Sown (ILS) and Restricted Irrigated Timely Sown (RITS) conditions in Central Zone and the data is given in tables 25-34.
- In Peninsular Zone, the *T. aestivum* and *T. durum* entries were tested under Irrigated Timely Sown (ITS), Irrigated Late Sown (ILS) and Restricted Irrigated Timely Sown (RITS) conditions and the data is given in tables 35-44.
- In 2nd year AVT and special trial (HYPT) entries including checks were evaluated for High Molecular Weight Glutenin Subunits (HMW-GS) encoded by Glu-A1, Glu-B1 and Glu-D1 loci and the data is given in tables 45-50.

Remarks: Grain hardness was measured from one centre of each zone.

Table 1: Grain appearance score (Max-10) of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Irrigated Timely Sown						
1	HPW349 (C)	2001	5.4	5.4	6.0	5.6
2	VL907 (C)	2003	5.4	5.8	6.0	5.7
3	HS507 (C)	2004	5.6	5.6	6.8	6.0
4	HS562 (C)	2005	5.2	5.6	6.0	5.6
5	VL2041	2002	5.6	5.4	5.6	5.5
	Mean		5.4	5.6	6.1	5.7
Rainfed Timely Sown						
1	HS562 (C)	2002	5.0	5.8	6.0	5.6
2	HPW349 (C)	2003	4.8	5.6	5.8	5.4
3	HS507 (C)	2004	5.0	5.8	6.0	5.6
4	VL907 (C)	2005	5.0	5.6	5.6	5.4
5	VL2041	2001	4.6	5.4	5.8	5.3
	Mean		4.9	5.6	5.8	5.5

Table 2: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Irrigated Timely Sown						
1	HPW349 (C)	2001	80.0	80.6	79.7	80.1
2	VL907 (C)	2003	80.2	79.2	78.5	79.3
3	HS507 (C)	2004	80.1	79.9	81.2	80.4
4	HS562 (C)	2005	79.9	80.2	79.4	79.8
5	VL2041	2002	80.7	79.6	78.4	79.6
	Mean		80.2	79.9	79.4	79.8
Rainfed Timely Sown						
1	HS562 (C)	2002	74.6	80.6	77.9	77.7
2	HPW349 (C)	2003	76.0	80.2	76.6	77.6
3	HS507 (C)	2004	76.6	79.8	78.2	78.2
4	VL907 (C)	2005	74.8	77.6	75.4	75.9
5	VL2041	2001	72.7	77.6	76.5	75.6
	Mean		74.9	79.2	76.9	77.0

Table 3: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Irrigated Timely Sown						
1	HPW349 (C)	2001	10.8	10.8	10.7	10.8
2	VL907 (C)	2003	11.7	10.9	11.6	11.4
3	HS507 (C)	2004	11.1	11.3	10.4	10.9
4	HS562 (C)	2005	10.1	10.5	14.3	11.6
5	VL2041	2002	9.8	9.9	10.4	10.0
	Mean		10.7	10.7	11.5	11.0
Rainfed Timely Sown						
1	HS562 (C)	2002	14.2	11.6	11.9	12.6
2	HPW349 (C)	2003	14.5	11.6	11.7	12.6
3	HS507 (C)	2004	13.6	12.4	12.0	12.7
4	VL907 (C)	2005	14.3	11.3	12.8	12.8
5	VL2041	2001	14.1	11.0	12.5	12.5
	Mean		14.2	11.6	12.2	12.6

Table 4: Sedimentation value (ml) of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Irrigated Timely Sown						
1	HPW349 (C)	2001	55.7	46.5	65.4	55.9
2	VL907 (C)	2003	44.2	36.9	44.2	41.8
3	HS507 (C)	2004	45.7	41.9	46.1	44.6
4	HS562 (C)	2005	53.8	49.6	51.9	51.8
5	VL2041	2002	46.5	40.7	57.3	48.2
	Mean		49.2	43.1	53.0	48.4
Rainfed Timely Sown						
1	HS562 (C)	2002	68.8	48.0	43.8	53.6
2	HPW349 (C)	2003	70.0	53.4	55.0	59.5
3	HS507 (C)	2004	55.4	44.6	50.0	50.0
4	VL907 (C)	2005	49.6	38.0	47.3	45.0
5	VL2041	2001	69.2	48.8	50.7	56.3
	Mean		62.6	46.6	49.4	52.8

Table 5: Phenol test (Max-10) of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Irrigated Timely Sown						
1	HPW349 (C)	2001	8.5	7.5	8.0	8.0
2	VL907 (C)	2003	8.5	7.0	8.0	7.8
3	HS507 (C)	2004	7.5	7.0	7.0	7.2
4	HS562 (C)	2005	7.5	7.5	8.0	7.7
5	VL2041	2002	2.5	4.0	4.5	3.7
	Mean		6.9	6.6	7.1	6.9
Rainfed Timely Sown						
1	HS562 (C)	2002	8.5	7.5	8.0	8.0
2	HPW349 (C)	2003	8.0	7.5	7.5	7.7
3	HS507 (C)	2004	7.0	7.0	8.0	7.3
4	VL907 (C)	2005	8.0	7.5	8.0	7.8
5	VL2041	2001	3.0	5.0	4.5	4.2
	Mean		6.9	6.9	7.2	7.0

Table 6: Hardness index of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Irrigated Timely Sown						
1	HPW349 (C)	2001			79.40	79.40
2	VL907 (C)	2003			74.74	74.74
3	HS507 (C)	2004			88.97	88.97
4	HS562 (C)	2005			74.15	74.15
5	VL2041	2002			29.54	29.54
	Mean				69.4	69.4
Rainfed Timely Sown						
1	HS562 (C)	2002			85.30	85.30
2	HPW349 (C)	2003			75.50	75.50
3	HS507 (C)	2004			74.22	74.22
4	VL907 (C)	2005			77.66	77.66
5	VL2041	2001			29.18	29.18
	Mean				68.4	68.4

Table 7: Grain iron content (ppm) of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Irrigated Timely Sown						
1	HPW349 (C)	2001	35.1	39.0	36.1	36.7
2	VL907 (C)	2003	33.9	39.4	35.3	36.2
3	HS507 (C)	2004	36.3	41.8	36.2	38.1
4	HS562 (C)	2005	41.1	35.8	43.6	40.2
5	VL2041	2002	40.5	37.1	33.6	37.1
	Mean		37.4	38.6	37.0	37.7
Rainfed Timely Sown						
1	HS562 (C)	2002	40.2	43.5	39.6	41.1
2	HPW349 (C)	2003	42.9	42.3	39.4	41.5
3	HS507 (C)	2004	38.6	39.2	40.6	39.5
4	VL907 (C)	2005	41.3	40.8	36.1	39.4
5	VL2041	2001	35.9	41.4	35.4	37.6
	Mean		39.8	41.4	38.2	39.8

Table 8: Grain zinc content (ppm) of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Irrigated Timely Sown						
1	HPW349 (C)	2001	48.9	38.5	22.2	36.5
2	VL907 (C)	2003	45.3	36.9	26.6	36.3
3	HS507 (C)	2004	42.8	43.8	27.9	38.2
4	HS562 (C)	2005	48.1	30.1	24.0	34.1
5	VL2041	2002	45.3	30.9	22.4	32.9
	Mean		46.1	36.0	24.6	35.6
Rainfed Timely Sown						
1	HS562 (C)	2002	36.2	29.2	31.8	32.4
2	HPW349 (C)	2003	50.2	34.2	25.5	36.6
3	HS507 (C)	2004	47.9	32.8	35.1	38.6
4	VL907 (C)	2005	50.1	34.9	33.3	39.4
5	VL2041	2001	40.1	36.0	27.8	34.6
	Mean		44.9	33.4	30.7	36.3

Table 9: Grain appearance score (Max-10) of *T. aestivum* genotypes in North Western Plains Zone (NWPZ) AVTs

S. No.	Entries	Code	Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Mean
Irrigated Timely Sown								
1	WH1105 (C)	101	5.0	6.0	5.0	5.4	6.2	5.5
2	DBW187 (C)	102	5.6	5.6	5.4	5.6	5.8	5.6
3	DBW222 (C)	106	5.4	5.4	5.2	5.4	6.0	5.5
4	HD2967 (C)	108	5.0	5.4	5.6	6.0	4.6	5.3
5	HD3086 (C)	113	5.2	5.8	5.6	6.0	7.0	5.9
6	HD3349	103	5.0	5.8	5.2	6.0	5.4	5.5
7	PBW876B	104	5.0	5.4	5.2	5.8	5.8	5.4
8	HD3406M	105	5.0	5.6	5.2	5.6	5.2	5.3
9	DBW313#	107	5.2	6.6	6.2	6.2	6.2	6.1
10	PBW826	109	5.0	6.6	5.8	6.0	6.0	5.9
11	RAJ4548#	110	4.8	5.0	5.8	5.8	6.6	5.6
12	HD3354	111	5.2	5.8	6.2	6.2	6.2	5.9
13	WH1283	112	5.2	6.0	5.6	6.0	6.8	5.9
	Mean		5.1	5.8	5.5	5.8	6.0	5.7
Irrigated Late Sown								
1	JKW261*	201	5.2	5.2	5.8	5.0	6.0	5.4
2	WH1124 (C)	202	5.4	5.4	5.6	5.2	6.2	5.6
3	PBW771 (C)	203	5.2	5.6	6.2	5.2	6.0	5.6
4	HD3059 (C)	204	5.0	5.6	6.2	5.2	6.2	5.6
5	DBW173 (C)	206	5.4	5.6	6.4	5.2	6.2	5.8
6	PBW834	205	5.2	5.6	6.2	5.0	6.0	5.6
	Mean		5.2	5.5	6.1	5.1	6.1	5.6
Restricted Irrigated Timely Sown								
1	HUW838#*	301	5.2	5.0	5.2	5.8	4.2	5.1
2	DBW296*	308	5.2	5.6	5.2	5.4	4.2	5.1
3	NIAW3170 (C)	306	5.2	5.6	5.0	5.6	4.4	5.2
4	HI1628 (C)	309	5.2	5.2	5.4	5.6	4.6	5.2
5	WH1142 (C)	311	5.0	5.8	5.2	5.2	4.2	5.1
6	HD3043 (C)	314	4.8	6.0	5.4	5.6	4.2	5.2
7	PBW644 (C)	315	5.2	6.2	5.6	5.6	4.6	5.4
8	NW7096	302	5.0	5.8	5.2	6.0	4.0	5.2
9	DBW321	303	5.0	5.8	5.2	6.0	4.0	5.2
10	K1910	304	5.4	6.2	5.4	5.8	4.2	5.4
11	HI1654	305	5.2	5.4	5.4	5.6	4.2	5.2
12	PBW838	307	5.2	5.2	5.4	5.4	4.2	5.1
13	HD3369	310	5.2	5.8	5.8	5.6	4.8	5.4
14	UP3062	312	5.2	5.6	5.2	5.2	4.6	5.2
15	HD3368	313	5.2	5.6	5.4	5.6	5.0	5.4
16	HI1653	316	5.0	5.4	5.6	6.0	4.4	5.3
17	PBW848	317	5.2	5.6	5.4	5.8	4.4	5.3
	Mean		5.1	5.6	5.4	5.6	4.4	5.2

Table 10: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in North Western Plains Zone (NWPZ) AVTs

S. No.	Entries	Code	Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Mean
Irrigated Timely Sown								
1	WH1105 (C)	101	76.6	81.9	74.7	80.3	82.1	79.1
2	DBW187 (C)	102	79.8	81.3	76.9	80.4	78.2	79.3
3	DBW222 (C)	106	78.7	80.4	74.6	79.0	78.5	78.2
4	HD2967 (C)	108	74.4	80.8	77.0	80.6	71.8	76.9
5	HD3086 (C)	113	76.0	82.1	76.9	80.9	81.6	79.5
6	HD3349	103	77.5	80.6	76.8	80.8	76.4	78.4
7	PBW876B	104	79.2	81.5	77.7	80.8	80.7	80.0
8	HD3406M	105	77.5	77.5	75.0	79.9	71.4	76.3
9	DBW313#	107	79.0	83.0	78.5	82.3	81.1	80.8
10	PBW826	109	74.7	82.5	77.8	81.6	76.0	78.5
11	RAJ4548#	110	74.1	80.8	78.5	81.4	80.6	79.1
12	HD3354	111	77.6	85.1	80.5	83.1	81.4	81.5
13	WH1283	112	76.9	81.0	76.5	78.4	82.2	79.0
	Mean		77.1	81.4	77.0	80.7	78.6	79.0
Irrigated Late Sown								
1	JKW261*	201	77.1	79.8	76.6	70.4	80.2	76.8
2	WH1124 (C)	202	78.3	80.4	76.5	70.6	81.1	77.4
3	PBW771 (C)	203	79.1	79.8	79.2	71.5	80.5	78.0
4	HD3059 (C)	204	77.0	80.3	77.1	73.1	80.8	77.7
5	DBW173 (C)	206	78.2	80.2	78.1	71.8	80.8	77.8
6	PBW834	205	78.6	80.4	77.1	71.0	79.9	77.4
	Mean		78.1	80.2	77.4	71.4	80.6	77.5
Restricted Irrigated Timely Sown								
1	HUW838#*	301	79.3	82.2	74.2	82.2	70.8	77.7
2	DBW296*	308	75.9	81.8	75.6	80.4	69.6	76.7
3	NIAW3170 (C)	306	75.1	80.2	73.4	79.8	67.2	75.1
4	HI1628 (C)	309	78.2	81.6	73.5	81.0	72.8	77.4
5	WH1142 (C)	311	77.7	81.9	75.5	81.3	66.2	76.5
6	HD3043 (C)	314	77.6	81.9	75.9	82.2	70.0	77.5
7	PBW644 (C)	315	77.0	81.5	75.0	81.4	72.6	77.5
8	NW7096	302	77.9	81.3	75.7	80.8	68.7	76.9
9	DBW321	303	75.6	81.4	73.7	80.7	66.8	75.6
10	K1910	304	78.3	83.0	76.7	83.0	71.7	78.5
11	HI1654	305	77.1	82.0	75.7	81.5	70.4	77.3
12	PBW838	307	78.1	82.1	77.5	81.4	69.6	77.7
13	HD3369	310	77.3	81.9	77.1	81.4	69.9	77.5
14	UP3062	312	77.7	81.8	75.8	80.7	71.4	77.5
15	HD3368	313	75.1	79.4	72.8	80.5	75.9	76.7
16	HI1653	316	76.7	80.0	75.6	80.2	68.5	76.2
17	PBW848	317	79.1	82.2	77.0	81.1	69.7	77.8
	Mean		77.3	81.5	75.3	81.2	70.1	77.1

Table 11: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes in North Western Plains Zone (NWPZ) AVTs

S. No.	Entries	Code	Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Mean
Irrigated Timely Sown								
1	WH1105 (C)	101	11.5	10.2	14.1	10.5	11.8	11.7
2	DBW187 (C)	102	11.6	10.0	14.2	10.3	13.1	11.8
3	DBW222 (C)	106	12.1	9.2	12.8	11.3	11.7	11.4
4	HD2967 (C)	108	11.7	9.8	14.4	10.8	14.0	12.1
5	HD3086 (C)	113	13.2	10.3	13.7	11.1	11.6	12.0
6	HD3349	103	12.9	10.3	13.8	11.4	12.7	12.2
7	PBW876B	104	13.3	11.0	13.7	11.4	11.9	12.2
8	HD3406M	105	11.3	11.0	15.1	11.1	13.9	12.5
9	DBW313#	107	12.1	11.6	14.5	12.3	12.7	12.6
10	PBW826	109	11.5	10.5	13.0	10.7	12.4	11.6
11	RAJ4548#	110	12.3	9.4	13.4	11.0	11.9	11.6
12	HD3354	111	11.7	9.8	13.5	11.5	12.7	11.9
13	WH1283	112	13.1	9.7	13.3	10.8	12.0	11.8
	Mean		12.2	10.2	13.8	11.1	12.5	12.0
Irrigated Late Sown								
1	JKW261*	201	11.5	8.6	11.6	11.9	12.7	11.3
2	WH1124 (C)	202	12.5	9.5	12.6	11.9	12.7	11.8
3	PBW771 (C)	203	12.7	9.4	12.4	11.9	12.2	11.7
4	HD3059 (C)	204	12.8	10.5	12.9	13.3	12.6	12.4
5	DBW173 (C)	206	12.7	9.3	12.4	12.1	13.4	12.0
6	PBW834	205	13.0	10.8	13.1	12.4	13.2	12.5
	Mean		12.5	9.7	12.5	12.3	12.8	12.0
Restricted Irrigated Timely Sown								
1	HUW838#*	301	10.9	8.8	13.7	10.3	15.2	11.8
2	DBW296*	308	12.3	10.2	13.4	9.4	15.4	12.1
3	NIAW3170 (C)	306	12.6	11.1	14.7	9.7	14.6	12.6
4	HI1628 (C)	309	11.3	8.9	14.0	9.7	14.4	11.7
5	WH1142 (C)	311	12.3	9.9	14.6	8.8	16.5	12.4
6	HD3043 (C)	314	13.0	9.6	15.0	9.7	16.3	12.7
7	PBW644 (C)	315	12.0	9.6	12.6	8.5	14.2	11.3
8	NW7096	302	11.7	10.4	13.9	9.6	15.1	12.1
9	DBW321	303	12.4	9.6	12.7	9.1	13.2	11.4
10	K1910	304	12.9	9.9	14.1	9.4	13.5	12.0
11	HI1654	305	11.7	9.7	13.8	9.9	15.0	12.0
12	PBW838	307	11.8	9.6	12.7	8.6	14.3	11.4
13	HD3369	310	11.5	10.0	12.8	10.1	14.5	11.8
14	UP3062	312	11.6	8.8	14.7	9.5	15.7	12.1
15	HD3368	313	12.8	9.5	13.7	9.2	12.4	11.5
16	HI1653	316	12.0	10.0	13.6	9.4	13.5	11.7
17	PBW848	317	12.1	10.6	13.2	9.8	15.9	12.3
	Mean		12.1	9.8	13.7	9.4	14.7	11.9

Table 12: Sedimentation value (ml) of *T. aestivum* genotypes in North Western Plains Zone (NWPZ) AVTs

S. No.	Entries	Code	Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Mean
Irrigated Timely Sown								
1	WH1105 (C)	101	60.0	58.1	57.3	55.0	58.4	57.7
2	DBW187 (C)	102	52.7	53.4	64.2	53.4	58.8	56.5
3	DBW222 (C)	106	54.2	47.3	56.1	53.1	60.0	54.1
4	HD2967 (C)	108	47.7	45.7	45.7	50.7	55.0	49.0
5	HD3086 (C)	113	55.4	49.2	55.4	49.6	47.7	51.4
6	HD3349	103	51.1	51.5	53.4	54.2	51.5	52.4
7	PBW876B	104	58.8	48.4	63.1	51.5	52.3	54.8
8	HD3406M	105	62.7	44.2	51.5	50.7	56.5	53.1
9	DBW313#	107	54.2	55.0	59.6	56.1	53.8	55.7
10	PBW826	109	49.6	50.0	52.3	46.5	53.4	50.4
11	RAJ4548#	110	51.9	46.1	48.0	45.4	56.1	49.5
12	HD3354	111	54.2	49.6	58.1	50.0	48.4	52.1
13	WH1283	112	51.5	51.5	53.4	54.6	49.2	52.1
	Mean		54.1	50.0	55.2	51.6	53.9	53.0
Irrigated Late Sown								
1	JKW261*	201	55.4	46.9	48.8	57.3	55.4	52.7
2	WH1124 (C)	202	53.4	39.6	50.7	43.8	58.4	49.2
3	PBW771 (C)	203	51.5	34.2	40.0	41.9	53.4	44.2
4	HD3059 (C)	204	37.3	55.0	53.4	65.4	40.0	50.2
5	DBW173 (C)	206	45.7	52.7	57.3	59.6	48.4	52.7
6	PBW834	205	43.8	54.6	55.0	63.1	48.4	53.0
	Mean		47.9	47.1	50.9	55.2	50.7	50.3
Restricted Irrigated Timely Sown								
1	HUW838#*	301	55.4	46.5	63.8	55.4	59.2	56.1
2	DBW296*	308	58.1	52.7	67.3	44.2	69.2	58.3
3	NIAW3170 (C)	306	52.3	47.7	57.3	43.0	57.3	51.5
4	HI1628 (C)	309	51.1	45.7	59.2	47.7	67.7	54.3
5	WH1142 (C)	311	51.5	45.4	61.1	42.7	62.7	52.7
6	HD3043 (C)	314	47.7	41.9	49.6	40.0	53.4	46.5
7	PBW644 (C)	315	48.0	45.7	53.4	38.0	53.4	47.7
8	NW7096	302	51.9	49.2	58.4	49.6	50.7	52.0
9	DBW321	303	53.4	53.1	57.3	51.5	53.4	53.7
10	K1910	304	46.5	41.9	53.4	41.9	44.2	45.6
11	HI1654	305	59.2	51.5	70.8	49.6	62.3	58.7
12	PBW838	307	54.6	51.1	61.1	45.0	56.5	53.7
13	HD3369	310	68.8	63.1	71.5	56.1	70.4	66.0
14	UP3062	312	43.0	34.2	52.7	34.2	50.4	42.9
15	HD3368	313	54.2	51.5	63.1	45.0	61.1	55.0
16	HI1653	316	55.4	61.5	70.8	51.5	67.3	61.3
17	PBW848	317	51.1	50.0	58.8	43.8	48.4	50.4
	Mean		53.1	49.0	60.6	45.8	58.1	53.3

Table 13: Phenol test (Max-10) of *T. aestivum* genotypes in North Western Plains Zone (NWPZ) AVTs

S. No.	Entries	Code	Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Mean
Irrigated Timely Sown								
1	WH1105 (C)	101	7.0	8.0	8.5	8.0	7.5	7.8
2	DBW187 (C)	102	5.5	8.0	8.5	7.0	8.0	7.4
3	DBW222 (C)	106	5.5	8.0	8.0	8.0	8.0	7.5
4	HD2967 (C)	108	7.5	6.5	6.5	6.0	7.0	6.7
5	HD3086 (C)	113	6.5	7.5	8.0	7.5	6.5	7.2
6	HD3349	103	4.5	8.0	8.0	8.0	7.0	7.1
7	PBW876B	104	6.0	6.5	7.0	6.5	6.0	6.4
8	HD3406M	105	6.0	7.0	6.5	7.0	6.5	6.6
9	DBW313#	107	5.5	6.0	6.0	5.5	6.0	5.8
10	PBW826	109	8.0	7.5	7.0	7.0	7.0	7.3
11	RAJ4548#	110	7.0	2.5	4.0	3.0	7.0	4.7
12	HD3354	111	6.0	7.5	8.0	7.0	4.0	6.5
13	WH1283	112	6.0	6.5	7.5	6.0	7.0	6.6
	Mean		6.2	6.9	7.2	6.7	6.7	6.7
Irrigated Late Sown								
1	JKW261*	201	7.5	7.5	7.5	8.0	6.5	7.4
2	WH1124 (C)	202	7.0	7.5	7.5	7.5	6.5	7.2
3	PBW771 (C)	203	6.0	7.5	6.5	6.0	6.0	6.4
4	HD3059 (C)	204	8.0	8.5	8.0	7.0	7.0	7.7
5	DBW173 (C)	206	7.0	8.5	7.0	8.0	8.0	7.7
6	PBW834	205	7.0	8.5	6.5	7.5	7.0	7.3
	Mean		7.1	8.0	7.2	7.3	6.8	7.3
Restricted Irrigated Timely Sown								
1	HUW838#*	301	7.0	7.5	8.0	7.0	6.5	7.2
2	DBW296*	308	7.5	6.5	8.5	6.5	5.5	6.9
3	NIAW3170 (C)	306	7.0	7.0	8.5	6.0	6.5	7.0
4	HI1628 (C)	309	8.0	7.5	8.5	6.5	6.0	7.3
5	WH1142 (C)	311	8.0	8.0	9.0	6.0	6.5	7.5
6	HD3043 (C)	314	7.0	6.5	8.0	7.0	7.0	7.1
7	PBW644 (C)	315	7.0	7.0	7.5	6.5	6.5	6.9
8	NW7096	302	6.0	7.5	7.5	6.5	6.5	6.8
9	DBW321	303	6.5	7.5	8.0	6.0	7.0	7.0
10	K1910	304	4.5	3.0	3.0	2.0	5.0	3.5
11	HI1654	305	6.0	8.5	8.0	6.0	6.5	7.0
12	PBW838	307	7.0	8.0	9.0	6.0	6.5	7.3
13	HD3369	310	7.0	7.0	8.0	6.0	6.5	6.9
14	UP3062	312	6.5	7.5	7.5	6.5	6.5	6.9
15	HD3368	313	8.0	8.5	8.5	7.0	7.0	7.8
16	HI1653	316	7.5	7.5	9.0	7.0	7.0	7.6
17	PBW848	317	7.0	7.0	8.5	6.5	6.5	7.1
	Mean		6.9	7.2	7.9	6.2	6.4	6.9

Table 14: Hardness index of *T. aestivum* genotypes in North Western Plains Zone (NWPZ) AVTs

S. No.	Entries	Code	Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Mean
Irrigated Timely Sown								
1	WH1105 (C)	101					71.6	71.6
2	DBW187 (C)	102					80.1	80.1
3	DBW222 (C)	106					79.1	79.1
4	HD2967 (C)	108					87.5	87.5
5	HD3086 (C)	113					68.0	68.0
6	HD3349	103					72.9	72.9
7	PBW876B	104					37.3	37.3
8	HD3406M	105					85.9	85.9
9	DBW313#	107					79.5	79.5
10	PBW826	109					80.6	80.6
11	RAJ4548#	110					83.1	83.1
12	HD3354	111					73.8	73.8
13	WH1283	112					65.4	65.4
	Mean						74.2	74.2
Irrigated Late Sown								
1	JKW261*	201					81.3	81.3
2	WH1124 (C)	202					77.9	77.9
3	PBW771 (C)	203					87.2	87.2
4	HD3059 (C)	204					90.2	90.2
5	DBW173 (C)	206					84.8	84.8
6	PBW834	205					82.6	82.6
	Mean						84.0	84.0
Restricted Irrigated Timely Sown								
1	HUW838#*	301					77.9	77.9
2	DBW296*	308					60.6	60.6
3	NIAW3170 (C)	306					40.7	40.7
4	HI1628 (C)	309					78.8	78.8
5	WH1142 (C)	311					82.3	82.3
6	HD3043 (C)	314					91.1	91.1
7	PBW644 (C)	315					90.9	90.9
8	NW7096	302					83.3	83.3
9	DBW321	303					90.7	90.7
10	K1910	304					87.3	87.3
11	HI1654	305					55.9	55.9
12	PBW838	307					86.7	86.7
13	HD3369	310					90.6	90.6
14	UP3062	312					55.0	55.0
15	HD3368	313					86.1	86.1
16	HI1653	316					79.6	79.6
17	PBW848	317					79.6	79.6
	Mean						77.5	77.5

Table 15: Grain iron content (ppm) of *T. aestivum* genotypes in North Western Plains Zone (NWPZ) AVTs

S. No.	Entries	Code	Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Mean
Irrigated Timely Sown								
1	WH1105 (C)	101	33.8	34.9	45.4	32.3	38.9	37.1
2	DBW187 (C)	102	39.4	33.6	47.7	36.5	36.3	38.7
3	DBW222 (C)	106	32.3	30.3	37.7	36.3	33.2	34.0
4	HD2967 (C)	108	32.7	30.3	46.6	35.8	33.7	35.8
5	HD3086 (C)	113	37.4	33.4	45.1	42.8	38.2	39.4
6	HD3349	103	41.4	33.4	48.6	33.4	33.0	38.0
7	PBW876B	104	38.0	36.7	48.9	38.0	33.5	39.0
8	HD3406M	105	33.6	33.4	50.3	35.6	34.9	37.6
9	DBW313#	107	40.8	39.2	47.3	41.2	38.0	41.3
10	PBW826	109	34.6	36.7	39.5	35.5	32.3	35.7
11	RAJ4548#	110	38.1	33.0	44.0	35.3	33.3	36.7
12	HD3354	111	33.4	34.8	51.2	40.0	33.4	38.6
13	WH1283	112	38.3	37.5	46.8	39.6	32.1	38.9
	Mean		36.4	34.4	46.1	37.1	34.7	37.7
Irrigated Late Sown								
1	JKW261*	201	38.4	35.6	36.9	48.0	35.5	38.9
2	WH1124 (C)	202	47.8	34.8	37.2	49.0	36.6	41.1
3	PBW771 (C)	203	37.4	35.1	37.1	45.2	36.7	38.3
4	HD3059 (C)	204	40.9	38.0	35.5	44.1	36.2	38.9
5	DBW173 (C)	206	34.3	34.8	35.6	42.5	35.0	36.4
6	PBW834	205	37.6	37.0	39.6	46.7	35.9	39.4
	Mean		39.4	35.9	37.0	45.9	36.0	38.8
Restricted Irrigated Timely Sown								
1	HUW838#*	301	36.0	36.8	39.0	36.6	41.9	38.1
2	DBW296*	308	44.7	36.2	42.9	38.6	45.3	41.5
3	NIAW3170 (C)	306	41.1	36.4	40.7	34.7	42.2	39.0
4	HI1628 (C)	309	38.3	31.4	39.7	30.9	43.0	36.7
5	WH1142 (C)	311	41.0	37.6	44.1	34.1	46.5	40.7
6	HD3043 (C)	314	41.2	32.3	42.8	29.7	43.8	38.0
7	PBW644 (C)	315	43.1	36.0	40.2	33.9	44.2	39.5
8	NW7096	302	38.4	36.9	38.7	35.4	42.8	38.4
9	DBW321	303	37.6	32.9	41.5	35.3	39.3	37.3
10	K1910	304	41.8	34.2	40.7	38.8	41.3	39.4
11	HI1654	305	38.0	37.1	43.5	36.1	39.5	38.8
12	PBW838	307	39.6	34.6	44.2	34.0	43.9	39.3
13	HD3369	310	41.1	37.1	42.2	33.2	44.8	39.7
14	UP3062	312	38.4	32.7	42.3	35.6	44.8	38.8
15	HD3368	313	37.7	34.6	39.9	34.9	42.8	38.0
16	HI1653	316	41.2	33.0	42.1	29.8	39.5	37.1
17	PBW848	317	37.6	32.6	40.7	33.9	42.4	37.4
	Mean		39.8	34.8	41.5	34.4	42.8	38.7

Table 16: Grain zinc content (ppm) of *T. aestivum* genotypes in North Western Plains Zone (NWPZ) AVTs

S. No.	Entries	Code	Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Mean
Irrigated Timely Sown								
1	WH1105 (C)	101	25.4	43.7	54.9	28.8	37.7	38.1
2	DBW187 (C)	102	28.3	39.7	44.9	26.3	31.7	34.2
3	DBW222 (C)	106	29.1	32.4	43.7	26.7	30.8	32.5
4	HD2967 (C)	108	26.2	35.5	56.9	29.6	36.8	37.0
5	HD3086 (C)	113	36.0	41.1	46.0	30.4	31.7	37.0
6	HD3349	103	46.2	39.4	48.4	30.3	25.6	38.0
7	PBW876B	104	44.3	44.8	55.1	30.7	25.0	40.0
8	HD3406M	105	28.5	40.8	58.7	28.3	32.2	37.7
9	DBW313#	107	32.2	46.2	48.6	30.4	35.0	38.5
10	PBW826	109	27.3	46.2	42.3	34.8	34.4	37.0
11	RAJ4548#	110	30.3	39.1	53.1	30.2	32.7	37.1
12	HD3354	111	27.0	46.7	50.8	33.9	33.7	38.4
13	WH1283	112	30.5	37.4	51.5	28.6	32.4	36.1
	Mean		31.6	41.0	50.4	29.9	32.3	37.0
Irrigated Late Sown								
1	JKW261*	201	32.2	32.0	42.8	30.5	23.4	32.2
2	WH1124 (C)	202	35.3	36.0	41.2	31.1	27.5	34.2
3	PBW771 (C)	203	24.9	44.1	45.0	29.4	27.3	34.1
4	HD3059 (C)	204	31.3	34.1	37.7	29.3	28.3	32.1
5	DBW173 (C)	206	26.1	30.8	36.1	33.6	27.3	30.8
6	PBW834	205	35.7	35.4	44.7	29.5	29.8	35.0
	Mean		30.9	35.4	41.3	30.6	27.3	33.1
Restricted Irrigated Timely Sown								
1	HUW838#*	301	28.5	38.5	55.8	35.5	50.6	41.8
2	DBW296*	308	29.9	41.6	56.5	30.1	46.1	40.8
3	NIAW3170 (C)	306	28.5	44.4	52.4	30.8	40.5	39.3
4	HI1628 (C)	309	33.5	32.8	55.8	29.2	51.2	40.5
5	WH1142 (C)	311	34.2	33.5	55.5	30.2	48.6	40.4
6	HD3043 (C)	314	34.5	41.6	55.5	34.3	51.3	43.4
7	PBW644 (C)	315	32.2	38.5	48.6	28.9	52.3	40.1
8	NW7096	302	29.3	45.4	54.3	33.0	49.4	42.3
9	DBW321	303	28.2	31.4	49.0	30.2	33.0	34.4
10	K1910	304	31.8	39.4	49.2	35.6	47.9	40.8
11	HI1654	305	24.1	39.3	54.1	32.2	35.4	37.0
12	PBW838	307	31.2	37.8	48.9	32.2	40.0	38.0
13	HD3369	310	29.7	36.9	44.8	29.3	37.2	35.6
14	UP3062	312	27.8	35.6	50.6	35.9	36.6	37.3
15	HD3368	313	28.2	37.0	47.6	32.2	32.2	35.4
16	HI1653	316	26.7	33.3	40.8	26.1	30.2	31.4
17	PBW848	317	27.6	40.0	52.4	33.0	46.7	39.9
	Mean		29.8	38.1	51.3	31.7	42.9	38.7

Table 17: Grain appearance score (Max-10) of *T. aestivum* genotypes in North Eastern Plains Zone (NEPZ) AVTs

S. No.	Entries	Code	Kanpur	Pusa	Sabour	Varanasi	Mean
Irrigated Timely Sown							
1	HD2733 (C)	101	6.0	6.2	5.0	5.4	5.7
2	HD3249 (C)	102	6.2	5.8	5.2	5.6	5.7
3	DBW187 (C)	103	5.8	6.0	5.0	5.0	5.5
4	DBW39 (C)	106	5.6	6.0	5.0	5.0	5.4
5	HD2967 (C)	107	5.8	6.0	5.2	6.0	5.8
6	HD3086 (C)	109	5.8	6.6	5.6	6.0	6.0
7	HD3406M	104	5.8	5.8	4.2	5.0	5.2
8	HD3411M	105	5.6	6.0	4.8	5.2	5.4
9	PBW826#	108	6.0	6.6	6.0	5.4	6.0
Mean			5.8	6.1	5.1	5.4	5.6
Irrigated Late Sown							
1	HI1563 (C)	204	5.6	6.2	5.4	6.0	5.8
2	DBW107 (C)	205	5.6	6.4	5.4	5.8	5.8
3	HD3118 (C)	208	5.4	6.0	5.4	5.4	5.6
4	HI1621 (C)	209	5.4	6.2	5.4	5.6	5.7
5	DBW317	201	5.4	6.8	5.8	5.6	5.9
6	DBW318	202	5.6	6.0	5.8	5.6	5.8
7	PBW835	203	5.6	6.4	5.6	5.8	5.9
8	PBW834	206	5.4	6.6	5.6	6.0	5.9
9	UP3060	207	5.6	6.8	5.6	5.2	5.8
10	DBW316	210	5.6	6.4	6.0	5.6	5.9
11	PBW833	211	5.6	6.6	6.0	5.6	6.0
12	HD3360	212	6.0	6.6	6.0	5.6	6.1
Mean			5.6	6.4	5.7	5.7	5.8
Restricted Irrigated Timely Sown							
1	HI1612 (C)	303	5.8	5.6	5.8	5.4	5.7
2	DBW252 (C)	304	5.8	5.6	5.8	5.4	5.7
3	HD3293(I) (C)	308	5.6	5.2	6.4	5.8	5.8
4	HD3171 (C)	311	5.4	5.4	5.8	6.0	5.7
5	K1317 (C)	313	6.0	5.6	6.2	6.4	6.1
6	HI1653	301	6.0	5.6	6.2	5.8	5.9
7	DBW322	302	6.2	5.8	6.0	5.6	5.9
8	DBW321	305	6.2	5.4	5.8	5.4	5.7
9	HD3368#	306	5.8	5.4	5.8	5.6	5.7
10	HI1654	307	5.4	5.2	5.6	5.8	5.5
11	WH1281	309	5.6	4.8	5.8	5.4	5.4
12	PBW848#	310	5.6	4.8	6.0	5.4	5.5
13	HD3369#	312	5.6	5.8	6.0	5.8	5.8
14	UP3062	314	5.4	5.2	5.6	5.0	5.3
Mean			5.7	5.4	5.9	5.6	5.7

Table 18: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in North Eastern Plains Zone (NEPZ) AVTs

S. No.	Entries	Code	Kanpur	Pusa	Sabour	Varanasi	Mean
Irrigated Timely Sown							
1	HD2733 (C)	101	79.0	78.6	73.4	72.9	76.0
2	HD3249 (C)	102	78.3	79.0	76.3	74.8	77.1
3	DBW187 (C)	103	77.6	78.6	71.8	72.8	75.2
4	DBW39 (C)	106	80.3	78.2	72.6	74.4	76.4
5	HD2967 (C)	107	79.2	78.8	73.5	75.3	76.7
6	HD3086 (C)	109	78.3	79.0	75.5	75.1	77.0
7	HD3406M	104	78.1	78.1	69.2	72.4	74.5
8	HD3411M	105	77.1	77.9	70.4	75.2	75.2
9	PBW826#	108	79.8	80.4	77.2	74.1	77.9
Mean			78.6	78.7	73.3	74.1	76.2
Irrigated Late Sown							
1	HI1563 (C)	204	81.3	77.2	78.8	80.0	79.3
2	DBW107 (C)	205	78.7	77.3	78.0	77.1	77.8
3	HD3118 (C)	208	77.5	75.2	73.5	75.8	75.5
4	HI1621 (C)	209	78.2	75.6	73.1	76.5	75.9
5	DBW317	201	78.0	77.2	77.0	75.3	76.9
6	DBW318	202	78.7	77.3	78.1	77.3	77.9
7	PBW835	203	78.4	75.2	76.1	75.9	76.4
8	PBW834	206	79.5	76.0	75.1	75.8	76.6
9	UP3060	207	78.7	77.7	77.9	75.6	77.5
10	DBW316	210	76.8	77.0	77.1	75.1	76.5
11	PBW833	211	79.4	78.9	78.2	78.2	78.7
12	HD3360	212	78.9	76.4	77.7	76.4	77.4
Mean			78.7	76.8	76.7	76.6	77.2
Restricted Irrigated Timely Sown							
1	HI1612 (C)	303	80.3	80.6	79.5	78.7	79.8
2	DBW252 (C)	304	79.9	80.3	79.4	79.9	79.9
3	HD3293(I) (C)	308	79.8	79.5	76.6	75.6	77.9
4	HD3171 (C)	311	81.9	80.6	79.0	78.8	80.1
5	K1317 (C)	313	83.9	82.6	81.3	81.0	82.2
6	HI1653	301	80.1	79.3	77.7	78.9	79.0
7	DBW322	302	80.8	78.5	79.8	77.9	79.3
8	DBW321	305	79.3	78.9	78.5	77.6	78.6
9	HD3368#	306	78.8	79.4	78.7	76.3	78.3
10	HI1654	307	79.4	80.6	78.5	79.0	79.4
11	WH1281	309	79.4	77.8	78.0	77.4	78.2
12	PBW848#	310	80.7	80.1	78.5	79.9	79.8
13	HD3369#	312	80.8	81.3	79.5	78.3	80.0
14	UP3062	314	80.6	79.8	80.3	78.4	79.8
Mean			80.4	80.0	79.0	78.4	79.4

Table 19: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes in North Eastern Plains Zone (NEPZ) AVTs

S. No.	Entries	Code	Kanpur	Pusa	Sabour	Varanasi	Mean
Irrigated Timely Sown							
1	HD2733 (C)	101	12.0	12.8	12.1	10.3	11.8
2	HD3249 (C)	102	12.3	13.7	12.6	10.7	12.3
3	DBW187 (C)	103	12.6	13.8	13.0	11.9	12.8
4	DBW39 (C)	106	11.5	13.0	13.2	11.8	12.4
5	HD2967 (C)	107	12.3	14.4	13.0	11.4	12.8
6	HD3086 (C)	109	12.2	14.3	12.6	11.7	12.7
7	HD3406M	104	12.4	14.5	13.1	10.9	12.7
8	HD3411M	105	12.8	13.6	13.2	11.7	12.8
9	PBW826#	108	11.5	12.8	11.6	11.3	11.8
Mean			12.2	13.6	12.7	11.3	12.5
Irrigated Late Sown							
1	HI1563 (C)	204	12.3	12.4	11.9	11.9	12.1
2	DBW107 (C)	205	13.4	13.3	13.1	12.7	13.1
3	HD3118 (C)	208	12.2	12.6	12.4	12.2	12.4
4	HI1621 (C)	209	13.0	13.4	12.7	12.2	12.8
5	DBW317	201	13.4	13.2	13.4	13.5	13.4
6	DBW318	202	12.1	12.6	12.4	12.4	12.4
7	PBW835	203	13.3	13.1	13.4	13.6	13.4
8	PBW834	206	12.7	13.3	13.0	13.6	13.2
9	UP3060	207	13.4	13.3	13.1	13.7	13.4
10	DBW316	210	13.7	14.0	13.7	13.9	13.8
11	PBW833	211	13.5	13.4	12.8	13.6	13.3
12	HD3360	212	12.8	13.4	13.5	13.8	13.4
Mean			13.0	13.2	13.0	13.1	13.1
Restricted Irrigated Timely Sown							
1	HI1612 (C)	303	10.8	10.9	8.5	10.4	10.1
2	DBW252 (C)	304	11.1	11.8	9.4	9.9	10.5
3	HD3293(I) (C)	308	10.0	12.5	8.6	10.2	10.3
4	HD3171 (C)	311	10.3	12.2	8.6	10.5	10.4
5	K1317 (C)	313	10.6	10.9	8.9	10.5	10.3
6	HI1653	301	11.0	12.6	8.8	10.0	10.6
7	DBW322	302	10.7	12.3	8.6	9.7	10.3
8	DBW321	305	11.2	11.6	8.9	10.1	10.4
9	HD3368#	306	10.3	11.7	8.7	9.3	10.0
10	HI1654	307	10.9	10.4	8.6	10.9	10.2
11	WH1281	309	10.8	11.4	8.7	9.0	10.0
12	PBW848#	310	10.8	11.9	8.2	8.7	9.9
13	HD3369#	312	10.5	12.4	9.0	10.5	10.6
14	UP3062	314	11.3	12.5	8.4	10.7	10.7
Mean			10.7	11.8	8.7	10.0	10.3

Table 20: Sedimentation value (ml) of *T. aestivum* genotypes in North Eastern Plains Zone (NEPZ) AVTs

S. No.	Entries	Code	Kanpur	Pusa	Sabour	Varanasi	Mean
Irrigated Timely Sown							
1	HD2733 (C)	101	40.0	51.5	43.4	42.7	44.4
2	HD3249 (C)	102	58.8	63.8	60.0	52.7	58.8
3	DBW187 (C)	103	59.2	69.6	65.0	54.2	62.0
4	DBW39 (C)	106	44.6	49.6	48.4	43.8	46.6
5	HD2967 (C)	107	49.6	62.7	46.5	51.5	52.6
6	HD3086 (C)	109	45.0	51.5	50.0	49.6	49.0
7	HD3406M	104	51.1	66.1	52.3	57.7	56.8
8	HD3411M	105	51.5	61.1	57.3	47.7	54.4
9	PBW826#	108	47.3	50.4	48.4	51.1	49.3
Mean			49.7	58.5	52.4	50.1	52.7
Irrigated Late Sown							
1	HI1563 (C)	204	42.3	49.6	48.8	47.3	47.0
2	DBW107 (C)	205	40.0	42.7	43.0	40.0	41.4
3	HD3118 (C)	208	46.5	51.9	54.2	48.4	50.3
4	HI1621 (C)	209	44.6	59.2	57.3	51.5	53.1
5	DBW317	201	41.1	53.4	49.6	48.8	48.2
6	DBW318	202	42.7	51.9	47.7	51.9	48.5
7	PBW835	203	47.7	59.2	61.5	62.3	57.7
8	PBW834	206	52.3	63.1	53.4	51.1	55.0
9	UP3060	207	65.0	68.1	64.9	56.9	63.7
10	DBW316	210	46.9	55.3	53.4	52.3	52.0
11	PBW833	211	43.8	46.1	48.0	43.8	45.4
12	HD3360	212	43.4	56.1	51.1	44.2	48.7
Mean			46.3	54.7	52.8	49.9	50.9
Restricted Irrigated Timely Sown							
1	HI1612 (C)	303	55.4	60.4	47.7	50.7	53.5
2	DBW252 (C)	304	52.3	53.4	49.6	45.7	50.3
3	HD3293(I) (C)	308	43.4	45.0	39.2	47.7	43.8
4	HD3171 (C)	311	50.0	61.1	49.6	51.1	53.0
5	K1317 (C)	313	46.1	48.4	42.3	43.4	45.1
6	HI1653	301	55.4	67.7	51.1	48.8	55.7
7	DBW322	302	48.4	60.0	46.5	44.6	49.9
8	DBW321	305	51.5	55.0	47.7	47.3	50.4
9	HD3368#	306	51.9	58.8	48.4	45.7	51.2
10	HI1654	307	53.4	57.3	43.0	49.6	50.8
11	WH1281	309	54.2	58.4	45.7	45.0	50.8
12	PBW848#	310	48.0	55.0	41.9	40.7	46.4
13	HD3369#	312	54.6	60.0	53.8	49.2	54.4
14	UP3062	314	42.3	46.5	32.6	39.2	40.2
Mean			50.5	56.2	45.7	46.3	49.7

Table 21: Phenol test (Max-10) of *T. aestivum* genotypes in North Eastern Plains Zone (NEPZ) AVTs

S. No.	Entries	Code	Kanpur	Pusa	Sabour	Varanasi	Mean
Irrigated Timely Sown							
1	HD2733 (C)	101	6.5	6.5	6.5	8.0	6.9
2	HD3249 (C)	102	7.5	8.5	7.5	8.5	8.0
3	DBW187 (C)	103	8.5	8.5	8.0	8.0	8.3
4	DBW39 (C)	106	2.0	2.0	3.0	2.5	2.4
5	HD2967 (C)	107	6.5	7.0	6.0	8.0	6.9
6	HD3086 (C)	109	7.0	7.0	6.5	8.0	7.1
7	HD3406M	104	6.5	7.5	6.5	8.0	7.1
8	HD3411M	105	4.5	7.0	3.0	3.0	4.4
9	PBW826#	108	7.0	7.5	6.5	7.0	7.0
Mean			6.2	6.8	5.9	6.8	6.4
Irrigated Late Sown							
1	HI1563 (C)	204	3.0	4.0	3.0	2.0	3.0
2	DBW107 (C)	205	6.5	7.5	7.5	8.0	7.4
3	HD3118 (C)	208	6.0	6.5	6.5	6.0	6.3
4	HI1621 (C)	209	6.0	7.0	7.5	7.0	6.9
5	DBW317	201	6.5	6.5	7.0	7.0	6.8
6	DBW318	202	6.0	5.5	7.0	7.5	6.5
7	PBW835	203	6.5	8.0	7.5	8.0	7.5
8	PBW834	206	7.5	7.5	7.5	8.0	7.6
9	UP3060	207	7.0	7.0	6.5	7.0	6.9
10	DBW316	210	7.0	7.0	7.5	8.0	7.4
11	PBW833	211	7.0	6.5	7.0	8.5	7.3
12	HD3360	212	7.0	6.5	7.0	7.0	6.9
Mean			6.3	6.6	6.8	7.0	6.7
Restricted Irrigated Timely Sown							
1	HI1612 (C)	303	8.0	6.5	7.0	8.5	7.5
2	DBW252 (C)	304	7.5	5.0	6.0	7.5	6.5
3	HD3293(I) (C)	308	7.0	7.0	7.0	8.0	7.3
4	HD3171 (C)	311	6.5	5.5	5.5	7.5	6.3
5	K1317 (C)	313	3.0	2.0	3.0	2.0	2.5
6	HI1653	301	8.0	6.0	8.5	8.5	7.8
7	DBW322	302	8.0	6.0	8.5	8.5	7.8
8	DBW321	305	8.5	6.0	6.5	8.5	7.4
9	HD3368#	306	7.5	7.0	7.0	8.0	7.4
10	HI1654	307	7.5	6.0	6.5	8.0	7.0
11	WH1281	309	7.5	6.5	7.0	8.0	7.3
12	PBW848#	310	7.0	6.0	6.5	7.5	6.8
13	HD3369#	312	7.0	6.0	6.0	8.0	6.8
14	UP3062	314	7.0	6.0	7.0	8.5	7.1
Mean			7.1	5.8	6.6	7.6	6.8

Table 22: Hardness index of *T. aestivum* genotypes in North Eastern Plains Zone (NEPZ) AVTs

S. No.	Entries	Code	Kanpur	Pusa	Sabour	Varanasi	Mean
Irrigated Timely Sown							
1	HD2733 (C)	101			87.2		87.2
2	HD3249 (C)	102			80.4		80.4
3	DBW187 (C)	103			87.4		87.4
4	DBW39 (C)	106			90.5		90.5
5	HD2967 (C)	107			86.5		86.5
6	HD3086 (C)	109			84.7		84.7
7	HD3406M	104			88.3		88.3
8	HD3411M	105			93.7		93.7
9	PBW826#	108			80.8		80.8
Mean					86.6		86.6
Irrigated Late Sown							
1	HI1563 (C)	204			84.6		84.6
2	DBW107 (C)	205			86.7		86.7
3	HD3118 (C)	208			86.1		86.1
4	HI1621 (C)	209			81.6		81.6
5	DBW317	201			79.7		79.7
6	DBW318	202			84.5		84.5
7	PBW835	203			97.9		97.9
8	PBW834	206			81.1		81.1
9	UP3060	207			81.7		81.7
10	DBW316	210			78.5		78.5
11	PBW833	211			95.3		95.3
12	HD3360	212			84.0		84.0
Mean					85.1		85.1
Restricted Irrigated Timely Sown							
1	HI1612 (C)	303			77.4		77.4
2	DBW252 (C)	304			80.4		80.4
3	HD3293(I) (C)	308			67.6		67.6
4	HD3171 (C)	311			68.7		68.7
5	K1317 (C)	313			78.8		78.8
6	HI1653	301			66.3		66.3
7	DBW322	302			81.0		81.0
8	DBW321	305			81.2		81.2
9	HD3368#	306			69.6		69.6
10	HI1654	307			42.0		42.0
11	WH1281	309			71.1		71.1
12	PBW848#	310			74.5		74.5
13	HD3369#	312			66.7		66.7
14	UP3062	314			44.4		44.4
Mean					69.3		69.3

Table 23: Grain iron content (ppm) of *T. aestivum* genotypes in North Eastern Plains Zone (NEPZ) AVTs

S. No.	Entries	Code	Kanpur	Pusa	Sabour	Varanasi	Mean
Irrigated Timely Sown							
1	HD2733 (C)	101	40.1	36.6	33.9	34.7	36.3
2	HD3249 (C)	102	45.3	39.1	34.2	40.6	39.8
3	DBW187 (C)	103	42.5	33.2	34.7	38.0	37.1
4	DBW39 (C)	106	44.4	34.0	34.6	36.3	37.3
5	HD2967 (C)	107	40.0	32.2	34.1	39.1	36.4
6	HD3086 (C)	109	39.4	37.4	31.9	38.1	36.7
7	HD3406M	104	38.6	35.1	28.0	40.0	35.4
8	HD3411M	105	41.0	34.3	30.0	32.2	34.4
9	PBW826#	108	39.9	38.0	30.3	34.1	35.6
Mean			41.2	35.5	32.4	37.0	36.6
Irrigated Late Sown							
1	HI1563 (C)	204	49.0	--	47.5	43.5	46.7
2	DBW107 (C)	205	44.7	--	38.8	45.5	43.0
3	HD3118 (C)	208	44.7	--	34.7	41.6	40.3
4	HI1621 (C)	209	46.8	--	42.3	38.9	42.7
5	DBW317	201	43.2	--	33.9	36.4	37.8
6	DBW318	202	43.8	--	35.2	40.8	39.9
7	PBW835	203	44.2	--	36.2	40.5	40.3
8	PBW834	206	40.7	--	33.8	37.9	37.5
9	UP3060	207	44.0	--	33.9	40.3	39.4
10	DBW316	210	48.4	--	35.7	37.9	40.7
11	PBW833	211	46.8	--	33.0	41.4	40.4
12	HD3360	212	50.5	--	39.6	45.3	45.1
Mean			45.6	--	37.1	40.8	41.2
Restricted Irrigated Timely Sown							
1	HI1612 (C)	303	38.9	34.9	29.1	37.9	35.2
2	DBW252 (C)	304	37.6	32.4	29.4	39.4	34.7
3	HD3293(I) (C)	308	34.0	32.1	28.8	38.5	33.4
4	HD3171 (C)	311	41.6	38.4	32.1	44.1	39.1
5	K1317 (C)	313	39.6	31.8	35.3	39.6	36.6
6	HI1653	301	36.3	35.8	28.3	38.0	34.6
7	DBW322	302	38.7	41.2	34.8	38.7	38.4
8	DBW321	305	34.5	35.4	32.2	40.1	35.6
9	HD3368#	306	40.0	30.4	31.1	35.2	34.2
10	HI1654	307	37.5	30.8	37.3	41.5	36.8
11	WH1281	309	39.9	29.9	31.1	39.8	35.2
12	PBW848#	310	39.0	31.6	32.0	38.4	35.3
13	HD3369#	312	40.9	33.8	34.1	37.3	36.5
14	UP3062	314	39.2	32.0	28.1	36.9	34.1
Mean			38.4	33.6	31.7	39.0	35.7

Table 24: Grain zinc content (ppm) of *T. aestivum* genotypes in North Eastern Plains Zone (NEPZ) AVTs

S. No.	Entries	Code	Kanpur	Pusa	Sabour	Varanasi	Mean
Irrigated Timely Sown							
1	HD2733 (C)	101	34.8	38.1	29.4	32.6	33.7
2	HD3249 (C)	102	33.2	36.8	28.2	31.3	32.4
3	DBW187 (C)	103	34.2	34.9	25.9	36.7	32.9
4	DBW39 (C)	106	43.9	36.4	31.7	38.4	37.6
5	HD2967 (C)	107	35.2	44.8	31.9	32.0	36.0
6	HD3086 (C)	109	35.9	39.1	27.4	41.4	36.0
7	HD3406M	104	33.7	40.1	27.9	39.6	35.3
8	HD3411M	105	38.2	32.8	29.2	31.4	32.9
9	PBW826#	108	34.4	35.5	28.0	35.9	33.5
Mean			35.9	37.6	28.8	35.5	34.5
Irrigated Late Sown							
1	HI1563 (C)	204	44.7	36.4	41.0	34.2	39.1
2	DBW107 (C)	205	45.6	37.4	40.6	32.1	38.9
3	HD3118 (C)	208	42.4	35.8	36.5	35.1	37.5
4	HI1621 (C)	209	44.4	35.4	35.8	36.2	38.0
5	DBW317	201	49.1	42.5	37.3	38.9	42.0
6	DBW318	202	44.7	39.4	35.6	38.5	39.6
7	PBW835	203	47.0	37.2	35.4	37.2	39.2
8	PBW834	206	39.0	39.2	37.7	37.1	38.3
9	UP3060	207	49.7	40.1	41.8	44.1	43.9
10	DBW316	210	42.4	41.2	39.7	37.0	40.1
11	PBW833	211	43.0	34.5	35.1	40.0	38.2
12	HD3360	212	52.4	34.2	36.4	42.5	41.4
Mean			45.4	37.8	37.7	37.7	39.7
Restricted Irrigated Timely Sown							
1	HI1612 (C)	303	37.8	36.6	29.5	32.2	34.0
2	DBW252 (C)	304	33.6	35.9	27.9	31.6	32.3
3	HD3293(I) (C)	308	35.5	43.0	28.4	29.8	34.2
4	HD3171 (C)	311	36.0	40.6	29.0	36.9	35.6
5	K1317 (C)	313	38.2	35.9	34.0	36.2	36.1
6	HI1653	301	37.3	36.5	23.3	32.2	32.3
7	DBW322	302	32.6	40.8	31.0	33.4	34.5
8	DBW321	305	32.1	38.7	28.6	37.9	34.3
9	HD3368#	306	35.9	30.9	24.4	30.3	30.4
10	HI1654	307	36.3	33.3	31.6	34.4	33.9
11	WH1281	309	34.9	35.8	25.9	29.7	31.6
12	PBW848#	310	40.9	39.2	31.7	30.6	35.6
13	HD3369#	312	38.7	39.5	32.3	36.1	36.7
14	UP3062	314	34.9	41.2	24.9	34.9	34.0
Mean			36.1	37.7	28.8	33.3	34.0

Table 25: Grain appearance score (Max-10) of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	P.Kheda	Indore	Mean
Irrigated Timely Sown							
<i>T. aestivum</i>							
1	GW513*	105	6.4	7.4	7.6	7.2	7.2
2	HI1636*	106	6.6	7.6	7.2	7.4	7.2
3	GW322 (C)	102	5.6	7.2	6.8	6.8	6.6
4	HI1544 (C)	109	6.4	7.4	7.0	7.0	7.0
5	MP3535	103	6.2	7.4	7.6	6.8	7.0
6	GW523	104	6.0	7.2	7.6	7.0	7.0
7	MACS6768	108	5.8	7.4	7.0	6.8	6.8
8	HI1667B	110	6.4	7.4	7.0	5.6	6.6
9	HI1650	113	7.0	7.4	7.2	6.8	7.1
	Mean		6.3	7.4	7.2	6.8	6.9
<i>T. durum</i>							
1	HI8498(d) (C)	111	5.6	7.8	7.2	7.2	7.0
2	HI8713(d) (C)	112	6.0	6.8	6.2	6.6	6.4
3	HI8833(d)M	101	6.2	7.4	7.2	6.8	6.9
4	HI8832(d)M	107	6.4	7.4	7.2	6.8	7.0
	Mean		6.1	7.4	7.0	6.9	6.8
Irrigated Late Sown							
<i>T. aestivum</i>							
1	MP4010 (C)	201	7.0	7.4	7.0	6.4	7.0
2	HD2864 (C)	202	6.8	7.0	6.2	5.8	6.5
3	MP3336 (C)	203	7.0	7.2	7.4	6.0	6.9
4	HD2932 (C)	204	7.0	7.2	7.4	6.6	7.1
5	HI1634(I) (C)	205	7.0	7.2	7.0	6.6	7.0
6	CG1029(I) (C)	207	6.0	7.4	7.2	6.2	6.7
7	HD3407M	206	6.8	7.2	6.6	6.2	6.7
	Mean		6.8	7.2	7.0	6.3	6.8
Restricted Irrigated Timely Sown							
<i>T. aestivum</i>							
1	DBW110 (C)	311	5.4	7.4	6.6	5.2	6.2
2	MP3288 (C)	312	5.4	7.6	6.8	5.4	6.3
3	GW528	302	6.4	7.6	7.2	6.8	7.0
4	DBW326	304	5.8	7.6	7.2	6.8	6.9
5	NIAW3851	307	6.4	7.6	7.2	7.2	7.1
6	CG1036	309	6.2	7.6	7.2	7.0	7.0
7	HI1655	310	5.6	7.6	7.2	6.8	6.8
	Mean		5.9	7.6	7.1	6.5	6.7
<i>T. durum</i>							
1	HI8823(d)*	301	6.0	7.8	6.6	7.0	6.9
2	DDW47(d) (C)	303	5.8	7.0	6.6	6.8	6.6
3	HI8627(d) (C)	306	6.0	7.2	5.6	6.4	6.3
4	UAS475(d)	305	5.8	7.0	5.6	5.6	6.0
5	HI8830(d)	308	6.2	7.8	7.0	6.0	6.8
6	DDW55(d)	313	7.2	8.0	6.8	6.0	7.0
Mean			6.2	7.5	6.4	6.3	6.6

Table 26: Hectolitre weight (Kg/hl) of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	P.Kheda	Indore	Mean
Irrigated Timely Sown							
<i>T. aestivum</i>							
1	GW513*	105	81.9	82.6	83.1	81.6	82.3
2	HI1636*	106	80.8	81.8	81.9	81.4	81.5
3	GW322 (C)	102	80.2	81.5	80.7	80.7	80.8
4	HI1544 (C)	109	82.5	83.1	82.5	81.8	82.5
5	MP3535	103	82.7	84.8	84.0	82.7	83.6
6	GW523	104	79.4	82.8	81.1	80.7	81.0
7	MACS6768	108	79.6	83.7	83.0	81.8	82.0
8	HI1667B	110	83.1	83.5	82.5	81.9	82.8
9	HI1650	113	82.9	84.8	83.4	81.9	83.3
	Mean		81.5	83.2	82.5	81.6	82.2
<i>T. durum</i>							
1	HI8498(d) (C)	111	82.0	84.3	83.3	82.6	83.1
2	HI8713(d) (C)	112	82.9	81.0	83.6	81.9	82.4
3	HI8833(d)M	101	80.7	82.3	80.9	81.8	81.4
4	HI8832(d)M	107	82.9	83.9	83.0	81.5	82.8
	Mean		82.1	82.9	82.7	82.0	82.4
Irrigated Late Sown							
<i>T. aestivum</i>							
1	MP4010 (C)	201	82.8	82.7	83.5	83.1	83.0
2	HD2864 (C)	202	83.8	83.2	83.5	83.3	83.5
3	MP3336 (C)	203	82.2	82.4	83.9	83.2	82.9
4	HD2932 (C)	204	80.5	81.1	83.1	81.6	81.6
5	HI1634(I) (C)	205	82.3	82.3	80.8	81.1	81.6
6	CG1029(I) (C)	207	82.8	82.7	83.3	83.1	83.0
7	HD3407M	206	79.9	80.0	78.9	80.6	79.9
	Mean		82.0	82.1	82.4	82.3	82.2
Restricted Irrigated Timely Sown							
<i>T. aestivum</i>							
1	DBW110 (C)	311	75.3	83.0	82.2	81.2	80.4
2	MP3288 (C)	312	77.7	82.7	82.1	83.0	81.4
3	GW528	302	81.3	83.3	83.2	83.8	82.9
4	DBW326	304	75.4	82.8	81.5	80.6	80.1
5	NIAW3851	307	76.9	82.4	81.1	80.6	80.3
6	CG1036	309	81.6	84.8	83.5	84.4	83.6
7	HI1655	310	77.0	81.3	81.6	81.8	80.4
	Mean		77.9	82.9	82.2	82.2	81.3
<i>T. durum</i>							
1	HI8823(d)*	301	81.1	84.2	85.6	85.3	84.1
2	DDW47(d) (C)	303	78.2	81.4	83.0	83.6	81.6
3	HI8627(d) (C)	306	76.9	80.8	83.7	84.4	81.5
4	UAS475(d)	305	75.9	82.4	83.4	82.5	81.1
5	HI8830(d)	308	79.4	82.3	83.5	83.7	82.2
6	DDW55(d)	313	83.1	83.5	85.5	85.4	84.4
Mean			79.1	82.4	84.1	84.2	82.5

Table 27: Protein content (%) at 12% moisture basis of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	P.Kheda	Indore	Mean
Irrigated Timely Sown							
<i>T. aestivum</i>							
1	GW513*	105	11.0	11.2	11.4	11.2	11.2
2	HI1636*	106	12.4	12.0	12.0	11.8	12.0
3	GW322 (C)	102	10.8	11.3	11.0	11.1	11.1
4	HI1544 (C)	109	12.2	11.8	11.7	12.6	12.1
5	MP3535	103	12.1	11.6	11.4	13.1	12.0
6	GW523	104	11.1	11.0	10.9	12.2	11.3
7	MACS6768	108	11.7	12.6	12.8	13.7	12.7
8	HI1667B	110	12.5	12.5	12.9	12.8	12.7
9	HI1650	113	13.1	11.7	11.8	12.3	12.3
	Mean		11.9	11.8	11.8	12.3	11.9
<i>T. durum</i>							
1	HI8498(d) (C)	111	12.1	12.0	12.2	13.1	12.3
2	HI8713(d) (C)	112	12.3	12.3	10.8	10.7	11.5
3	HI8833(d)M	101	12.5	11.7	12.1	12.6	12.2
4	HI8832(d)M	107	11.8	11.9	12.4	12.4	12.1
	Mean		12.2	12.0	11.9	12.2	12.0
Irrigated Late Sown							
<i>T. aestivum</i>							
1	MP4010 (C)	201	12.7	13.3	11.9	11.6	12.4
2	HD2864 (C)	202	11.3	12.5	10.8	10.8	11.4
3	MP3336 (C)	203	11.9	13.4	12.3	12.4	12.5
4	HD2932 (C)	204	11.8	13.9	11.2	11.1	12.0
5	HI1634(I) (C)	205	11.4	13.3	11.4	10.3	11.6
6	CG1029(I) (C)	207	11.1	12.5	11.2	11.6	11.6
7	HD3407M	206	11.8	14.2	11.4	11.9	12.3
	Mean		11.7	13.3	11.5	11.4	12.0
Restricted Irrigated Timely Sown							
<i>T. aestivum</i>							
1	DBW110 (C)	311	13.8	14.4	8.9	9.1	11.6
2	MP3288 (C)	312	14.2	13.9	11.5	9.4	12.3
3	GW528	302	12.8	15.2	9.8	10.1	12.0
4	DBW326	304	12.5	13.0	8.7	10.4	11.2
5	NIAW3851	307	12.3	13.4	9.0	9.4	11.0
6	CG1036	309	13.0	13.3	9.7	9.2	11.3
7	HI1655	310	12.8	13.2	10.6	9.8	11.6
	Mean		13.1	13.8	9.8	9.6	11.6
<i>T. durum</i>							
1	HI8823(d)*	301	15.5	13.1	9.3	10.1	12.0
2	DDW47(d) (C)	303	14.4	12.9	9.1	9.9	11.6
3	HI8627(d) (C)	306	16.0	14.1	8.2	10.8	12.3
4	UAS475(d)	305	15.3	12.3	8.3	9.3	11.3
5	HI8830(d)	308	13.8	12.8	9.8	8.9	11.3
6	DDW55(d)	313	13.9	13.8	8.6	9.5	11.4
Mean			14.8	13.2	8.9	9.7	11.7

Table 28: Sedimentation value (ml) of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	P.Kheda	Indore	Mean
Irrigated Timely Sown							
<i>T. aestivum</i>							
1	GW513*	105	40.0	40.3	37.3	40.0	39.4
2	HI1636*	106	41.1	44.2	41.9	40.3	41.9
3	GW322 (C)	102	40.7	38.8	38.4	40.7	39.7
4	HI1544 (C)	109	40.0	40.7	40.3	38.0	39.8
5	MP3535	103	53.8	51.5	51.5	40.0	49.2
6	GW523	104	37.7	34.6	35.0	36.1	35.8
7	MACS6768	108	38.8	40.3	39.6	40.7	39.9
8	HI1667B	110	44.6	55.4	56.1	50.4	51.6
9	HI1650	113	36.5	39.6	39.6	41.1	39.2
	Mean		41.5	42.8	42.2	40.8	41.8
<i>T. durum</i>							
1	HI8498(d) (C)	111	42.3	36.9	34.2	35.0	37.1
2	HI8713(d) (C)	112	45.4	30.3	27.3	26.5	32.4
3	HI8833(d)M	101	36.1	36.5	32.3	35.0	35.0
4	HI8832(d)M	107	40.0	34.2	31.5	34.2	35.0
	Mean		40.9	34.5	31.3	32.6	34.8
Irrigated Late Sown							
<i>T. aestivum</i>							
1	MP4010 (C)	201	42.7	41.1	41.9	41.9	41.9
2	HD2864 (C)	202	43.0	44.2	41.9	39.2	42.1
3	MP3336 (C)	203	39.2	38.0	35.7	36.5	37.4
4	HD2932 (C)	204	51.5	46.9	47.7	48.0	48.5
5	HI1634(I) (C)	205	41.9	41.1	47.7	42.7	43.3
6	CG1029(I) (C)	207	39.2	38.0	40.7	38.0	39.0
7	HD3407M	206	51.9	49.6	53.4	49.6	51.1
	Mean		44.2	42.7	44.1	42.3	43.3
Restricted Irrigated Timely Sown							
<i>T. aestivum</i>							
1	DBW110 (C)	311	56.9	50.0	48.4	48.0	50.8
2	MP3288 (C)	312	52.7	41.9	44.6	45.7	46.2
3	GW528	302	46.5	45.7	45.7	41.9	45.0
4	DBW326	304	46.1	42.7	41.9	43.8	43.6
5	NIAW3851	307	51.5	45.7	43.4	41.9	45.6
6	CG1036	309	50.4	38.0	44.6	41.1	43.5
7	HI1655	310	45.7	38.8	40.7	41.1	41.6
	Mean		50.0	43.3	44.2	43.4	45.2
<i>T. durum</i>							
1	HI8823(d)*	301	36.1	34.2	36.9	36.1	35.8
2	DDW47(d) (C)	303	38.4	28.8	34.2	34.2	33.9
3	HI8627(d) (C)	306	31.5	26.5	28.4	29.2	28.9
4	UAS475(d)	305	40.0	30.3	36.1	43.0	37.4
5	HI8830(d)	308	31.9	30.0	29.2	31.1	30.5
6	DDW55(d)	313	36.1	32.6	36.1	35.3	35.1
Mean			35.7	30.4	33.5	34.8	33.6

Table 29: Phenol test (Max-10) of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	P.Kheda	Indore	Mean
Irrigated Timely Sown							
<i>T. aestivum</i>							
1	GW513*	105	4.5	4.0	4.0	4.0	4.1
2	HI1636*	106	5.5	5.0	6.0	6.0	5.6
3	GW322 (C)	102	7.0	6.5	8.0	7.0	7.1
4	HI1544 (C)	109	7.0	6.5	8.0	7.5	7.3
5	MP3535	103	7.5	6.5	8.0	7.0	7.3
6	GW523	104	7.0	6.0	7.5	7.5	7.0
7	MACS6768	108	7.5	7.0	8.0	7.5	7.5
8	HI1667B	110	7.0	7.0	8.0	7.0	7.3
9	HI1650	113	8.0	7.0	8.0	7.5	7.6
	Mean		6.8	6.2	7.3	6.8	6.8
<i>T. durum</i>							
1	HI8498(d) (C)	111	0.0	0.0	0.0	0.0	0.0
2	HI8713(d) (C)	112	0.0	0.0	0.0	0.0	0.0
3	HI8833(d)M	101	0.0	0.0	0.0	0.0	0.0
4	HI8832(d)M	107	0.0	0.0	0.0	0.0	0.0
	Mean		0.0	0.0	0.0	0.0	0.0
Irrigated Late Sown							
<i>T. aestivum</i>							
1	MP4010 (C)	201	6.0	6.0	6.5	6.0	6.1
2	HD2864 (C)	202	4.0	4.5	5.5	4.5	4.6
3	MP3336 (C)	203	4.0	4.0	4.0	4.0	4.0
4	HD2932 (C)	204	4.0	4.0	8.0	4.0	5.0
5	HI1634(I) (C)	205	7.5	6.5	5.0	7.0	6.5
6	CG1029(I) (C)	207	5.0	5.5	5.5	5.0	5.3
7	HD3407M	206	7.5	7.0	8.0	7.0	7.4
	Mean		5.4	5.4	6.1	5.4	5.6
Restricted Irrigated Timely Sown							
<i>T. aestivum</i>							
1	DBW110 (C)	311	7.0	7.0	8.0	7.0	7.3
2	MP3288 (C)	312	7.0	7.5	8.0	7.5	7.5
3	GW528	302	8.0	7.0	9.0	8.0	8.0
4	DBW326	304	7.5	7.5	8.0	7.5	7.6
5	NIAW3851	307	8.0	7.0	7.5	6.5	7.3
6	CG1036	309	4.0	4.0	5.0	4.0	4.3
7	HI1655	310	7.0	7.0	8.0	7.0	7.3
	Mean		6.9	6.7	7.6	6.8	7.0
<i>T. durum</i>							
1	HI8823(d)*	301	0.0	0.0	0.0	0.0	0.0
2	DDW47(d) (C)	303	0.0	0.0	0.0	0.0	0.0
3	HI8627(d) (C)	306	0.0	0.0	0.0	0.0	0.0
4	UAS475(d)	305	0.0	0.0	0.0	0.0	0.0
5	HI8830(d)	308	0.0	0.0	0.0	0.0	0.0
6	DDW55(d)	313	0.0	0.0	0.0	0.0	0.0
Mean			0.0	0.0	0.0	0.0	0.0

Table 30: Yellow pigment (ppm) of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	P.Kheda	Indore	Mean
Irrigated Timely Sown							
<i>T. aestivum</i>							
1	GW513*	105					
2	HI1636*	106					
3	GW322 (C)	102					
4	HI1544 (C)	109					
5	MP3535	103					
6	GW523	104					
7	MACS6768	108					
8	HI1667B	110					
9	HI1650	113					
	Mean						
<i>T. durum</i>							
1	HI8498(d) (C)	111	4.5	4.3	5.0	5.1	4.7
2	HI8713(d) (C)	112	6.6	7.5	7.8	7.0	7.2
3	HI8833(d)M	101	4.8	5.3	4.8	4.7	4.9
4	HI8832(d)M	107	4.2	3.3	4.1	4.0	3.9
	Mean		5.0	5.1	5.4	5.2	5.2
Irrigated Late Sown							
<i>T. aestivum</i>							
1	MP4010 (C)	201					
2	HD2864 (C)	202					
3	MP3336 (C)	203					
4	HD2932 (C)	204					
5	HI1634(I) (C)	205					
6	CG1029(I) (C)	207					
7	HD3407M	206					
	Mean						
Restricted Irrigated Timely Sown							
<i>T. aestivum</i>							
1	DBW110 (C)	311					
2	MP3288 (C)	312					
3	GW528	302					
4	DBW326	304					
5	NIAW3851	307					
6	CG1036	309					
7	HI1655	310					
	Mean						
<i>T. durum</i>							
1	HI8823(d)*	301	6.8	6.6	6.9	6.0	6.6
2	DDW47(d) (C)	303	8.3	7.7	8.4	8.0	8.1
3	HI8627(d) (C)	306	8.1	7.7	7.4	7.6	7.7
4	UAS475(d)	305	8.5	7.8	7.5	8.3	8.0
5	HI8830(d)	308	7.2	7.5	6.6	7.4	7.2
6	DDW55(d)	313	6.6	6.7	6.3	6.0	6.4
Mean			7.6	7.3	7.2	7.2	7.3

Table 31: Hardness index of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	P.Kheda	Indore	Mean
Irrigated Timely Sown							
<i>T. aestivum</i>							
1	GW513*	105				71.6	71.6
2	HI1636*	106				72.0	72.0
3	GW322 (C)	102				74.8	74.8
4	HI1544 (C)	109				72.1	72.1
5	MP3535	103				65.7	65.7
6	GW523	104				76.4	76.4
7	MACS6768	108				64.5	64.5
8	HI1667B	110				73.5	73.5
9	HI1650	113				65.9	65.9
	Mean					70.7	70.7
<i>T. durum</i>							
1	HI8498(d) (C)	111				81.9	81.9
2	HI8713(d) (C)	112				84.1	84.1
3	HI8833(d)M	101				83.9	83.9
4	HI8832(d)M	107				82.8	82.8
	Mean					83.2	83.2
Irrigated Late Sown							
<i>T. aestivum</i>							
1	MP4010 (C)	201				79.8	79.8
2	HD2864 (C)	202				79.1	79.1
3	MP3336 (C)	203				80.3	80.3
4	HD2932 (C)	204				76.6	76.6
5	HI1634(I) (C)	205				82.8	82.8
6	CG1029(I) (C)	207				75.5	75.5
7	HD3407M	206				85.0	85.0
	Mean					79.9	79.9
Restricted Irrigated Timely Sown							
<i>T. aestivum</i>							
1	DBW110 (C)	311				76.0	76.0
2	MP3288 (C)	312				82.9	82.9
3	GW528	302				80.0	80.0
4	DBW326	304				86.0	86.0
5	NIAW3851	307				85.0	85.0
6	CG1036	309				81.8	81.8
7	HI1655	310				91.3	91.3
	Mean					83.3	83.3
<i>T. durum</i>							
1	HI8823(d)*	301				94.4	94.4
2	DDW47(d) (C)	303				93.8	93.8
3	HI8627(d) (C)	306				91.9	91.9
4	UAS475(d)	305				96.1	96.1
5	HI8830(d)	308				89.0	89.0
6	DDW55(d)	313				87.6	87.6
Mean						92.1	92.1

Table 32: Grain iron content (ppm) of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	P.Kheda	Indore	Mean
Irrigated Timely Sown							
<i>T. aestivum</i>							
1	GW513*	105	35.3	33.9	35.1	38.0	35.6
2	HI1636*	106	36.4	31.3	34.4	38.7	35.2
3	GW322 (C)	102	32.3	36.3	32.1	41.3	35.5
4	HI1544 (C)	109	33.8	35.7	37.7	45.0	38.1
5	MP3535	103	38.1	36.5	35.8	40.8	37.8
6	GW523	104	34.0	33.8	34.2	37.1	34.8
7	MACS6768	108	35.6	43.3	39.1	48.7	41.7
8	HI1667B	110	38.5	36.8	42.5	46.3	41.0
9	HI1650	113	39.5	34.3	38.7	43.8	39.1
	Mean		35.9	35.8	36.6	42.2	37.6
<i>T. durum</i>							
1	HI8498(d) (C)	111	38.5	37.3	32.6	44.7	38.3
2	HI8713(d) (C)	112	43.9	37.8	32.5	46.2	40.1
3	HI8833(d)M	101	37.9	37.4	34.3	44.0	38.4
4	HI8832(d)M	107	37.8	37.2	35.8	42.0	38.2
	Mean		39.5	37.4	33.8	44.2	38.7
Irrigated Late Sown							
<i>T. aestivum</i>							
1	MP4010 (C)	201	37.3	38.3	36.9	39.0	37.9
2	HD2864 (C)	202	32.8	44.1	33.5	37.2	36.9
3	MP3336 (C)	203	33.5	41.9	39.8	38.0	38.3
4	HD2932 (C)	204	32.0	41.4	36.7	38.0	37.0
5	HI1634(I) (C)	205	34.5	39.6	34.5	39.3	37.0
6	CG1029(I) (C)	207	34.9	39.0	33.7	36.6	36.1
7	HD3407M	206	32.6	40.4	32.6	36.8	35.6
Restricted Irrigated Timely Sown							
<i>T. aestivum</i>							
1	DBW110 (C)	311	33.7	46.7	33.1	37.6	37.8
2	MP3288 (C)	312	32.9	44.0	38.4	37.7	38.3
3	GW528	302	37.3	44.2	41.0	42.9	41.4
4	DBW326	304	29.8	38.0	32.2	39.3	34.8
5	NIAW3851	307	36.7	43.2	36.6	37.9	38.6
6	CG1036	309	36.8	41.7	38.6	38.6	38.9
7	HI1655	310	32.0	45.1	35.0	40.6	38.2
	Mean		34.2	43.3	36.4	39.2	38.3
<i>T. durum</i>							
1	HI8823(d)*	301	36.5	40.1	33.6	36.8	36.8
2	DDW47(d) (C)	303	37.9	42.3	35.9	40.0	39.0
3	HI8627(d) (C)	306	33.1	42.3	33.6	38.4	36.9
4	UAS475(d)	305	34.5	38.7	34.9	36.4	36.1
5	HI8830(d)	308	33.0	39.7	32.8	40.3	36.5
6	DDW55(d)	313	33.6	43.5	37.2	34.5	37.2
Mean			34.8	41.1	34.7	37.7	37.1

Table 33: Grain zinc content (ppm) of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	P.Kheda	Indore	Mean
Irrigated Timely Sown							
<i>T. aestivum</i>							
1	GW513*	105	43.3	34.2	40.8	38.1	39.1
2	HI1636*	106	53.8	41.1	46.5	42.1	45.9
3	GW322 (C)	102	48.8	44.9	42.2	52.5	47.1
4	HI1544 (C)	109	55.6	36.9	43.6	44.9	45.3
5	MP3535	103	45.3	38.3	44.4	44.2	43.1
6	GW523	104	46.3	40.7	40.9	45.0	43.2
7	MACS6768	108	48.9	41.7	53.7	54.7	49.8
8	HI1667B	110	52.1	44.8	55.4	47.4	49.9
9	HI1650	113	60.4	37.2	43.2	47.1	47.0
	Mean		50.5	40.0	45.6	46.2	45.6
<i>T. durum</i>							
1	HI8498(d) (C)	111	50.2	49.1	46.7	53.3	49.8
2	HI8713(d) (C)	112	58.7	45.2	43.2	43.3	47.6
3	HI8833(d)M	101	50.9	47.9	46.3	54.4	49.9
4	HI8832(d)M	107	54.3	44.1	50.0	49.8	49.6
	Mean		53.5	46.6	46.6	50.2	49.2
Irrigated Late Sown							
<i>T. aestivum</i>							
1	MP4010 (C)	201	52.5	41.1	44.0	39.6	44.3
2	HD2864 (C)	202	48.4	36.7	35.9	37.6	39.7
3	MP3336 (C)	203	51.2	33.5	44.0	43.7	43.1
4	HD2932 (C)	204	41.1	37.0	43.1	34.5	38.9
5	HI1634(I) (C)	205	46.2	31.3	40.6	36.9	38.8
6	CG1029(I) (C)	207	46.1	36.4	40.8	39.4	40.7
7	HD3407M	206	39.7	34.0	34.6	36.5	36.2
	Mean		46.5	35.7	40.4	38.3	40.2
Restricted Irrigated Timely Sown							
<i>T. aestivum</i>							
1	DBW110 (C)	311	45.0	59.8	32.0	32.0	42.2
2	MP3288 (C)	312	37.1	53.0	28.5	32.8	37.9
3	GW528	302	41.7	61.0	33.9	43.5	45.0
4	DBW326	304	36.4	51.2	28.1	43.1	39.7
5	NIAW3851	307	39.0	53.8	29.3	32.8	38.7
6	CG1036	309	42.3	51.8	29.9	31.8	39.0
7	HI1655	310	35.4	59.5	26.4	43.6	41.2
	Mean		39.6	55.7	29.7	37.1	40.5
<i>T. durum</i>							
1	HI8823(d)*	301	40.0	53.3	32.4	38.1	41.0
2	DDW47(d) (C)	303	46.6	57.9	33.5	37.5	43.9
3	HI8627(d) (C)	306	45.3	54.3	32.0	40.5	43.0
4	UAS475(d)	305	39.1	52.7	30.7	34.4	39.2
5	HI8830(d)	308	39.4	50.8	27.7	37.2	38.8
6	DDW55(d)	313	45.1	61.2	35.9	34.9	44.3
Mean			42.6	55.0	32.0	37.1	41.7

Table 34: Yellow berry (%) of *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	P.Kheda	Indore	Mean
Irrigated Timely Sown							
<i>T. aestivum</i>							
1	GW513*	105					
2	HI1636*	106					
3	GW322 (C)	102					
4	HI1544 (C)	109					
5	MP3535	103					
6	GW523	104					
7	MACS6768	108					
8	HI1667B	110					
9	HI1650	113					
	Mean						
<i>T. durum</i>							
1	HI8498(d) (C)	111	0	30	0	0	8
2	HI8713(d) (C)	112	0	20	20	20	15
3	HI8833(d)M	101	10	10	10	0	8
4	HI8832(d)M	107	0	20	0	0	5
	Mean		3	20	8	5	9
Irrigated Late Sown							
<i>T. aestivum</i>							
1	MP4010 (C)	201					
2	HD2864 (C)	202					
3	MP3336 (C)	203					
4	HD2932 (C)	204					
5	HI1634(I) (C)	205					
6	CG1029(I) (C)	207					
7	HD3407M	206					
	Mean						
Restricted Irrigated Timely Sown							
<i>T. aestivum</i>							
1	DBW110 (C)	311					
2	MP3288 (C)	312					
3	GW528	302					
4	DBW326	304					
5	NIAW3851	307					
6	CG1036	309					
7	HI1655	310					
	Mean						
<i>T. durum</i>							
1	HI8823(d)*	301	0	10	30	10	13
2	DDW47(d) (C)	303	20	10	50	20	25
3	HI8627(d) (C)	306	0	30	60	10	25
4	UAS475(d)	305	0	30	60	40	33
5	HI8830(d)	308	0	10	20	50	20
6	DDW55(d)	313	0	20	30	60	28
Mean			3	18	42	32	24

Table 35: Grain appearance score (Max-10) of *T. aestivum* and *T. durum* genotypes in Peninsular Zone (PZ) AVTs

S. No.	Entries	Code	Pune	Dharwad	Niphad	Mean
Irrigated Timely Sown						
<i>T. durum</i>						
1	UAS428(d) (C)	102	7.2	6.4	6.0	6.5
2	MACS3949(d) (C)	105	7.6	5.4	6.4	6.5
3	DDW48(d)(I) (C)	114	7.0	6.6	6.2	6.6
4	WHD965(d)	101	7.4	6.6	6.2	6.7
5	HI8826(d)	103	7.0	6.2	6.0	6.4
6	MACS4100(d)	104	6.8	5.8	5.8	6.1
7	DDW53(d)	106	6.8	5.2	6.0	6.0
8	NIDW1345(d)	107	6.2	5.4	6.2	5.9
9	MACS4106(d)	109	6.2	6.2	6.0	6.1
10	NIDW1348(d)	110	7.0	5.6	6.4	6.3
11	HI8828(d)	111	7.8	7.0	6.4	7.1
12	HI8827(d)	113	6.6	6.8	5.8	6.4
	Mean		7.0	6.1	6.1	6.4
<i>T. aestivum</i>						
1	MACS6222 (C)	108	6.4	5.0	6.2	5.9
2	GW322 (C)	112	5.8	5.6	5.6	5.7
	Mean		6.1	5.3	5.9	5.8
Irrigated Late Sown						
<i>T. aestivum</i>						
1	HD3090 (C)	201	6.4	5.2	6.0	5.9
2	HI1633(I) (C)	202	6.6	5.2	6.6	6.1
3	HD2932 (C)	203	7.0	5.2	6.2	6.1
4	RAJ4083 (C)	204	6.8	5.4	6.2	6.1
5	DBW320	205	6.8	5.4	6.2	6.1
6	MACS6774	206	6.8	5.4	6.4	6.2
7	NWS2180#	207	6.6	5.4	6.0	6.0
8	HI1651	208	7.0	5.4	6.4	6.3
	Mean		6.8	5.3	6.3	6.1
Restricted Irrigated Timely Sown						
<i>T. aestivum</i>						
1	MP1358*	301	6.8	6.4	6.4	6.5
2	HI1605 (C)	303	6.6	6.4	6.0	6.3
3	NIAW3170 (C)	307	6.0	5.4	5.2	5.5
4	MACS6755	302	6.2	6.2	6.2	6.2
5	MACS6753	304	6.6	6.0	6.0	6.2
6	DBW325	309	6.2	5.4	6.4	6.0
7	UAS3014	310	5.8	5.2	5.8	5.6
	Mean		6.3	5.9	6.0	6.1
<i>T. durum</i>						
1	AKDW2997-16(d) (C)	305	6.6	5.8	5.6	6.0
2	NIDW1149(d)(I) (C)	306	6.4	6.0	6.0	6.1
3	UAS446(d) (C)	308	6.4	7.4	6.0	6.6
	Mean		6.5	6.4	5.9	6.2

Table 36: Hectolitre weight (Kg/hl) of *T. aestivum* and *T. durum* genotypes in Peninsular Zone (PZ) AVTs

S. No.	Entries	Code	Pune	Dharwad	Niphad	Mean
Irrigated Timely Sown						
<i>T. durum</i>						
1	UAS428(d) (C)	102	83.2	83.5	83.3	83.3
2	MACS3949(d) (C)	105	83.6	81.7	82.4	82.6
3	DDW48(d)(I) (C)	114	83.2	82.6	82.8	82.9
4	WHD965(d)	101	83.5	82.8	83.8	83.4
5	HI8826(d)	103	82.6	82.3	83.0	82.6
6	MACS4100(d)	104	83.0	82.4	83.8	83.1
7	DDW53(d)	106	82.7	81.5	82.7	82.3
8	NIDW1345(d)	107	83.0	82.9	83.6	83.2
9	MACS4106(d)	109	80.2	81.3	82.3	81.3
10	NIDW1348(d)	110	82.4	81.8	83.4	82.5
11	HI8828(d)	111	82.4	82.6	84.3	83.1
12	HI8827(d)	113	81.8	82.4	83.8	82.7
	Mean		82.6	82.3	83.3	82.7
<i>T. aestivum</i>						
1	MACS6222 (C)	108	82.1	81.8	82.9	82.3
2	GW322 (C)	112	80.6	80.7	81.5	80.9
	Mean		81.4	81.3	82.2	81.6
Irrigated Late Sown						
<i>T. aestivum</i>						
1	HD3090 (C)	201	79.8	75.5	81.4	78.9
2	HI1633(I) (C)	202	81.3	78.1	82.6	80.7
3	HD2932 (C)	203	80.8	75.4	81.4	79.2
4	RAJ4083 (C)	204	80.3	76.9	82.4	79.9
5	DBW320	205	80.4	75.8	82.4	79.5
6	MACS6774	206	81.2	77.0	82.0	80.1
7	NWS2180#	207	81.1	76.5	82.5	80.0
8	HI1651	208	81.3	76.6	82.6	80.2
	Mean		80.8	76.5	82.2	79.8
Restricted Irrigated Timely Sown						
<i>T. aestivum</i>						
1	MP1358*	301	79.5	79.6	81.9	80.3
2	HI1605 (C)	303	80.6	82.0	83.5	82.0
3	NIAW3170 (C)	307	78.6	78.0	80.6	79.1
4	MACS6755	302	80.9	80.6	82.9	81.5
5	MACS6753	304	81.1	80.5	82.5	81.4
6	DBW325	309	78.2	78.5	80.9	79.2
7	UAS3014	310	77.4	77.3	80.3	78.3
	Mean		79.5	79.5	81.8	80.3
<i>T. durum</i>						
1	AKDW2997-16(d) (C)	305	79.9	81.3	81.7	81.0
2	NIDW1149(d)(I) (C)	306	79.0	78.7	81.0	79.6
3	UAS446(d) (C)	308	81.3	82.2	82.9	82.1
	Mean		80.1	80.7	81.9	80.9

Table 37: Protein content (%) at 12% moisture basis of *T. aestivum* and *T. durum* genotypes in Peninsular Zone (PZ) AVTs

S. No.	Entries	Code	Pune	Dharwad	Niphad	Mean
Irrigated Timely Sown						
<i>T. durum</i>						
1	UAS428(d) (C)	102	11.4	12.3	10.6	11.4
2	MACS3949(d) (C)	105	10.8	12.3	12.5	11.9
3	DDW48(d)(I) (C)	114	10.9	11.8	11.2	11.3
4	WHD965(d)	101	12.2	12.7	11.9	12.2
5	HI8826(d)	103	10.7	11.6	11.3	11.2
6	MACS4100(d)	104	10.9	11.3	10.5	10.9
7	DDW53(d)	106	11.3	11.9	12.0	11.7
8	NIDW1345(d)	107	11.5	13.0	12.0	12.2
9	MACS4106(d)	109	11.2	11.9	11.5	11.5
10	NIDW1348(d)	110	11.2	11.4	11.3	11.3
11	HI8828(d)	111	11.9	11.7	11.4	11.7
12	HI8827(d)	113	11.6	12.7	11.2	11.8
	Mean		11.3	12.0	11.5	11.6
<i>T. aestivum</i>						
1	MACS6222 (C)	108	12.4	13.5	12.6	12.8
2	GW322 (C)	112	10.9	12.0	11.5	11.4
	Mean		11.7	12.7	12.0	12.1
Irrigated Late Sown						
<i>T. aestivum</i>						
1	HD3090 (C)	201	12.3	13.0	10.4	11.9
2	HI1633(I) (C)	202	13.8	13.5	10.8	12.7
3	HD2932 (C)	203	13.9	14.8	11.8	13.5
4	RAJ4083 (C)	204	13.6	13.1	11.1	12.6
5	DBW320	205	12.8	13.6	10.6	12.3
6	MACS6774	206	12.9	13.1	11.2	12.4
7	NWS2180#	207	11.9	13.2	10.2	11.8
8	HI1651	208	13.3	12.9	10.5	12.2
	Mean		13.1	13.4	10.8	12.4
Restricted Irrigated Timely Sown						
<i>T. aestivum</i>						
1	MP1358*	301	13.1	12.4	12.0	12.5
2	HI1605 (C)	303	13.1	11.7	12.4	12.4
3	NIAW3170 (C)	307	13.8	12.0	12.4	12.7
4	MACS6755	302	12.8	12.0	11.8	12.2
5	MACS6753	304	13.8	12.8	12.4	13.0
6	DBW325	309	12.7	11.4	11.6	11.9
7	UAS3014	310	12.2	10.7	11.8	11.6
	Mean		13.1	11.9	12.0	12.3
<i>T. durum</i>						
1	AKDW2997-16(d) (C)	305	12.4	10.4	11.2	11.3
2	NIDW1149(d)(I) (C)	306	11.9	12.2	11.2	11.8
3	UAS446(d) (C)	308	12.8	11.9	12.4	12.4
	Mean		12.4	11.5	11.6	11.8

Table 38: Sedimentation value (ml) of *T. aestivum* and *T. durum* genotypes in Peninsular Zone (PZ) AVTs

S. No.	Entries	Code	Pune	Dharwad	Niphad	Mean
Irrigated Timely Sown						
<i>T. durum</i>						
1	UAS428(d) (C)	102	35.0	31.5	36.1	34.2
2	MACS3949(d) (C)	105	38.0	40.7	37.3	38.7
3	DDW48(d)(I) (C)	114	30.3	32.3	34.2	32.3
4	WHD965(d)	101	35.3	34.6	36.5	35.5
5	HI8826(d)	103	27.6	28.4	32.6	29.6
6	MACS4100(d)	104	42.3	41.1	38.0	40.5
7	DDW53(d)	106	30.7	37.7	32.3	33.5
8	NIDW1345(d)	107	34.2	34.2	38.0	35.5
9	MACS4106(d)	109	34.2	31.1	33.0	32.8
10	NIDW1348(d)	110	35.7	36.5	36.1	36.1
11	HI8828(d)	111	30.7	35.0	29.6	31.8
12	HI8827(d)	113	30.3	29.6	28.4	29.4
	Mean		33.7	34.4	34.3	34.1
<i>T. aestivum</i>						
1	MACS6222 (C)	108	38.8	38.8	41.1	39.6
2	GW322 (C)	112	38.0	40.7	40.0	39.6
	Mean		38.4	39.8	40.5	39.6
Irrigated Late Sown						
<i>T. aestivum</i>						
1	HD3090 (C)	201	42.7	46.1	41.9	43.6
2	HI1633(I) (C)	202	43.8	42.3	41.1	42.4
3	HD2932 (C)	203	46.1	53.4	47.7	49.1
4	RAJ4083 (C)	204	53.4	55.4	47.3	52.0
5	DBW320	205	47.3	51.5	47.7	48.8
6	MACS6774	206	48.8	57.7	51.9	52.8
7	NWS2180#	207	54.6	57.3	51.1	54.3
8	HI1651	208	38.0	43.0	42.3	41.1
	Mean		46.8	50.8	46.4	48.0
Restricted Irrigated Timely Sown						
<i>T. aestivum</i>						
1	MP1358*	301	47.7	50.7	48.8	49.1
2	HI1605 (C)	303	58.4	53.4	57.3	56.4
3	NIAW3170 (C)	307	48.8	48.0	52.3	49.7
4	MACS6755	302	49.6	52.3	49.6	50.5
5	MACS6753	304	47.3	43.8	45.0	45.4
6	DBW325	309	55.4	48.4	53.4	52.4
7	UAS3014	310	47.7	49.2	57.3	51.4
	Mean		50.7	49.4	52.0	50.7
<i>T. durum</i>						
1	AKDW2997-16(d) (C)	305	40.0	39.6	36.9	38.8
2	NIDW1149(d)(I) (C)	306	32.3	33.8	32.3	32.8
3	UAS446(d) (C)	308	43.0	44.2	45.7	44.3
	Mean		38.4	39.2	38.3	38.6

Table 39: Phenol test (Max-10) of *T. aestivum* and *T. durum* genotypes in Peninsular Zone (PZ) AVTs

S. No.	Entries	Code	Pune	Dharwad	Niphad	Mean
Irrigated Timely Sown						
<i>T. durum</i>						
1	UAS428(d) (C)	102	0.0	0.0	0.0	0.0
2	MACS3949(d) (C)	105	0.0	0.0	0.0	0.0
3	DDW48(d)(I) (C)	114	0.0	0.0	0.0	0.0
4	WHD965(d)	101	0.0	0.0	0.0	0.0
5	HI8826(d)	103	0.0	0.0	0.0	0.0
6	MACS4100(d)	104	0.0	0.0	0.0	0.0
7	DDW53(d)	106	0.0	0.0	0.0	0.0
8	NIDW1345(d)	107	0.0	0.0	0.0	0.0
9	MACS4106(d)	109	0.0	0.0	0.0	0.0
10	NIDW1348(d)	110	0.0	0.0	0.0	0.0
11	HI8828(d)	111	0.0	0.0	0.0	0.0
12	HI8827(d)	113	0.0	0.0	0.0	0.0
	Mean		0.0	0.0	0.0	0.0
<i>T. aestivum</i>						
1	MACS6222 (C)	108	8.0	7.5	8.0	7.8
2	GW322 (C)	112	7.5	7.5	7.0	7.3
	Mean		7.8	7.5	7.5	7.6
Irrigated Late Sown						
<i>T. aestivum</i>						
1	HD3090 (C)	201	9.0	9.0	9.0	9.0
2	HI1633(I) (C)	202	7.5	8.5	8.0	8.0
3	HD2932 (C)	203	4.0	4.5	5.0	4.5
4	RAJ4083 (C)	204	8.0	8.5	8.5	8.3
5	DBW320	205	8.0	8.0	8.0	8.0
6	MACS6774	206	8.5	8.5	8.5	8.5
7	NWS2180#	207	8.0	8.0	8.0	8.0
8	HI1651	208	8.0	7.5	8.0	7.8
	Mean		7.6	7.8	7.9	7.8
Restricted Irrigated Timely Sown						
<i>T. aestivum</i>						
1	MP1358*	301	5.0	5.0	6.5	5.5
2	HI1605 (C)	303	4.0	4.0	6.0	4.7
3	NIAW3170 (C)	307	7.5	6.5	8.0	7.3
4	MACS6755	302	4.5	4.0	5.0	4.5
5	MACS6753	304	5.0	4.0	6.0	5.0
6	DBW325	309	7.0	6.5	8.0	7.2
7	UAS3014	310	7.0	6.5	8.0	7.2
	Mean		5.7	5.2	6.8	5.9
<i>T. durum</i>						
1	AKDW2997-16(d) (C)	305	0.0	0.0	0.0	0.0
2	NIDW1149(d)(I) (C)	306	0.0	0.0	0.0	0.0
3	UAS446(d) (C)	308	0.0	0.0	0.0	0.0
	Mean		0.0	0.0	0.0	0.0

Table 40: Yellow pigment (ppm) of *T. aestivum* and *T. durum* genotypes in Peninsular Zone (PZ) AVTs

S. No.	Entries	Code	Pune	Dharwad	Niphad	Mean
Irrigated Timely Sown						
<i>T. durum</i>						
1	UAS428(d) (C)	102	6.2	6.8	6.3	6.4
2	MACS3949(d) (C)	105	7.0	6.9	6.3	6.7
3	DDW48(d)(I) (C)	114	6.2	5.2	5.7	5.7
4	WHD965(d)	101	6.8	6.4	6.0	6.4
5	HI8826(d)	103	7.5	8.4	6.9	7.6
6	MACS4100(d)	104	7.8	8.0	7.2	7.7
7	DDW53(d)	106	7.7	7.3	6.9	7.3
8	NIDW1345(d)	107	6.4	6.6	6.0	6.3
9	MACS4106(d)	109	6.5	5.5	5.7	5.9
10	NIDW1348(d)	110	5.7	5.3	5.4	5.5
11	HI8828(d)	111	9.5	9.2	8.1	8.9
12	HI8827(d)	113	6.1	5.7	5.4	5.8
	Mean		6.9	6.8	6.3	6.7
<i>T. aestivum</i>						
1	MACS6222 (C)	108				
2	GW322 (C)	112				
	Mean					
Irrigated Late Sown						
<i>T. aestivum</i>						
1	HD3090 (C)	201				
2	HI1633(I) (C)	202				
3	HD2932 (C)	203				
4	RAJ4083 (C)	204				
5	DBW320	205				
6	MACS6774	206				
7	NWS2180#	207				
8	HI1651	208				
	Mean					
Restricted Irrigated Timely Sown						
<i>T. aestivum</i>						
1	MP1358*	301				
2	HI1605 (C)	303				
3	NIAW3170 (C)	307				
4	MACS6755	302				
5	MACS6753	304				
6	DBW325	309				
7	UAS3014	310				
	Mean					
<i>T. durum</i>						
1	AKDW2997-16(d) (C)	305	5.5	4.5	5.1	5.0
2	NIDW1149(d)(I) (C)	306	6.3	5.7	5.8	5.9
3	UAS446(d) (C)	308	7.5	6.0	6.4	6.7
	Mean		6.4	5.4	5.8	5.9

Table 41: Hardness index of *T. aestivum* and *T. durum* genotypes in Peninsular Zone (PZ) AVTs

S. No.	Entries	Code	Pune	Dharwad	Niphad	Mean
Irrigated Timely Sown						
<i>T. durum</i>						
1	UAS428(d) (C)	102	97.6			97.6
2	MACS3949(d) (C)	105	94.3			94.3
3	DDW48(d)(I) (C)	114	92.4			92.4
4	WHD965(d)	101	87.8			87.8
5	HI8826(d)	103	93.5			93.5
6	MACS4100(d)	104	83.0			83.0
7	DDW53(d)	106	92.8			92.8
8	NIDW1345(d)	107	104.5			104.5
9	MACS4106(d)	109	95.6			95.6
10	NIDW1348(d)	110	92.1			92.1
11	HI8828(d)	111	89.1			89.1
12	HI8827(d)	113	99.0			99.0
	Mean		93.5			93.5
<i>T. aestivum</i>						
1	MACS6222 (C)	108	91.5			91.5
2	GW322 (C)	112	79.1			79.1
	Mean		85.3			85.3
Irrigated Late Sown						
<i>T. aestivum</i>						
1	HD3090 (C)	201	80.4			80.4
2	HI1633(I) (C)	202	74.6			74.6
3	HD2932 (C)	203	65.8			65.8
4	RAJ4083 (C)	204	74.7			74.7
5	DBW320	205	67.7			67.7
6	MACS6774	206	78.3			78.3
7	NWS2180#	207	79.1			79.1
8	HI1651	208	73.2			73.2
	Mean		74.2			74.2
Restricted Irrigated Timely Sown						
<i>T. aestivum</i>						
1	MP1358*	301	77.7			77.7
2	HI1605 (C)	303	97.1			97.1
3	NIAW3170 (C)	307	36.0			36.0
4	MACS6755	302	79.2			79.2
5	MACS6753	304	87.9			87.9
6	DBW325	309	84.6			84.6
7	UAS3014	310	75.7			75.7
	Mean		76.9			76.9
<i>T. durum</i>						
1	AKDW2997-16(d) (C)	305	101.3			101.3
2	NIDW1149(d)(I) (C)	306	89.8			89.8
3	UAS446(d) (C)	308	99.3			99.3
	Mean		96.8			96.8

Table 42: Grain iron content (ppm) of *T. aestivum* and *T. durum* genotypes in Peninsular Zone (PZ) AVTs

S. No.	Entries	Code	Pune	Dharwad	Niphad	Mean
Irrigated Timely Sown						
<i>T. durum</i>						
1	UAS428(d) (C)	102	34.0	38.6	35.7	36.1
2	MACS3949(d) (C)	105	35.4	41.3	37.5	38.1
3	DDW48(d)(I) (C)	114	34.8	37.8	36.2	36.3
4	WHD965(d)	101	34.1	39.7	38.7	37.5
5	HI8826(d)	103	32.8	37.4	33.2	34.5
6	MACS4100(d)	104	28.6	37.5	30.9	32.3
7	DDW53(d)	106	33.8	38.3	38.1	36.7
8	NIDW1345(d)	107	34.1	40.1	35.7	36.6
9	MACS4106(d)	109	36.6	39.6	37.2	37.8
10	NIDW1348(d)	110	36.1	38.7	39.6	38.1
11	HI8828(d)	111	35.1	40.8	36.0	37.3
12	HI8827(d)	113	33.0	40.9	33.9	35.9
	Mean		34.0	39.2	36.1	36.4
<i>T. aestivum</i>						
1	MACS6222 (C)	108	36.7	42.5	43.6	40.9
2	GW322 (C)	112	36.1	40.3	31.9	36.1
	Mean		36.4	41.4	37.75	38.5
Irrigated Late Sown						
<i>T. aestivum</i>						
1	HD3090 (C)	201	40.4	36.2	35.8	37.5
2	HI1633(I) (C)	202	41.5	40.0	37.1	39.5
3	HD2932 (C)	203	38.2	35.7	41.6	38.5
4	RAJ4083 (C)	204	43.2	43.2	41.5	42.6
5	DBW320	205	43.2	39.0	35.7	39.3
6	MACS6774	206	43.5	35.6	35.5	38.2
7	NWS2180#	207	38.2	35.3	34.0	35.8
8	HI1651	208	46.5	46.8	44.2	45.8
	Mean		41.8	39.0	38.2	39.7
Restricted Irrigated Timely Sown						
<i>T. aestivum</i>						
1	MP1358*	301	37.5	38.6	39.5	38.5
2	HI1605 (C)	303	38.1	39.1	38.8	38.7
3	NIAW3170 (C)	307	40.9	39.8	39.6	40.1
4	MACS6755	302	37.8	43.3	39.8	40.3
5	MACS6753	304	42.0	45.3	40.8	42.7
6	DBW325	309	39.8	41.0	34.9	38.6
7	UAS3014	310	38.0	38.0	33.0	36.3
	Mean		39.2	40.7	38.1	39.3
<i>T. durum</i>						
1	AKDW2997-16(d) (C)	305	34.9	34.1	33.3	34.1
2	NIDW1149(d)(I) (C)	306	33.8	39.5	36.0	36.4
3	UAS446(d) (C)	308	35.0	37.5	36.9	36.5
	Mean		34.6	37.0	35.4	35.7

Table 43: Grain zinc content (ppm) of *T. aestivum* and *T. durum* genotypes in Peninsular Zone (PZ) AVTs

S. No.	Entries	Code	Pune	Dharwad	Niphad	Mean
Irrigated Timely Sown						
<i>T. durum</i>						
1	UAS428(d) (C)	102	49.6	39.2	40.4	43.1
2	MACS3949(d) (C)	105	42.6	36.5	40.2	39.8
3	DDW48(d)(I) (C)	114	40.0	34.4	44.9	39.8
4	WHD965(d)	101	50.1	36.8	42.9	43.3
5	HI8826(d)	103	44.9	38.8	39.0	40.9
6	MACS4100(d)	104	36.6	35.9	31.7	34.7
7	DDW53(d)	106	42.7	34.5	37.4	38.2
8	NIDW1345(d)	107	44.1	40.7	38.6	41.1
9	MACS4106(d)	109	49.8	37.9	40.3	42.7
10	NIDW1348(d)	110	44.9	34.4	43.3	40.9
11	HI8828(d)	111	46.9	35.0	40.3	40.7
12	HI8827(d)	113	45.3	35.9	44.3	41.8
	Mean		44.8	36.7	40.3	40.6
<i>T. aestivum</i>						
1	MACS6222 (C)	108	46.9	36.2	43.4	42.2
2	GW322 (C)	112	45.0	34.7	35.5	38.4
	Mean		46.0	35.5	39.5	40.3
Irrigated Late Sown						
<i>T. aestivum</i>						
1	HD3090 (C)	201	46.9	41.5	31.5	40.0
2	HI1633(I) (C)	202	47.4	43.7	34.9	42.0
3	HD2932 (C)	203	49.0	42.8	39.0	43.6
4	RAJ4083 (C)	204	54.8	39.0	42.1	45.3
5	DBW320	205	47.9	39.1	30.7	39.2
6	MACS6774	206	44.7	34.6	29.9	36.4
7	NWS2180#	207	48.7	39.5	30.6	39.6
8	HI1651	208	53.2	39.2	40.1	44.2
	Mean		49.1	39.9	34.9	41.3
Restricted Irrigated Timely Sown						
<i>T. aestivum</i>						
1	MP1358*	301	43.5	29.9	37.5	37.0
2	HI1605 (C)	303	46.8	37.5	37.8	40.7
3	NIAW3170 (C)	307	51.6	35.2	34.5	40.4
4	MACS6755	302	51.0	40.9	36.2	42.7
5	MACS6753	304	50.7	40.2	36.9	42.6
6	DBW325	309	47.3	32.0	36.1	38.5
7	UAS3014	310	47.5	31.3	39.0	39.3
	Mean		48.3	35.3	36.9	40.2
<i>T. durum</i>						
1	AKDW2997-16(d) (C)	305	44.9	35.8	34.1	38.3
2	NIDW1149(d)(I) (C)	306	49.6	37.9	31.4	39.6
3	UAS446(d) (C)	308	47.7	34.2	38.6	40.2
	Mean		47.4	36.0	34.7	39.4

Table 44: Yellow berry (%) of *T. durum* genotypes in Peninsular Zone (PZ) AVTs

S. No.	Entries	Code	Pune	Dharwad	Niphad	Mean
Irrigated Timely Sown						
<i>T. durum</i>						
1	UAS428(d) (C)	102	40	10	40	30
2	MACS3949(d) (C)	105	20	30	20	23
3	DDW48(d)(I) (C)	114	10	20	30	20
4	WHD965(d)	101	20	20	20	20
5	HI8826(d)	103	50	20	40	37
6	MACS4100(d)	104	60	50	50	53
7	DDW53(d)	106	20	40	20	27
8	NIDW1345(d)	107	30	20	30	27
9	MACS4106(d)	109	20	40	40	33
10	NIDW1348(d)	110	30	50	10	30
11	HI8828(d)	111	10	10	10	10
12	HI8827(d)	113	20	20	50	30
	Mean		28	28	30	28
<i>T. aestivum</i>						
1	MACS6222 (C)	108				
2	GW322 (C)	112				
	Mean					
Irrigated Late Sown						
<i>T. aestivum</i>						
1	HD3090 (C)	201				
2	HI1633(I) (C)	202				
3	HD2932 (C)	203				
4	RAJ4083 (C)	204				
5	DBW320	205				
6	MACS6774	206				
7	NWS2180#	207				
8	HI1651	208				
	Mean					
Restricted Irrigated Timely Sown						
<i>T. aestivum</i>						
1	MP1358*	301				
2	HI1605 (C)	303				
3	NIAW3170 (C)	307				
4	MACS6755	302				
5	MACS6753	304				
6	DBW325	309				
7	UAS3014	310				
	Mean					
<i>T. durum</i>						
1	AKDW2997-16(d) (C)	305	10	30	10	17
2	NIDW1149(d)(I) (C)	306	20	20	20	20
3	UAS446(d) (C)	308	10	10	10	10
	Mean		13	20	13	16

HMW glutenin subunit profiles of AVTs

Table 45: High molecular weight glutenin subunits of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVTs

S. No.	Entries	Code	Glu-D1	Glu-A1	Glu-B1	Score
Irrigated Timely Sown						
1	HPW349 (C)	2001	5+10	1	7	8
2	VL907 (C)	2003	5+10	1	17+18	10
3	HS507 (C)	2004	5+10	1	7	8
4	HS562 (C)	2005	5+10	1	17+18	10
Rainfed Timely Sown						
1	HS562 (C)	2002	5+10	1	17+18	10
2	HPW349 (C)	2003	5+10	1	7	8
3	HS507 (C)	2004	5+10	1	7	8
4	VL907 (C)	2005	5+10	1	17+18	10

Table 46: High molecular weight glutenin subunits of *T. aestivum* genotypes in North Western Plains Zone (NWPZ) AVTs

S. No.	Entries	Code	Glu-D1	Glu-A1	Glu-B1	Score
Irrigated Timely Sown						
1	WH1105 (C)	101	5+10	2*	7	8
2	DBW187 (C)	102	5+10	2*	17+18	10
3	DBW222 (C)	106	5+10	2*	17+18	10
4	HD2967 (C)	108	5+10	2*	17+18	10
5	HD3086 (C)	113	5+10	1	17+18	10
Irrigated Late Sown						
1	JKW261*	201	5+10	N	7	6
2	WH1124 (C)	202	5+10	1	17+18	10
3	PBW771 (C)	203	5+10	N	7+9	7
4	HD3059 (C)	204	5+10	2*	17+18	10
5	DBW173 (C)	206	5+10	2*	17+18	10
Restricted Irrigated Timely Sown						
1	HUW838#*	301	5+10	N	7	6
2	DBW296*	308	5+10	2*	13+16	10
3	NIAW3170 (C)	306	2+10	N	17+18	6
4	HI1628 (C)	309	5+10	2*	7	8
5	WH1142 (C)	311	5+10	1	17+18	10
6	HD3043 (C)	314	5+10	2*	7	8
7	PBW644 (C)	315	2+10	1	7+8	8

Table 47: High molecular weight glutenin subunits of *T. aestivum* genotypes in North Eastern Plains Zone (NEPZ) AVTs

S. No.	Entries	Code	Glu-D1	Glu-A1	Glu-B1	Score
Irrigated Timely Sown						
1	HD2733 (C)	101	5+10	2*	7+9	9
2	HD3249 (C)	102	5+10	N	17+18	8
3	DBW187 (C)	103	5+10	2*	17+18	10
4	DBW39 (C)	106	5+10	2*	7+9	9
5	HD2967 (C)	107	5+10	2*	17+18	10
6	HD3086 (C)	109	5+10	1	17+18	10
Irrigated Late Sown						
1	HI1563 (C)	204	2+12	2*	7+8	8
2	DBW107 (C)	205	2+12	2*	7+8	8
3	HD3118 (C)	208	5+10	2*	7	8
4	HI1621 (C)	209	5+10	N	17+18	8
Restricted Irrigated Timely Sown						
1	HI1612 (C)	303	5+10	2*	7	8
2	DBW252 (C)	304	5+10	N	7	6
3	HD3293(I) (C)	308	5+10	2*	7	8
4	HD3171 (C)	311	5+10	2*	7	8
5	K1317 (C)	313	2+12	N	7	4

Table 48: High molecular weight glutenin subunits of *T. aestivum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Glu-D1	Glu-A1	Glu-B1	Score
Irrigated Timely Sown						
1	GW513*	105	5+10	N	17+18	8
2	HI1636*	106	2+12	N	7+8	6
3	GW322 (C)	102	2+12	2*	7+8	8
4	HI1544 (C)	109	2+12	N	7+8	6
Irrigated Late Sown						
1	MP4010 (C)	201				
2	HD2864 (C)	202	2+12	1	7+8	8
3	MP3336 (C)	203	2+12	2*	7+8	8
4	HD2932 (C)	204	2+12	2*	17+18	8
5	HI1634(I) (C)	205	5+10	2*	7	8
6	CG1029(I) (C)	207	2+12	2*	7+8	8
Restricted Irrigated Timely Sown						
1	DBW110 (C)	311	5+10	1	7	8
2	MP3288 (C)	312	2+12	2*	7+9	7

Table 49: High molecular weight glutenin subunits of *T. aestivum* genotypes in Peninsular Zone (PZ) AVTs

S. No.	Entries	Code	Glu-D1	Glu-A1	Glu-B1	Score
Irrigated Timely Sown						
1	MACS6222 (C)	108	2+12	2*	7+9	7
2	GW322 (C)	112	2+12	2*	7+8	8
Irrigated Late Sown						
1	HD3090 (C)	201	5+10	1	7	8
2	HI1633(I) (C)	202	5+10	2*	7	8
3	HD2932 (C)	203	2+12	2*	17+18	8
4	RAJ4083 (C)	204	5+10	1	7+8	10
Restricted Irrigated Timely Sown						
1	MP1358*	301	5+10	2*	7+8	10
2	HI1605 (C)	303	5+10	2*	7	8
3	NIAW3170 (C)	307	2+12	N	17+18	6

Table 50: High molecular weight glutenin subunits of *T. aestivum* genotypes of SPL-HYPT trial

S. No.	Entries	Code	Glu-D1	Glu-A1	Glu-B1	Score
1	DBW 328*	101	5+10	N	17+18	8
2	DBW 327*	104	5+10	N	7+9	7
3	WH 1252*	105	5+10	N	7	6
4	DBW 332*	108	5+10	N	7+9	7
5	DBW 333*	112	5+10	N	7	6
6	HD 3086 (C)	111	5+10	1	17+18	10
7	DBW 187 (I) (C)	114	5+10	2*	17+18	10
8	WH 1270 (I) (C)	115	5+10	2*	7	8
9	DBW 303 (I) (C)	116	5+10	2*	7	8

SECTION B

SPECIAL TRIALS

- i. HYPT and CI-HYT**
- ii. Dicocum Trial**
- iii. Alkalinity/Salinity Trial**

SPECIAL TRIALS

High Yield Potential Trial (HYPT) (Tables 1 - 16)

Under this trial, Sixteen entries including three checks from five centres (Karnal, Ludhiana, Pantnagar, Delhi and Hisar) in **NWPZ** and 3 centres in **CZ** were evaluated for grain appearance, hectolitre weight, protein content, sedimentation value, hardness index, phenol test and Iron & Zinc content.

CI-HYT (Tables 17-26)

Under this trial, twenty five entries including two checks from five centres (Karnal, Ludhiana, Pantnagar, Delhi and Hisar) in **NWPZ** and 3 centres in **CZ** were evaluated for grain appearance, hectolitre weight, protein content, sedimentation value, hardness index, phenol test.

***Dicoccum* Trial (Tables 27-32)**

Six dicoccum entries along with three checks from five centres of PZ namely Dharwad, Pune, Niphad, Ugar and Mudhal were analysed for 1000 grain weight (TGW), protein content, sedimentation value and yellow pigments content.

Alkalinity/Salinity Trial (Tables 33-40)

Under this trial, eleven entries including three checks from four centres (Karnal, Panipat, Ayodhya and Hisar) were evaluated for grain appearance, hectolitre weight, protein content, sedimentation value, hardness index, phenol test and 3 centres for Fe and Zn content.

HYPT Trial.

Table 1: Grain appearance score (Max-10) of *T. aestivum* genotypes of SPL-HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Karnal	Pantnagar	Delhi	Mean
1	DBW328*	101	5.4	5.8	6.2	6.0	6.4	6.0
2	DBW327*	104	5.6	6.4	6.2	6.0	6.6	6.2
3	WH1252*	105	5.4	5.6	5.2	5.8	6.0	5.6
4	DBW332*	108	5.2	5.4	5.2	5.8	5.6	5.4
5	DBW333*	112	5.4	5.6	6.2	6.2	6.2	5.9
6	HD3086 (C)	111	5.4	5.8	6.0	6.0	6.4	5.9
7	DBW187(I) (C)	114	4.8	5.6	5.4	6.0	6.2	5.6
8	WH1270(I) (C)	115	4.8	5.8	5.6	6.2	6.6	5.8
9	DBW303(I) (C)	116	5.0	5.4	5.6	6.2	6.2	5.7
10	DBW372	102	5.4	5.8	5.8	6.0	6.6	5.9
11	DBW370	103	5.4	5.8	5.6	5.8	6.4	5.8
12	PBW874	106	4.8	5.4	5.6	6.0	5.4	5.4
13	HD3410	107	5.2	5.4	5.2	6.2	5.4	5.5
14	PBW873	109	5.2	5.4	5.2	6.0	5.8	5.5
15	DBW371	110	5.0	5.8	6.4	6.2	6.2	5.9
16	PBW872	113	5.4	5.6	6.2	6.2	6.2	5.9
	Mean		5.2	5.7	5.7	6.0	6.1	5.8

Table 2: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes of SPL-HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Karnal	Pantnagar	Delhi	Mean
1	DBW328*	101	80.7	80.6	81.4	81.6	81.3	81.1
2	DBW327*	104	79.6	82.4	81.8	81.0	81.5	81.3
3	WH1252*	105	78.4	78.2	78.0	80.7	79.0	78.9
4	DBW332*	108	76.4	78.9	79.9	79.5	78.4	78.6
5	DBW333*	112	79.3	80.5	80.7	80.7	79.6	80.2
6	HD3086 (C)	111	78.0	80.6	80.9	79.5	80.5	79.9
7	DBW187(I) (C)	114	77.5	78.3	77.9	79.6	79.8	78.6
8	WH1270(I) (C)	115	78.1	82.1	81.8	81.1	82.4	81.1
9	DBW303(I) (C)	116	79.5	81.0	80.9	82.1	82.2	81.1
10	DBW372	102	78.6	81.6	81.9	82.3	82.0	81.3
11	DBW370	103	78.1	79.2	78.8	79.4	79.1	78.9
12	PBW874	106	77.7	78.6	81.3	81.6	77.2	79.3
13	HD3410	107	74.3	76.3	76.0	78.0	73.7	75.7
14	PBW873	109	78.8	78.5	80.6	81.1	81.3	80.1
15	DBW371	110	79.3	80.1	80.1	81.7	81.6	80.6
16	PBW872	113	80.4	80.8	80.0	81.4	82.2	81.0
	Mean		78.4	79.9	80.1	80.7	80.1	79.8

Table 3: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes of SPL-HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Karnal	Pantnagar	Delhi	Mean
1	DBW328*	101	12.0	14.0	12.2	13.3	13.2	12.9
2	DBW327*	104	12.2	12.0	13.0	12.3	12.6	12.4
3	WH1252*	105	11.6	12.9	12.6	10.7	12.5	12.1
4	DBW332*	108	12.3	12.4	12.5	12.6	13.4	12.6
5	DBW333*	112	12.5	13.7	13.1	11.9	13.4	12.9
6	HD3086 (C)	111	13.1	13.1	12.4	12.7	12.7	12.8
7	DBW187(I) (C)	114	13.1	13.7	13.4	12.7	13.5	13.3
8	WH1270(I) (C)	115	12.2	12.4	12.0	11.6	12.9	12.3
9	DBW303(I) (C)	116	13.4	12.7	14.1	13.2	13.2	13.3
10	DBW372	102	12.0	12.4	11.9	11.2	13.8	12.3
11	DBW370	103	11.9	12.0	12.4	12.1	12.8	12.2
12	PBW874	106	13.0	13.6	13.1	13.8	15.0	13.7
13	HD3410	107	10.8	11.6	10.9	12.1	13.3	11.7
14	PBW873	109	11.6	13.8	12.4	11.1	12.8	12.3
15	DBW371	110	12.0	13.3	13.0	13.3	13.2	12.9
16	PBW872	113	11.7	12.4	11.5	11.6	11.3	11.7
	Entries	Code	12.2	12.9	12.5	12.3	13.1	12.6

Table 4: Sedimentation value (ml) of *T. aestivum* genotypes of SPL-HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Karnal	Pantnagar	Delhi	Mean
1	DBW328*	101	59.2	61.1	65.0	57.3	55.4	59.6
2	DBW327*	104	57.3	50.0	53.4	51.5	53.4	53.1
3	WH1252*	105	52.7	58.1	55.4	53.4	61.1	56.1
4	DBW332*	108	55.4	61.1	55.0	57.3	62.7	58.3
5	DBW333*	112	51.5	55.7	53.4	51.1	54.6	53.3
6	HD3086 (C)	111	52.3	50.0	48.0	51.5	49.6	50.3
7	DBW187(I) (C)	114	68.1	64.2	68.4	57.3	62.7	64.1
8	WH1270(I) (C)	115	50.7	47.7	51.5	47.7	49.6	49.4
9	DBW303(I) (C)	116	55.0	51.5	60.4	49.6	50.0	53.3
10	DBW372	102	49.6	50.7	48.0	45.7	57.3	50.3
11	DBW370	103	48.0	53.8	51.5	57.3	52.7	52.7
12	PBW874	106	52.7	54.6	50.4	53.8	58.1	53.9
13	HD3410	107	46.9	49.6	45.0	46.9	51.9	48.0
14	PBW873	109	52.7	65.0	51.1	51.1	55.0	55.0
15	DBW371	110	53.4	52.7	52.3	51.9	52.3	52.5
16	PBW872	113	55.4	49.6	50.4	50.4	49.6	51.0
	Mean		53.8	54.7	53.7	52.1	54.7	53.8

Table 5: Hardness index of *T. aestivum* genotypes of SPL-HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Karnal	Pantnagar	Delhi	Mean
1	DBW328*	101			75.3			75.3
2	DBW327*	104			72.2			72.2
3	WH1252*	105			80.5			80.5
4	DBW332*	108			71.3			71.3
5	DBW333*	112			64.1			64.1
6	HD3086 (C)	111			77.9			77.9
7	DBW187(I) (C)	114			78.1			78.1
8	WH1270(I) (C)	115			80.1			80.1
9	DBW303(I) (C)	116			72.8			72.8
10	DBW372	102			75.6			75.6
11	DBW370	103			75.6			75.6
12	PBW874	106			77.6			77.6
13	HD3410	107			81.3			81.3
14	PBW873	109			71.2			71.2
15	DBW371	110			74.2			74.2
16	PBW872	113			75.4			75.4
	Mean				75.2			75.2

Table 6: Phenol test score (Max-10) of *T. aestivum* genotypes of SPL-HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Karnal	Pantnagar	Delhi	Mean
1	DBW328*	101	7.5	7.0	8.0	8.0	7.5	7.6
2	DBW327*	104	7.5	7.5	7.0	7.5	7.5	7.4
3	WH1252*	105	7.0	8.0	7.0	7.0	7.5	7.3
4	DBW332*	108	6.0	7.0	7.0	7.0	6.5	6.7
5	DBW333*	112	5.5	6.5	6.0	6.5	8.0	6.5
6	HD3086 (C)	111	5.5	7.0	8.0	7.5	8.0	7.2
7	DBW187(I) (C)	114	6.0	8.0	8.0	7.5	8.5	7.6
8	WH1270(I) (C)	115	5.5	7.5	7.0	6.5	7.0	6.7
9	DBW303(I) (C)	116	6.0	8.0	7.5	7.5	7.0	7.2
10	DBW372	102	7.5	6.5	7.0	6.5	8.0	7.1
11	DBW370	103	4.5	4.0	3.0	3.0	4.5	3.8
12	PBW874	106	8.0	8.5	7.0	7.5	8.5	7.9
13	HD3410	107	7.5	7.0	6.5	7.5	7.5	7.2
14	PBW873	109	7.0	8.0	7.0	7.0	8.5	7.5
15	DBW371	110	4.5	3.0	2.0	2.0	3.0	2.9
16	PBW872	113	6.0	7.5	7.5	6.5	8.0	7.1
	Mean		6.3	6.9	6.6	6.6	7.2	6.7

Table 7: Grain iron content (ppm) of *T. aestivum* genotypes of SPL-HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Karnal	Pantnagar	Delhi	Mean
1	DBW328*	101	40.2	40.5	38.3	37.6	33.0	37.9
2	DBW327*	104	41.0	45.2	37.5	39.8	36.0	39.9
3	WH1252*	105	37.4	40.3	38.1	37.5	37.0	38.1
4	DBW332*	108	42.2	46.9	37.3	39.0	37.5	40.6
5	DBW333*	112	44.4	42.5	41.6	40.6	39.7	41.8
6	HD3086 (C)	111	44.3	49.5	40.2	41.0	35.2	42.0
7	DBW187(I) (C)	114	41.3	39.1	39.2	36.0	35.0	38.1
8	WH1270(I) (C)	115	42.2	42.2	35.1	42.5	35.1	39.4
9	DBW303(I) (C)	116	39.8	40.1	32.7	35.6	32.2	36.1
10	DBW372	102	37.4	42.0	37.8	38.8	33.0	37.8
11	DBW370	103	40.8	39.8	33.5	43.3	34.0	38.3
12	PBW874	106	40.7	43.0	34.6	44.8	38.6	40.3
13	HD3410	107	33.0	39.0	34.7	38.3	33.7	35.7
14	PBW873	109	35.9	38.8	34.9	37.7	36.3	36.7
15	DBW371	110	49.5	41.7	45.7	50.2	38.0	45.0
16	PBW872	113	39.4	45.6	34	35.3	36.2	38.1
	Mean		40.6	42.3	37.2	39.9	35.7	39.1

Table 8: Grain zinc content (ppm) of *T. aestivum* genotypes of SPL-HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Karnal	Pantnagar	Delhi	Mean
1	DBW328*	101	33.6	41.9	43.3	48.9	31.0	39.7
2	DBW327*	104	36.4	41.0	47.0	43.7	40.5	41.7
3	WH1252*	105	32.0	44.9	44.7	45.0	26.5	38.6
4	DBW332*	108	32.5	34.8	35.5	47.2	34.4	36.9
5	DBW333*	112	41.7	37.2	52.2	54.5	34.5	44.0
6	HD3086 (C)	111	33.1	48.6	47.9	54.7	38.3	44.5
7	DBW187(I) (C)	114	29.8	36.3	45.2	45.3	33.1	37.9
8	WH1270(I) (C)	115	37.7	44.7	50.0	52.7	40.5	45.1
9	DBW303(I) (C)	116	36.8	43.3	39.3	54.7	33.1	41.4
10	DBW372	102	34.1	43.3	46.7	46.4	33.3	40.8
11	DBW370	103	28.0	38.4	38.9	49.7	23.4	35.7
12	PBW874	106	36.8	49.8	46.1	56.3	39.6	45.7
13	HD3410	107	26.2	31.2	36.4	37.2	30.8	32.4
14	PBW873	109	32.2	37.0	41.5	51.6	36.5	39.8
15	DBW371	110	37.8	39.8	43.5	56.4	32.8	42.1
16	PBW872	113	33.4	44.8	39.2	42.6	36.3	39.3
	Mean		33.9	41.1	43.6	49.2	33.7	40.3

CZ SPL-HYPT

Table 9: Grain appearance score (Max-10) of *T. aestivum* genotypes of SPL-HYPT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	DBW328*	101	6.2	5.4	5.8	5.8
2	DBW327*	104	6.6	5.2	6.0	5.9
3	WH1252*	105	6.4	4.8	5.6	5.6
4	DBW332*	108	6.6	4.8	5.4	5.6
5	DBW333*	112	6.0	5.4	6.2	5.9
6	HD3086 (C)	111	7.0	5.2	6.2	6.1
7	DBW187(I) (C)	114	6.0	5.5	6.0	5.8
8	WH1270(I) (C)	115	6.0	5.2	6.2	5.8
9	DBW303(I) (C)	116	6.0	5.2	6.2	5.8
10	DBW372	102	5.6	5.4	5.8	5.6
11	DBW370	103	6.6	5.4	5.4	5.8
12	PBW874	106	5.6	5.4	5.2	5.4
13	HD3410	107	5.6	4.8	5.0	5.1
14	PBW873	109	6.0	5.0	6.0	5.7
15	DBW371	110	6.8	5.2	6.2	6.1
16	PBW872	113	6.4	5.4	6.2	6.0
	Mean		6.2	5.2	5.8	5.8

Table 10: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes of SPL-HYPT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	DBW328*	101	82.9	79.1	80.4	80.8
2	DBW327*	104	81.6	80.3	80.4	80.8
3	WH1252*	105	79.9	76.6	79.9	78.8
4	DBW332*	108	81.3	76.8	78.7	78.9
5	DBW333*	112	80.0	79.3	80.4	79.9
6	HD3086 (C)	111	82.0	80.7	80.4	81.0
7	DBW187(I) (C)	114	80.6	79.3	79.9	79.9
8	WH1270(I) (C)	115	80.9	79.5	81.5	80.6
9	DBW303(I) (C)	116	81.9	79.8	82.3	81.3
10	DBW372	102	80.0	79.8	78.6	79.5
11	DBW370	103	81.1	77.0	77.4	78.5
12	PBW874	106	81.0	80.4	80.3	80.6
13	HD3410	107	78.0	76.8	71.3	75.4
14	PBW873	109	80.0	78.5	80.7	79.7
15	DBW371	110	82.0	78.7	78.6	79.8
16	PBW872	113	81.0	78.5	80.2	79.9
	Mean		80.9	78.8	79.4	79.7

Table 11: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes of SPL-HYPT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	DBW328*	101	14.1	13.2	12.4	13.2
2	DBW327*	104	11.8	11.9	11.2	11.6
3	WH1252*	105	11.7	12.9	11.2	12.0
4	DBW332*	108	13.2	13.4	12.5	13.0
5	DBW333*	112	13.4	12.9	11.7	12.7
6	HD3086 (C)	111	12.4	12.5	11.4	12.1
7	DBW187(I) (C)	114	13.9	13.6	11.7	13.1
8	WH1270(I) (C)	115	12.8	12.6	11.4	12.3
9	DBW303(I) (C)	116	13.4	12.3	11.5	12.4
10	DBW372	102	13.5	13.0	12.4	13.0
11	DBW370	103	12.6	12.1	11.3	12.0
12	PBW874	106	13.9	12.8	12.8	13.1
13	HD3410	107	11.9	13.1	12.7	12.6
14	PBW873	109	13.8	13.6	12.4	13.3
15	DBW371	110	12.7	13.0	11.9	12.5
16	PBW872	113	12.6	12.7	11.3	12.2
	Mean		13.0	12.9	11.9	12.6

Table 12: Sedimentation value (ml) of *T. aestivum* genotypes of SPL-HYPT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	DBW328*	101	51.5	59.2	58.4	56.4
2	DBW327*	104	46.1	50.4	47.3	47.9
3	WH1252*	105	46.1	58.8	50.7	51.9
4	DBW332*	108	61.9	63.4	59.2	61.5
5	DBW333*	112	61.1	57.3	51.5	56.6
6	HD3086 (C)	111	54.2	56.1	48.4	52.9
7	DBW187(I) (C)	114	65.8	65.0	55.7	62.2
8	WH1270(I) (C)	115	51.5	49.6	50.0	50.4
9	DBW303(I) (C)	116	50.4	55.4	49.6	51.8
10	DBW372	102	47.7	53.4	50.0	50.4
11	DBW370	103	45.0	49.6	49.6	48.0
12	PBW874	106	66.9	51.5	49.6	56.0
13	HD3410	107	55.7	50.4	49.6	51.9
14	PBW873	109	53.4	50.4	48.0	50.6
15	DBW371	110	49.6	52.7	50.4	50.9
16	PBW872	113	50.4	48.4	45.7	48.2
	Mean		53.6	54.5	50.9	53.0

Table 13: Hardness index of *T. aestivum* genotypes of SPL-HYPT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	DBW328*	101	55.7			55.7
2	DBW327*	104	67.2			67.2
3	WH1252*	105	67.0			67.0
4	DBW332*	108	66.1			66.1
5	DBW333*	112	60.6			60.6
6	HD3086 (C)	111	56.8			56.8
7	DBW187(I) (C)	114	61.9			61.9
8	WH1270(I) (C)	115	63.6			63.6
9	DBW303(I) (C)	116	63.5			63.5
10	DBW372	102	70.0			70.0
11	DBW370	103	68.6			68.6
12	PBW874	106	71.2			71.2
13	HD3410	107	80.8			80.8
14	PBW873	109	68.1			68.1
15	DBW371	110	70.1			70.1
16	PBW872	113	64.3			64.3
	Mean		66.0			66.0

Table 14: Phenol test score (Max-10) of *T. aestivum* genotypes of SPL-HYPT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	DBW328*	101	8.0	7.0	8.5	7.8
2	DBW327*	104	7.5	8.0	7.5	7.7
3	WH1252*	105	7.5	7.0	7.5	7.3
4	DBW332*	108	7.0	6.5	7.5	7.0
5	DBW333*	112	7.0	7.0	7.5	7.2
6	HD3086 (C)	111	4.0	7.0	7.0	6.0
7	DBW187(I) (C)	114	7.5	7.5	7.0	7.3
8	WH1270(I) (C)	115	6.5	6.5	7.0	6.7
9	DBW303(I) (C)	116	6.5	7.0	8.0	7.2
10	DBW372	102	7.0	7.0	7.0	7.0
11	DBW370	103	5.0	5.5	4.0	4.8
12	PBW874	106	8.5	7.0	8.0	7.8
13	HD3410	107	7.5	6.5	7.0	7.0
14	PBW873	109	7.0	6.0	7.5	6.8
15	DBW371	110	7.0	4.5	4.0	5.2
16	PBW872	113	7.0	7.0	7.0	7.0
	Mean		6.9	6.7	7.0	6.9

Table 15: Grain iron content (ppm) of *T. aestivum* genotypes of SPL-HYPT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	DBW328*	101	47.4	43.0	33.3	41.2
2	DBW327*	104	38.8	46.1	34.3	39.7
3	WH1252*	105	45.4	42.5	31.3	39.7
4	DBW332*	108	42.1	46.0	37.1	41.7
5	DBW333*	112	44.3	44.8	31.4	40.2
6	HD3086 (C)	111	46.9	41.7	30.2	39.6
7	DBW187(I) (C)	114	40.1	44.8	32.2	39.0
8	WH1270(I) (C)	115	40.0	45.6	35.1	40.2
9	DBW303(I) (C)	116	45.3	39.3	28.9	37.8
10	DBW372	102	40.1	43.1	32.8	38.7
11	DBW370	103	44.4	39.5	35.0	39.6
12	PBW874	106	42.4	37.7	37.6	39.2
13	HD3410	107	36.7	42.4	32.8	37.3
14	PBW873	109	40.5	41.0	32.1	37.9
15	DBW371	110	42.1	45.8	39.5	42.5
16	PBW872	113	39.9	42.0	31.4	37.8
	Mean		42.3	42.8	33.2	39.5

Table 16: Grain zinc content (ppm) of *T. aestivum* genotypes of SPL-HYPT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	DBW328*	101	47.5	40.6	42.2	43.4
2	DBW327*	104	35.2	39.6	45.8	40.2
3	WH1252*	105	43.1	42.8	44.0	43.3
4	DBW332*	108	42.4	37.4	47.4	42.4
5	DBW333*	112	44.3	42.3	40.1	42.2
6	HD3086 (C)	111	40.3	40.1	37.0	39.1
7	DBW187(I) (C)	114	42.1	45.1	32.7	40.0
8	WH1270(I) (C)	115	43.0	44.6	43.8	43.8
9	DBW303(I) (C)	116	45.7	31.7	41.5	39.6
10	DBW372	102	41.1	37.8	45.2	41.4
11	DBW370	103	43.6	41.2	40.6	41.8
12	PBW874	106	45.7	44.9	46.2	45.6
13	HD3410	107	34.4	36.9	40.6	37.3
14	PBW873	109	47.1	42.9	46.5	45.5
15	DBW371	110	45.3	37.2	45.2	42.6
16	PBW872	113	40.7	36.9	45.4	41.0
	Mean		42.6	40.1	42.8	41.8

SPL CI-HYT Trial

Table 17: Grain appearance score (Max-10) of *T. aestivum* genotypes of SPL-HYT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Pantnagar	Delhi	Mean
1	HD3086 (C)	218	5.2	5.6	5.8	5.8	5.6
2	DBW187(I) (C)	222	5.4	5.6	5.8	6.2	5.8
3	HD3412	201	4.6	5.2	5.8	5.0	5.2
4	DBW375	202	4.8	6.2	5.8	5.8	5.7
5	DBW374	203	5.4	5.8	6.0	5.6	5.7
6	HD3403	204	5.0	5.6	5.6	5.2	5.4
7	WH1406	205	4.8	5.6	6.0	5.4	5.5
8	HD3413	206	5.0	5.6	5.8	5.8	5.6
9	PBW867	207	5.2	5.8	6.0	5.6	5.7
10	UP3096	208	4.8	5.8	5.8	5.4	5.5
11	WH1404	209	5.0	5.4	5.8	5.2	5.4
12	PBW868	210	5.0	5.6	5.8	5.2	5.4
13	DBW318	211	5.2	5.6	6.0	5.8	5.7
14	DBW378	212	5.2	5.4	5.8	5.4	5.5
15	WH1405	213	5.4	5.2	5.8	5.6	5.5
16	HD3405	214	5.2	5.6	5.8	5.2	5.5
17	DBW377	215	5.4	5.4	5.8	5.4	5.5
18	PBW869	216	5.0	5.4	6.0	5.4	5.5
19	PBW871	217	5.2	5.8	6.0	5.8	5.7
20	DBW376	219	5.0	5.6	5.8	6.2	5.7
21	DBW373	220	4.8	5.8	5.8	6.0	5.6
22	HD3404	221	5.0	5.8	5.8	6.2	5.7
23	WH1407	223	5.0	5.6	5.8	5.8	5.6
24	PBW870	224	5.0	5.2	6.0	6.0	5.6
25	UP3095	225	5.0	5.2	5.8	5.0	5.3
	Mean		5.1	5.6	5.8	5.6	5.5

Table 18: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes of SPL-HYT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Pantnagar	Delhi	Mean
1	HD3086 (C)	218	77.9	80.0	77.9	79.1	78.7
2	DBW187(I) (C)	222	78.3	79.7	79.1	77.7	78.7
3	HD3412	201	73.1	78.4	79.7	76.2	76.9
4	DBW375	202	73.4	80.0	78.3	78.3	77.5
5	DBW374	203	77.7	78.7	79.5	78.0	78.5
6	HD3403	204	77.1	80.0	79.5	78.0	78.7
7	WH1406	205	75.9	78.9	79.6	77.2	77.9
8	HD3413	206	77.4	79.9	79.2	80.0	79.1
9	PBW867	207	78.7	79.4	80.6	79.8	79.6
10	UP3096	208	75.5	80.1	80.0	78.6	78.6
11	WH1404	209	78.8	80.6	80.6	79.0	79.8
12	PBW868	210	73.9	79.8	78.9	76.0	77.2
13	DBW318	211	77.5	80.2	80.5	80.8	79.8
14	DBW378	212	78.9	80.5	79.1	75.2	78.4
15	WH1405	213	77.9	77.7	79.2	79.0	78.5
16	HD3405	214	80.3	81.7	78.8	78.3	79.8
17	DBW377	215	78.1	79.7	78.7	77.4	78.5
18	PBW869	216	77.9	80.6	80.6	80.3	79.9
19	PBW871	217	77.5	80.5	79.4	79.2	79.2
20	DBW376	219	75.2	76.6	78.5	78.2	77.1
21	DBW373	220	77.9	81.5	79.6	78.4	79.4
22	HD3404	221	77.8	80.9	79.9	79.1	79.4
23	WH1407	223	76.5	79.7	80.6	80.3	79.3
24	PBW870	224	74.6	76.7	79.2	77.4	77.0
25	UP3095	225	76.2	79.3	80.0	75.6	77.8
	Mean		77.0	79.6	79.5	78.3	78.6

Table 19: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes of SPL-HYT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Pantnagar	Delhi	Mean
1	HD3086 (C)	218	13.2	13.4	13.0	13.6	13.3
2	DBW187(I) (C)	222	11.5	13.2	13.7	13.6	13.0
3	HD3412	201	11.5	12.6	13.4	14.9	13.1
4	DBW375	202	13.8	12.5	14.9	14.0	13.8
5	DBW374	203	13.7	13.1	15.0	13.7	13.9
6	HD3403	204	11.4	12.9	13.7	14.1	13.0
7	WH1406	205	12.8	12.6	12.5	14.1	13.0
8	HD3413	206	12.6	13.3	13.4	13.7	13.2
9	PBW867	207	11.1	12.6	13.1	13.8	12.7
10	UP3096	208	11.6	12.2	12.7	13.1	12.4
11	WH1404	209	10.8	12.8	13.3	13.2	12.5
12	PBW868	210	11.3	12.2	12.3	12.9	12.2
13	DBW318	211	11.8	13.0	12.0	12.5	12.3
14	DBW378	212	11.4	12.6	12.3	12.8	12.3
15	WH1405	213	11.4	13.6	12.5	13.2	12.7
16	HD3405	214	11.7	13.1	14.1	14.6	13.4
17	DBW377	215	10.7	12.6	12.4	14.4	12.5
18	PBW869	216	12.8	12.9	13.0	12.4	12.8
19	PBW871	217	11.1	13.0	13.3	14.1	12.9
20	DBW376	219	12.3	12.8	12.9	14.1	13.0
21	DBW373	220	11.1	12.8	13.1	13.2	12.5
22	HD3404	221	11.5	12.4	13.0	13.1	12.5
23	WH1407	223	13.3	12.9	13.3	13.3	13.2
24	PBW870	224	11.2	12.2	12.5	12.3	12.1
25	UP3095	225	10.2	11.5	12.8	13.7	12.1
	Mean		11.8	12.8	13.1	13.5	12.8

Table 20: Sedimentation value (ml) of *T. aestivum* genotypes of SPL-HYT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Pantnagar	Delhi	Mean
1	HD3086 (C)	218	46.1	55.4	59.6	51.9	53.2
2	DBW187(I) (C)	222	62.7	61.1	61.1	70.0	63.7
3	HD3412	201	47.3	44.2	48.0	48.0	46.9
4	DBW375	202	57.3	56.1	49.6	53.4	54.1
5	DBW374	203	57.3	55.4	50.0	54.2	54.2
6	HD3403	204	61.1	55.4	55.7	57.3	57.4
7	WH1406	205	52.3	52.7	52.3	56.1	53.3
8	HD3413	206	48.4	48.4	50.4	50.4	49.4
9	PBW867	207	46.5	46.5	49.6	55.4	49.5
10	UP3096	208	54.2	53.4	51.1	58.4	54.3
11	WH1404	209	52.7	55.4	52.3	57.3	54.4
12	PBW868	210	52.3	50.0	51.1	68.8	55.6
13	DBW318	211	45.7	45.7	49.6	51.5	48.1
14	DBW378	212	53.4	48.4	57.3	58.8	54.5
15	WH1405	213	47.7	46.1	52.3	51.5	49.4
16	HD3405	214	57.7	55.4	60.0	68.1	60.3
17	DBW377	215	46.1	51.5	51.5	66.5	53.9
18	PBW869	216	51.1	55.4	61.1	61.1	57.2
19	PBW871	217	50.0	59.2	57.7	66.9	58.4
20	DBW376	219	28.0	34.2	32.3	36.1	32.6
21	DBW373	220	53.4	63.4	61.9	60.0	59.7
22	HD3404	221	59.2	60.0	60.0	66.1	61.3
23	WH1407	223	59.2	69.2	52.3	56.1	59.2
24	PBW870	224	40.7	41.1	37.3	44.6	40.9
25	UP3095	225	42.7	44.6	45.7	51.5	46.1
	Mean		50.9	52.3	52.4	56.8	53.1

Table 21: Phenol test score (Max-10) of *T. aestivum* genotypes of SPL-HYT NWPZ trial

S. No.	Entries	Code	Ludhiana	Hisar	Pantnagar	Delhi	Mean
1	HD3086 (C)	218	6.5	7.0	8.0	7.5	7.3
2	DBW187(I) (C)	222	7.0	8.5	8.5	8.0	8.0
3	HD3412	201	5.5	7.5	7.5	7.5	7.0
4	DBW375	202	5.0	7.5	6.0	7.0	6.4
5	DBW374	203	4.5	3.0	3.5	3.0	3.5
6	HD3403	204	8.0	9.0	8.5	8.5	8.5
7	WH1406	205	5.0	7.0	6.0	8.0	6.5
8	HD3413	206	4.5	5.0	5.0	4.5	4.8
9	PBW867	207	6.5	7.5	7.0	7.5	7.1
10	UP3096	208	6.0	8.5	8.0	8.5	7.8
11	WH1404	209	4.0	4.0	3.5	4.5	4.0
12	PBW868	210	4.5	4.0	3.5	4.0	4.0
13	DBW318	211	6.0	6.5	7.0	8.0	6.9
14	DBW378	212	6.0	6.5	7.0	7.0	6.6
15	WH1405	213	5.0	5.5	5.0	6.5	5.5
16	HD3405	214	7.0	8.5	8.0	8.5	8.0
17	DBW377	215	7.5	9.0	8.5	7.5	8.1
18	PBW869	216	5.5	8.5	8.5	8.5	7.8
19	PBW871	217	8.0	9.0	9.0	8.0	8.5
20	DBW376	219	6.5	7.5	7.0	7.0	7.0
21	DBW373	220	7.5	8.0	8.5	8.5	8.1
22	HD3404	221	7.5	8.0	8.5	8.0	8.0
23	WH1407	223	7.0	7.0	8.0	7.5	7.4
24	PBW870	224	6.5	6.5	6.5	7.0	6.6
25	UP3095	225	6.0	7.0	7.0	7.0	6.8
	Mean		6.1	7.0	6.9	7.1	6.8

Table 22: Grain appearance score (Max-10) of *T. aestivum* genotypes of SPL-HYT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	HD3086 (C)	218	6.0	6.0	5.8	5.9
2	DBW187(I) (C)	222	5.4	5.4	6.0	5.6
3	HD3412	201	5.2	6.2	4.2	5.2
4	DBW375	202	6.2	6.0	6.4	6.2
5	DBW374	203	5.8	5.4	5.8	5.7
6	HD3403	204	5.6	5.8	5.8	5.7
7	WH1406	205	6.0	6.0	5.6	5.9
8	HD3413	206	5.8	6.2	6.0	6.0
9	PBW867	207	5.6	6.2	6.2	6.0
10	UP3096	208	6.4	5.8	6.0	6.1
11	WH1404	209	5.8	5.8	6.2	5.9
12	PBW868	210	5.8	6.0	6.0	5.9
13	DBW318	211	5.8	5.4	6.0	5.7
14	DBW378	212	6.0	5.6	5.8	5.8
15	WH1405	213	5.8	6.2	6.0	6.0
16	HD3405	214	5.8	6.6	5.8	6.1
17	DBW377	215	5.2	5.6	5.6	5.5
18	PBW869	216	5.4	5.6	6.4	5.8
19	PBW871	217	6.0	6.0	6.2	6.1
20	DBW376	219	6.2	5.8	5.6	5.9
21	DBW373	220	5.6	5.2	5.4	5.4
22	HD3404	221	5.6	5.2	5.4	5.4
23	WH1407	223	6.0	5.6	6.0	5.9
24	PBW870	224	5.8	5.6	5.2	5.5
25	UP3095	225	5.8	5.2	5.8	5.6
	Mean		5.8	5.8	5.8	5.8

Table 23: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes of SPL-HYT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	HD3086 (C)	218	81.3	79.8	80.0	80.4
2	DBW187(I) (C)	222	81.0	80.8	79.0	80.3
3	HD3412	201	77.3	81.5	71.0	76.6
4	DBW375	202	80.5	80.3	80.3	80.4
5	DBW374	203	79.3	74.4	77.5	77.1
6	HD3403	204	81.2	80.9	79.1	80.4
7	WH1406	205	80.2	80.6	77.3	79.4
8	HD3413	206	80.5	82.0	81.5	81.3
9	PBW867	207	79.9	80.1	80.0	80.0
10	UP3096	208	81.3	80.9	79.1	80.4
11	WH1404	209	81.6	81.7	80.5	81.3
12	PBW868	210	79.7	79.2	75.9	78.3
13	DBW318	211	80.6	79.4	79.2	79.7
14	DBW378	212	81.5	80.5	80.0	80.7
15	WH1405	213	80.1	80.3	80.2	80.2
16	HD3405	214	82.2	82.0	80.4	81.5
17	DBW377	215	79.7	76.1	78.5	78.1
18	PBW869	216	80.7	78.9	81.9	80.5
19	PBW871	217	81.2	80.3	80.0	80.5
20	DBW376	219	79.6	77.7	76.5	77.9
21	DBW373	220	82.3	79.6	78.0	80.0
22	HD3404	221	82.4	80.1	78.8	80.4
23	WH1407	223	78.8	79.9	80.3	79.7
24	PBW870	224	81.6	77.3	72.5	77.1
25	UP3095	225	81.7	80.2	79.2	80.4
	Mean		80.6	79.8	78.7	79.7

Table 24: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes of SPL-HYT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	HD3086 (C)	218	11.6	12.2	11.0	11.6
2	DBW187(I) (C)	222	13.2	12.9	11.8	12.6
3	HD3412	201	12.9	11.1	13.9	12.6
4	DBW375	202	13.7	12.5	11.3	12.5
5	DBW374	203	14.9	14.3	11.8	13.7
6	HD3403	204	13.4	12.1	11.4	12.3
7	WH1406	205	12.8	11.3	12.5	12.2
8	HD3413	206	13.0	11.7	11.6	12.1
9	PBW867	207	13.5	12.6	11.8	12.6
10	UP3096	208	13.6	12.2	11.7	12.5
11	WH1404	209	12.5	11.2	10.7	11.5
12	PBW868	210	13.5	12.5	11.8	12.6
13	DBW318	211	13.1	12.3	11.7	12.4
14	DBW378	212	13.0	11.9	10.8	11.9
15	WH1405	213	13.3	12.8	12.0	12.7
16	HD3405	214	14.1	11.9	11.7	12.6
17	DBW377	215	12.9	13.6	11.7	12.8
18	PBW869	216	13.0	13.2	12.1	12.8
19	PBW871	217	15.0	12.3	12.1	13.1
20	DBW376	219	12.6	12.2	11.1	12.0
21	DBW373	220	13.4	12.8	12.0	12.7
22	HD3404	221	12.6	12.5	12.0	12.4
23	WH1407	223	12.4	12.3	12.5	12.4
24	PBW870	224	13.3	11.9	12.9	12.7
25	UP3095	225	12.6	11.2	11.6	11.8
	Mean		13.2	12.3	11.8	12.4

Table 25: Sedimentation value (ml) of *T. aestivum* genotypes of SPL-HYT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	HD3086 (C)	218	50.4	48.8	50.4	49.8
2	DBW187(I) (C)	222	63.1	62.7	57.3	61.0
3	HD3412	201	57.3	49.6	45.7	50.9
4	DBW375	202	53.4	55.4	50.0	52.9
5	DBW374	203	55.4	50.7	47.7	51.3
6	HD3403	204	61.1	55.4	38.0	51.5
7	WH1406	205	58.1	54.2	47.7	53.3
8	HD3413	206	47.3	49.6	51.9	49.6
9	PBW867	207	48.0	46.5	52.3	48.9
10	UP3096	208	63.1	51.1	60.8	58.3
11	WH1404	209	49.6	50.0	52.3	50.6
12	PBW868	210	51.5	51.1	52.7	51.8
13	DBW318	211	45.7	45.0	51.5	47.4
14	DBW378	212	57.3	57.3	53.4	56.0
15	WH1405	213	47.7	47.7	47.7	47.7
16	HD3405	214	65.0	55.4	51.5	57.3
17	DBW377	215	55.4	55.0	51.5	53.9
18	PBW869	216	55.4	52.7	53.4	53.8
19	PBW871	217	63.4	53.8	51.9	56.4
20	DBW376	219	32.3	38.8	36.5	35.9
21	DBW373	220	63.1	53.4	53.4	56.6
22	HD3404	221	60.0	51.5	55.0	55.5
23	WH1407	223	38.0	52.7	51.1	47.3
24	PBW870	224	48.0	43.4	39.2	43.6
25	UP3095	225	45.7	44.6	50.0	46.8
	Mean		53.4	51.0	50.1	51.5

Table 26: Phenol test score (Max-10) of *T. aestivum* genotypes of SPL-HYT CZ trial

S. No.	Entries	Code	Indore	Gwalior	Vijapur	Mean
1	HD3086 (C)	218	7.5	8.0	8.0	7.8
2	DBW187(I) (C)	222	7.0	8.0	7.5	7.5
3	HD3412	201	6.0	7.5	6.0	6.5
4	DBW375	202	6.0	7.5	6.0	6.5
5	DBW374	203	5.0	5.5	5.0	5.2
6	HD3403	204	7.0	8.5	8.5	8.0
7	WH1406	205	6.0	7.5	6.0	6.5
8	HD3413	206	5.5	6.0	5.5	5.7
9	PBW867	207	8.0	7.0	8.0	7.7
10	UP3096	208	8.0	8.0	7.5	7.8
11	WH1404	209	5.0	5.5	5.0	5.2
12	PBW868	210	5.0	5.5	4.0	4.8
13	DBW318	211	7.5	7.5	7.0	7.3
14	DBW378	212	6.5	8.5	6.0	7.0
15	WH1405	213	5.5	6.0	5.5	5.7
16	HD3405	214	6.5	8.5	8.5	7.8
17	DBW377	215	7.5	8.0	8.5	8.0
18	PBW869	216	7.0	7.0	8.0	7.3
19	PBW871	217	7.0	7.5	8.0	7.5
20	DBW376	219	6.5	7.0	7.0	6.8
21	DBW373	220	7.0	7.0	8.0	7.3
22	HD3404	221	7.0	8.0	8.5	7.8
23	WH1407	223	7.5	8.0	8.0	7.8
24	PBW870	224	7.0	8.0	7.5	7.5
25	UP3095	225	6.5	7.5	7.5	7.2
	Mean		6.6	7.3	7.0	7.0

Dicoccum Trial

Table 27: Thousand grain weight (g) of Dicoccum genotypes

Sl No.	Entry	Trial Code	Peninsular Zone					Mean
			Dharwad	Ugar	Mudhol	Pune	Niphad	
	<i>T. aestivum</i>							
1	MACS6222(a)(C)	SPL-DIC-102	47.03	46.10	47.55	39.55	47.65	45.58
	<i>T. dicoccum</i>							
1	MACS5058	SPL-DIC-101	45.76	43.58	44.13	41.13	48.93	44.71
2	DDK1061	SPL-DIC-104	45.27	46.35	39.85	39.05	49.15	43.93
3	MACS5057	SPL-DIC-106	47.00	44.03	42.25	43.63	46.68	44.72
4	DDK1060	SPL-DIC-107	39.70	39.98	40.63	37.23	40.83	39.67
5	DDK1029 (C)	SPL-DIC-103	45.84	43.98	43.63	39.40	47.03	43.98
6	HW1098 (C)	SPL-DIC-105	45.56	45.78	45.90	42.20	45.58	45.00
	Mean		44.86	43.95	42.73	40.44	46.37	

Table 28: Protein content (%) at 12% moisture basis of Dicoccum genotypes

Sl No.	Entry	Trial Code	Peninsular Zone					Mean
			Dharwad	Ugar	Mudhol	Pune	Niphad	
	<i>T. aestivum</i>							
1	MACS6222(a)(C)	SPL-DIC-102	12.6	11.7	13.4	12.4	11.3	12.3
	<i>T. dicoccum</i>							
1	MACS5058	SPL-DIC-101	12.3	11.5	13.4	11.4	10.9	11.9
2	DDK1061	SPL-DIC-104	11.3	11.0	13.2	11.2	10.5	11.4
3	MACS5057	SPL-DIC-106	11.6	11.4	14.0	11.4	11.1	11.9
4	DDK1060	SPL-DIC-107	11.9	12.0	13.2	12.1	11.0	12.0
5	DDK1029 (C)	SPL-DIC-103	11.0	11.3	13.5	11.5	10.2	11.5
6	HW1098 (C)	SPL-DIC-105	11.8	11.5	14.0	11.8	11.3	12.1
	Mean		11.7	11.5	13.6	11.6	10.8	

Table 29: Sedimentation Value (ml) of Dicoccum genotypes

Sl No.	Entry	Trial Code	Peninsular Zone					Mean
			Dharwad	Ugar	Mudhol	Pune	Niphad	
	<i>T. aestivum</i>							
1	MACS6222(a)(C)	SPL-DIC-102	45.5	46.5	46.0	43.5	45.0	45.3
	<i>T. dicoccum</i>							
1	MACS5058	SPL-DIC-101	24.5	22.5	19.0	21.0	18.0	21.0
2	DDK1061	SPL-DIC-104	24.5	23.5	23.0	23.0	18.5	22.5
3	MACS5057	SPL-DIC-106	22.5	20.5	22.0	20.0	18.0	20.6
4	DDK1060	SPL-DIC-107	21.5	25.0	23.0	22.5	21.0	22.6
5	DDK1029 (C)	SPL-DIC-103	20.5	23.0	20.5	21.5	17.5	20.6
6	HW1098 (C)	SPL-DIC-105	26.5	26.0	24.0	25.0	23.0	24.9
	Mean		23.3	23.4	21.9	22.2	19.3	

Table 30: Yellow Pigment content (ppm) of Dicoccum genotypes

Sl No.	Entry	Trial Code	Peninsular Zone					Mean
			Dharwad	Ugar	Mudhol	Pune	Niphad	
	<i>T. aestivum</i>							
1	MACS6222(a)(C)	SPL-DIC-102	4.0	3.5	4.4	3.7	3.7	3.9
	<i>T. dicoccum</i>							
1	MACS5058	SPL-DIC-101	4.0	5.2	3.6	4.1	4.4	4.3
2	DDK1061	SPL-DIC-104	4.7	5.4	6.4	4.9	5.6	5.4
3	MACS5057	SPL-DIC-106	4.5	5.0	5.8	4.2	5.4	5.0
4	DDK1060	SPL-DIC-107	4.4	5.1	4.4	4.2	4.6	4.5
5	DDK1029 (C)	SPL-DIC-103	4.5	5.0	4.6	4.9	4.9	4.8
6	HW1098 (C)	SPL-DIC-105	4.4	5.3	4.7	4.5	4.8	4.7
	Mean		4.4	5.2	4.9	4.5	5.0	

Table 31: Fe content (ppm) of Dicoccum genotypes

Sl No.	Entry	Trial Code	Peninsular Zone					Mean
			Dharwad	Ugar	Mudhol	Pune	Niphad	
	<i>T. aestivum</i>							
1	MACS6222(a)(C)	SPL-DIC-102	42.5			35.2	43.5	40.4
	<i>T. dicoccum</i>							
1	MACS5058	SPL-DIC-101	47.6			34.2	37.6	39.8
2	DDK1061	SPL-DIC-104	45.0			35.0	36.9	39.0
3	MACS5057	SPL-DIC-106	40.5			39.0	41.8	40.4
4	DDK1060	SPL-DIC-107	43.2			40.9	40.2	41.4
5	DDK1029 (C)	SPL-DIC-103	50.2			39.6	37.2	42.3
6	HW1098 (C)	SPL-DIC-105	42.4			37.5	47.2	42.4
	Mean		44.5			37.3	40.6	40.8

Table 32: Zinc content (ppm) of Dicoccum genotypes

Sl No.	Entry	Trial Code	Peninsular Zone					Mean
			Dharwad	Ugar	Mudhol	Pune	Niphad	
	<i>T. aestivum</i>							
1	MACS6222(a)(C)	SPL-DIC-102	45.4			41.7	48.6	45.2
	<i>T. dicoccum</i>							
1	MACS5058	SPL-DIC-101	41.2			47.2	39.3	42.6
2	DDK1061	SPL-DIC-104	36.8			41.1	39.2	39.0
3	MACS5057	SPL-DIC-106	40.4			48.5	45.8	44.9
4	DDK1060	SPL-DIC-107	35.1			45.8	35.4	38.8
5	DDK1029 (C)	SPL-DIC-103	42.5			52.3	39.4	44.7
6	HW1098 (C)	SPL-DIC-105	41.6			46.0	45.7	44.4
	Mean		40.4			46.1	41.9	42.8

Salinity/Alkalinity

Table 33: Grain appearance score (Max-10) of *T. aestivum* genotypes in Alkalinity Salinity Trial (AST)

S. No.	Entries	Code	Karnal	Ayodhya	Panipat	Hisar	Mean
1	Kharchia 65 (C)	106	5.0	4.2	5.0	5.2	4.9
2	KRL210 (C)	108	5.2	5.8	6.4	5.4	5.7
3	KRL19 (C)	111	5.0	5.2	5.4	6.0	5.4
4	DBW368	101	5.4	5.2	6.6	6.8	6.0
5	DBW363	102	5.4	5.0	6.0	6.2	5.7
6	DBW369	103	5.4	5.6	6.4	6.2	5.9
7	DBW367	104	5.2	5.6	6.0	5.8	5.7
8	DBW364	105	5.2	5.8	5.8	6.2	5.8
9	DBW366	107	5.6	6.0	6.0	5.6	5.8
10	DBW365	109	5.4	5.2	5.4	6.0	5.5
11	K1805	110	5.4	5.0	5.6	5.8	5.5
	Mean		5.3	5.3	5.9	5.9	5.6

Table 34: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in Alkalinity/Salinity Trial (AST)

S. No.	Entries	Code	Karnal	Ayodhya	Panipat	Hisar	Mean
1	Kharchia 65 (C)	106	83.5	74.7	83.4	82.8	81.1
2	KRL210 (C)	108	81.7	74.3	81.0	81.4	79.6
3	KRL19 (C)	111	82.3	74.8	81.4	80.4	79.7
4	DBW368	101	82.3	74.9	81.2	80.0	79.6
5	DBW363	102	80.4	74.9	80.7	79.2	78.8
6	DBW369	103	81.3	75.8	81.2	79.5	79.5
7	DBW367	104	81.3	77.3	80.8	80.0	79.9
8	DBW364	105	82.1	76.2	81.8	80.7	80.2
9	DBW366	107	79.9	75.1	79.5	79.2	78.4
10	DBW365	109	79.5	73.5	77.9	79.1	77.5
11	K1805	110	80.9	73.5	79.8	80.3	78.6
	Mean		81.4	75.0	80.8	80.2	79.4

Table 35: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes in Alkalinity/Salinity Trial (AST)

S. No.	Entries	Code	Karnal	Ayodhya	Panipat	Hisar	Mean
1	Kharchia 65 (C)	106	9.4	13.1	10.7	14.1	11.8
2	KRL210 (C)	108	10.0	12.9	11.1	12.6	11.7
3	KRL19 (C)	111	9.2	13.7	10.5	12.9	11.5
4	DBW368	101	9.3	13.3	10.8	11.8	11.3
5	DBW363	102	9.7	13.6	11.2	13.9	12.1
6	DBW369	103	10.2	12.9	11.4	13.2	11.9
7	DBW367	104	9.6	13.4	10.5	12.6	11.5
8	DBW364	105	9.7	13.0	10.3	11.1	11.0
9	DBW366	107	9.9	13.1	10.4	12.3	11.4
10	DBW365	109	9.4	12.4	9.5	11.5	10.7
11	K1805	110	10.1	13.9	11.0	12.5	11.9
	Mean		9.7	13.2	10.7	12.6	11.5

Table 36: Sedimentation value (ml) of *T. aestivum* genotypes in Alkalinity/Salinity Trial (AST)

S. No.	Entries	Code	Karnal	Ayodhya	Panipat	Hisar	Mean
1	Kharchia 65 (C)	106	43.4	46.1	45.7	50.7	46.5
2	KRL210 (C)	108	51.5	55.0	51.5	48.8	51.7
3	KRL19 (C)	111	47.3	58.1	46.5	50.7	50.6
4	DBW368	101	38.8	61.1	43.0	42.7	46.4
5	DBW363	102	53.4	57.7	57.7	61.9	57.7
6	DBW369	103	53.4	65.4	61.9	54.2	58.7
7	DBW367	104	44.2	61.9	52.3	53.4	53.0
8	DBW364	105	44.6	48.4	45.0	45.0	45.7
9	DBW366	107	44.2	51.5	45.7	47.7	47.3
10	DBW365	109	50.4	65.0	53.4	51.5	55.1
11	K1805	110	47.7	51.9	45.0	51.1	48.9
	Mean		47.2	56.6	49.8	50.7	51.1

Table 37: Phenol test (Max-10) of *T. aestivum* genotypes in Alkalinity/Salinity Trial (AST)

S. No.	Entries	Code	Karnal	Ayodhya	Panipat	Hisar	Mean
1	Kharchia 65 (C)	106	5.5	5.5	6.0	5.0	5.5
2	KRL210 (C)	108	8.0	6.0	8.0	5.0	6.8
3	KRL19 (C)	111	5.5	5.0	5.0	5.0	5.1
4	DBW368	101	6.0	7.0	7.0	7.0	6.8
5	DBW363	102	7.5	7.5	7.5	7.0	7.4
6	DBW369	103	6.0	7.0	7.0	7.5	6.9
7	DBW367	104	7.0	6.5	7.5	6.5	6.9
8	DBW364	105	6.0	6.0	7.5	6.0	6.4
9	DBW366	107	4.5	4.5	5.5	6.5	5.3
10	DBW365	109	4.0	4.5	4.0	5.0	4.4
11	K1805	110	8.5	7.0	8.5	8.0	8.0
	Mean		6.2	6.0	6.7	6.2	6.3

Table 38: Hardness index of *T. aestivum* genotypes in Alkalinity/Salinity Trial (AST)

S. No.	Entries	Code	Karnal	Ayodhya	Panipat	Hisar	Mean
1	Kharchia 65 (C)	106	66.0				66.0
2	KRL210 (C)	108	82.4				82.4
3	KRL19 (C)	111	78.5				78.5
4	DBW368	101	80.7				80.7
5	DBW363	102	69.1				69.1
6	DBW369	103	77.8				77.8
7	DBW367	104	66.4				66.4
8	DBW364	105	76.0				76.0
9	DBW366	107	74.5				74.5
10	DBW365	109	59.5				59.5
11	K1805	110	81.2				81.2
	Mean		73.8				73.8

Table 39: Grain iron content (ppm) of *T. aestivum* genotypes in Alkalinity/Salinity Trial (AST)

S. No.	Entries	Code	Karnal	Ayodhya	Panipat	Hisar	Mean
1	Kharchia 65 (C)	106	45.7	43.0	39.9		42.9
2	KRL210 (C)	108	45.3	43.2	34.3		40.9
3	KRL19 (C)	111	47.8	40.1	32.6		40.2
4	DBW368	101	50.3	39.0	34.8		41.4
5	DBW363	102	45.3	45.2	40.2		43.6
6	DBW369	103	45.7	41.4	36.2		41.1
7	DBW367	104	45.1	40.8	35.4		40.4
8	DBW364	105	44.7	40.3	39.6		41.5
9	DBW366	107	40.8	39.9	41.1		40.6
10	DBW365	109	43.9	39.8	39.0		40.9
11	K1805	110	46.3	45.2	37.0		42.8
	Mean		45.5	41.6	37.3		41.5

Table 40: Grain zinc content (ppm) of *T. aestivum* genotypes in Alkalinity/Salinity Trial (AST)

S. No.	Entries	Code	Karnal	Ayodhya	Panipat	Hisar	Mean
1	Kharchia 65 (C)	106	29.4	45.6	35.5		36.8
2	KRL210 (C)	108	22.9	28.3	34.8		28.7
3	KRL19 (C)	111	33.9	37.4	38.6		36.6
4	DBW368	101	32.8	31.3	31.1		31.7
5	DBW363	102	28.5	40.0	33.3		33.9
6	DBW369	103	25.5	35.1	38.6		33.1
7	DBW367	104	30.7	40.0	36.7		35.8
8	DBW364	105	28.8	37.3	35.0		33.7
9	DBW366	107	28.5	36.9	40.2		35.2
10	DBW365	109	20.8	35.0	36.7		30.8
11	K1805	110	28.4	36.2	37.1		33.9
	Mean		28.2	36.6	36.1		33.7