AVTs

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
Rainfed, Timely Sown						
1	HS562 (C)	101	6.8	5.6	6.6	**6.3**
2	VL907 (C)	102	7.0	5.8	6.6	**6.5**
3	VL2041 (C)	104	7.0	6.0	6.4	**6.5**
4	HPW349 (C)	105	6.8	5.6	6.6	**6.3**
5	VL2059M	103	6.8	5.6	6.0	**6.1**
Mean			**6.9**	**5.7**	**6.4**	**6.3**

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

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Rainfed, Timely Sown						
1	HS562 (C)	101	81.3	80.6	80.6	**80.8**
2	VL907 (C)	102	81.5	80.5	80.6	**80.9**
3	VL2041 (C)	104	82.2	79.7	79.7	**80.5**
4	HPW349 (C)	105	82.6	82.2	81.2	**82.0**
5	VL2059M	103	79.8	79.0	77.6	**78.8**
Mean			**81.5**	**80.4**	**79.9**	**80.6**

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
Rainfed, Timely Sown						
1	HS562 (C)	101	12.2	7.8	9.3	**9.8**
2	VL907 (C)	102	13.2	8.4	9.7	**10.4**
3	VL2041 (C)	104	10.8	6.9	8.7	**8.8**
4	HPW349 (C)	105	12.4	8.8	9.0	**10.1**
5	VL2059M	103	13.7	10.1	10.3	**11.3**
Mean			**12.5**	**8.4**	**9.4**	**10.1**

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

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Rainfed, Timely Sown						
1	HS562 (C)	101	51	35	52	**46**
2	VL907 (C)	102	41	32	40	**38**
3	VL2041 (C)	104	49	28	48	**41**
4	HPW349 (C)	105	51	41	51	**48**
5	VL2059M	103	48	44	50	**47**
Mean			**48**	**36**	**48**	**44**

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

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Rainfed, Timely Sown						
1	HS562 (C)	101	8.0	6.5	7.5	**7.3**
2	VL907 (C)	102	7.5	6.5	7.0	**7.0**
3	VL2041 (C)	104	3.0	4.5	5.0	**4.2**
4	HPW349 (C)	105	8.5	7.0	8.0	**7.8**
5	VL2059M	103	8.0	7.0	7.5	**7.5**
Mean			**7.0**	**6.3**	**7.0**	**6.8**

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

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Rainfed, Timely Sown						
1	HS562 (C)	101	82.9			**82.9**
2	VL907 (C)	102	64.5			**64.5**
3	VL2041 (C)	104	32.5			**32.5**
4	HPW349 (C)	105	76.3			**76.3**
5	VL2059M	103	58.5			**58.5**
Mean			**62.9**			**62.9**

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

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Rainfed, Timely Sown						
1	HS562 (C)	101	48.3	45.0	43.0	**45.4**
2	VL907 (C)	102	50.8	44.8	45.9	**47.2**
3	VL2041 (C)	104	43.9	38.1	39.3	**40.4**
4	HPW349 (C)	105	47.7	47.1	43.4	**46.1**
5	VL2059M	103	51.9	49.4	43.4	**48.2**
Mean			**48.5**	**44.9**	**43.0**	**45.5**

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

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
Rainfed, Timely Sown						
1	HS562 (C)	101	41.5	31.6	27.8	**33.6**
2	VL907 (C)	102	53.0	41.5	33.6	**42.7**
3	VL2041 (C)	104	42.6	30.9	23.7	**32.4**
4	HPW349 (C)	105	53.3	27.8	28.6	**36.6**
5	VL2059M	103	53.0	44.3	31.8	**43.0**
Mean			**48.7**	**35.2**	**29.1**	**37.7**

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

S. No.	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D'pura	Mean
Irrigated, timely sown									
1	HI1668*	104	5.8	6.4	6.2	6.2	5.8	6.8	**6.2**
2	HD3471M*	108	6.0	6.6	6.4	6.0	5.8	6.2	**6.2**
3	DBW386*	109	6.2	6.8	6.6	6.2	6.4	6.8	**6.5**
4	PBW725 (C)	101	6.2	6.6	6.8	5.6	5.4	6.2	**6.1**
5	DBW88 (C)	103	6.0	6.2	6.6	5.8	5.4	5.8	**6.0**
6	HD2967 (C)	106	5.4	5.8	6.6	6.0	5.6	6.4	**6.0**
7	HD3086 (C)	110	5.8	6.4	6.8	6.2	6.2	6.6	**6.3**
8	DBW187 (C)	111	5.8	6.2	6.2	6.0	5.4	6.4	**6.0**
9	DBW222 (C)	112	6.4	6.6	6.4	6.0	5.2	6.8	**6.2**
10	HD3386(I) (C)	115	6.6	6.8	7.0	6.2	6.2	6.8	**6.6**
11	PBW826 (C)	116	6.8	6.4	6.8	6.0	6.8	6.8	**6.6**
12	DBW477M	102	5.8	6.4	6.4	5.8	5.6	6.4	**6.1**
13	PBW957M	105	6.0	6.2	6.8	5.8	5.6	6.2	**6.1**
14	DBW417	107	6.6	6.6	6.6	6.0	5.8	6.6	**6.4**
15	PBW916	113	6.4	6.2	6.8	6.0	5.8	6.6	**6.3**
16	PBW958M	114	5.8	6.2	6.6	6.0	5.6	6.6	**6.1**
17	DBW476M	117	6.2	6.0	6.4	5.8	5.0	6.4	**6.0**
18	HD3494M	118	6.6	6.0	6.4	5.8	5.8	6.2	**6.1**
Mean			**6.1**	**6.4**	**6.6**	**6.0**	**5.7**	**6.5**	**6.2**
Irrigated, late sown									
1	HD3428*	202	6.2	5.8	6.6	6.0	6.2	5.2	**6.0**
2	HD3059 (C)	205	6.6	5.6	5.8	6.2	5.8	6.4	**6.1**
3	PBW771 (C)	206	6.6	6.0	6.4	6.4	6.2	6.4	**6.3**
4	JKW261 (C)	207	5.6	5.4	5.8	5.6	5.6	5.4	**5.6**
5	DBW173 (C)	212	6.4	5.6	6.4	6.2	6.4	6.2	**6.2**
6	WH1324	201	5.8	5.4	6.4	6.0	5.4	5.6	**5.8**
7	NW8071	203	6.6	6.2	6.4	6.0	6.6	6.0	**6.3**
8	HD3455	204	6.4	5.4	6.2	5.6	5.6	5.2	**5.7**
9	DBW422	208	5.2	6.4	6.4	5.8	6.4	5.8	**6.0**
10	PBW921	209	5.8	5.4	6.0	5.6	6.2	5.0	**5.7**
11	Raj4581	210	6.4	5.6	6.2	6.0	6.2	6.2	**6.1**
12	HD3495M	211	5.8	5.4	6.2	6.0	5.8	6.4	**5.9**
Mean			**6.1**	**5.7**	**6.2**	**6.0**	**6.0**	**5.8**	**6.0**
Restricted Irrigated, timely sown									
1	WH1402(I) (C)	301	6.2	6.6	6.8	6.2	6.8	6.8	**6.6**
2	HD3369 (C)	302	6.0	5.6	7.0	6.2	6.6	6.6	**6.3**
3	HI1653 (C)	303	5.8	5.6	7.6	6.0	6.8	7.2	**6.5**
4	PBW644 (C)	305	6.2	6.0	6.8	6.2	6.8	6.4	**6.4**
5	NIAW3170 (C)	306	6.2	6.2	6.8	5.8	7.0	6.4	**6.4**
6	DBW296 (C)	308	6.0	6.0	6.6	6.2	6.8	6.6	**6.4**
7	PBW927	304	5.6	6.4	6.6	6.2	7.0	6.6	**6.4**
8	JKW304	307	5.6	6.0	6.4	6.0	6.8	6.0	**6.1**
9	HD3468	309	5.8	6.2	5.8	5.8	6.8	6.8	**6.2**
10	WH1326	310	5.8	5.6	6.6	5.8	7.4	7.4	**6.4**
Mean			**5.9**	**6.0**	**6.7**	**6.0**	**6.9**	**6.7**	**6.4**

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

S. No.	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D'pura	Mean
Irrigated, timely sown									
1	HI1668*	104	79.3	80.6	80.2	79.0	75.5	80.3	**79.2**
2	HD3471M*	108	80.9	81.3	80.9	80.1	74.8	79.8	**79.6**
3	DBW386*	109	82.0	82.9	81.8	80.9	78.7	82.4	**81.5**
4	PBW725 (C)	101	81.6	81.9	83.7	79.3	76.1	80.8	**80.6**
5	DBW88 (C)	103	81.3	79.7	82.0	79.7	75.5	80.1	**79.7**
6	HD2967 (C)	106	77.3	79.2	80.6	76.5	75.0	82.0	**78.4**
7	HD3086 (C)	110	82.1	82.4	82.5	80.5	78.8	80.4	**81.1**
8	DBW187 (C)	111	80.4	77.2	82.3	79.6	74.9	81.2	**79.3**
9	DBW222 (C)	112	80.6	80.4	81.4	79.2	75.2	81.6	**79.7**
10	HD3386(I) (C)	115	82.5	82.5	82.7	80.5	78.4	81.4	**81.3**
11	PBW826 (C)	116	81.9	81.2	83.4	80.6	80.5	81.9	**81.6**
12	DBW477M	102	81.6	81.7	81.1	80.1	76.0	83.0	**80.6**
13	PBW957M	105	82.0	81.8	82.5	81.1	78.3	81.8	**81.3**
14	DBW417	107	79.4	77.0	80.5	75.6	73.5	78.4	**77.4**
15	PBW916	113	80.8	80.4	81.7	79.0	77.2	80.8	**80.0**
16	PBW958M	114	82.1	83.0	83.1	82.3	77.2	83.4	**81.9**
17	DBW476M	117	81.4	81.5	81.7	80.3	75.8	80.6	**80.2**
18	HD3494M	118	80.3	80.0	80.6	77.5	75.8	80.6	**79.1**
Mean			**81.0**	**80.8**	**81.8**	**79.5**	**76.5**	**81.1**	**80.1**
Irrigated, late sown									
1	HD3428*	202	80.4	81.8	81.8	81.1	79.9	73.8	**79.8**
2	HD3059 (C)	205	80.1	81.2	79.2	79.7	78.2	79.7	**79.7**
3	PBW771 (C)	206	79.8	80.2	81.0	79.8	79.9	77.8	**79.8**
4	JKW261 (C)	207	78.2	79.2	79.3	79.3	77.2	68.5	**77.0**
5	DBW173 (C)	212	77.2	80.0	80.1	79.5	78.0	75.0	**78.3**
6	WH1324	201	77.1	78.8	80.6	80.1	77.1	76.2	**78.3**
7	NW8071	203	79.7	80.7	80.5	80.2	79.5	78.5	**79.9**
8	HD3455	204	78.6	78.8	80.2	78.5	78.2	72.7	**77.8**
9	DBW422	208	79.8	83.0	84.5	81.8	82.2	82.3	**82.3**
10	PBW921	209	79.7	79.6	81.6	79.2	79.5	73.3	**78.8**
11	Raj4581	210	79.8	80.6	81.5	80.1	81.2	76.4	**79.9**
12	HD3495M	211	77.4	80.2	79.8	80.0	76.3	78.3	**78.7**
Mean			**79.0**	**80.3**	**80.8**	**79.9**	**78.9**	**76.0**	**79.2**
Restricted Irrigated, timely sown									
1	WH1402(I) (C)	301	81.2	80.5	80.7	82.1	83.7	82.9	**81.9**
2	HD3369 (C)	302	80.6	81.6	82.7	81.1	82.0	81.9	**81.7**
3	HI1653 (C)	303	79.2	79.9	80.0	79.9	80.3	80.9	**80.0**
4	PBW644 (C)	305	77.9	80.0	80.9	79.5	80.4	79.4	**79.7**
5	NIAW3170 (C)	306	78.9	80.4	80.8	80.0	80.7	81.8	**80.4**
6	DBW296 (C)	308	80.8	82.0	82.7	81.0	83.5	82.2	**82.0**
7	PBW927	304	80.5	81.6	80.9	81.2	82.0	82.2	**81.4**
8	JKW304	307	77.8	79.9	79.5	79.3	79.4	77.9	**79.0**
9	HD3468	309	79.7	81.0	79.1	81.8	82.1	83.1	**81.1**
10	WH1326	310	79.5	80.3	80.5	79.9	81.5	82.2	**80.7**
Mean			**79.6**	**80.7**	**80.8**	**80.6**	**81.6**	**81.5**	**80.8**

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

S. No.	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.pura	Mean
Irrigated, timely sown									
1	HI1668*	104	10.4	11.3	12.3	9.9	13.1	10.1	**11.2**
2	HD3471M*	108	10.3	11.1	12.7	9.0	12.9	10.9	**11.1**
3	DBW386*	109	9.0	10.7	11.1	9.1	11.9	10.2	**10.4**
4	PBW725 (C)	101	10.3	11.1	12.2	10.8	13.0	12.2	**11.6**
5	DBW88 (C)	103	9.9	12.3	11.8	9.7	13.0	11.5	**11.4**
6	HD2967 (C)	106	9.1	11.0	11.6	10.7	13.0	10.3	**10.9**
7	HD3086 (C)	110	9.7	11.3	12.0	9.7	12.1	10.9	**11.0**
8	DBW187 (C)	111	9.4	12.5	12.1	9.7	13.3	10.5	**11.3**
9	DBW222 (C)	112	9.6	10.4	11.1	10.4	12.7	11.1	**10.9**
10	HD3386(I) (C)	115	9.0	9.5	10.9	9.7	11.9	10.3	**10.2**
11	PBW826 (C)	116	9.4	10.6	11.0	9.3	11.5	10.3	**10.4**
12	DBW477M	102	9.3	11.9	12.2	10.5	13.1	11.1	**11.4**
13	PBW957M	105	9.2	11.2	12.9	10.6	12.9	11.3	**11.4**
14	DBW417	107	9.8	11.0	11.0	9.8	12.9	10.8	**10.9**
15	PBW916	113	9.8	11.3	12.7	10.8	13.1	11.9	**11.6**
16	PBW958M	114	10.2	10.3	12.4	9.9	13.3	11.7	**11.3**
17	DBW476M	117	10.4	11.9	12.3	10.2	12.9	11.4	**11.5**
18	HD3494M	118	10.4	12.2	12.3	9.9	13.2	11.7	**11.6**
Mean			**9.7**	**11.2**	**11.9**	**10.0**	**12.8**	**11.0**	**11.1**
Irrigated, late sown									
1	HD3428*	202	10.7	10.3	10.9	11.8	12.0	13.7	**11.6**
2	HD3059 (C)	205	10.8	10.6	12.0	12.3	12.4	12.4	**11.8**
3	PBW771 (C)	206	12.3	10.0	10.7	11.5	11.7	12.1	**11.4**
4	JKW261 (C)	207	10.6	10.6	9.8	9.9	11.3	13.4	**10.9**
5	DBW173 (C)	212	10.9	10.9	12.0	11.6	12.1	13.9	**11.9**
6	WH1324	201	11.6	9.7	11.5	10.7	11.8	13.0	**11.4**
7	NW8071	203	11.4	11.1	11.2	10.9	12.5	13.1	**11.7**
8	HD3455	204	12.2	11.7	11.5	11.2	11.8	13.0	**11.9**
9	DBW422	208	11.2	10.0	10.5	12.0	12.2	11.9	**11.3**
10	PBW921	209	10.3	10.4	11.8	11.7	12.0	13.6	**11.6**
11	Raj4581	210	10.5	10.6	10.9	10.8	11.3	12.0	**11.0**
12	HD3495M	211	11.0	10.8	10.7	11.4	12.2	14.1	**11.7**
Mean			**11.1**	**10.5**	**11.1**	**11.3**	**11.9**	**13.0**	**11.5**
Restricted Irrigated, timely sown									
1	WH1402(I) (C)	301	9.9	11.6	11.5	8.5	10.7	12.7	**10.8**
2	HD3369 (C)	302	10.5	12.7	10.9	9.6	13.1	10.7	**11.3**
3	HI1653 (C)	303	10.7	12.1	11.8	8.7	12.3	12.1	**11.3**
4	PBW644 (C)	305	10.4	12.9	11.0	8.7	12.1	12.5	**11.3**
5	NIAW3170 (C)	306	10.8	12.1	10.7	9.2	12.8	11.7	**11.2**
6	DBW296 (C)	308	10.5	12.7	10.1	10.0	11.5	11.8	**11.1**
7	PBW927	304	10.4	13.7	11.5	9.1	12.8	13.0	**11.8**
8	JKW304	307	10.3	12.2	10.6	8.2	11.2	11.7	**10.7**
9	HD3468	309	9.7	12.0	12.3	8.5	11.3	11.3	**10.8**
10	WH1326	310	10.1	11.5	11.0	8.9	11.9	12.4	**11.0**
Mean			**10.3**	**12.4**	**11.1**	**8.9**	**12.0**	**12.0**	**11.1**

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

S. No.	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.,pura	Mean
Irrigated, timely sown									
1	HI1668*	104	52	56	56	49	59	56	**55**
2	HD3471M*	108	52	58	54	47	59	57	**54**
3	DBW386*	109	43	50	45	42	57	50	**48**
4	PBW725 (C)	101	53	53	50	50	58	55	**53**
5	DBW88 (C)	103	51	57	51	46	59	51	**53**
6	HD2967 (C)	106	49	53	46	47	56	52	**50**
7	HD3086 (C)	110	47	54	46	42	54	53	**49**
8	DBW187 (C)	111	52	60	54	51	62	57	**56**
9	DBW222 (C)	112	49	53	51	42	55	53	**50**
10	HD3386(I) (C)	115	43	49	44	41	52	52	**47**
11	PBW826 (C)	116	47	51	45	42	56	51	**49**
12	DBW477M	102	53	54	50	52	60	54	**54**
13	PBW957M	105	56	58	57	53	58	57	**57**
14	DBW417	107	47	45	46	43	56	51	**48**
15	PBW916	113	49	53	52	49	61	50	**53**
16	PBW958M	114	54	52	53	48	59	55	**53**
17	DBW476M	117	51	52	52	44	60	53	**52**
18	HD3494M	118	49	49	51	46	53	47	**49**
Mean			**50**	**53**	**50**	**46**	**58**	**53**	**52**
Irrigated, late sown									
1	HD3428*	202	52	49	53	48	54	56	**52**
2	HD3059 (C)	205	55	50	53	49	58	57	**54**
3	PBW771 (C)	206	42	39	40	36	38	41	**39**
4	JKW261 (C)	207	50	46	47	42	49	55	**48**
5	DBW173 (C)	212	52	53	54	48	56	55	**53**
6	WH1324	201	63	53	59	52	58	61	**58**
7	NW8071	203	56	54	53	46	55	56	**53**
8	HD3455	204	53	48	52	41	46	53	**49**
9	DBW422	208	53	52	54	47	56	57	**53**
10	PBW921	209	56	50	55	49	54	59	**54**
11	Raj4581	210	49	47	45	45	49	57	**49**
12	HD3495M	211	54	49	49	44	56	57	**52**
Mean			**53**	**49**	**51**	**46**	**52**	**55**	**51**
Restricted Irrigated, timely sown									
1	WH1402(I) (C)	301	57	59	64	46	56	67	**58**
2	HD3369 (C)	302	61	63	57	51	61	66	**60**
3	HI1653 (C)	303	55	60	59	47	60	66	**58**
4	PBW644 (C)	305	43	46	46	39	42	45	**44**
5	NIAW3170 (C)	306	47	48	51	42	47	53	**48**
6	DBW296 (C)	308	53	54	51	46	52	56	**52**
7	PBW927	304	44	53	56	39	53	54	**50**
8	JKW304	307	50	49	52	39	48	50	**48**
9	HD3468	309	46	54	60	39	47	52	**50**
10	WH1326	310	52	56	57	48	58	61	**55**
Mean			**51**	**54**	**55**	**44**	**52**	**57**	**52**

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

S. No.	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.pura	Mean
Irrigated, timely sown									
1	HI1668*	104	8.0	7.5	8.0	7.5	7.5	9.5	**8.0**
2	HD3471M*	108	8.5	7.5	7.5	7.0	8.5	9.5	**8.1**
3	DBW386*	109	7.5	7.0	7.0	6.5	8.0	9.0	**7.5**
4	PBW725 (C)	101	7.5	7.5	7.5	7.0	7.0	9.0	**7.6**
5	DBW88 (C)	103	8.0	8.0	8.0	8.0	8.0	9.0	**8.2**
6	HD2967 (C)	106	7.5	7.0	7.5	7.0	7.0	7.5	**7.3**
7	HD3086 (C)	110	7.0	7.5	7.5	7.0	7.5	9.0	**7.6**
8	DBW187 (C)	111	7.5	8.0	7.5	7.5	7.5	9.5	**7.9**
9	DBW222 (C)	112	7.5	7.5	8.0	7.5	7.5	9.5	**7.9**
10	HD3386(I) (C)	115	7.0	7.5	7.0	7.0	7.5	8.5	**7.4**
11	PBW826 (C)	116	7.0	7.5	7.5	7.0	7.0	7.5	**7.3**
12	DBW477M	102	7.5	7.0	7.5	7.0	6.5	8.5	**7.3**
13	PBW957M	105	7.5	7.0	8.0	7.0	7.5	8.0	**7.5**
14	DBW417	107	5.5	5.0	5.0	5.0	5.5	6.0	**5.3**
15	PBW916	113	6.5	6.5	6.5	6.0	7.0	7.0	**6.6**
16	PBW958M	114	7.0	7.0	7.5	6.5	7.5	7.5	**7.2**
17	DBW476M	117	7.5	8.0	7.5	7.0	7.5	8.0	**7.6**
18	HD3494M	118	7.0	7.5	7.0	7.5	7.0	7.5	**7.3**
Mean			**7.3**	**7.3**	**7.3**	**6.9**	**7.3**	**8.3**	**7.4**
Irrigated, late sown									
1	HD3428*	202	8.0	7.5	7.5	7.0	7.5	9.0	**7.8**
2	HD3059 (C)	205	8.0	8.0	8.5	7.5	8.5	9.0	**8.3**
3	PBW771 (C)	206	8.0	7.5	8.0	7.5	8.0	9.0	**8.0**
4	JKW261 (C)	207	7.0	7.5	7.0	7.0	7.5	9.0	**7.5**
5	DBW173 (C)	212	6.0	8.0	8.0	7.5	7.5	9.0	**7.7**
6	WH1324	201	8.5	7.5	8.0	8.0	8.0	9.5	**8.3**
7	NW8071	203	8.0	8.0	8.0	6.5	8.0	8.5	**7.8**
8	HD3455	204	6.0	5.0	6.0	5.0	6.0	6.5	**5.8**
9	DBW422	208	8.0	8.0	7.5	7.5	8.0	9.0	**8.0**
10	PBW921	209	7.5	7.5	7.5	7.5	8.0	9.5	**7.9**
11	Raj4581	210	7.5	8.0	7.0	7.0	7.5	9.5	**7.8**
12	HD3495M	211	7.5	8.0	7.5	7.0	7.0	8.5	**7.6**
Mean			**7.5**	**7.5**	**7.5**	**7.1**	**7.6**	**8.8**	**7.7**
Restricted Irrigated, timely sown									
1	WH1402(I) (C)	301	7.0	8.0	8.5	6.0	6.5	7.5	**7.3**
2	HD3369 (C)	302	7.0	7.0	7.5	6.5	6.5	7.5	**7.0**
3	HI1653 (C)	303	8.0	8.0	8.0	7.0	8.0	8.0	**7.8**
4	PBW644 (C)	305	8.5	7.0	7.5	6.5	8.5	8.0	**7.7**
5	NIAW3170 (C)	306	7.0	7.0	7.0	6.0	7.0	7.5	**6.9**
6	DBW296 (C)	308	7.5	6.5	7.0	6.5	7.0	8.0	**7.1**
7	PBW927	304	8.0	7.5	8.0	6.5	8.5	8.5	**7.8**
8	JKW304	307	7.5	7.0	7.5	7.0	8.0	8.0	**7.5**
9	HD3468	309	8.0	8.0	9.0	7.5	8.0	9.0	**8.3**
10	WH1326	310	8.5	7.5	8.5	7.5	8.0	9.0	**8.2**
Mean			**7.7**	**7.4**	**7.9**	**6.7**	**7.6**	**8.1**	**7.6**

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

S. No.	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D'pura	Mean
Irrigated, timely sown									
1	HI1668*	104						80.0	**80.0**
2	HD3471M*	108						86.7	**86.7**
3	DBW386*	109						83.2	**83.2**
4	PBW725 (C)	101						83.2	**83.2**
5	DBW88 (C)	103						82.9	**82.9**
6	HD2967 (C)	106						81.8	**81.8**
7	HD3086 (C)	110						85.9	**85.9**
8	DBW187 (C)	111						82.4	**82.4**
9	DBW222 (C)	112						80.3	**80.3**
10	HD3386(I) (C)	115						80.2	**80.2**
11	PBW826 (C)	116						84.0	**84.0**
12	DBW477M	102						86.3	**86.3**
13	PBW957M	105						80.0	**80.0**
14	DBW417	107						74.2	**74.2**
15	PBW916	113						80.8	**80.8**
16	PBW958M	114						82.2	**82.2**
17	DBW476M	117						88.6	**88.6**
18	HD3494M	118						79.2	**79.2**
Mean								**82.3**	**82.3**
Irrigated, late sown									
1	HD3428*	202						85.6	**85.6**
2	HD3059 (C)	205						87.2	**87.2**
3	PBW771 (C)	206						88.2	**88.2**
4	JKW261 (C)	207						89.4	**89.4**
5	DBW173 (C)	212						86.8	**86.8**
6	WH1324	201						82.3	**82.3**
7	NW8071	203						77.8	**77.8**
8	HD3455	204						87.7	**87.7**
9	DBW422	208						81.3	**81.3**
10	PBW921	209						96.7	**96.7**
11	Raj4581	210						89.0	**89.0**
12	HD3495M	211						85.9	**85.9**
Mean								**86.5**	**86.5**
Restricted Irrigated, timely sown									
1	WH1402(I) (C)	301						74.5	**74.5**
2	HD3369 (C)	302						74.3	**74.3**
3	HI1653 (C)	303						69.5	**69.5**
4	PBW644 (C)	305						78.3	**78.3**
5	NIAW3170 (C)	306						33.5	**33.5**
6	DBW296 (C)	308						40.0	**40.0**
7	PBW927	304						71.2	**71.2**
8	JKW304	307						79.9	**79.9**
9	HD3468	309						85.2	**85.2**
10	WH1326	310						72.2	**72.2**
Mean								**67.9**	**67.9**

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

S. No.	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.pura	Mean
Irrigated, timely sown									
1	HI1668*	104	42.6	38.9	42.9	40.7	46.3	38.9	**41.7**
2	HD3471M*	108	35.2	43.2	32.9	38.4	41.5	39.3	**38.4**
3	DBW386*	109	34.4	39.4	33.7	37.3	41.9	37.6	**37.4**
4	PBW725 (C)	101	33.1	37.1	42.2	37.6	46.7	37.0	**39.0**
5	DBW88 (C)	103	31.1	36.4	36.7	38.7	42.0	32.4	**36.2**
6	HD2967 (C)	106	35.9	37.3	35.4	38.6	39.5	35.3	**37.0**
7	HD3086 (C)	110	38.4	40.3	39.0	41.6	44.9	35.9	**40.0**
8	DBW187 (C)	111	32.9	41.6	39.3	37.0	42.1	37.9	**38.5**
9	DBW222 (C)	112	37.0	41.2	36.4	35.3	39.8	37.0	**37.8**
10	HD3386(I) (C)	115	33.4	30.0	40.3	33.3	38.5	33.9	**34.9**
11	PBW826 (C)	116	40.9	39.4	34.3	32.9	38.9	34.2	**36.8**
12	DBW477M	102	31.6	40.0	38.9	39.3	44.7	35.5	**38.3**
13	PBW957M	105	38.1	38.2	39.2	40.3	44.7	39.9	**40.1**
14	DBW417	107	39.3	39.7	41.4	39.5	40.9	35.1	**39.3**
15	PBW916	113	34.6	44.4	41.4	40.9	43.7	32.9	**39.7**
16	PBW958M	114	39.2	40.6	37.0	37.8	42.7	39.6	**39.5**
17	DBW476M	117	35.1	38.5	36.8	34.7	41.8	39.1	**37.7**
18	HD3494M	118	38.3	39.5	32.1	42.7	41.4	39.7	**39.0**
Mean			**36.2**	**39.2**	**37.8**	**38.1**	**42.3**	**36.7**	**38.4**
Irrigated, late sown									
1	HD3428*	202	33.8	43.9	39.4	40.3	46.3	42.8	**41.1**
2	HD3059 (C)	205	32.8	46.1	37.5	39.5	38.5	36.8	**38.5**
3	PBW771 (C)	206	37.9	39.3	36.8	38.3	41.7	40.8	**39.1**
4	JKW261 (C)	207	37.1	36.2	32.2	35.3	40.8	38.3	**36.7**
5	DBW173 (C)	212	33.0	42.8	41.6	40.5	47.3	39.9	**40.9**
6	WH1324	201	36.8	41.6	35.7	38.0	41.2	37.5	**38.5**
7	NW8071	203	38.5	47.7	37.7	42.1	42.1	35.2	**40.6**
8	HD3455	204	35.4	40.6	40.1	43.8	42.3	33.2	**39.2**
9	DBW422	208	40.4	44.9	37.7	40.0	41.4	40.7	**40.9**
10	PBW921	209	36.3	35.4	39.4	37.7	42.0	35.7	**37.8**
11	Raj4581	210	38.2	44.3	38.5	37.3	44.0	36.2	**39.8**
12	HD3495M	211	34.8	43.6	36.2	36.5	39.0	36.2	**37.7**
Mean			**36.3**	**42.2**	**37.7**	**39.1**	**42.2**	**37.8**	**39.2**
Restricted Irrigated, timely sown									
1	WH1402(I) (C)	301	30.9	43.7	36.4	34.9	41.9	43.8	**38.6**
2	HD3369 (C)	302	35.5	43.5	39.8	39.0	46.4	40.0	**40.7**
3	HI1653 (C)	303	32.8	43.0	37.4	37.6	44.6	50.7	**41.0**
4	PBW644 (C)	305	43.3	43.1	37.8	40.3	45.0	44.5	**42.3**
5	NIAW3170 (C)	306	37.4	40.3	36.1	38.9	45.0	42.6	**40.1**
6	DBW296 (C)	308	38.8	39.7	41.9	45.5	43.7	39.2	**41.5**
7	PBW927	304	34.3	39.1	39.8	36.2	44.8	46.5	**40.1**
8	JKW304	307	33.9	37.0	34.2	35.3	37.5	43.6	**36.9**
9	HD3468	309	34.6	38.0	40.8	37.5	42.3	38.4	**38.6**
10	WH1326	310	34.4	35.7	38.4	40.2	47.8	36.9	**38.9**
Mean			**35.6**	**40.3**	**38.3**	**38.5**	**43.9**	**42.6**	**39.9**

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

S. No.	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.pura	Mean
Irrigated, timely sown									
1	HI1668*	104	56.4	24.4	41.9	29.2	34.0	35.3	**36.9**
2	HD3471M*	108	50.4	30.8	39.1	29.2	35.0	34.1	**36.4**
3	DBW386*	109	57.6	32.2	41.1	28.7	34.3	35.3	**38.2**
4	PBW725 (C)	101	51.1	26.3	39.5	35.0	32.3	26.8	**35.2**
5	DBW88 (C)	103	45.5	25.3	37.8	33.8	32.6	26.6	**33.6**
6	HD2967 (C)	106	52.6	26.9	38.7	40.6	36.3	37.3	**38.7**
7	HD3086 (C)	110	52.7	30.8	46.7	40.5	33.9	34.0	**39.8**
8	DBW187 (C)	111	53.3	27.2	42.9	35.1	34.1	33.5	**37.7**
9	DBW222 (C)	112	48.9	31.6	40.3	37.1	33.8	31.9	**37.3**
10	HD3386(I) (C)	115	44.3	25.0	54.2	29.8	34.4	32.6	**36.7**
11	PBW826 (C)	116	58.7	29.7	41.8	32.7	31.5	32.8	**37.9**
12	DBW477M	102	47.1	29.5	41.2	37.3	37.8	31.7	**37.4**
13	PBW957M	105	58.9	28.6	39.0	40.9	34.9	34.6	**39.5**
14	DBW417	107	59.1	32.3	55.5	47.9	39.2	34.3	**44.7**
15	PBW916	113	49.4	29.7	48.8	40.3	35.9	26.6	**38.5**
16	PBW958M	114	55.6	29.3	42.6	34.9	37.3	33.8	**38.9**
17	DBW476M	117	52.9	29.6	41.5	34.9	36.0	36.7	**38.6**
18	HD3494M	118	53.5	30.5	43.7	38.8	37.3	39.5	**40.6**
Mean			**52.7**	**28.9**	**43.1**	**35.9**	**35.0**	**33.2**	**38.1**
Irrigated, late sown									
1	HD3428*	202	26.9	22.7	37.2	46.7	28.4	37.7	**33.3**
2	HD3059 (C)	205	23.7	27.1	37.7	43.8	31.6	26.0	**31.7**
3	PBW771 (C)	206	29.3	31.8	38.3	48.7	33.8	33.7	**35.9**
4	JKW261 (C)	207	24.8	25.6	32.5	44.9	30.3	34.1	**32.0**
5	DBW173 (C)	212	23.7	30.0	33.9	41.1	32.8	30.4	**32.0**
6	WH1324	201	20.5	29.3	30.1	38.2	29.1	26.2	**28.9**
7	NW8071	203	26.1	27.4	37.1	42.9	31.2	30.0	**32.5**
8	HD3455	204	27.3	20.3	39.4	45.1	35.4	30.7	**33.0**
9	DBW422	208	25.5	26.2	38.4	54.4	33.1	34.1	**35.3**
10	PBW921	209	25.8	30.3	34.6	42.7	31.5	31.3	**32.7**
11	Raj4581	210	26.5	21.6	33.4	48.1	30.5	36.5	**32.8**
12	HD3495M	211	26.8	30.3	36.7	44.6	31.1	26.2	**32.6**
Mean			**25.6**	**26.9**	**35.8**	**45.1**	**31.6**	**31.4**	**32.7**
Restricted Irrigated, timely sown									
1	WH1402(I) (C)	301	27.5	34.4	44.8	41.6	34.7	27.2	**35.0**
2	HD3369 (C)	302	30.4	38.5	47.5	50.2	44.7	24.8	**39.4**
3	HI1653 (C)	303	38.9	31.2	42.3	32.4	34.4	28.9	**34.7**
4	PBW644 (C)	305	31.7	36.0	49.3	43.5	37.5	28.0	**37.7**
5	NIAW3170 (C)	306	30.7	33.5	47.9	42.7	46.1	33.5	**39.1**
6	DBW296 (C)	308	23.9	33.5	45.7	48.3	37.3	27.3	**36.0**
7	PBW927	304	29.0	38.6	48.3	45.1	38.0	34.4	**38.9**
8	JKW304	307	28.9	32.2	47.0	39.5	34.4	29.1	**35.2**
9	HD3468	309	25.4	32.4	45.3	41.7	33.7	18.0	**32.8**
10	WH1326	310	26.5	25.2	40.1	39.0	34.1	25.8	**31.8**
Mean			**29.3**	**33.6**	**45.8**	**42.4**	**37.5**	**27.7**	**36.0**

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

S. No.	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	6.2	5.8	6.4	5.6	**6.0**
2	DBW222 (C)	105	6.8	5.4	6.0	5.4	**5.9**
3	PBW826 (C)	106	7.6	5.6	6.6	5.6	**6.4**
4	HD3388(I) (C)	107	6.8	5.2	6.0	5.4	**5.9**
5	HD3249 (C)	113	7.0	5.8	6.2	5.8	**6.2**
6	DBW187 (C)	117	7.2	5.6	6.2	5.6	**6.2**
7	UP3123	101	6.6	4.8	5.4	5.4	**5.6**
8	HD3447	102	6.4	4.0	5.6	5.2	**5.3**
9	PBW908	103	6.2	5.8	6.0	5.4	**5.9**
10	PBW915	104	6.6	5.6	6.4	5.6	**6.1**
11	Filler	108	6.4	5.8	5.8	5.0	**5.8**
12	HP1978	109	6.4	5.0	6.0	5.4	**5.7**
13	KRL2106	110	6.2	4.8	4.2	5.4	**5.2**
14	PBW913	111	6.8	5.6	6.4	5.4	**6.1**
15	HD3467	114	6.6	5.8	6.2	5.8	**6.1**
16	BCW29	115	6.6	6.0	6.4	5.6	**6.2**
17	UP3124	116	7.0	6.0	6.0	6.2	**6.3**
Mean			**6.7**	**5.4**	**6.0**	**5.5**	**5.9**
Irrigated, late sown							
1	HI1563 (C)	201	6.6	5.0	5.4	5.6	**5.7**
2	DBW107 (C)	205	6.2	5.4	5.4	5.6	**5.7**
3	PBW833 (C)	206	6.8	5.6	5.6	5.4	**5.9**
4	HD3118 (C)	207	5.8	5.0	4.6	5.4	**5.2**
5	HI1621 (C)	208	6.4	5.4	5.2	5.6	**5.7**
6	WH1323	202	6.4	4.8	5.0	5.6	**5.5**
7	Raj4581	203	6.6	5.0	5.2	6.4	**5.8**
8	WH1324	204	6.4	4.8	5.2	5.4	**5.5**
Mean			**6.4**	**5.1**	**5.2**	**5.6**	**5.6**
Restricted Irrigated, timely sown							
1	HD3171 (C)	301	6.0	6.2	6.0	5.6	**6.0**
2	HI1612 (C)	303	6.6	6.0	5.6	5.4	**5.9**
3	K1317 (C)	304	6.8	6.4	5.8	5.6	**6.2**
4	HD3293 (C)	305	5.6	6.6	6.0	6.0	**6.1**
5	DBW252 (C)	307	5.8	5.6	5.4	5.0	**5.5**
6	JKW304	302	6.4	6.0	5.8	5.4	**5.9**
7	HD3460	306	5.8	6.2	5.8	5.8	**5.9**
Mean			**6.1**	**6.1**	**5.8**	**5.5**	**5.9**

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

S. No.	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	82.2	76.5	77.3	73.7	**77.4**
2	DBW222 (C)	105	79.9	71.6	75.0	69.5	**74.0**
3	PBW826 (C)	106	82.1	77.6	79.8	72.5	**78.0**
4	HD3388(I) (C)	107	79.8	71.7	75.8	71.2	**74.6**
5	HD3249 (C)	113	80.9	75.2	76.9	75.3	**77.1**
6	DBW187 (C)	117	81.7	73.9	76.0	72.5	**76.0**
7	UP3123	101	79.1	69.5	74.1	72.7	**73.9**
8	HD3447	102	80.7	65.1	73.4	70.5	**72.4**
9	PBW908	103	79.5	76.3	76.6	69.8	**75.6**
10	PBW915	104	83.5	79.2	79.4	77.5	**79.9**
11	Filler	108	80.5	70.6	75.8	69.4	**74.1**
12	HP1978	109	78.9	71.3	73.3	70.2	**73.4**
13	KRL2106	110	81.8	72.0	66.0	73.3	**73.3**
14	PBW913	111	81.6	76.9	78.8	74.5	**78.0**
15	HD3467	114	81.6	76.4	78.1	73.8	**77.5**
16	BCW29	115	80.4	76.9	75.6	73.3	**76.6**
17	UP3124	116	81.8	79.8	79.0	78.1	**79.7**
Mean			**80.9**	**74.1**	**75.9**	**72.8**	**76.0**
Irrigated, late sown							
1	HI1563 (C)	201	81.2	76.7	74.5	76.6	**77.3**
2	DBW107 (C)	205	79.9	78.7	71.8	75.6	**76.5**
3	PBW833 (C)	206	80.9	76.4	75.3	74.6	**76.8**
4	HD3118 (C)	207	76.4	70.9	65.3	69.3	**70.5**
5	HI1621 (C)	208	78.3	71.2	69.4	70.5	**72.4**
6	WH1323	202	79.1	70.5	66.4	73.0	**72.3**
7	Raj4581	203	80.3	75.5	71.8	76.5	**76.0**
8	WH1324	204	76.4	70.0	68.0	72.1	**71.6**
Mean			**79.1**	**73.7**	**70.3**	**73.5**	**74.2**
Restricted Irrigated, timely sown							
1	HD3171 (C)	301	79.1	76.6	75.1	74.0	**76.2**
2	HI1612 (C)	303	81.8	74.8	75.9	72.4	**76.2**
3	K1317 (C)	304	81.9	79.5	74.2	74.5	**77.5**
4	HD3293 (C)	305	80.1	78.4	76.4	74.5	**77.4**
5	DBW252 (C)	307	81.5	75.3	71.3	70.7	**74.7**
6	JKW304	302	79.0	75.2	74.1	72.2	**75.1**
7	HD3460	306	80.3	78.6	76.5	78.0	**78.4**
Mean			**80.5**	**76.9**	**74.8**	**73.8**	**76.5**

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

S. No.	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	9.4	12.4	10.7	11.5	**11.0**
2	DBW222 (C)	105	9.2	12.8	11.1	12.1	**11.3**
3	PBW826 (C)	106	9.3	12.0	10.3	12.2	**10.9**
4	HD3388(I) (C)	107	10.0	13.6	11.3	12.6	**11.9**
5	HD3249 (C)	113	10.3	13.6	10.7	12.0	**11.6**
6	DBW187 (C)	117	9.8	13.6	10.9	12.9	**11.8**
7	UP3123	101	11.4	14.0	11.3	11.7	**12.1**
8	HD3447	102	10.6	14.1	11.7	12.5	**12.2**
9	PBW908	103	10.3	13.1	11.1	12.6	**11.8**
10	PBW915	104	11.7	14.4	12.4	13.2	**12.9**
11	Filler	108	9.7	13.8	10.1	13.2	**11.7**
12	HP1978	109	9.2	13.5	10.5	11.7	**11.2**
13	KRL2106	110	8.9	15.2	13.7	13.2	**12.8**
14	PBW913	111	10.2	13.3	11.6	11.9	**11.7**
15	HD3467	114	10.2	14.2	11.7	12.7	**12.2**
16	BCW29	115	9.8	13.5	11.1	12.2	**11.6**
17	UP3124	116	12.4	14.0	12.1	13.5	**13.0**
Mean			**10.1**	**13.6**	**11.3**	**12.5**	**11.9**
Irrigated, late sown							
1	HI1563 (C)	201	10.9	13.0	11.5	10.9	**11.6**
2	DBW107 (C)	205	11.6	12.8	12.9	12.5	**12.5**
3	PBW833 (C)	206	12.3	12.9	13.0	13.1	**12.8**
4	HD3118 (C)	207	11.5	12.7	12.5	12.6	**12.3**
5	HI1621 (C)	208	11.4	12.7	12.1	12.3	**12.1**
6	WH1323	202	11.0	14.0	13.4	12.9	**12.8**
7	Raj4581	203	11.1	12.8	12.5	11.6	**12.0**
8	WH1324	204	11.6	14.5	12.9	13.0	**13.0**
Mean			**11.4**	**13.2**	**12.6**	**12.4**	**12.4**
Restricted Irrigated, timely sown							
1	HD3171 (C)	301	13.8	11.4	11.6	12.5	**12.3**
2	HI1612 (C)	303	10.4	10.9	11.9	11.8	**11.2**
3	K1317 (C)	304	11.5	11.6	12.0	12.3	**11.9**
4	HD3293 (C)	305	11.2	10.3	11.2	11.5	**11.1**
5	DBW252 (C)	307	11.4	10.7	11.9	12.6	**11.6**
6	JKW304	302	11.7	11.7	11.7	12.5	**11.9**
7	HD3460	306	10.4	11.0	11.4	11.6	**11.1**
Mean			**11.5**	**11.1**	**11.7**	**12.1**	**11.6**

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

S. No.	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	45	59	51	55	**52**
2	DBW222 (C)	105	49	53	50	59	**53**
3	PBW826 (C)	106	45	50	45	54	**48**
4	HD3388(I) (C)	107	50	54	52	57	**53**
5	HD3249 (C)	113	55	64	52	59	**57**
6	DBW187 (C)	117	49	45	55	61	**52**
7	UP3123	101	50	54	47	49	**50**
8	HD3447	102	42	49	45	52	**47**
9	PBW908	103	47	49	49	57	**51**
10	PBW915	104	49	46	49	55	**50**
11	Filler	108	48	55	47	54	**51**
12	HP1978	109	46	47	49	55	**49**
13	KRL2106	110	43	39	46	46	**44**
14	PBW913	111	47	51	52	52	**51**
15	HD3467	114	52	59	53	58	**56**
16	BCW29	115	48	53	52	53	**51**
17	UP3124	116	57	56	56	57	**57**
Mean			**48**	**52**	**50**	**55**	**51**
Irrigated, late sown							
1	HI1563 (C)	201	42	44	50	47	**46**
2	DBW107 (C)	205	44	47	52	49	**48**
3	PBW833 (C)	206	46	49	54	57	**52**
4	HD3118 (C)	207	42	46	50	50	**47**
5	HI1621 (C)	208	49	50	52	58	**52**
6	WH1323	202	55	61	68	60	**61**
7	Raj4581	203	44	52	63	52	**53**
8	WH1324	204	45	57	67	63	**58**
Mean			**46**	**51**	**57**	**54**	**52**
Restricted Irrigated, timely sown							
1	HD3171 (C)	301	52	53	56	57	**54**
2	HI1612 (C)	303	49	56	49	59	**53**
3	K1317 (C)	304	44	46	57	49	**49**
4	HD3293 (C)	305	40	40	45	43	**42**
5	DBW252 (C)	307	45	48	57	52	**50**
6	JKW304	302	51	46	53	54	**51**
7	HD3460	306	43	47	52	46	**47**
Mean			**46**	**48**	**53**	**52**	**50**

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

S. No.	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	5.5	5.5	5.5	6.5	**5.8**
2	DBW222 (C)	105	9.0	9.0	9.0	8.5	**8.9**
3	PBW826 (C)	106	9.5	8.5	9.0	6.5	**8.4**
4	HD3388(I) (C)	107	8.5	9.0	8.5	8.0	**8.5**
5	HD3249 (C)	113	9.0	8.5	9.5	8.5	**8.9**
6	DBW187 (C)	117	8.0	7.0	9.0	8.5	**8.1**
7	UP3123	101	6.0	6.0	6.0	7.0	**6.3**
8	HD3447	102	8.5	9.0	8.5	8.0	**8.5**
9	PBW908	103	6.0	7.0	6.5	6.5	**6.5**
10	PBW915	104	8.5	7.5	7.0	7.5	**7.6**
11	Filler	108	9.0	9.5	9.0	8.5	**9.0**
12	HP1978	109	8.5	7.5	9.0	8.0	**8.3**
13	KRL2106	110	8.5	7.0	8.5	7.5	**7.9**
14	PBW913	111	8.5	7.5	9.5	7.5	**8.3**
15	HD3467	114	8.5	7.5	7.5	8.0	**7.9**
16	BCW29	115	8.0	7.5	7.0	8.0	**7.6**
17	UP3124	116	5.5	6.0	6.5	6.5	**6.1**
Mean			**7.9**	**7.6**	**8.0**	**7.6**	**7.8**
Irrigated, late sown							
1	HI1563 (C)	201	5.5	5.5	5.5	6.0	**5.6**
2	DBW107 (C)	205	8.0	7.5	8.0	8.0	**7.9**
3	PBW833 (C)	206	8.5	7.5	9.0	8.0	**8.3**
4	HD3118 (C)	207	8.0	7.0	8.0	7.5	**7.6**
5	HI1621 (C)	208	7.5	7.5	8.5	8.0	**7.9**
6	WH1323	202	8.5	8.0	9.5	8.5	**8.6**
7	Raj4581	203	8.5	7.5	9.0	8.0	**8.3**
8	WH1324	204	8.5	8.0	9.5	8.5	**8.6**
Mean			**7.9**	**7.3**	**8.4**	**7.8**	**7.8**
Restricted Irrigated, timely sown							
1	HD3171 (C)	301	8.0	8.0	7.5	7.5	**7.8**
2	HI1612 (C)	303	5.0	8.0	8.5	8.5	**7.5**
3	K1317 (C)	304	8.0	5.5	5.0	6.0	**6.1**
4	HD3293 (C)	305	8.0	7.5	8.5	7.5	**7.9**
5	DBW252 (C)	307	9.0	8.0	9.0	8.0	**8.5**
6	JKW304	302	7.0	7.5	8.0	8.5	**7.8**
7	HD3460	306	8.5	7.5	8.5	7.5	**8.0**
Mean			**7.6**	**7.4**	**7.9**	**7.6**	**7.6**

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

S. No.	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	75.9				**75.9**
2	DBW222 (C)	105	75.5				**75.5**
3	PBW826 (C)	106	78.2				**78.2**
4	HD3388(I) (C)	107	78.0				**78.0**
5	HD3249 (C)	113	75.3				**75.3**
6	DBW187 (C)	117	77.3				**77.3**
7	UP3123	101	74.9				**74.9**
8	HD3447	102	75.3				**75.3**
9	PBW908	103	83.8				**83.8**
10	PBW915	104	81.0				**81.0**
11	Filler	108	66.3				**66.3**
12	HP1978	109	70.8				**70.8**
13	KRL2106	110	74.5				**74.5**
14	PBW913	111	77.3				**77.3**
15	HD3467	114	79.2				**79.2**
16	BCW29	115	76.8				**76.8**
17	UP3124	116	77.8				**77.8**
Mean			**76.3**				**76.3**
Irrigated, late sown							
1	HI1563 (C)	201	79.2				**79.2**
2	DBW107 (C)	205	82.6				**82.6**
3	PBW833 (C)	206	87.4				**87.4**
4	HD3118 (C)	207	73.6				**73.6**
5	HI1621 (C)	208	68.3				**68.3**
6	WH1323	202	75.0				**75.0**
7	Raj4581	203	77.3				**77.3**
8	WH1324	204	80.6				**80.6**
Mean			**78.0**				**78.0**
Restricted Irrigated, timely sown							
1	HD3171 (C)	301	80.0				**80.0**
2	HI1612 (C)	303	83.4				**83.4**
3	K1317 (C)	304	82.4				**82.4**
4	HD3293 (C)	305	78.7				**78.7**
5	DBW252 (C)	307	70.2				**70.2**
6	JKW304	302	78.6				**78.6**
7	HD3460	306	69.8				**69.8**
Mean			**77.6**				**77.6**

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

S. No.	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	33.7	34.5	46.7	31.1	**36.5**
2	DBW222 (C)	105	32.3	30.5	49.3	31.7	**36.0**
3	PBW826 (C)	106	34.1	40.5	36.0	33.2	**36.0**
4	HD3388(I) (C)	107	35.1	34.1	39.3	36.4	**36.2**
5	HD3249 (C)	113	40.2	35.6	43.4	36.1	**38.8**
6	DBW187 (C)	117	34.0	37.8	49.6	33.1	**38.6**
7	UP3123	101	35.6	37.8	34.9	33.9	**35.6**
8	HD3447	102	37.3	43.2	39.6	35.1	**38.8**
9	PBW908	103	32.4	33.9	38.3	33.6	**34.6**
10	PBW915	104	40.7	39.7	40.2	36.1	**39.2**
11	Filler	108	32.8	38.9	46.4	36.2	**38.6**
12	HP1978	109	35.5	31.8	46.6	31.2	**36.3**
13	KRL2106	110	33.6	34.4	48.3	35.1	**37.9**
14	PBW913	111	36.1	30.3	38.3	31.6	**34.1**
15	HD3467	114	33.2	33.6	36.3	36.2	**34.8**
16	BCW29	115	35.8	39.7	45.6	37.0	**39.5**
17	UP3124	116	39.0	39.4	43.1	35.3	**39.2**
Mean			**35.4**	**36.2**	**42.5**	**34.3**	**37.1**
Irrigated, late sown							
1	HI1563 (C)	201	48.9	33.3	56.2	80.1	**41.1**
2	DBW107 (C)	205	38.4	34.3	54.2	47.9	**36.4**
3	PBW833 (C)	206	40.0	30.8	43.6	40.3	**35.4**
4	HD3118 (C)	207	38.0	29.7	67.2	69.8	**33.9**
5	HI1621 (C)	208	38.4	30.1	38.8	71.8	**34.3**
6	WH1323	202	38.1	32.6	55.6	48.7	**35.4**
7	Raj4581	203	35.6	29.7	42.7	34.8	**32.7**
8	WH1324	204	44.6	30.8	90.7	40.9	**37.7**
Mean			**40.3**	**31.4**	**56.1***	**54.3***	**35.8**
Restricted Irrigated, timely sown							
1	HD3171 (C)	301	41.4	42.3	40.6	52.1	**44.1**
2	HI1612 (C)	303	34.5	32.0	37.6	51.3	**38.9**
3	K1317 (C)	304	33.5	32.3	34.4	45.6	**36.5**
4	HD3293 (C)	305	35.9	31.5	33.1	47.2	**36.9**
5	DBW252 (C)	307	37.1	30.4	35.8	49.3	**38.2**
6	JKW304	302	33.4	36.2	39.2	51.2	**40.0**
7	HD3460	306	34.8	36.1	35.2	49.7	**39.0**
Mean			**35.8**	**34.4**	**36.6**	**49.5**	**39.1**

***Fe content exceptionally high at Sabour and Pusa centres under ILS condition and hence not been included in calculating average**

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

S. No.	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	26.6	32.7	32.4	23.6	**28.8**
2	DBW222 (C)	105	25.3	30.4	28.6	22.3	**26.7**
3	PBW826 (C)	106	26.1	36.9	26.3	22.7	**28.0**
4	HD3388(I) (C)	107	28.9	35.2	28.1	27.2	**29.9**
5	HD3249 (C)	113	26.2	33.6	29.8	25.8	**28.9**
6	DBW187 (C)	117	22.8	33.7	23.8	21.6	**25.5**
7	UP3123	101	30.8	41.1	32.7	24.4	**32.3**
8	HD3447	102	28.4	37.3	32.7	26.1	**31.1**
9	PBW908	103	28.2	35.9	29.3	26.6	**30.0**
10	PBW915	104	38.7	39.0	35.3	30.7	**35.9**
11	Filler	108	26.1	32.9	28.9	28.5	**29.1**
12	HP1978	109	23.6	30.6	27.0	22.0	**25.8**
13	KRL2106	110	28.8	39.5	38.7	27.4	**33.6**
14	PBW913	111	29.6	30.4	28.0	21.3	**27.3**
15	HD3467	114	29.8	35.2	34.4	25.4	**31.2**
16	BCW29	115	25.8	37.0	29.1	28.9	**30.2**
17	UP3124	116	28.9	41.2	30.7	21.5	**30.6**
Mean			**27.9**	**35.4**	**30.3**	**25.1**	**29.7**
Irrigated, late sown							
1	HI1563 (C)	201	32.4	33.9	23.1	36.1	**31.4**
2	DBW107 (C)	205	26.7	37.5	29.4	36.3	**32.5**
3	PBW833 (C)	206	32.8	34.6	28.8	36.2	**33.1**
4	HD3118 (C)	207	28.5	32.6	30.0	29.2	**30.1**
5	HI1621 (C)	208	26.5	34.3	26.9	29.6	**29.3**
6	WH1323	202	28.2	36.0	27.2	29.9	**30.3**
7	Raj4581	203	31.0	36.3	26.7	31.4	**31.4**
8	WH1324	204	23.5	32.9	28.6	30.3	**28.8**
Mean			**28.7**	**34.8**	**27.6**	**32.4**	**30.9**
Restricted Irrigated, timely sown							
1	HD3171 (C)	301	29.6	38.7	23.7	24.6	**29.2**
2	HI1612 (C)	303	27.3	33.3	23.9	29.5	**28.5**
3	K1317 (C)	304	29.1	32.2	23.1	23.7	**27.0**
4	HD3293 (C)	305	34.8	33.4	25.6	32.3	**31.5**
5	DBW252 (C)	307	29.4	27.8	20.3	22.7	**25.1**
6	JKW304	302	28.5	36.9	21.8	31.3	**29.6**
7	HD3460	306	31.9	34.8	24.7	27.1	**29.6**
Mean			**30.1**	**33.9**	**23.3**	**27.3**	**28.6**

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

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.khera	Mean
Irrigated, timely sown							
T. aestivum							
1	HI1669*	112	6.8	6.2	6.4	6.2	**6.4**
2	GW547(I) (C)	101	7.8	6.8	7.6	6.4	**7.2**
3	HI1650 (C)	115	6.4	7.0	6.8	6.6	**6.7**
4	MACS6768 (C)	116	6.6	6.8	6.2	6.6	**6.6**
5	GW322 (C)	118	6.4	6.4	6.2	6.4	**6.4**
6	GW554	104	6.0	7.2	6.8	6.6	**6.7**
7	MACS6837	106	7.0	7.0	6.6	6.6	**6.8**
8	HI1684	107	7.0	6.8	7.0	6.2	**6.8**
9	GW555	111	6.4	6.6	6.6	6.4	**6.5**
10	MP3570	113	7.0	6.8	6.8	6.6	**6.8**
11	HI1683	114	6.6	7.0	7.0	6.4	**6.8**
Mean			**6.7**	**6.8**	**6.7**	**6.5**	**6.7**
T. durum							
1	HI8737(d) (C)	102	8.4	7.4	8.0	6.8	**7.7**
2	HI8713(d) (C)	117	7.4	6.8	6.6	6.4	**6.8**
3	MACS4125(d)	103	8.6	7.4	8.6	7.2	**8.0**
4	MACS4135(d)	105	8.2	7.2	8.4	6.8	**7.7**
5	HI8850(d)	108	8.0	7.0	8.2	5.8	**7.3**
6	HI8849(d)	109	7.0	7.6	8.2	6.6	**7.4**
7	HI8848(d)	110	8.0	7.2	8.4	6.8	**7.6**
8	MPO1395(d)	119	8.2	7.8	8.4	6.8	**7.8**
Mean			**8.0**	**7.3**	**8.1**	**6.7**	**7.5**
Irrigated, late sown							
T. aestivum							
1	HI1674*	206	7.2	6.8	6.6	5.6	**6.6**
2	HI1634 (C)	203	6.4	6.8	6.8	6.0	**6.5**
3	MP4010 (C)	204	6.2	6.6	6.8	5.6	**6.3**
4	HD2932 (C)	207	7.0	7.0	6.4	6.2	**6.7**
5	CG1029 (C)	208	6.8	6.8	6.8	6.2	**6.7**
6	WSM138	201	7.4	7.0	6.2	5.8	**6.6**
7	HI1687	202	7.6	6.6	6.8	5.8	**6.7**
8	MACS6830	205	6.8	6.6	6.8	6.4	**6.7**
9	DBW425	209	6.8	6.8	6.6	6.2	**6.6**
10	GW556	210	7.2	7.0	6.8	5.6	**6.7**
Mean			**6.9**	**6.8**	**6.7**	**5.9**	**6.6**
Restricted Irrigated, timely sown							
T. aestivum							
1	DBW441M*	312	6.6	6.6	6.0	6.6	**6.5**
2	CG1040(I) (C)	301	6.8	7.0	6.2	6.4	**6.6**
3	DBW110 (C)	302	6.4	6.4	6.4	6.4	**6.4**
4	CG1036 (C)	304	7.8	6.0	6.6	6.4	**6.7**
5	HI1655 (C)	306	6.4	7.0	6.8	6.0	**6.6**
6	DBW359(I) (C)	317	6.8	7.4	6.8	6.8	**7.0**
7	NIAW4267	303	6.8	6.6	6.4	6.2	**6.5**
8	UAS3029	307	6.8	6.8	6.8	6.6	**6.8**
9	DBW432	309	6.8	6.8	6.2	6.8	**6.7**
10	DBW428	314	7.0	6.8	7.2	6.6	**6.9**
Mean			**6.8**	**6.7**	**6.5**	**6.5**	**6.6**
T. durum							
1	HI8627(d) (C)	308	6.8	6.6	6.8	6.4	**6.7**
2	HI8823(d) (C)	316	6.8	6.8	7.2	6.4	**6.8**
3	HI8852(d)	305	8.4	7.6	6.8	6.6	**7.4**
4	MACS4131(d)	310	8.4	8.2	6.8	6.8	**7.6**
5	HI8851(d)	311	7.4	8.4	7.6	6.6	**7.5**
6	UAS484(d)	313	6.8	6.4	5.6	5.8	**6.2**
7	MPO1398(d)	315	7.0	6.4	6.6	6.6	**6.7**
Mean			**7.4**	**7.2**	**6.8**	**6.5**	**7.0**

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

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.khera	Mean
Irrigated, timely sown							
T. aestivum							
1	HI1669*	112	83.3	82.7	84.7	81.5	**83.1**
2	GW547(I) (C)	101	80.2	79.4	81.2	80.7	**80.4**
3	HI1650 (C)	115	83.7	83.5	83.7	82.1	**83.3**
4	MACS6768 (C)	116	83.0	81.8	84.0	81.6	**82.6**
5	GW322 (C)	118	80.0	80.2	81.2	79.2	**80.2**
6	GW554	104	83.3	83.5	85.6	82.9	**83.8**
7	MACS6837	106	80.9	80.5	80.4	79.3	**80.3**
8	HI1684	107	83.4	82.6	84.3	81.2	**82.9**
9	GW555	111	84.7	83.4	84.6	82.6	**83.8**
10	MP3570	113	82.1	81.8	81.9	82.6	**82.1**
11	HI1683	114	82.8	82.3	82.6	81.2	**82.2**
Mean			**82.5**	**82.0**	**83.1**	**81.4**	**82.2**
T. durum							
1	HI8737(d) (C)	102	85.1	83.5	84.8	82.8	**84.1**
2	HI8713(d) (C)	117	83.7	81.8	84.5	79.8	**82.5**
3	MACS4125(d)	103	84.7	81.9	84.2	81.6	**83.1**
4	MACS4135(d)	105	84.4	83.8	84.8	81.9	**83.7**
5	HI8850(d)	108	83.9	82.4	84.3	79.9	**82.6**
6	HI8849(d)	109	84.5	82.7	84.1	80.5	**83.0**
7	HI8848(d)	110	83.9	81.9	83.6	80.1	**82.4**
8	MPO1395(d)	119	82.8	80.1	82.8	81.4	**81.8**
Mean			**84.1**	**82.3**	**84.1**	**81.0**	**82.9**
Irrigated, late sown							
T. aestivum							
1	HI1674*	206	83.3	80.8	82.6	77.2	**81.0**
2	HI1634 (C)	203	82.6	81.1	84.8	78.7	**81.8**
3	MP4010 (C)	204	81.3	80.3	84.6	78.1	**81.1**
4	HD2932 (C)	207	80.8	80.3	82.7	76.8	**80.2**
5	CG1029 (C)	208	82.1	81.1	84.4	79.0	**81.7**
6	WSM138	201	82.9	81.9	84.7	78.8	**82.1**
7	HI1687	202	81.7	80.3	82.8	77.3	**80.5**
8	MACS6830	205	78.1	79.4	84.6	75.5	**79.4**
9	DBW425	209	79.0	79.5	83.5	79.1	**80.3**
10	GW556	210	82.6	81.1	84.6	77.4	**81.4**
Mean			**81.4**	**80.6**	**83.9**	**77.8**	**80.9**
Restricted Irrigated, timely sown							
T. aestivum							
1	DBW441M*	312	79.5	81.9	81.1	81.1	**80.9**
2	CG1040(I) (C)	301	77.8	81.5	81.3	81.3	**80.5**
3	DBW110 (C)	302	78.1	81.1	80.1	81.3	**80.2**
4	CG1036 (C)	304	83.2	83.6	83.5	83.8	**83.5**
5	HI1655 (C)	306	76.9	81.1	81.8	80.7	**80.1**
6	DBW359(I) (C)	317	80.8	82.7	82.9	82.6	**82.3**
7	NIAW4267	303	79.9	82.0	81.6	79.7	**80.8**
8	UAS3029	307	79.6	82.1	81.8	82.4	**81.5**
9	DBW432	309	79.5	81.1	81.5	81.6	**80.9**
10	DBW428	314	78.9	82.3	82.3	82.6	**81.5**
Mean			**79.4**	**81.9**	**81.8**	**81.7**	**81.2**
T. durum							
1	HI8627(d) (C)	308	80.3	80.6	83.5	82.5	**81.7**
2	HI8823(d) (C)	316	83.6	83.8	85.9	84.3	**84.4**
3	HI8852(d)	305	82.9	83.8	83.7	84.1	**83.6**
4	MACS4131(d)	310	83.1	83.0	84.4	83.9	**83.6**
5	HI8851(d)	311	82.6	84.7	84.6	84.8	**84.2**
6	UAS484(d)	313	81.7	83.0	82.9	81.6	**82.3**
7	MPO1398(d)	315	80.9	82.5	82.8	83.1	**82.3**
Mean			**82.2**	**83.1**	**84.0**	**83.5**	**83.2**

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	Junagadh	Indore	P.khera	Mean
Irrigated, timely sown							
T. aestivum							
1	HI1669*	112	10.6	12.5	11.2	12.1	**11.6**
2	GW547(I) (C)	101	12.0	13.5	12.7	13.1	**12.8**
3	HI1650 (C)	115	10.8	12.7	11.5	11.7	**11.7**
4	MACS6768 (C)	116	11.0	14.6	12.4	12.8	**12.7**
5	GW322 (C)	118	10.0	11.0	10.3	10.7	**10.5**
6	GW554	104	10.4	13.1	11.2	11.4	**11.5**
7	MACS6837	106	10.1	12.5	11.0	12.1	**11.5**
8	HI1684	107	10.9	12.4	11.3	12.2	**11.7**
9	GW555	111	10.1	13.3	11.5	12.2	**11.8**
10	MP3570	113	10.0	11.7	10.6	10.1	**10.6**
11	HI1683	114	10.8	12.5	11.4	12.4	**11.8**
Mean			**10.6**	**12.7**	**11.4**	**11.9**	**11.7**
T. durum							
1	HI8737(d) (C)	102	11.0	11.8	11.4	11.9	**11.5**
2	HI8713(d) (C)	117	10.0	12.0	11.0	11.6	**11.2**
3	MACS4125(d)	103	11.2	11.4	11.8	12.6	**11.7**
4	MACS4135(d)	105	10.4	11.5	11.6	11.9	**11.4**
5	HI8850(d)	108	10.2	12.5	11.0	12.0	**11.4**
6	HI8849(d)	109	10.3	12.0	11.5	11.6	**11.4**
7	HI8848(d)	110	11.8	12.6	12.2	12.0	**12.2**
8	MPO1395(d)	119	10.8	12.8	11.8	12.6	**12.0**
Mean			**10.7**	**12.1**	**11.5**	**12.0**	**11.6**
Irrigated, late sown							
T. aestivum							
1	HI1674*	206	10.4	14.0	10.2	11.5	**11.5**
2	HI1634 (C)	203	12.2	15.1	12.0	13.0	**13.1**
3	MP4010 (C)	204	12.0	14.4	11.7	12.6	**12.7**
4	HD2932 (C)	207	10.9	14.9	10.9	12.5	**12.3**
5	CG1029 (C)	208	11.4	14.2	10.9	12.2	**12.2**
6	WSM138	201	10.6	14.3	10.3	12.3	**11.9**
7	HI1687	202	11.1	14.1	11.1	11.2	**11.9**
8	MACS6830	205	12.6	14.7	10.3	12.8	**12.6**
9	DBW425	209	10.6	14.3	11.1	12.2	**12.0**
10	GW556	210	10.7	13.3	10.5	11.8	**11.6**
Mean			**11.2**	**14.3**	**10.9**	**12.2**	**12.2**
Restricted Irrigated, timely sown							
T. aestivum							
1	DBW441M*	312	12.8	13.3	10.4	11.3	**11.9**
2	CG1040(I) (C)	301	11.7	13.0	10.2	10.6	**11.4**
3	DBW110 (C)	302	11.5	12.8	11.1	11.2	**11.7**
4	CG1036 (C)	304	12.3	13.5	11.0	11.5	**12.1**
5	HI1655 (C)	306	11.9	12.9	9.0	10.9	**11.2**
6	DBW359(I) (C)	317	10.6	13.9	10.1	11.0	**11.4**
7	NIAW4267	303	12.0	13.9	10.3	11.6	**11.9**
8	UAS3029	307	12.9	13.7	11.1	11.1	**12.2**
9	DBW432	309	11.9	13.7	9.9	12.0	**11.9**
10	DBW428	314	13.5	13.7	10.7	12.1	**12.5**
Mean			**12.1**	**13.4**	**10.4**	**11.3**	**11.8**
T. durum							
1	HI8627(d) (C)	308	13.2	14.4	10.2	10.9	**12.2**
2	HI8823(d) (C)	316	12.5	13.6	10.2	10.6	**11.7**
3	HI8852(d)	305	12.9	13.0	10.0	11.1	**11.8**
4	MACS4131(d)	310	12.8	13.5	10.3	11.0	**11.9**
5	HI8851(d)	311	12.5	13.2	10.8	11.2	**11.9**
6	UAS484(d)	313	12.8	12.3	9.2	11.4	**11.4**
7	MPO1398(d)	315	11.8	13.5	10.7	10.7	**11.7**
Mean			**12.6**	**13.4**	**10.2**	**11.0**	**11.8**

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

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.khera	Mean
Irrigated, timely sown							
T. aestivum							
1	HI1669*	112	47	46	47	46	**46**
2	GW547(I) (C)	101	53	55	52	51	**53**
3	HI1650 (C)	115	42	44	41	40	**42**
4	MACS6768 (C)	116	40	42	41	40	**41**
5	GW322 (C)	118	40	41	39	36	**39**
6	GW554	104	44	45	43	44	**44**
7	MACS6837	106	56	54	52	53	**54**
8	HI1684	107	47	39	45	46	**44**
9	GW555	111	44	47	47	46	**46**
10	MP3570	113	48	49	47	43	**47**
11	HI1683	114	44	43	46	43	**44**
Mean			**46**	**46**	**45**	**44**	**45**
T. durum							
1	HI8737(d) (C)	102	38	37	39	35	**37**
2	HI8713(d) (C)	117	29	29	30	43	**33**
3	MACS4125(d)	103	34	34	36	38	**35**
4	MACS4135(d)	105	41	39	37	44	**40**
5	HI8850(d)	108	38	42	39	38	**39**
6	HI8849(d)	109	36	29	29	32	**31**
7	HI8848(d)	110	38	34	41	39	**38**
8	MPO1395(d)	119	42	37	43	38	**40**
Mean			**37**	**35**	**37**	**38**	**37**
Irrigated, late sown							
T. aestivum							
1	HI1674*	206	42	42	46	41	**43**
2	HI1634 (C)	203	48	46	44	43	**45**
3	MP4010 (C)	204	47	45	41	42	**44**
4	HD2932 (C)	207	54	52	47	47	**50**
5	CG1029 (C)	208	39	38	36	40	**38**
6	WSM138	201	38	38	36	36	**37**
7	HI1687	202	50	47	47	43	**47**
8	MACS6830	205	51	43	38	43	**44**
9	DBW425	209	54	65	52	54	**56**
10	GW556	210	49	46	41	46	**46**
Mean			**47**	**46**	**43**	**43**	**45**
Restricted Irrigated, timely sown							
T. aestivum							
1	DBW441M*	312	54	56	51	53	**53**
2	CG1040(I) (C)	301	56	59	49	54	**55**
3	DBW110 (C)	302	56	56	53	56	**55**
4	CG1036 (C)	304	47	43	43	43	**44**
5	HI1655 (C)	306	41	49	39	41	**42**
6	DBW359(I) (C)	317	53	58	52	54	**54**
7	NIAW4267	303	34	43	36	34	**37**
8	UAS3029	307	51	53	49	45	**50**
9	DBW432	309	49	50	44	44	**47**
10	DBW428	314	55	59	58	54	**57**
Mean			**50**	**53**	**47**	**48**	**49**
T. durum							
1	HI8627(d) (C)	308	32	54	29	30	**36**
2	HI8823(d) (C)	316	39	39	35	34	**37**
3	HI8852(d)	305	34	39	38	35	**36**
4	MACS4131(d)	310	33	35	36	34	**35**
5	HI8851(d)	311	32	34	36	33	**34**
6	UAS484(d)	313	37	42	39	38	**39**
7	MPO1398(d)	315	42	43	45	41	**43**
Mean			**36**	**41**	**37**	**35**	**37**

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

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.khera	Mean
Irrigated, timely sown							
T. aestivum							
1	HI1669*	112	3.5	3.0	3.0	5.5	**3.8**
2	GW547(I) (C)	101	7.5	7.5	8.0	7.5	**7.6**
3	HI1650 (C)	115	7.5	7.0	7.5	8.0	**7.5**
4	MACS6768 (C)	116	8.0	7.5	7.5	7.5	**7.6**
5	GW322 (C)	118	7.5	6.5	6.0	7.0	**6.8**
6	GW554	104	6.0	6.0	5.5	7.0	**6.1**
7	MACS6837	106	7.5	7.0	7.5	8.0	**7.5**
8	HI1684	107	4.0	3.0	3.5	6.0	**4.1**
9	GW555	111	3.0	3.5	3.0	5.5	**3.8**
10	MP3570	113	5.0	7.0	6.5	7.0	**6.4**
11	HI1683	114	6.5	6.5	6.5	8.0	**6.9**
Mean			**6.0**	**5.9**	**5.9**	**7.0**	**6.2**
T. durum							
1	HI8737(d) (C)	102	0.0	0.0	0.0	0.0	**0.0**
2	HI8713(d) (C)	117	0.0	0.0	0.0	0.0	**0.0**
3	MACS4125(d)	103	0.0	0.0	0.0	0.0	**0.0**
4	MACS4135(d)	105	0.0	0.0	0.0	0.0	**0.0**
5	HI8850(d)	108	0.0	0.0	0.0	0.0	**0.0**
6	HI8849(d)	109	0.0	0.0	0.0	0.0	**0.0**
7	HI8848(d)	110	0.0	0.0	0.0	0.0	**0.0**
8	MPO1395(d)	119	0.0	0.0	0.0	0.0	**0.0**
Mean			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Irrigated, late sown							
T. aestivum							
1	HI1674*	206	3.0	3.5	3.0	3.0	**3.1**
2	HI1634 (C)	203	6.5	6.5	6.5	7.0	**6.6**
3	MP4010 (C)	204	7.0	6.0	6.0	6.5	**6.4**
4	HD2932 (C)	207	6.0	3.0	3.0	3.5	**3.9**
5	CG1029 (C)	208	7.5	7.5	7.5	8.0	**7.6**
6	WSM138	201	6.5	7.0	6.5	8.0	**7.0**
7	HI1687	202	6.0	6.0	5.5	6.0	**5.9**
8	MACS6830	205	5.0	3.5	3.0	3.5	**3.8**
9	DBW425	209	5.5	2.5	2.0	4.5	**3.6**
10	GW556	210	4.5	3.0	2.5	5.0	**3.8**
Mean			**5.8**	**4.9**	**4.6**	**5.5**	**5.2**
Restricted Irrigated, timely sown							
T. aestivum							
1	DBW441M*	312	8.5	8.0	7.0	8.0	**7.9**
2	CG1040(I) (C)	301	8.0	8.0	7.5	7.5	**7.8**
3	DBW110 (C)	302	7.5	9.0	7.5	7.5	**7.9**
4	CG1036 (C)	304	5.0	4.0	3.5	4.5	**4.3**
5	HI1655 (C)	306	9.0	8.5	8.0	7.5	**8.3**
6	DBW359(I) (C)	317	5.5	4.0	5.0	5.5	**5.0**
7	NIAW4267	303	8.5	7.5	7.5	8.0	**7.9**
8	UAS3029	307	9.5	7.5	7.0	7.5	**7.9**
9	DBW432	309	7.0	7.0	6.0	7.5	**6.9**
10	DBW428	314	7.5	7.0	7.5	8.0	**7.5**
Mean			**7.6**	**7.1**	**6.7**	**7.2**	**7.1**
T. durum							
1	HI8627(d) (C)	308	0.0	0.0	0.0	0.0	**0.0**
2	HI8823(d) (C)	316	0.0	0.0	0.0	0.0	**0.0**
3	HI8852(d)	305	0.0	0.0	0.0	0.0	**0.0**
4	MACS4131(d)	310	0.0	0.0	0.0	0.0	**0.0**
5	HI8851(d)	311	0.0	0.0	0.0	0.0	**0.0**
6	UAS484(d)	313	0.0	0.0	0.0	0.0	**0.0**
7	MPO1398(d)	315	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	Junagadh	Indore	P.khera	Mean
Irrigated, timely sown							
T. aestivum							
1	HI1669*	112					
2	GW547(I) (C)	101					
3	HI1650 (C)	115					
4	MACS6768 (C)	116					
5	GW322 (C)	118					
6	GW554	104					
7	MACS6837	106					
8	HI1684	107					
9	GW555	111					
10	MP3570	113					
11	HI1683	114					
Mean							
T. durum							
1	HI8737(d) (C)	102	5.4	4.9	4.6	4.5	**4.8**
2	HI8713(d) (C)	117	6.9	8.1	6.3	5.0	**6.6**
3	MACS4125(d)	103	5.8	6.8	6.0	6.2	**6.2**
4	MACS4135(d)	105	6.6	6.6	6.5	5.7	**6.4**
5	HI8850(d)	108	5.7	5.5	5.0	6.1	**5.6**
6	HI8849(d)	109	6.6	6.7	6.7	6.1	**6.5**
7	HI8848(d)	110	6.7	7.7	7.3	6.4	**7.0**
8	MPO1395(d)	119	5.0	5.1	4.4	4.4	**4.7**
Mean			**6.1**	**6.4**	**5.8**	**5.6**	**6.0**
Irrigated, late sown							
T. aestivum							
1	HI1674*	206					
2	HI1634 (C)	203					
3	MP4010 (C)	204					
4	HD2932 (C)	207					
5	CG1029 (C)	208					
6	WSM138	201					
7	HI1687	202					
8	MACS6830	205					
9	DBW425	209					
10	GW556	210					
Mean							
Restricted Irrigated, timely sown							
T. aestivum							
1	DBW441M*	312					
2	CG1040(I) (C)	301					
3	DBW110 (C)	302					
4	CG1036 (C)	304					
5	HI1655 (C)	306					
6	DBW359(I) (C)	317					
7	NIAW4267	303					
8	UAS3029	307					
9	DBW432	309					
10	DBW428	314					
Mean							
T. durum							
1	HI8627(d) (C)	308	6.8	6.2	4.6	6.6	**6.0**
2	HI8823(d) (C)	316	5.4	5.4	5.6	6.5	**5.7**
3	HI8852(d)	305	5.8	5.6	5.6	6.0	**5.8**
4	MACS4131(d)	310	6.7	5.5	4.9	5.3	**5.6**
5	HI8851(d)	311	6.9	5.6	6.0	5.9	**6.1**
6	UAS484(d)	313	8.0	7.7	6.2	7.2	**7.3**
7	MPO1398(d)	315	6.8	7.8	6.5	6.5	**6.9**
Mean			**6.7**	**6.2**	**5.6**	**6.3**	**6.2**

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

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.khera	Mean
Irrigated, timely sown							
T. aestivum							
1	HI1669*	112		72.9			**72.9**
2	GW547(I) (C)	101		68.1			**68.1**
3	HI1650 (C)	115		75.8			**75.8**
4	MACS6768 (C)	116		82.8			**82.8**
5	GW322 (C)	118		77.9			**77.9**
6	GW554	104		77.4			**77.4**
7	MACS6837	106		79.1			**79.1**
8	HI1684	107		88.5			**88.5**
9	GW555	111		79.1			**79.1**
10	MP3570	113		78.3			**78.3**
11	HI1683	114		76.1			**76.1**
Mean				**77.8**			**77.8**
T. durum							
1	HI8737(d) (C)	102		90.7			**90.7**
2	HI8713(d) (C)	117		90.6			**90.6**
3	MACS4125(d)	103		89.7			**89.7**
4	MACS4135(d)	105		84.9			**84.9**
5	HI8850(d)	108		91.7			**91.7**
6	HI8849(d)	109		83.6			**83.6**
7	HI8848(d)	110		91.1			**91.1**
8	MPO1395(d)	119		89.6			**89.6**
Mean				**89.0**			**89.0**
Irrigated, late sown							
T. aestivum							
1	HI1674*	206		71.4			**71.4**
2	HI1634 (C)	203		75.3			**75.3**
3	MP4010 (C)	204		80.6			**80.6**
4	HD2932 (C)	207		68.8			**68.8**
5	CG1029 (C)	208		67.8			**67.8**
6	WSM138	201		73.9			**73.9**
7	HI1687	202		73.5			**73.5**
8	MACS6830	205		66.6			**66.6**
9	DBW425	209		74.9			**74.9**
10	GW556	210		72.5			**72.5**
Mean				**72.5**			**72.5**
Restricted Irrigated, timely sown							
T. aestivum							
1	DBW441M*	312		80.0			**80.0**
2	CG1040(I) (C)	301		80.1			**80.1**
3	DBW110 (C)	302		80.3			**80.3**
4	CG1036 (C)	304		80.2			**80.2**
5	HI1655 (C)	306		84.0			**84.0**
6	DBW359(I) (C)	317		79.0			**79.0**
7	NIAW4267	303		80.0			**80.0**
8	UAS3029	307		74.4			**74.4**
9	DBW432	309		72.3			**72.3**
10	DBW428	314		71.6			**71.6**
Mean				**78.2**			**78.2**
T. durum							
1	HI8627(d) (C)	308		76.2			**76.2**
2	HI8823(d) (C)	316		100.2			**100.2**
3	HI8852(d)	305		91.8			**91.8**
4	MACS4131(d)	310		89.9			**89.9**
5	HI8851(d)	311		87.7			**87.7**
6	UAS484(d)	313		100.0			**100.0**
7	MPO1398(d)	315		97.6			**97.6**
Mean				**91.9**			**91.9**

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

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.khera	Mean
Irrigated, timely sown							
T. aestivum							
1	HI1669*	112	31.3	35.2	45.3	34.8	**36.7**
2	GW547(I) (C)	101	32.4	38.7	43.1	39.8	**38.5**
3	HI1650 (C)	115	38.4	36.9	46.9	40.7	**40.7**
4	MACS6768 (C)	116	37.8	41.8	47.5	38.3	**41.4**
5	GW322 (C)	118	30.1	33.4	40.3	32.9	**34.2**
6	GW554	104	30.5	31.4	42.0	37.8	**35.4**
7	MACS6837	106	31.5	35.0	40.2	30.4	**34.3**
8	HI1684	107	32.8	34.9	41.6	35.2	**36.1**
9	GW555	111	32.2	36.5	42.1	38.5	**37.3**
10	MP3570	113	35.5	36.1	35.7	33.6	**35.2**
11	HI1683	114	36.6	40.8	48.2	41.3	**41.7**
Mean			**33.6**	**36.4**	**43.0**	**36.7**	**37.4**
T. durum							
1	HI8737(d) (C)	102	35.2	38.0	43.8	37.7	**38.7**
2	HI8713(d) (C)	117	33.6	36.4	38.5	37.0	**36.4**
3	MACS4125(d)	103	38.6	36.6	49.0	41.3	**41.4**
4	MACS4135(d)	105	34.7	36.2	46.2	38.5	**38.9**
5	HI8850(d)	108	34.9	36.1	40.0	34.9	**36.5**
6	HI8849(d)	109	33.1	35.0	49.0	37.2	**38.6**
7	HI8848(d)	110	33.9	36.5	43.1	35.0	**37.1**
8	MPO1395(d)	119	36.0	39.2	50.0	36.1	**40.3**
Mean			**35.0**	**36.8**	**45.0**	**37.2**	**38.5**
Irrigated, late sown							
T. aestivum							
1	HI1674*	206	30.6	39.9	36.0	33.0	**34.9**
2	HI1634 (C)	203	31.2	46.6	38.0	35.8	**37.9**
3	MP4010 (C)	204	32.7	47.0	38.8	36.2	**38.7**
4	HD2932 (C)	207	28.1	37.5	36.8	36.0	**34.6**
5	CG1029 (C)	208	31.7	47.9	38.4	38.1	**39.0**
6	WSM138	201	31.6	43.0	35.4	36.7	**36.7**
7	HI1687	202	32.2	39.8	36.9	40.4	**37.3**
8	MACS6830	205	35.2	47.3	39.8	42.2	**41.1**
9	DBW425	209	32.6	44.4	35.4	35.2	**36.9**
10	GW556	210	30.1	43.6	42.3	39.4	**38.9**
Mean			**31.6**	**43.7**	**37.8**	**37.3**	**37.6**
Restricted Irrigated, timely sown							
T. aestivum							
1	DBW441M*	312	38.5	38.7	37.4	32.2	**36.7**
2	CG1040(I) (C)	301	32.5	40.0	42.6	38.0	**38.3**
3	DBW110 (C)	302	35.4	40.8	44.3	39.4	**40.0**
4	CG1036 (C)	304	35.6	44.4	43.8	36.4	**40.1**
5	HI1655 (C)	306	30.2	39.5	39.1	37.3	**36.5**
6	DBW359(I) (C)	317	34.7	43.7	38.8	36.5	**38.4**
7	NIAW4267	303	36.3	42.8	47.0	36.6	**40.7**
8	UAS3029	307	32.4	43.9	47.0	37.8	**40.3**
9	DBW432	309	39.2	42.8	43.2	39.2	**41.1**
10	DBW428	314	35.7	42.4	44.2	32.5	**38.7**
Mean			**35.1**	**41.9**	**42.7**	**36.6**	**39.1**
T. durum							
1	HI8627(d) (C)	308	33.9	44.0	41.2	35.5	**38.7**
2	HI8823(d) (C)	316	34.1	38.8	47.9	32.1	**38.2**
3	HI8852(d)	305	31.0	42.1	40.7	36.8	**37.7**
4	MACS4131(d)	310	32.4	42.5	39.7	32.7	**36.8**
5	HI8851(d)	311	36.0	44.4	49.2	38.5	**42.0**
6	UAS484(d)	313	34.0	38.8	44.8	35.7	**38.3**
7	MPO1398(d)	315	33.7	41.4	47.9	34.4	**39.4**
Mean			**33.6**	**41.7**	**44.5**	**35.1**	**38.7**

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

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.khera	Mean
Irrigated, timely sown							
T. aestivum							
1	HI1669*	112	46.1	41.0	35.5	39.2	**40.5**
2	GW547(I) (C)	101	41.4	41.7	40.8	43.5	**41.9**
3	HI1650 (C)	115	44.7	41.0	36.3	36.7	**39.7**
4	MACS6768 (C)	116	48.8	45.1	38.2	41.4	**43.4**
5	GW322 (C)	118	42.4	40.4	33.0	38.5	**38.6**
6	GW554	104	42.2	38.3	35.6	40.3	**39.1**
7	MACS6837	106	37.5	36.2	34.8	31.8	**35.1**
8	HI1684	107	42.9	36.6	35.3	35.4	**37.6**
9	GW555	111	44.0	44.2	33.5	44.5	**41.6**
10	MP3570	113	47.4	38.2	30.0	35.1	**37.7**
11	HI1683	114	43.1	36.3	33.9	41.2	**38.6**
Mean			**43.7**	**39.9**	**35.2**	**38.9**	**39.4**
T. durum							
1	HI8737(d) (C)	102	50.2	42.0	41.2	43.9	**44.3**
2	HI8713(d) (C)	117	44.1	38.5	38.9	40.5	**40.5**
3	MACS4125(d)	103	46.7	32.2	35.8	48.1	**40.7**
4	MACS4135(d)	105	44.0	39.8	41.2	38.7	**40.9**
5	HI8850(d)	108	45.5	39.2	35.6	42.5	**40.7**
6	HI8849(d)	109	42.6	36.9	37.7	35.4	**38.2**
7	HI8848(d)	110	44.6	41.5	39.4	40.6	**41.5**
8	MPO1395(d)	119	41.7	37.5	33.2	38.2	**37.7**
Mean			**44.9**	**38.5**	**37.9**	**41.0**	**40.6**
Irrigated, late sown							
T. aestivum							
1	HI1674*	206	39.4	36.2	33.2	35.0	**36.0**
2	HI1634 (C)	203	43.6	36.9	42.1	38.2	**40.2**
3	MP4010 (C)	204	48.8	38.9	41.6	44.4	**43.4**
4	HD2932 (C)	207	39.7	33.4	41.3	39.5	**38.5**
5	CG1029 (C)	208	47.2	36.8	36.6	42.2	**40.7**
6	WSM138	201	39.2	29.8	29.4	37.8	**34.1**
7	HI1687	202	44.5	30.2	39.0	46.0	**39.9**
8	MACS6830	205	46.2	32.4	37.5	37.0	**38.3**
9	DBW425	209	45.5	32.4	34.2	32.2	**36.1**
10	GW556	210	39.9	31.8	40.8	40.4	**38.2**
Mean			**43.4**	**33.9**	**37.6**	**39.3**	**38.5**
Restricted Irrigated, timely sown							
T. aestivum							
1	DBW441M*	312	35.4	48.9	30.7	25.2	**35.1**
2	CG1040(I) (C)	301	32.8	48.4	34.7	28.5	**36.1**
3	DBW110 (C)	302	35.3	48.0	37.2	30.9	**37.9**
4	CG1036 (C)	304	29.0	45.5	33.8	26.0	**33.6**
5	HI1655 (C)	306	26.9	43.2	34.1	28.5	**33.2**
6	DBW359(I) (C)	317	30.0	45.7	31.9	29.8	**34.4**
7	NIAW4267	303	33.7	45.5	40.7	30.5	**37.6**
8	UAS3029	307	32.9	51.1	43.9	34.9	**40.7**
9	DBW432	309	37.1	48.6	35.6	29.5	**37.7**
10	DBW428	314	35.0	46.7	32.3	26.0	**35.0**
Mean			**32.8**	**47.2**	**35.5**	**29.0**	**36.1**
T. durum							
1	HI8627(d) (C)	308	36.7	47.5	35.8	33.5	**38.4**
2	HI8823(d) (C)	316	41.2	44.4	41.2	29.0	**39.0**
3	HI8852(d)	305	34.9	49.9	33.6	35.4	**38.5**
4	MACS4131(d)	310	38.0	54.9	37.1	28.8	**39.7**
5	HI8851(d)	311	38.0	47.8	38.8	33.5	**39.5**
6	UAS484(d)	313	37.7	44.0	32.5	29.7	**36.0**
7	MPO1398(d)	315	34.5	47.8	37.4	31.4	**37.8**
Mean			**37.3**	**48.0**	**36.6**	**31.6**	**38.4**

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

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.khera	Mean
Irrigated, timely sown							
T. aestivum							
1	HI1669*	112					
2	GW547(I) (C)	101					
3	HI1650 (C)	115					
4	MACS6768 (C)	116					
5	GW322 (C)	118					
6	GW554	104					
7	MACS6837	106					
8	HI1684	107					
9	GW555	111					
10	MP3570	113					
11	HI1683	114					
Mean							
T. durum							
1	HI8737(d) (C)	102	10.0	10.0	0.0	10.0	**7.5**
2	HI8713(d) (C)	117	30.0	10.0	10.0	10.0	**15.0**
3	MACS4125(d)	103	10.0	10.0	0.0	0.0	**5.0**
4	MACS4135(d)	105	20.0	10.0	10.0	20.0	**15.0**
5	HI8850(d)	108	0.0	0.0	0.0	0.0	**0.0**
6	HI8849(d)	109	0.0	10.0	0.0	10.0	**5.0**
7	HI8848(d)	110	20.0	0.0	0.0	10.0	**7.5**
8	MPO1395(d)	119	10.0	0.0	0.0	10.0	**5.0**
Mean			**12.5**	**6.3**	**2.5**	**8.8**	**7.5**
Irrigated, late sown							
T. aestivum							
1	HI1674*	206					
2	HI1634 (C)	203					
3	MP4010 (C)	204					
4	HD2932 (C)	207					
5	CG1029 (C)	208					
6	WSM138	201					
7	HI1687	202					
8	MACS6830	205					
9	DBW425	209					
10	GW556	210					
Mean							
Restricted Irrigated, timely sown							
T. aestivum							
1	DBW441M*	312					
2	CG1040(I) (C)	301					
3	DBW110 (C)	302					
4	CG1036 (C)	304					
5	HI1655 (C)	306					
6	DBW359(I) (C)	317					
7	NIAW4267	303					
8	UAS3029	307					
9	DBW432	309					
10	DBW428	314					
Mean							
T. durum							
1	HI8627(d) (C)	308	0.0	0.0	20.0	10.0	**7.5**
2	HI8823(d) (C)	316	0.0	0.0	10.0	10.0	**5.0**
3	HI8852(d)	305	10.0	0.0	30.0	10.0	**12.5**
4	MACS4131(d)	310	0.0	0.0	20.0	10.0	**7.5**
5	HI8851(d)	311	0.0	0.0	20.0	10.0	**7.5**
6	UAS484(d)	313	10.0	10.0	50.0	20.0	**22.5**
7	MPO1398(d)	315	10.0	0.0	10.0	20.0	**10.0**
Mean			**4.3**	**1.4**	**22.9**	**12.9**	**10.4**

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

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
T. aestivum						
1	PBW891*	104	6.4	7.0	6.4	**6.6**
2	AKAW5100*	108	6.6	7.0	6.4	**6.7**
3	WH1306*	110	6.8	7.6	7.0	**7.1**
4	NWS2222*	116	6.8	6.8	6.8	**6.8**
5	DBW443*	123	6.8	8.0	7.0	**7.3**
6	GW322 (C)	118	6.2	6.8	6.0	**6.3**
7	MACS6222 (C)	122	6.4	7.2	6.8	**6.8**
8	MP1378(I) (C)	124	6.4	6.8	6.2	**6.5**
9	MACS6842	102	6.8	7.0	7.4	**7.1**
10	UAS3026	103	6.2	6.8	6.0	**6.3**
11	MACS6837	106	6.6	6.8	6.8	**6.7**
12	MACS6844	111	6.6	6.6	6.6	**6.6**
13	MP3570	117	6.8	8.0	7.0	**7.3**
14	NIAW4364	119	6.0	6.8	5.8	**6.2**
15	CG1045	121	7.2	7.2	6.4	**6.9**
Mean			**6.6**	**7.1**	**6.6**	**6.7**
T. durum						
1	HI8737(d) (C)	109	7.8	7.4	6.8	**7.3**
2	MACS3949(d) (C)	115	6.2	7.0	7.4	**6.9**
3	DDW62(d)	101	6.4	6.8	7.8	**7.0**
4	MPO1395(d)	105	6.6	7.2	7.6	**7.1**
5	HI8849(d)	107	6.8	6.8	6.8	**6.8**
6	MACS4125(d)	112	6.4	6.8	7.6	**6.9**
7	HI8850(d)	113	6.8	5.6	7.8	**6.7**
8	HI8848(d)	114	6.6	7.2	7.6	**7.1**
9	MACS4135(d)	120	6.4	7.2	7.6	**7.1**
Mean			**6.7**	**6.9**	**7.4**	**7.0**

Table 35 cont.

Irrigated, late sown						
T. aestivum						
1	LOK79*	202	6.6	7.8	6.8	**7.1**
2	NIAW4114*	206	6.2	7.0	6.4	**6.5**
3	HI1674*	213	7.0	6.6	6.4	**6.7**
4	NIAW4120*	215	7.2	7.6	6.8	**7.2**
5	HD3090 (C)	203	6.0	6.8	6.8	**6.5**
6	HD2932 (C)	208	5.2	7.0	6.0	**6.1**
7	RAJ4083 (C)	209	6.4	7.6	6.4	**6.8**
8	HI1633 (C)	214	6.8	6.8	6.8	**6.8**
9	UAS3027	201	5.2	7.2	5.8	**6.1**
10	DBW425	204	4.6	7.4	6.4	**6.1**
11	NIAW4432	205	6.0	6.4	6.4	**6.3**
12	MACS6830	207	7.8	7.8	6.6	**7.4**
13	HI1687	210	7.2	7.8	6.8	**7.3**
14	DBW426	211	7.0	8.0	6.8	**7.3**
15	MACS6829	212	6.0	7.8	6.6	**6.8**
Mean			**6.3**	**7.3**	**6.5**	**6.7**
Restricted Irrigated, timely sown						
T. aestivum						
1	HI1605 (C)	302	5.0	6.4	7.4	**6.3**
2	NIAW3170 (C)	305	5.4	6.6	5.8	**5.9**
3	HI1665(I) (C)	309	5.6	7.6	6.2	**6.5**
4	DBW359(I) (C)	313	6.4	7.4	6.6	**6.8**
5	CG1047	301	6.4	6.8	7.6	**6.9**
6	NIAW4267	311	6.6	6.8	6.4	**6.6**
Mean			**5.9**	**6.9**	**6.7**	**6.5**
T. durum						
1	UAS446(d) (C)	307	5.2	6.6	7.6	**6.5**
2	UAS478(d)(I) (C)	308	4.6	6.8	7.8	**6.4**
3	NIDW1149(d) (C)	312	6.8	7.6	7.4	**7.3**
4	MACS4131(d)	303	5.6	6.8	7.2	**6.5**
5	GW1368(d)	304	4.8	6.6	6.8	**6.1**
6	HI8852(d)	306	6.0	7.8	7.2	**7.0**
7	UAS484(d)	310	5.8	7.0	8.0	**6.9**
8	HI8851(d)	314	6.6	8.2	7.6	**7.5**
Mean			**5.7**	**7.2**	**7.5**	**6.8**

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

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
T. aestivum						
1	PBW891*	104	78.9	78.5	81.5	**79.6**
2	AKAW5100*	108	79.6	80.6	83.1	**81.1**
3	WH1306*	110	80.1	79.7	83.6	**81.1**
4	NWS2222*	116	81.1	79.3	84.4	**81.6**
5	DBW443*	123	81.7	80.7	83.4	**81.9**
6	GW322 (C)	118	78.0	79.1	83.0	**80.0**
7	MACS6222 (C)	122	79.7	80.1	83.2	**81.0**
8	MP1378(I) (C)	124	81.8	83.2	84.3	**83.1**
9	MACS6842	102	79.2	79.0	83.1	**80.4**
10	UAS3026	103	79.2	80.3	83.2	**80.9**
11	MACS6837	106	78.7	77.8	82.6	**79.7**
12	MACS6844	111	79.2	78.7	82.1	**80.0**
13	MP3570	117	78.5	81.2	83.4	**81.0**
14	NIAW4364	119	78.3	78.2	83.2	**79.9**
15	CG1045	121	80.5	81.1	83.4	**81.7**
Mean			**79.6**	**79.8**	**83.2**	**80.9**
T. durum						
1	HI8737(d) (C)	109	82.9	82.6	85.1	**83.5**
2	MACS3949(d) (C)	115	80.3	82.5	84.3	**82.4**
3	DDW62(d)	101	79.7	82.4	85.9	**82.7**
4	MPO1395(d)	105	78.1	81.2	83.6	**81.0**
5	HI8849(d)	107	83.5	82.4	85.3	**83.7**
6	MACS4125(d)	112	80.7	81.9	84.3	**82.3**
7	HI8850(d)	113	81.9	77.6	84.6	**81.4**
8	HI8848(d)	114	80.2	82.8	85.1	**82.7**
9	MACS4135(d)	120	81.8	82.9	85.5	**83.4**
Mean			**81.0**	**81.8**	**84.9**	**82.6**

Table 36 cont.

Irrigated, late sown						
T. aestivum						
1	LOK79*	202	79.4	80.6	82.1	**80.7**
2	NIAW4114*	206	79.6	82.0	82.1	**81.2**
3	HI1674*	213	80.3	82.0	82.6	**81.6**
4	NIAW4120*	215	75.7	77.7	75.9	**76.4**
5	HD3090 (C)	203	77.3	79.1	80.2	**78.9**
6	HD2932 (C)	208	74.0	79.7	79.8	**77.8**
7	RAJ4083 (C)	209	79.0	81.5	80.2	**80.2**
8	HI1633 (C)	214	79.2	82.0	82.0	**81.1**
9	UAS3027	201	70.0	77.7	78.9	**75.5**
10	DBW425	204	66.2	79.9	79.8	**75.3**
11	NIAW4432	205	73.9	77.8	80.0	**77.2**
12	MACS6830	207	79.0	80.7	81.0	**80.2**
13	HI1687	210	79.3	81.1	83.3	**81.2**
14	DBW426	211	77.0	80.1	79.0	**78.7**
15	MACS6829	212	73.8	78.8	81.5	**78.0**
Mean			**76.2**	**80.0**	**80.6**	**79.0**
Restricted Irrigated, timely sown						
T. aestivum						
1	HI1605 (C)	302	73.4	80.4	85.4	**79.7**
2	NIAW3170 (C)	305	69.8	78.4	81.9	**76.7**
3	HI1665(I) (C)	309	72.2	80.2	82.9	**78.4**
4	DBW359(I) (C)	313	73.6	77.7	83.5	**78.3**
5	CG1047	301	76.6	80.9	85.1	**80.9**
6	NIAW4267	311	73.6	77.7	83.4	**78.2**
Mean			**73.2**	**79.2**	**83.7**	**78.7**
T. durum						
1	UAS446(d) (C)	307	72.2	79.5	84.3	**78.7**
2	UAS478(d)(I) (C)	308	68.2	81.2	85.4	**78.3**
3	NIDW1149(d) (C)	312	74.0	78.3	82.8	**78.4**
4	MACS4131(d)	303	77.2	82.1	82.9	**80.7**
5	GW1368(d)	304	59.4	72.2	76.1	**69.2**
6	HI8852(d)	306	77.1	80.5	84.6	**80.7**
7	UAS484(d)	310	70.6	75.7	82.7	**76.3**
8	HI8851(d)	314	78.6	82.8	85.8	**82.4**
Mean			**72.2**	**79.0**	**83.1**	**78.1**

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

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
T. aestivum						
1	PBW891*	104	13.0	12.3	11.5	**12.3**
2	AKAW5100*	108	14.1	13.0	10.9	**12.7**
3	WH1306*	110	12.6	12.4	12.0	**12.3**
4	NWS2222*	116	12.8	12.1	10.7	**11.9**
5	DBW443*	123	14.0	13.8	11.3	**13.0**
6	GW322 (C)	118	11.2	11.5	10.5	**11.0**
7	MACS6222 (C)	122	12.7	12.7	11.6	**12.3**
8	MP1378(I) (C)	124	13.9	12.7	10.7	**12.4**
9	MACS6842	102	13.5	12.3	11.2	**12.3**
10	UAS3026	103	11.8	11.9	9.8	**11.2**
11	MACS6837	106	12.5	11.9	10.9	**11.8**
12	MACS6844	111	13.1	12.6	11.2	**12.3**
13	MP3570	117	13.0	12.0	10.7	**11.9**
14	NIAW4364	119	12.1	11.6	9.2	**11.0**
15	CG1045	121	13.8	13.5	10.7	**12.7**
Mean			**12.9**	**12.4**	**10.9**	**12.1**
T. durum						
1	HI8737(d) (C)	109	12.4	12.0	9.8	**11.4**
2	MACS3949(d) (C)	115	12.8	12.1	10.8	**11.9**
3	DDW62(d)	101	14.1	11.4	11.1	**12.2**
4	MPO1395(d)	105	11.7	12.3	11.3	**11.8**
5	HI8849(d)	107	11.9	11.4	9.4	**10.9**
6	MACS4125(d)	112	11.9	12.2	10.7	**11.6**
7	HI8850(d)	113	12.0	12.2	10.5	**11.6**
8	HI8848(d)	114	12.2	12.6	10.7	**11.9**
9	MACS4135(d)	120	11.0	11.7	10.9	**11.2**
Mean			**12.2**	**12.0**	**10.6**	**11.6**

Table 37 cont.

Irrigated, late sown						
T. aestivum						
1	LOK79*	202	12.3	12.8	12.5	**12.5**
2	NIAW4114*	206	12.9	12.7	12.3	**12.7**
3	HI1674*	213	13.0	11.9	13.1	**12.7**
4	NIAW4120*	215	12.2	12.0	12.9	**12.4**
5	HD3090 (C)	203	13.3	12.5	12.7	**12.8**
6	HD2932 (C)	208	11.7	13.0	11.6	**12.1**
7	RAJ4083 (C)	209	12.7	13.0	12.4	**12.7**
8	HI1633 (C)	214	12.9	12.5	12.4	**12.6**
9	UAS3027	201	12.2	12.3	12.6	**12.4**
10	DBW425	204	11.9	12.6	11.9	**12.1**
11	NIAW4432	205	14.3	13.7	12.3	**13.4**
12	MACS6830	207	13.5	12.7	13.5	**13.2**
13	HI1687	210	13.1	12.3	12.2	**12.5**
14	DBW426	211	13.3	12.9	13.1	**13.1**
15	MACS6829	212	14.1	13.0	13.1	**13.4**
Mean			**12.9**	**12.7**	**12.6**	**12.7**
Restricted Irrigated, timely sown						
T. aestivum						
1	HI1605 (C)	302	13.8	13.4	13.1	**13.4**
2	NIAW3170 (C)	305	15.4	12.8	13.4	**13.9**
3	HI1665(I) (C)	309	12.5	12.5	11.7	**12.2**
4	DBW359(I) (C)	313	14.4	13.2	12.6	**13.4**
5	CG1047	301	13.2	12.4	12.9	**12.8**
6	NIAW4267	311	13.9	13.4	13.2	**13.5**
Mean			**13.8**	**13.0**	**12.8**	**13.2**
T. durum						
1	UAS446(d) (C)	307	15.4	14.7	13.0	**14.4**
2	UAS478(d)(I) (C)	308	15.4	13.4	12.1	**13.6**
3	NIDW1149(d) (C)	312	12.8	12.1	11.7	**12.2**
4	MACS4131(d)	303	13.8	13.0	12.7	**13.2**
5	GW1368(d)	304	14.1	13.2	13.2	**13.5**
6	HI8852(d)	306	14.2	13.4	13.0	**13.5**
7	UAS484(d)	310	14.4	14.4	12.2	**13.7**
8	HI8851(d)	314	14.6	13.6	12.7	**13.7**
Mean			**14.3**	**13.5**	**12.6**	**13.5**

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

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
T. aestivum						
1	PBW891*	104	58	57	63	**59**
2	AKAW5100*	108	45	42	42	**43**
3	WH1306*	110	57	64	56	**59**
4	NWS2222*	116	54	58	48	**53**
5	DBW443*	123	47	54	53	**51**
6	GW322 (C)	118	43	45	42	**44**
7	MACS6222 (C)	122	40	45	40	**42**
8	MP1378(I) (C)	124	42	43	42	**42**
9	MACS6842	102	66	62	56	**61**
10	UAS3026	103	53	53	49	**52**
11	MACS6837	106	54	57	51	**54**
12	MACS6844	111	54	59	53	**55**
13	MP3570	117	52	53	48	**51**
14	NIAW4364	119	55	56	48	**53**
15	CG1045	121	54	58	52	**55**
Mean			**52**	**54**	**50**	**52**
T. durum						
1	HI8737(d) (C)	109	39	40	36	**38**
2	MACS3949(d) (C)	115	44	45	37	**42**
3	DDW62(d)	101	54	43	41	**46**
4	MPO1395(d)	105	42	43	43	**43**
5	HI8849(d)	107	29	34	29	**31**
6	MACS4125(d)	112	36	40	33	**37**
7	HI8850(d)	113	39	43	37	**39**
8	HI8848(d)	114	36	39	35	**37**
9	MACS4135(d)	120	36	43	40	**40**
Mean			**39**	**41**	**37**	**39**

Table 38 cont.

Irrigated, late sown						
T. aestivum						
1	LOK79*	202	42	47	45	**45**
2	NIAW4114*	206	50	57	53	**53**
3	HI1674*	213	41	48	43	**44**
4	NIAW4120*	215	48	52	53	**51**
5	HD3090 (C)	203	49	52	45	**48**
6	HD2932 (C)	208	48	55	54	**52**
7	RAJ4083 (C)	209	49	55	52	**52**
8	HI1633 (C)	214	44	44	44	**44**
9	UAS3027	201	48	54	53	**52**
10	DBW425	204	48	62	56	**55**
11	NIAW4432	205	53	60	54	**56**
12	MACS6830	207	46	52	47	**48**
13	HI1687	210	49	54	50	**51**
14	DBW426	211	59	61	59	**60**
15	MACS6829	212	49	54	50	**51**
Mean			**48**	**54**	**51**	**51**
Restricted Irrigated, timely sown						
T. aestivum						
1	HI1605 (C)	302	64	65	51	**60**
2	NIAW3170 (C)	305	56	60	45	**54**
3	HI1665(I) (C)	309	30	41	36	**36**
4	DBW359(I) (C)	313	61	70	56	**63**
5	CG1047	301	49	54	42	**48**
6	NIAW4267	311	30	41	37	**36**
Mean			**48**	**55**	**44**	**49**
T. durum						
1	UAS446(d) (C)	307	44	57	37	**46**
2	UAS478(d)(I) (C)	308	39	39	37	**38**
3	NIDW1149(d) (C)	312	29	38	32	**33**
4	MACS4131(d)	303	39	46	28	**37**
5	GW1368(d)	304	33	36	27	**32**
6	HI8852(d)	306	34	51	30	**39**
7	UAS484(d)	310	41	48	41	**43**
8	HI8851(d)	314	31	37	33	**34**
Mean			**36**	**44**	**33**	**38**

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

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
T. aestivum						
1	PBW891*	104	3.0	3.0	2.0	**2.7**
2	AKAW5100*	108	4.0	5.0	5.5	**4.8**
3	WH1306*	110	2.0	2.5	2.0	**2.2**
4	NWS2222*	116	4.5	4.5	6.0	**5.0**
5	DBW443*	123	4.0	6.0	7.0	**5.7**
6	GW322 (C)	118	5.5	5.0	7.0	**5.8**
7	MACS6222 (C)	122	5.5	5.0	6.5	**5.7**
8	MP1378(I) (C)	124	3.5	6.0	5.5	**5.0**
9	MACS6842	102	6.0	6.5	7.0	**6.5**
10	UAS3026	103	5.5	5.0	5.5	**5.3**
11	MACS6837	106	6.5	7.0	7.0	**6.8**
12	MACS6844	111	2.0	3.0	2.5	**2.5**
13	MP3570	117	5.0	5.0	5.5	**5.2**
14	NIAW4364	119	4.0	4.5	5.5	**4.7**
15	CG1045	121	2.0	2.5	2.5	**2.3**
Mean			**4.2**	**4.7**	**5.1**	**4.7**
T. durum						
1	HI8737(d) (C)	109	0.0	0.0	0.0	**0.0**
2	MACS3949(d) (C)	115	0.0	0.0	0.0	**0.0**
3	DDW62(d)	101	0.0	0.0	0.0	**0.0**
4	MPO1395(d)	105	0.0	0.0	0.0	**0.0**
5	HI8849(d)	107	0.0	0.0	0.0	**0.0**
6	MACS4125(d)	112	0.0	0.0	0.0	**0.0**
7	HI8850(d)	113	0.0	0.0	0.0	**0.0**
8	HI8848(d)	114	0.0	0.0	0.0	**0.0**
9	MACS4135(d)	120	0.0	0.0	0.0	**0.0**
Mean			**0.0**	**0.0**	**0.0**	**0.0**

Table 39 cont.

Irrigated, late sown						
T. aestivum						
1	LOK79*	202	6.0	4.5	6.0	**5.5**
2	NIAW4114*	206	2.0	2.5	2.0	**2.2**
3	HI1674*	213	2.0	2.5	2.0	**2.2**
4	NIAW4120*	215	3.5	2.5	2.0	**2.7**
5	HD3090 (C)	203	6.5	6.5	7.5	**6.8**
6	HD2932 (C)	208	2.0	2.5	2.0	**2.2**
7	RAJ4083 (C)	209	4.0	3.5	4.5	**4.0**
8	HI1633 (C)	214	5.0	5.0	5.5	**5.2**
9	UAS3027	201	2.5	3.5	2.0	**2.7**
10	DBW425	204	3.0	4.5	2.0	**3.2**
11	NIAW4432	205	6.0	5.5	6.5	**6.0**
12	MACS6830	207	2.0	2.0	2.0	**2.0**
13	HI1687	210	3.0	4.5	3.0	**3.5**
14	DBW426	211	3.0	3.0	2.5	**2.8**
15	MACS6829	212	2.0	3.0	2.0	**2.3**
Mean			**3.5**	**3.7**	**3.4**	**3.5**
Restricted Irrigated, timely sown						
T. aestivum						
1	HI1605 (C)	302	2.0	2.5	2.5	**2.3**
2	NIAW3170 (C)	305	5.5	5.0	6.0	**5.5**
3	HI1665(I) (C)	309	4.5	4.0	7.0	**5.2**
4	DBW359(I) (C)	313	2.5	2.5	2.5	**2.5**
5	CG1047	301	6.5	3.5	6.0	**5.3**
6	NIAW4267	311	6.5	6.0	6.5	**6.3**
Mean			**4.6**	**3.9**	**5.1**	**4.5**
T. durum						
1	UAS446(d) (C)	307	0.0	0.0	0.0	**0.0**
2	UAS478(d)(I) (C)	308	0.0	0.0	0.0	**0.0**
3	NIDW1149(d) (C)	312	0.0	0.0	0.0	**0.0**
4	MACS4131(d)	303	0.0	0.0	0.0	**0.0**
5	GW1368(d)	304	2.0	2.0	2.5	**2.2***
6	HI8852(d)	306	0.0	0.0	0.0	**0.0**
7	UAS484(d)	310	0.0	0.0	0.0	**0.0**
8	HI8851(d)	314	0.0	0.0	0.0	**0.0**
Mean			**0.3**	**0.3**	**0.3**	**0.0**

***Suspected mixture so not included in overall mean**

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

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
T. aestivum						
1	PBW891*	104				
2	AKAW5100*	108				
3	WH1306*	110				
4	NWS2222*	116				
5	DBW443*	123				
6	GW322 (C)	118				
7	MACS6222 (C)	122				
8	MP1378(I) (C)	124				
9	MACS6842	102				
10	UAS3026	103				
11	MACS6837	106				
12	MACS6844	111				
13	MP3570	117				
14	NIAW4364	119				
15	CG1045	121				
Mean						
T. durum						
1	HI8737(d) (C)	109	5.2	5.9	4.3	**5.1**
2	MACS3949(d) (C)	115	6.9	6.7	5.9	**6.5**
3	DDW62(d)	101	5.3	7.8	6.3	**6.5**
4	MPO1395(d)	105	5.3	6.2	4.4	**5.3**
5	HI8849(d)	107	7.2	6.8	5.5	**6.5**
6	MACS4125(d)	112	7.4	6.9	5.7	**6.6**
7	HI8850(d)	113	6.3	7.6	5.0	**6.3**
8	HI8848(d)	114	7.9	7.6	6.0	**7.2**
9	MACS4135(d)	120	7.9	7.5	6.4	**7.3**
Mean			**6.6**	**7.0**	**5.5**	**6.4**

Table 40 cont.

Irrigated, late sown						
T. aestivum						
1	LOK79*	202				
2	NIAW4114*	206				
3	HI1674*	213				
4	NIAW4120*	215				
5	HD3090 (C)	203				
6	HD2932 (C)	208				
7	RAJ4083 (C)	209				
8	HI1633 (C)	214				
9	UAS3027	201				
10	DBW425	204				
11	NIAW4432	205				
12	MACS6830	207				
13	HI1687	210				
14	DBW426	211				
15	MACS6829	212				
Mean						
Restricted Irrigated, timely sown						
T. aestivum						
1	HI1605 (C)	302				
2	NIAW3170 (C)	305				
3	HI1665(I) (C)	309				
4	DBW359(I) (C)	313				
5	CG1047	301				
6	NIAW4267	311				
Mean						
T. durum						
1	UAS446(d) (C)	307	9.0	6.2	5.9	**7.0**
2	UAS478(d)(I) (C)	308	10.1	8.0	6.6	**8.2**
3	NIDW1149(d) (C)	312	6.2	5.2	4.7	**5.4**
4	MACS4131(d)	303	7.5	5.8	5.6	**6.3**
5	GW1368(d)	304	7.1	5.4	4.6	**5.7**
6	HI8852(d)	306	8.4	7.0	5.8	**7.1**
7	UAS484(d)	310	9.9	8.3	6.1	**8.1**
8	HI8851(d)	314	7.7	6.2	5.9	**6.6**
Mean			**8.3**	**6.5**	**5.7**	**6.8**

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

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
T. aestivum						
1	PBW891*	104			68.7	**68.7**
2	AKAW5100*	108			77.5	**77.5**
3	WH1306*	110			79.7	**79.7**
4	NWS2222*	116			84.4	**84.4**
5	DBW443*	123			77.3	**77.3**
6	GW322 (C)	118			82.7	**82.7**
7	MACS6222 (C)	122			78.6	**78.6**
8	MP1378(I) (C)	124			79.9	**79.9**
9	MACS6842	102			85.4	**85.4**
10	UAS3026	103			74.4	**74.4**
11	MACS6837	106			78.0	**78.0**
12	MACS6844	111			78.1	**78.1**
13	MP3570	117			72.2	**72.2**
14	NIAW4364	119			73.7	**73.7**
15	CG1045	121			71.1	**71.1**
Mean					**77.4**	**77.4**
T. durum						
1	HI8737(d) (C)	109			83.2	**83.2**
2	MACS3949(d) (C)	115			81.4	**81.4**
3	DDW62(d)	101			85.7	**85.7**
4	MPO1395(d)	105			83.7	**83.7**
5	HI8849(d)	107			77.8	**77.8**
6	MACS4125(d)	112			77.2	**77.2**
7	HI8850(d)	113			87.4	**87.4**
8	HI8848(d)	114			88.5	**88.5**
9	MACS4135(d)	120			79.5	**79.5**
Mean					**82.7**	**82.7**

Table 41 cont.

Irrigated, late sown						
T. aestivum						
1	LOK79*	202			83.5	**83.5**
2	NIAW4114*	206			82.5	**82.5**
3	HI1674*	213			76.6	**76.6**
4	NIAW4120*	215			76.6	**76.6**
5	HD3090 (C)	203			79.4	**79.4**
6	HD2932 (C)	208			81.3	**81.3**
7	RAJ4083 (C)	209			80.4	**80.4**
8	HI1633 (C)	214			81.9	**81.9**
9	UAS3027	201			76.7	**76.7**
10	DBW425	204			81.7	**81.7**
11	NIAW4432	205			76.4	**76.4**
12	MACS6830	207			72.5	**72.5**
13	HI1687	210			74.3	**74.3**
14	DBW426	211			78.2	**78.2**
15	MACS6829	212			77.5	**77.5**
Mean					**78.6**	**78.6**
Restricted Irrigated, timely sown						
T. aestivum						
1	HI1605 (C)	302			78.2	**78.2**
2	NIAW3170 (C)	305			39.9	**39.9**
3	HI1665(I) (C)	309			82.0	**82.0**
4	DBW359(I) (C)	313			75.5	**75.5**
5	CG1047	301			80.2	**80.2**
6	NIAW4267	311			65.9	**65.9**
Mean					**70.3**	**70.3**
T. durum						
1	UAS446(d) (C)	307			81.5	**81.5**
2	UAS478(d)(I) (C)	308			83.5	**83.5**
3	NIDW1149(d) (C)	312			78.0	**78.0**
4	MACS4131(d)	303			77.7	**77.7**
5	GW1368(d)	304			83.8	**83.8**
6	HI8852(d)	306			80.2	**80.2**
7	UAS484(d)	310			86.0	**86.0**
8	HI8851(d)	314			79.9	**79.9**
Mean					**81.3**	**81.3**

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

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
T. aestivum						
1	PBW891*	104	42.4	45.0	40.4	**42.6**
2	AKAW5100*	108	43.8	36.2	35.5	**38.5**
3	WH1306*	110	38.1	43.6	41.8	**41.2**
4	NWS2222*	116	45.1	38.8	38.4	**40.8**
5	DBW443*	123	43.1	41.1	48.7	**44.3**
6	GW322 (C)	118	32.3	36.3	35.9	**34.8**
7	MACS6222 (C)	122	40.6	36.9	52.8	**43.4**
8	MP1378(I) (C)	124	48.3	44.3	38.7	**43.8**
9	MACS6842	102	39.1	40.3	33.5	**37.6**
10	UAS3026	103	41.3	43.1	36.0	**40.1**
11	MACS6837	106	38.1	32.5	37.4	**36.0**
12	MACS6844	111	45.9	35.1	42.3	**41.1**
13	MP3570	117	42.4	38.8	37.0	**39.4**
14	NIAW4364	119	38.3	35.0	33.1	**35.5**
15	CG1045	121	44.8	45.1	48.9	**46.3**
Mean			**41.6**	**39.5**	**40.0**	**40.4**
T. durum						
1	HI8737(d) (C)	109	39.7	34.4	38.3	**37.5**
2	MACS3949(d) (C)	115	42.5	34.3	35.5	**37.4**
3	DDW62(d)	101	47.5	34.6	40.4	**40.8**
4	MPO1395(d)	105	38.7	38.3	38.2	**38.4**
5	HI8849(d)	107	40.6	38.0	39.4	**39.3**
6	MACS4125(d)	112	42.9	34.1	41.4	**39.5**
7	HI8850(d)	113	36.7	31.1	37.9	**35.2**
8	HI8848(d)	114	38.5	33.2	38.9	**36.9**
9	MACS4135(d)	120	37.2	37.5	37.0	**37.2**
Mean			**40.5**	**35.1**	**38.6**	**38.0**

Table 42 cont.

Irrigated, late sown						
T. aestivum						
1	LOK79*	202	49.4	42.8	48.9	**47.0**
2	NIAW4114*	206	41.3	38.7	37.0	**39.0**
3	HI1674*	213	42.9	36.4	39.8	**39.7**
4	NIAW4120*	215	46.0	35.6	38.9	**40.2**
5	HD3090 (C)	203	44.4	38.7	36.4	**39.8**
6	HD2932 (C)	208	35.6	34.9	37.1	**35.9**
7	RAJ4083 (C)	209	46.6	39.4	42.8	**42.9**
8	HI1633 (C)	214	39.4	39.8	39.0	**39.4**
9	UAS3027	201	42.6	32.4	35.7	**36.9**
10	DBW425	204	40.9	39.8	42.5	**41.1**
11	NIAW4432	205	44.0	35.0	37.3	**38.8**
12	MACS6830	207	42.0	39.3	46.3	**42.5**
13	HI1687	210	39.9	39.7	45.0	**41.5**
14	DBW426	211	49.0	40.5	43.1	**44.2**
15	MACS6829	212	43.5	44.1	40.7	**42.8**
Mean			**43.2**	**38.5**	**40.7**	**40.8**
Restricted Irrigated, timely sown						
T. aestivum						
1	HI1605 (C)	302	43.1	40.6	40.9	**41.5**
2	NIAW3170 (C)	305	36.5	42.1	35.6	**38.1**
3	HI1665(I) (C)	309	45.3	38.6	43.4	**42.4**
4	DBW359(I) (C)	313	44.0	39.1	43.8	**42.3**
5	CG1047	301	42.9	39.2	43.1	**41.7**
6	NIAW4267	311	43.2	43.5	44.0	**43.6**
Mean			**42.5**	**40.5**	**41.8**	**41.6**
T. durum						
1	UAS446(d) (C)	307	37.4	37.2	39.4	**38.0**
2	UAS478(d)(I) (C)	308	38.2	39.9	41.1	**39.7**
3	NIDW1149(d) (C)	312	37.9	36.4	33.5	**35.9**
4	MACS4131(d)	303	41.4	38.7	38.1	**39.4**
5	GW1368(d)	304	35.4	46.9	35.7	**39.3**
6	HI8852(d)	306	44.7	42.1	39.6	**42.1**
7	UAS484(d)	310	38.4	35.7	35.8	**36.6**
8	HI8851(d)	314	43.9	43.5	43.8	**43.7**
Mean			**39.7**	**40.1**	**38.4**	**39.4**

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

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
T. aestivum						
1	PBW891*	104	32.9	47.2	35.6	**38.6**
2	AKAW5100*	108	32.0	40.9	40.4	**37.8**
3	WH1306*	110	35.3	49.1	41.5	**42.0**
4	NWS2222*	116	38.6	38.0	36.9	**37.8**
5	DBW443*	123	40.2	49.9	44.6	**44.9**
6	GW322 (C)	118	36.8	42.8	42.6	**40.7**
7	MACS6222 (C)	122	37.8	40.5	48.8	**42.4**
8	MP1378(I) (C)	124	50.8	50.9	44.9	**48.9**
9	MACS6842	102	36.6	42.3	35.3	**38.1**
10	UAS3026	103	34.5	48.3	34.3	**39.0**
11	MACS6837	106	31.0	38.8	41.7	**37.2**
12	MACS6844	111	28.6	43.1	35.5	**35.7**
13	MP3570	117	38.2	48.2	35.8	**40.7**
14	NIAW4364	119	37.2	40.0	32.6	**36.6**
15	CG1045	121	42.2	53.0	46.5	**47.2**
Mean			**36.8**	**44.9**	**39.8**	**40.5**
T. durum						
1	HI8737(d) (C)	109	40.1	45.1	41.5	**42.2**
2	MACS3949(d) (C)	115	40.7	40.2	41.5	**40.8**
3	DDW62(d)	101	38.2	41.0	38.2	**39.1**
4	MPO1395(d)	105	31.6	45.6	41.0	**39.4**
5	HI8849(d)	107	38.3	45.7	39.5	**41.2**
6	MACS4125(d)	112	35.6	42.8	40.1	**39.5**
7	HI8850(d)	113	40.5	44.1	41.5	**42.0**
8	HI8848(d)	114	37.5	44.9	39.1	**40.5**
9	MACS4135(d)	120	36.1	48.3	39.5	**41.3**
Mean			**37.6**	**44.2**	**40.2**	**40.7**

Table 43 cont.

Irrigated, late sown						
T. aestivum						
1	LOK79*	202	33.9	52.1	50.0	**45.3**
2	NIAW4114*	206	30.6	44.0	38.9	**37.8**
3	HI1674*	213	36.3	45.2	50.2	**43.9**
4	NIAW4120*	215	36.7	38.8	40.0	**38.5**
5	HD3090 (C)	203	35.2	47.0	39.8	**40.7**
6	HD2932 (C)	208	31.4	43.7	38.7	**37.9**
7	RAJ4083 (C)	209	39.1	53.1	47.3	**46.5**
8	HI1633 (C)	214	31.6	48.0	43.3	**41.0**
9	UAS3027	201	35.7	42.4	37.5	**38.5**
10	DBW425	204	34.1	54.9	38.1	**42.4**
11	NIAW4432	205	28.9	44.2	34.6	**35.9**
12	MACS6830	207	34.2	43.8	42.9	**40.3**
13	HI1687	210	33.2	55.2	47.5	**45.3**
14	DBW426	211	37.6	51.4	44.6	**44.5**
15	MACS6829	212	34.8	49.3	36.5	**40.2**
Mean			**34.2**	**47.5**	**42.0**	**41.3**
Restricted Irrigated, timely sown						
T. aestivum						
1	HI1605 (C)	302	36.7	40.2	33.2	**36.7**
2	NIAW3170 (C)	305	34.9	42.6	36.9	**38.1**
3	HI1665(I) (C)	309	35.9	41.3	35.7	**37.6**
4	DBW359(I) (C)	313	40.2	42.7	41.9	**41.6**
5	CG1047	301	36.0	43.1	43.8	**41.0**
6	NIAW4267	311	30.4	47.6	43.1	**40.4**
Mean			**35.7**	**42.9**	**39.1**	**39.2**
T. durum						
1	UAS446(d) (C)	307	38.2	43.1	39.3	**40.2**
2	UAS478(d)(I) (C)	308	39.8	44.1	44.0	**42.6**
3	NIDW1149(d) (C)	312	38.4	43.7	37.2	**39.8**
4	MACS4131(d)	303	45.8	44.7	38.0	**42.8**
5	GW1368(d)	304	38.2	40.0	44.1	**40.8**
6	HI8852(d)	306	39.9	46.9	42.8	**43.2**
7	UAS484(d)	310	35.2	38.7	37.9	**37.3**
8	HI8851(d)	314	41.1	44.1	41.2	**42.1**
Mean			**39.6**	**43.2**	**40.6**	**41.1**

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

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
T. aestivum						
1	PBW891*	104				
2	AKAW5100*	108				
3	WH1306*	110				
4	NWS2222*	116				
5	DBW443*	123				
6	GW322 (C)	118				
7	MACS6222 (C)	122				
8	MP1378(I) (C)	124				
9	MACS6842	102				
10	UAS3026	103				
11	MACS6837	106				
12	MACS6844	111				
13	MP3570	117				
14	NIAW4364	119				
15	CG1045	121				
Mean						
T. durum						
1	HI8737(d) (C)	109	10.0	10.0	50.0	**23.3**
2	MACS3949(d) (C)	115	0.0	0.0	10.0	**3.3**
3	DDW62(d)	101	0.0	20.0	10.0	**10.0**
4	MPO1395(d)	105	10.0	10.0	20.0	**13.3**
5	HI8849(d)	107	20.0	40.0	60.0	**40.0**
6	MACS4125(d)	112	10.0	10.0	30.0	**16.7**
7	HI8850(d)	113	0.0	0.0	10.0	**3.3**
8	HI8848(d)	114	0.0	10.0	20.0	**10.0**
9	MACS4135(d)	120	40.0	20.0	40.0	**33.3**
Mean			**10.0**	**13.3**	**27.8**	**17.0**

Table 44 cont.

Irrigated, late sown						
T. aestivum						
1	LOK79*	202				
2	NIAW4114*	206				
3	HI1674*	213				
4	NIAW4120*	215				
5	HD3090 (C)	203				
6	HD2932 (C)	208				
7	RAJ4083 (C)	209				
8	HI1633 (C)	214				
9	UAS3027	201				
10	DBW425	204				
11	NIAW4432	205				
12	MACS6830	207				
13	HI1687	210				
14	DBW426	211				
15	MACS6829	212				
Mean						
Restricted Irrigated, timely sown						
T. aestivum						
1	HI1605 (C)	302				
2	NIAW3170 (C)	305				
3	HI1665(I) (C)	309				
4	DBW359(I) (C)	313				
5	CG1047	301				
6	NIAW4267	311				
Mean						
T. durum						
1	UAS446(d) (C)	307	0.0	0.0	0.0	**0.0**
2	UAS478(d)(I) (C)	308	0.0	10.0	10.0	**6.7**
3	NIDW1149(d) (C)	312	10.0	10.0	10.0	**10.0**
4	MACS4131(d)	303	0.0	0.0	0.0	**0.0**
5	GW1368(d)	304	0.0	0.0	0.0	**0.0**
6	HI8852(d)	306	0.0	0.0	0.0	**0.0**
7	UAS484(d)	310	0.0	0.0	0.0	**0.0**
8	HI8851(d)	314	0.0	0.0	0.0	**0.0**
Mean			**1.3**	**2.5**	**2.1**	**2.1**

Table 45: High Molecular weight Glutenin Subunits of *T. aestivum* genotypes of NHZ AVTs

S. No.	Entries	Code	Glu-D1	Glu-A1	Glu-B1	Glu-1 Score
Rainfed, Timely Sown						
1	HS562 (C)	101	5+10	1	17+18	10
2	VL907 (C)	102	5+10	1	17+18	10
3	VL2041 (C)	104	2+12	N	7+9	5
4	HPW349 (C)	105	5+10	1	7	8

Table 46: High Molecular weight Glutenin Subunits of T. aestivum genotypes in North Western Plains Zone AVTs

S. No.	Varieties	Code	Glu-D1	Glu-A1	Glu-B1	Glu-1 Score
Irrigated, timely sown						
1	HI1668*	104	2+12	2*	7+8	8
2	HD3471M*	108	5+10	2*	17+18	10
3	DBW386*	109	2+12	2*	7+9	7
4	PBW725 (C)	101	5+10	1	7	8
5	DBW88 (C)	103	5+10	2*	17+18	10
6	HD2967 (C)	106	5+10	2*	17+18	10
7	HD3086 (C)	110	5+10	1	17+18	10
8	DBW187 (C)	111	5+10	2*	17+18	10
9	DBW222 (C)	112	5+10	2*	17+18	10
10	HD3386(I) (C)	115	2+ 12	2 *	7+ 8	8
11	PBW826 (C)	116	2+ 12	2 *	7+ 8	8
Irrigated, late sown						
1	HD3428*	202	5+10	1	17+18	10
2	HD3059 (C)	205	5+10	2*	17+18	10
3	PBW771 (C)	206	5+10	N	7+9	7
4	JKW261 (C)	207	5+10	N	7	6
5	DBW173 (C)	212	5+10	2*	17+18	10

Table 47: High Molecular weight Glutenin Subunits of T. aestivum genotypes in North Eastern Plains Zone AVTs

S. No.	Varieties	Code	Glu-D1	Glu-A1	Glu-B1	Glu-1 Score
Irrigated, timely sown						
1	DBW386*	112	2+12	2*	7+9	7
2	DBW222 (C)	105	5+10	2*	17+18	10
3	PBW826 (C)	106	2+ 12	2 *	7+ 8	8
4	HD3388(I) (C)	107	5+10	2 *	7+ 9	9
5	HD3249 (C)	113	5+10	N	17+18	8
6	DBW187 (C)	117	5+10	2*	17+18	10

Table 48: High Molecular weight Glutenin Subunits of T. aestivum genotypes in Central Zone AVTs

S. No.	Entries	Code	Glu-D1	Glu-A1	Glu-B1	Glu-1 Score
Irrigated, timely sown						
1	HI1669*	112	2+12	2*	17+18	8
2	GW547(I) (C)	101	2+12	2*	7+8	8
3	HI1650 (C)	115	2+12	2*	7+9	7
4	MACS6768 (C)	116	2+12	2*	7+9	7
5	GW322 (C)	118	2+12	2*	7+8	8
Irrigated, late sown						
1	HI1674*	206	2+12	2*	17+18	8
2	HI1634 (C)	203	5+10	2 *	7	8
3	MP4010 (C)	204	5+10	2 *	7	8
4	HD2932 (C)	207	2+12	2*	17+18	8
5	CG1029 (C)	208	2+12	2*	7+8	8
Restricted Irrigation, Timely Sown						
1	DBW441M*	312	2+12	2*	17+18	8
2	CG1040(I) (C)	301	2+12	2*	7+8	8
3	DBW110 (C)	302	5+10	1	7	8
4	CG1036 (C)	304	2+12	2*	7	6
5	HI1655 (C)	306	2+12	2*	7	6
6	DBW359(I) (C)	317	5+10	2*	7+8	10

Table 49: High Molecular weight Glutenin Subunits of *T. aestivum* genotypes in Peninsular Zone AVTs

S. No.	Entries	Code	Glu-D1	Glu-A1	Glu-B1	Glu-1 Score
Irrigated, timely sown						
1	PBW891*	104	5+10	2*	17+18	**10**
2	AKAW5100*	108	2+12	2*	17+18	**8**
3	WH1306*	110	5+10	2*	17+18	**10**
4	NWS2222*	116	2+12	2*	17+18	**8**
5	DBW443*	123	2+12	1	7+9	**7**
6	GW322 (C)	118	2+12	2*	7+8	8
7	MACS6222 (C)	122	2+12	2*	7+9	7
8	MP1378(I) (C)	124	2+12	2*	7+9	7
Irrigated, late sown						
1	LOK79*	202	2+12	2*	17+18	**8**
2	NIAW4114*	206	2+12	2*	17+18	**8**
3	HI1674*	213	2+12	2*	17+18	**8**
4	NIAW4120*	215	5+10	2*	17+18	**10**
5	HD3090 (C)	203	5+10	1	7	**8**
6	HD2932 (C)	208	2+12	2*	17+18	8
7	RAJ4083 (C)	209	5+10	1	7+8	**10**
8	HI1633 (C)	214	5+10	2*	7	**8**

Table 50: High Molecular weight Glutenin Subunits of *T. aestivum* genotypes of HYPT NWPZ trial

S. No.	Entries	Code	Glu-D1	Glu-A1	Glu-B1	Glu-1 Score
1	DBW371 (C)	101	2+12	2*	7+9	7
2	PBW872 (C)	102	2+12	2*	7+8	8
3	DBW372 (C)	103	2+12	2*	7	6
4	DBW327 (C)	104	5+10	N	7+9	7
5	DBW187 (C)	105	5+10	2*	17+18	10

Table 51: High Molecular weight Glutenin Subunits of *T. aestivum* genotypes in Central Zone HYPTs

S. No.	Entries	Code	Glu-D1	Glu-A1	Glu-B1	Glu-1 Score
1	CG1044*	201	2+12	2*	7+8	8
2	GW543*	208	2+12	2*	7+9	7
3	DBW377(I) (C)	202	2+12	2*	7+8	8
4	DBW187 (C)	206	5+10	2*	17+18	10
5	GW322 (C)	211	2+12	2*	7+8	8
6	DBW327(I) (C)	214	5+10	N	7+9	7
7	DBW303 (C)	216	5+10	2*	7	8

HYPTs

Table 52: Grain appearance score (Max-10) of *T. aestivum* genotypes of HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Delhi	Hisar	Karnal	Mean
1	DBW371 (C)	101	7.4	6.8	6.2	5.8	**6.6**
2	PBW872 (C)	102	7.2	6.8	6.4	6.6	**6.8**
3	DBW372 (C)	103	5.6	6.2	6.0	5.8	**5.9**
4	DBW327 (C)	104	6.8	6.6	6.4	6.2	**6.5**
5	DBW187 (C)	105	6.4	6.6	6.4	5.8	**6.3**
6	DBW438	106	6.6	6.4	6.2	5.2	**6.1**
Mean			**6.7**	**6.6**	**6.3**	**5.9**	**6.4**

Table 53: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes of HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Delhi	Hisar	Karnal	Mean
1	DBW371 (C)	101	82.7	82.0	81.2	78.9	**81.2**
2	PBW872 (C)	102	82.7	81.9	82.1	80.7	**81.9**
3	DBW372 (C)	103	82.0	82.6	80.8	78.7	**81.0**
4	DBW327 (C)	104	82.9	82.5	81.9	80.3	**81.9**
5	DBW187 (C)	105	80.9	80.5	80.7	77.6	**79.9**
6	DBW438	106	81.7	81.3	79.9	75.2	**79.5**
Mean			**82.2**	**81.8**	**81.1**	**78.6**	**80.9**

Table 54: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes of HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Delhi	Hisar	Karnal	Mean
1	DBW371 (C)	101	10.2	12.1	10.4	12.5	**11.3**
2	PBW872 (C)	102	10.3	11.2	9.8	12.5	**10.9**
3	DBW372 (C)	103	11.2	12.0	10.5	12.5	**11.5**
4	DBW327 (C)	104	10.4	11.3	10.0	12.5	**11.0**
5	DBW187 (C)	105	10.7	12.8	10.2	13.3	**11.7**
6	DBW438	106	10.6	12.6	9.5	13.4	**11.5**
Mean			**10.6**	**12.0**	**10.1**	**12.8**	**11.3**

Table 55: Sedimentation value (ml) of *T. aestivum* genotypes of HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Delhi	Hisar	Karnal	Mean
1	DBW371 (C)	101	46	49	47	50	**48**
2	PBW872 (C)	102	53	46	45	47	**48**
3	DBW372 (C)	103	46	49	48	52	**49**
4	DBW327 (C)	104	46	49	45	46	**47**
5	DBW187 (C)	105	53	57	51	61	**55**
6	DBW438	106	50	55	47	53	**51**
Mean			**49**	**51**	**47**	**51**	**50**

Table 56: Hardness index of *T. aestivum* genotypes of HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Delhi	Hisar	Karnal	Mean
1	DBW371 (C)	101				77.9	**77.9**
2	PBW872 (C)	102				76.8	**76.8**
3	DBW372 (C)	103				84.7	**84.7**
4	DBW327 (C)	104				77.1	**77.1**
5	DBW187 (C)	105				76.0	**76.0**
6	DBW438	106				77.1	**77.1**
Mean						**78.3**	**78.3**

Table 57: Phenol test score (Max-10) of *T. aestivum* genotypes of HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Delhi	Hisar	Karnal	Mean
1	DBW371 (C)	101	6.0	5.0	5.5	5.0	**5.4**
2	PBW872 (C)	102	7.5	7.0	7.5	7.5	**7.4**
3	DBW372 (C)	103	7.5	7.5	8.0	8.0	**7.8**
4	DBW327 (C)	104	7.5	8.0	7.5	7.5	**7.6**
5	DBW187 (C)	105	8.0	8.0	8.0	8.5	**8.1**
6	DBW438	106	8.0	8.0	8.5	8.5	**8.3**
Mean			**7.4**	**7.3**	**7.5**	**7.5**	**7.4**

Table 58: Grain iron content (ppm) of *T. aestivum* genotypes of HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Delhi	Hisar	Karnal	Mean
1	DBW371 (C)	101	36.2	40.2	39.4	42.9	**39.7**
2	PBW872 (C)	102	36.7	37.8	43.3	41.8	**39.9**
3	DBW372 (C)	103	34.6	36.3	38.1	42.0	**37.8**
4	DBW327 (C)	104	40.3	36.3	40.4	43.5	**40.1**
5	DBW187 (C)	105	34.5	38.8	35.7	42.6	**37.9**
6	DBW438	106	40.7	38.3	40.1	39.5	**39.7**
Mean			**37.2**	**38.0**	**39.5**	**42.1**	**39.2**

Table 59: Grain zinc content (ppm) of *T. aestivum* genotypes of HYPT NWPZ trial

S. No.	Entries	Code	Ludhiana	Delhi	Hisar	Karnal	Mean
1	DBW371 (C)	101	31.1	49.3	29.1	31.0	**35.1**
2	PBW872 (C)	102	39.4	43.6	36.7	33.0	**38.2**
3	DBW372 (C)	103	40.0	47.8	34.4	30.5	**38.2**
4	DBW327 (C)	104	40.6	46.6	37.4	31.9	**39.1**
5	DBW187 (C)	105	39.3	47.8	31.0	30.5	**37.2**
6	DBW438	106	45.0	32.4	38.0	30.5	**36.5**
Mean			**39.2**	**44.6**	**34.4**	**31.2**	**37.4**

Table 46: Grain appearance score (Max-10) of *T. aestivum* genotypes of HYPT CZ trial

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
1	CG1044*	201	7.6	6.8	6.8	7.4	**7.2**
2	GW543*	208	6.8	6.8	7.4	7.4	**7.1**
3	DBW377(I) (C)	202	6.8	6.6	6.0	6.8	**6.6**
4	DBW187 (C)	206	6.6	6.6	6.8	7.2	**6.8**
5	GW322 (C)	211	6.2	6.4	6.6	6.6	**6.5**
6	DBW327(I) (C)	214	6.8	6.8	7.0	7.6	**7.1**
7	DBW303 (C)	216	6.8	6.6	6.6	6.8	**6.7**
8	MP1399	203	7.4	6.2	7.2	7.4	**7.1**
9	WH1320	204	6.8	6.8	7.2	7.0	**7.0**
10	HD3461	205	7.2	6.6	6.8	7.2	**7.0**
11	DBW434	207	6.6	6.6	7.0	7.2	**6.9**
12	PBW906	209	7.8	7.0	6.8	7.6	**7.3**
13	HD3463	210	7.0	6.6	6.6	6.8	**6.8**
14	PBW929	212	7.0	6.8	6.6	7.4	**7.0**
15	DBW445	213	7.2	5.8	5.4	6.8	**6.3**
16	DBW436	215	7.0	6.6	6.8	7.2	**6.9**
Mean			**7.0**	**6.6**	**6.7**	**7.2**	**6.9**

Table 61: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes of HYPT CZ trial

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
1	CG1044*	201	80.5	81.2	82.9	81.6	**81.6**
2	GW543*	208	80.2	81.1	83.2	83.2	**81.9**
3	DBW377(I) (C)	202	78.6	80.0	80.4	79.7	**79.7**
4	DBW187 (C)	206	79.7	81.2	82.5	82.5	**81.5**
5	GW322 (C)	211	79.6	80.9	82.1	81.9	**81.1**
6	DBW327(I) (C)	214	81.3	82.2	82.9	83.6	**82.5**
7	DBW303 (C)	216	81.7	82.9	83.7	83.2	**82.9**
8	MP1399	203	81.2	81.8	83.2	83.5	**82.4**
9	WH1320	204	81.8	82.5	82.8	83.0	**82.5**
10	HD3461	205	79.4	79.7	79.7	78.6	**79.4**
11	DBW434	207	81.7	82.3	84.0	84.0	**83.0**
12	PBW906	209	82.2	83.3	82.9	83.0	**82.9**
13	HD3463	210	79.3	79.3	79.9	78.2	**79.2**
14	PBW929	212	80.1	80.3	81.9	81.0	**80.8**
15	DBW445	213	79.2	76.6	76.6	80.2	**78.2**
16	DBW436	215	82.2	82.5	83.5	84.5	**83.2**
Mean			**80.5**	**81.1**	**82.0**	**82.0**	**81.4**

Table 62: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes of HYPT CZ trial

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
1	CG1044*	201	11.6	12.0	10.4	11.0	**11.3**
2	GW543*	208	11.3	12.0	11.2	12.3	**11.7**
3	DBW377(I) (C)	202	12.2	12.8	12.4	12.1	**12.4**
4	DBW187 (C)	206	12.6	13.7	11.3	11.4	**12.2**
5	GW322 (C)	211	10.9	11.4	10.5	10.6	**10.9**
6	DBW327(I) (C)	214	11.6	11.9	10.8	11.2	**11.3**
7	DBW303 (C)	216	12.3	12.5	11.0	12.2	**12.0**
8	MP1399	203	11.8	12.3	11.7	11.3	**11.8**
9	WH1320	204	12.1	12.6	12.6	10.7	**12.0**
10	HD3461	205	11.4	12.1	10.8	11.0	**11.3**
11	DBW434	207	13.3	13.2	12.0	12.3	**12.7**
12	PBW906	209	11.2	11.9	11.4	11.3	**11.4**
13	HD3463	210	11.1	12.1	11.1	11.4	**11.4**
14	PBW929	212	12.1	12.4	11.3	11.6	**11.9**
15	DBW445	213	12.2	14.7	12.5	9.5	**12.2**
16	DBW436	215	12.8	12.5	11.4	11.8	**12.1**
Mean			**11.9**	**12.5**	**11.4**	**11.3**	**11.8**

Table 63: Sedimentation value (ml) of *T. aestivum* genotypes of HYPT CZ trial

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
1	CG1044*	201	50	52	53	52	**52**
2	GW543*	208	52	58	53	46	**52**
3	DBW377(I) (C)	202	54	58	58	54	**56**
4	DBW187 (C)	206	62	64	62	57	**61**
5	GW322 (C)	211	43	58	43	38	**45**
6	DBW327(I) (C)	214	56	50	52	49	**51**
7	DBW303 (C)	216	59	52	49	53	**53**
8	MP1399	203	47	54	56	48	**51**
9	WH1320	204	60	59	67	56	**61**
10	HD3461	205	54	53	57	51	**54**
11	DBW434	207	60	58	65	55	**60**
12	PBW906	209	52	55	58	49	**54**
13	HD3463	210	54	57	55	49	**54**
14	PBW929	212	55	43	58	47	**51**
15	DBW445	213	55	53	50	43	**50**
16	DBW436	215	56	56	57	53	**55**
Mean			**54**	**55**	**56**	**50**	**54**

Table 64: Hardness index of *T. aestivum* genotypes of HYPT CZ trial

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
1	CG1044*	201		85.3			**85.3**
2	GW543*	208		76.7			**76.7**
3	DBW377(I) (C)	202		76.6			**76.6**
4	DBW187 (C)	206		80.1			**80.1**
5	GW322 (C)	211		86.0			**86.0**
6	DBW327(I) (C)	214		76.6			**76.6**
7	DBW303 (C)	216		80.3			**80.3**
8	MP1399	203		79.2			**79.2**
9	WH1320	204		83.1			**83.1**
10	HD3461	205		84.3			**84.3**
11	DBW434	207		77.3			**77.3**
12	PBW906	209		84.7			**84.7**
13	HD3463	210		79.8			**79.8**
14	PBW929	212		83.8			**83.8**
15	DBW445	213		29.7			**29.7**
16	DBW436	215		86.4			**86.4**
Mean				**78.1**			**78.1**

Table 65: Phenol test score (Max-10) of *T. aestivum* genotypes of HYPT CZ trial

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
1	CG1044*	201	9.0	8.5	8.0	7.0	**8.1**
2	GW543*	208	6.0	5.0	6.0	5.5	**5.6**
3	DBW377(I) (C)	202	9.0	9.0	8.5	7.5	**8.5**
4	DBW187 (C)	206	8.5	8.5	8.0	8.5	**8.4**
5	GW322 (C)	211	7.5	8.0	7.0	7.5	**7.5**
6	DBW327(I) (C)	214	8.0	9.0	7.5	7.0	**7.9**
7	DBW303 (C)	216	8.0	7.5	7.5	7.0	**7.5**
8	MP1399	203	5.5	5.5	6.0	5.5	**5.6**
9	WH1320	204	8.5	8.0	8.0	7.5	**8.0**
10	HD3461	205	8.5	8.0	7.0	6.5	**7.5**
11	DBW434	207	9.0	9.5	8.0	8.0	**8.6**
12	PBW906	209	8.5	7.0	7.5	7.0	**7.5**
13	HD3463	210	8.5	7.5	7.5	7.0	**7.6**
14	PBW929	212	6.5	6.5	6.0	5.5	**6.1**
15	DBW445	213	7.5	8.0	7.5	6.5	**7.4**
16	DBW436	215	8.5	8.0	7.5	7.0	**7.8**
Mean			**7.9**	**7.7**	**7.3**	**6.9**	**7.5**

Table 66: Grain iron content (ppm) of *T. aestivum* genotypes of HYPT CZ trial

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
1	CG1044*	201	36.4	38.0	46.3	39.4	**40.0**
2	GW543*	208	36.7	32.7	41.6	44.0	**38.8**
3	DBW377(I) (C)	202	34.2	40.9	46.9	39.8	**40.5**
4	DBW187 (C)	206	35.2	39.5	41.0	39.8	**38.9**
5	GW322 (C)	211	29.5	38.5	41.9	32.2	**35.5**
6	DBW327(I) (C)	214	37.7	43.0	43.5	39.1	**40.8**
7	DBW303 (C)	216	36.1	35.8	35.8	43.2	**37.7**
8	MP1399	203	34.5	38.7	45.3	42.1	**40.2**
9	WH1320	204	31.0	40.0	45.9	35.1	**38.0**
10	HD3461	205	30.8	35.8	44.5	35.8	**36.7**
11	DBW434	207	37.5	37.4	45.8	36.5	**39.3**
12	PBW906	209	34.4	41.4	49.1	43.1	**42.0**
13	HD3463	210	34.3	40.7	44.3	35.4	**38.7**
14	PBW929	212	30.2	38.5	43.9	34.0	**36.7**
15	DBW445	213	34.7	39.8	39.7	32.4	**36.7**
16	DBW436	215	31.9	41.2	44.2	43.3	**40.2**
Mean			**34.1**	**38.9**	**43.7**	**38.5**	**38.8**

Table 67: Grain zinc content (ppm) of *T. aestivum* genotypes of HYPT CZ trial

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
1	CG1044*	201	41.1	31.8	34.2	39.0	**36.5**
2	GW543*	208	41.0	29.4	32.7	47.1	**37.6**
3	DBW377(I) (C)	202	34.8	37.6	34.2	37.3	**36.0**
4	DBW187 (C)	206	33.1	38.3	31.0	33.6	**34.0**
5	GW322 (C)	211	36.3	38.6	41.0	35.1	**37.8**
6	DBW327(I) (C)	214	41.7	32.2	29.3	35.7	**34.7**
7	DBW303 (C)	216	39.3	36.7	32.2	41.0	**37.3**
8	MP1399	203	37.1	40.1	34.4	39.7	**37.8**
9	WH1320	204	34.4	36.2	37.0	38.2	**36.5**
10	HD3461	205	32.6	28.5	32.0	29.6	**30.7**
11	DBW434	207	39.0	36.2	31.8	32.4	**34.9**
12	PBW906	209	35.3	34.6	35.7	37.4	**35.8**
13	HD3463	210	32.0	34.7	29.2	31.1	**31.8**
14	PBW929	212	39.4	35.4	34.0	34.1	**35.7**
15	DBW445	213	38.1	36.5	30.0	32.3	**34.2**
16	DBW436	215	35.2	39.5	31.1	40.3	**36.5**
Mean			**36.9**	**35.4**	**33.1**	**36.5**	**35.5**

Wheat product evaluation

Table 68: Chapati score (max. 10) of *T. aestivum* genotypes in AVTs

North Western Plain Zone

S. No.	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.pura	Mean
Irrigated, timely sown									
1	HI1668*	104	6.8	7.8	7.0	7.1	8.0	8.5	**7.5**
2	HD3471M*	108	7.5	7.3	7.9	7.8	8	7.8	**7.7**
3	DBW386*	109	7.8	7.7	8.3	6.7	7.9	7.5	**7.6**
4	PBW725 (C)	101	8.2	8.0	7.7	8.0	7.9	7.3	**7.8**
5	DBW88 (C)	103	8.5	7.8	7.9	7.5	7.8	7.5	**7.8**
6	HD2967 (C)	106	7.7	8.3	6.8	6.9	8.0	7.4	**7.5**
7	HD3086 (C)	110	7.9	7.9	7.6	7.1	8.3	8.4	**7.8**
8	DBW187 (C)	111	7.8	7.6	8.2	8.0	7.9	8.3	**8.0**
9	DBW222 (C)	112	7.6	8.1	7.8	8.0	8.1	8.4	**8.0**
10	PBW826 (C)	116	8.2	7.8	8.0	7.7	7.8	7.7	**7.9**
11	HD3386(I) (C)	115	7.4	8.3	8.4	7.8	8.3	7.6	**7.9**
Mean			**7.8**	**7.9**	**7.8**	**7.5**	**8.0**	**7.9**	**7.8**
Irrigated, late sown									
1	HD3428*	202	7.8	7.9	8.4	7.9	8.3	8.3	**8.1**
2	HD3059 (C)	205	7.2	7.8	8.3	7.6	8.2	7.9	**7.8**
3	PBW771 (C)	206	8.1	7.9	7.8	6.3	7.7	8.0	**7.6**
4	JKW261 (C)	207	8.1	7.4	7.6	8.1	7.9	6.6	**7.6**
5	DBW173 (C)	212	8.2	6.9	8.3	7.4	8.0	6.3	**7.5**
Mean			**7.9**	**7.6**	**8.1**	**7.5**	**8.0**	**7.4**	**7.7**

North Eastern Plain Zone

S. No.	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	7.8	7.7	7.9	8.0	**7.8**
2	DBW222 (C)	105	7.8	7.8	8.0	7.8	**7.8**
3	PBW826 (C)	106	8.0	7.9	7.7	7.9	**7.8**
4	HD3249 (C)	113	8.2	7.9	7.9	8.1	**8.0**
5	DBW187 (C)	117	8.0	8.0	8.3	7.8	**8.0**
6	HD3388(I) (C)	107	7.9	7.5	7.8	7.9	**7.8**
Mean			**7.9**	**7.8**	**7.9**	**7.9**	**7.9**

Central Zone

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	HI1669*	112	8.4	8.2	7.3	7.6	**7.9**
2	HI1650 (C)	115	8.2	8.0	8.3	8.0	**8.1**
3	MACS6768 (C)	116	7.6	6.8	7.3	7.0	**7.2**
4	GW322 (C)	118	7.9	7.5	7.5	7.6	**7.6**
5	GW547(I) (C)	101	8.3	7.5	7.4	7.0	**7.5**
Mean			**8.1**	**7.6**	**7.5**	**7.4**	**7.6**
Irrigated, late sown							
1	HI1674*	206	7.3	7.4	7.5	7.2	**7.3**
2	HI1634 (C)	203	7.9	7.4	8.2	7.6	**7.8**
3	MP4010 (C)	204	7.8	6.7	8.0	7.9	**7.6**
4	HD2932 (C)	207	7.3	7.1	8.3	7.5	**7.5**
5	CG1029 (C)	208	7.6	7.2	8.2	7.9	**7.7**
Mean			**7.6**	**7.1**	**8.0**	**7.6**	**7.6**
Restricted Irrigation, Timely Sown							
1	DBW441M*	312	7.8	8.2	8.1	7.9	**8.0**
2	DBW110 (C)	302	7.9	8.3	8.2	7.9	**8.0**
3	CG1036 (C)	304	7.9	7.7	8.0	7.6	**7.8**
4	HI1655 (C)	306	7.7	8.1	7.4	7.1	**7.6**
5	CG1040(I) (C)	301	7.6	8.0	8.1	7.8	**7.9**
6	DBW359(I) (C)	317	7.3	8.3	7.8	7.8	**7.8**
Mean			**7.7**	**8.1**	**7.9**	**7.7**	**7.8**

Peninsular Zone

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
1	PBW891*	104	7.9	7.4	7.5	**7.6**
2	AKAW5100*	108	8.2	7.7	7.8	**7.9**
3	WH1306*	110	8.3	8.1	7.7	**8.0**
4	NWS2222*	116	8.2	8.0	8.1	**8.1**
5	DBW443*	123	6.6	7.2	7.7	**7.1**
6	GW322 (C)	118	8.3	8.1	7.3	**7.9**
7	MACS6222 (C)	122	7.5	8.0	7.9	**7.8**
8	MP1378(I) (C)	124	7.6	8.0	7.4	**7.7**
Mean			**7.8**	**7.8**	**7.6**	**7.7**
Irrigated, late sown						
1	LOK79*	202	7.8	8.0	7.1	**7.6**
2	NIAW4114*	206	8.2	7.8	8.3	**8.1**
3	HI1674*	213	7.5	7.9	7.2	**7.5**
4	NIAW4120*	215	7.9	7.8	8.3	**8.0**
5	HD3090 (C)	203	6.9	8.2	8.1	**7.7**
6	HD2932 (C)	208	8.2	7.3	7.8	**7.7**
7	RAJ4083 (C)	209	8.3	7.9	7.8	**8.0**
8	HI1633 (C)	214	8.3	7.6	8.2	**8.0**
Mean			**7.8**	**7.8**	**7.8**	**7.8**

Table 69: Bread loaf volume (cc) of *T. aestivum* genotypes in AVTs

North Western Plain Zone

S. No.	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.pura	Mean
Irrigated, timely sown									
1	HI1668*	104	475	565	590	480	500	475	**514**
2	HD3471M*	108	500	615	625	565	645	600	**592**
3	DBW386*	109	480	585	550	530	605	535	**548**
4	PBW725 (C)	101	525	580	580	545	635	525	**565**
5	DBW88 (C)	103	505	615	625	505	650	560	**577**
6	HD2967 (C)	106	590	605	475	585	635	550	**573**
7	HD3086 (C)	110	420	625	550	470	625	555	**541**
8	DBW187 (C)	111	495	620	570	495	625	515	**553**
9	DBW222 (C)	112	570	610	615	550	665	605	**603**
10	PBW826 (C)	116	475	500	520	470	590	495	**508**
11	HD3386(I) (C)	115	475	495	530	445	595	510	**508**
Mean			**501**	**583**	**566**	**513**	**615**	**539**	**553**
Irrigated, late sown									
1	HD3428*	202	555	535	505	565	580	615	**559**
2	HD3059 (C)	205	550	520	525	620	625	580	**570**
3	PBW771 (C)	206	455	420	415	490	505	405	**448**
4	JKW261 (C)	207	620	600	595	575	595	620	**601**
5	DBW173 (C)	212	585	595	640	615	605	615	**609**
Mean			**553**	**534**	**536**	**573**	**582**	**567**	**558**

North Eastern Plain Zone

S. No.	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	530	625	510	595	565
2	DBW222 (C)	105	495	670	600	625	598
3	PBW826 (C)	106	575	650	495	590	578
4	HD3249 (C)	113	530	690	525	635	595
5	DBW187 (C)	117	485	685	525	645	585
6	HD3388(I) (C)	107	525	660	575	635	599
Mean			**523**	**663**	**538**	**621**	**586**

Central Zone

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	HI1669*	112	565	555	555	645	**580**
2	HI1650 (C)	115	550	600	585	525	**565**
3	MACS6768 (C)	116	450	510	530	510	**500**
4	GW322 (C)	118	535	505	525	545	**528**
5	GW547(I) (C)	101	630	645	680	670	**656**
Mean			**546**	**563**	**575**	**579**	**566**
Irrigated, late sown							
1	HI1674*	206	520	505	505	525	**514**
2	HI1634 (C)	203	555	615	575	615	**590**
3	MP4010 (C)	204	530	535	525	600	**548**
4	HD2932 (C)	207	530	545	550	575	**550**
5	CG1029 (C)	208	510	495	465	495	**491**
Mean			**529**	**539**	**524**	**562**	**539**
Restricted Irrigation, Timely Sown							
1	DBW441M*	312	625	610	540	600	**594**
2	DBW110 (C)	302	595	620	560	500	**569**
3	CG1036 (C)	304	435	445	360	485	**431**
4	HI1655 (C)	306	440	445	365	430	**420**
5	CG1040(I) (C)	301	595	610	605	605	**604**
6	DBW359(I) (C)	317	530	660	475	525	**548**
Mean			**537**	**565**	**484**	**524**	**528**

Peninsular Zone

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
1	PBW891*	104	625	630	575	**610**
2	AKAW5100*	108	630	610	585	**608**
3	WH1306*	110	590	590	575	**585**
4	NWS2222*	116	585	600	560	**582**
5	DBW443*	123	545	650	495	**563**
6	GW322 (C)	118	595	545	545	**562**
7	MACS6222 (C)	122	525	530	545	**533**
8	MP1378(I) (C)	124	650	625	585	**620**
Mean			**593**	**598**	**558**	**583**
Irrigated, late sown						
1	LOK79*	202	500	475	470	**482**
2	NIAW4114*	206	560	520	580	**553**
3	HI1674*	213	540	515	530	**528**
4	NIAW4120*	215	540	500	545	**528**
5	HD3090 (C)	203	665	630	570	**622**
6	HD2932 (C)	208	580	580	560	**573**
7	RAJ4083 (C)	209	615	585	565	**588**
8	HI1633 (C)	214	610	525	560	**565**
Mean			**576**	**541**	**548**	**555**

Table 70: Bread quality score (max. 10) of *T. aestivum* genotypes in AVTs

North Western Plain Zone

S. No.	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.pura	Mean
Irrigated, timely sown									
1	HI1668*	104	5.2	7.8	7.8	5.1	6.2	5.7	**6.3**
2	HD3471M*	108	5.5	7.8	8.4	7.5	8.6	7.6	**7.6**
3	DBW386*	109	5.4	7.1	6.6	6.4	7.5	6.7	**6.6**
4	PBW725 (C)	101	6.3	7.3	7.7	6.2	8.3	7.0	**7.1**
5	DBW88 (C)	103	5.9	7.5	8.0	5.5	8.7	7.0	**7.1**
6	HD2967 (C)	106	7.3	7.9	4.9	7.8	7.5	7.3	**7.1**
7	HD3086 (C)	110	4.5	8.6	6.2	5.5	7.8	7.5	**6.7**
8	DBW187 (C)	111	5.3	8.1	6.5	5.6	7.9	6.6	**6.7**
9	DBW222 (C)	112	6.6	7.7	7.2	7.0	8.6	7.5	**7.4**
10	PBW826 (C)	116	5.5	6.1	5.9	5.7	7.6	5.6	**6.1**
11	HD3386(I) (C)	115	5.5	6.0	6.1	5.3	8.2	6.5	**6.3**
Mean			**5.7**	**7.4**	**6.8**	**6.1**	**7.9**	**6.8**	**6.8**
Irrigated, late sown									
1	HD3428*	202	7.4	6.4	5.7	7.5	7.7	7.6	**7.1**
2	HD3059 (C)	205	6.9	6.5	6.3	8.2	8.2	8.0	**7.3**
3	PBW771 (C)	206	4.7	4.3	3.9	5.1	5.6	4.3	**4.6**
4	JKW261 (C)	207	7.3	7.6	7.5	7.0	6.8	8.2	**7.4**
5	DBW173 (C)	212	7.5	7.8	7.8	8.1	7.5	8.2	**7.8**
Mean			**6.7**	**6.5**	**6.2**	**7.2**	**7.2**	**7.3**	**6.8**

North Eastern Plain Zone

S. No.	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	6.4	8.3	6.2	7.8	**7.2**
2	DBW222 (C)	105	5.5	8.4	7.2	7.9	**7.2**
3	PBW826 (C)	106	7.1	8.8	5.7	8.1	**7.4**
4	HD3249 (C)	113	6.4	8.8	6.4	8.4	**7.5**
5	DBW187 (C)	117	6.0	8.6	6.0	8.4	**7.3**
6	HD3388(I) (C)	107	5.9	8.7	7.1	8.3	**7.5**
Mean			**6.2**	**8.6**	**6.4**	**8.2**	**7.3**

Central Zone

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	HI1669*	112	6.4	6.2	6.0	8.6	**6.8**
2	HI1650 (C)	115	6.2	7.2	7.1	6.2	**6.7**
3	MACS6768 (C)	116	4.7	5.7	5.5	5.7	**5.4**
4	GW322 (C)	118	5.9	5.5	5.6	6.3	**5.8**
5	GW547(I) (C)	101	8.1	8.3	8.8	8.7	**8.5**
Mean			**6.3**	**6.6**	**6.6**	**7.1**	**6.6**
Irrigated, late sown							
1	HI1674*	206	5.9	5.5	5.7	5.2	**5.6**
2	HI1634 (C)	203	7.2	7.6	7.0	8.3	**7.5**
3	MP4010 (C)	204	5.9	6.3	4.9	7.4	**6.1**
4	HD2932 (C)	207	6.5	6.3	6.2	7.1	**6.5**
5	CG1029 (C)	208	5.1	5.2	4.7	6.0	**5.3**
Mean			**6.1**	**6.2**	**5.7**	**6.8**	**6.2**
Restricted Irrigation, Timely Sown							
1	DBW441M*	312	8.6	7.8	7.0	8.4	**8.0**
2	DBW110 (C)	302	8.4	8.1	7.0	6.2	**7.4**
3	CG1036 (C)	304	4.9	5.3	3.9	5.5	**4.9**
4	HI1655 (C)	306	4.6	5.1	3.0	4.3	**4.2**
5	CG1040(I) (C)	301	7.9	8.2	8.0	8.3	**8.1**
6	DBW359(I) (C)	317	6.8	8.7	5.2	7.0	**6.9**
Mean			**6.9**	**7.2**	**5.7**	**6.6**	**6.6**

Peninsular zone

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
1	PBW891*	104	8.6	7.4	7.5	**7.8**
2	AKAW5100*	108	7.6	7.8	7.5	**7.6**
3	WH1306*	110	7.8	7.7	7.9	**7.8**
4	NWS2222*	116	7.5	7.3	7.2	**7.3**
5	DBW443*	123	6.4	8.8	5.6	**6.9**
6	GW322 (C)	118	7.8	6.2	6.7	**6.9**
7	MACS6222 (C)	122	6.6	6.2	6.6	**6.4**
8	MP1378(I) (C)	124	8.2	7.9	7.1	**7.7**
Mean			**7.6**	**7.4**	**7.0**	**7.3**
Irrigated, late sown						
1	LOK79*	202	5.1	5.6	5.3	**5.3**
2	NIAW4114*	206	6.4	6.6	7.2	**6.7**
3	HI1674*	213	5.8	6.3	5.5	**5.9**
4	NIAW4120*	215	6.6	5.9	5.6	**6.1**
5	HD3090 (C)	203	8.9	7.7	7.3	**8.0**
6	HD2932 (C)	208	7.2	7.0	6.6	**6.9**
7	RAJ4083 (C)	209	8.3	7.8	7.6	**7.9**
8	HI1633 (C)	214	7.8	6.6	6.9	**7.1**
Mean			**7.0**	**6.7**	**6.5**	**6.7**

Table 71: Biscuit spread factor of *T. aestivum* genotypes in AVTs

North Western Plain Zone

S. No	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.pura	Mean
Irrigated, timely sown									
1	HI1668*	104	7.0	7.2	5.9	7.0	6.7	6.2	**6.7**
2	HD3471M*	108	7.8	7.1	7.5	7.8	7.1	7.5	**7.5**
3	DBW386*	109	6.9	6.1	6.8	7.2	6.3	6.0	**6.5**
4	PBW725 (C)	101	6.6	7.2	7.1	6.7	6.3	6.3	**6.7**
5	DBW88 (C)	103	6.3	6.3	7.2	6.8	6.4	6.3	**6.6**
6	HD2967 (C)	106	7.2	6.7	5.8	7.6	7.9	6.0	**6.9**
7	HD3086 (C)	110	7.2	6.3	6.1	7.0	6.9	6.1	**6.6**
8	DBW187 (C)	111	8.0	6.5	6.2	7.5	6.6	6.7	**6.9**
9	DBW222 (C)	112	7.6	6.9	7.6	7.3	6.9	7.5	**7.3**
10	PBW826 (C)	116	7.5	5.6	6.6	6.4	7.1	6.6	**6.7**
11	HD3386 (I) (C)	115	6.9	7.2	6.4	6.8	6.4	6.1	**6.6**
Mean			**7.2**	**6.6**	**6.7**	**7.1**	**6.8**	**6.5**	**6.8**
Irrigated, late sown									
1	HD3428*	202	8.0	7.0	6.7	8.0	7.1	6.0	**7.1**
2	HD3059 (C)	205	6.5	7.0	6.7	8.5	6.5	6.5	**7.0**
3	PBW771 (C)	206	5.5	6.3	6.3	6.6	6.6	5.8	**6.2**
4	JKW261 (C)	207	7.9	8.1	8.4	8.7	8.2	6.1	**7.9**
5	DBW173 (C)	212	8.0	8.0	8.1	8.0	7.1	6.5	**7.6**
Mean			**7.2**	**7.3**	**7.2**	**8.0**	**7.1**	**6.2**	**7.2**

North Eastern Plain Zone

S. No	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	7.2	7.6	7.4	7.6	**7.5**
2	DBW222 (C)	105	7.2	7.1	7.3	6.7	**7.1**
3	PBW826 (C)	106	6.5	7.0	6.3	6.0	**6.5**
4	HD3249 (C)	113	7.2	6.1	7.7	7.6	**7.2**
5	DBW187 (C)	117	6.4	6.0	7.0	7.2	**6.6**
6	HD3388(I) (C)	107	7.8	6.6	7.4	6.7	**7.1**
Mean			**7.1**	**6.7**	**7.2**	**7.0**	**7.0**

Central Zone

S. No.	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	HI1669*	112	7.7	7.0	6.4	6.9	**7.0**
2	HI1650 (C)	115	6.7	6.1	6.0	5.7	**6.1**
3	MACS6768 (C)	116	5.9	5.3	6.0	5.9	**5.8**
4	GW322 (C)	118	7.3	6.6	6.0	6.5	**6.6**
5	GW547(I) (C)	101	7.5	6.5	6.3	5.9	**6.5**
Mean			**7.0**	**6.3**	**6.1**	**6.2**	**6.4**
Irrigated, late sown							
1	HI1674*	206	6.6	6.1	6.8	6.7	**6.5**
2	HI1634 (C)	203	5.6	6.4	7.2	6.3	**6.4**
3	MP4010 (C)	204	5.5	6.0	5.7	7.7	**6.2**
4	HD2932 (C)	207	6.5	6.3	6.9	8.1	**6.9**
5	CG1029 (C)	208	6.5	6.3	6.8	6.4	**6.5**
Mean			**6.1**	**6.2**	**6.7**	**7.0**	**6.5**
Restricted Irrigated, timely sown							
1	DBW441M*	312	6.7	6.3	6.8	7.3	**6.8**
2	DBW110 (C)	302	6.2	6.1	6.9	6.2	**6.4**
3	CG1036 (C)	304	6.0	5.7	5.9	6.2	**5.9**
4	HI1655 (C)	306	6.3	5.5	5.8	6.2	**5.9**
5	CG1040(I) (C)	301	5.9	5.6	6.3	6.2	**6.0**
6	DBW359(I) (C)	317	6.3	5.5	7.9	6.4	**6.5**
Mean			**6.2**	**5.8**	**6.6**	**6.4**	**6.3**

Peninsular Zone

S. No.	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
1	PBW891*	104	6.3	7.0	5.6	**6.3**
2	AKAW5100*	108	6.6	7.5	6.2	**6.8**
3	WH1306*	110	6.2	6.7	6.5	**6.5**
4	NWS2222*	116	5.9	7.5	6.8	**6.7**
5	DBW443*	123	5.7	7.3	5.8	**6.2**
6	GW322 (C)	118	6.0	7.4	7.0	**6.8**
7	MACS6222 (C)	122	5.9	7.5	5.7	**6.4**
8	MP1378(I) (C)	124	6.0	6.8	7.8	**6.9**
Mean			**6.1**	**7.2**	**6.4**	**6.6**
Irrigated, late sown						
1	LOK79*	202	6.6	6.8	6.7	**6.7**
2	NIAW4114*	206	6.9	7.0	6.5	**6.8**
3	HI1674*	213	5.9	7.6	6.2	**6.6**
4	NIAW4120*	215	6.7	6.7	5.8	**6.4**
5	HD3090 (C)	203	5.9	7.0	6.8	**6.5**
6	HD2932 (C)	208	6.7	6.9	7.0	**6.9**
7	RAJ4083 (C)	209	7.0	6.9	6.1	**6.7**
8	HI1633 (C)	214	6.7	6.7	6.9	**6.8**
Mean			**6.6**	**7.0**	**6.5**	**6.7**

Table 72: Wet Gluten (%) of *T. aestivum* genotypes in AVTs

North Western Plain Zone

S. No	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.pura	Mean
Irrigated, timely sown									
1	HI1668*	104	21.9	26.8	30.4	22.0	32.0	23.6	**26.1**
2	HD3471M*	108	23.3	28.6	30.8	18.9	31.0	28.1	**26.8**
3	DBW386*	109	19.4	26.1	28.1	19.6	28.5	24.9	**24.4**
4	PBW725 (C)	101	23.1	26.1	30.3	27.3	32.4	30.7	**28.3**
5	DBW88 (C)	103	22.4	30.9	29.0	22.0	33.6	30.7	**28.1**
6	HD2967 (C)	106	20.2	26.8	28.5	26.6	32.6	26.6	**26.9**
7	HD3086 (C)	110	23.1	29.1	31.9	23.4	31.1	28.3	**27.8**
8	DBW187 (C)	111	20.6	29.4	29.4	22.9	33.8	25.9	**27.0**
9	DBW222 (C)	112	23.2	25.8	27.4	22.0	33.8	30.7	**27.2**
10	PBW826 (C)	116	20.8	24.6	27.8	20.5	27.1	25.6	**24.4**
11	HD3386(I) (C)	115	18.4	21.2	27.0	22.2	29.2	25.4	**23.9**
Mean			**21.5**	**26.9**	**29.1**	**22.5**	**31.4**	**27.3**	**26.4**
Irrigated, late sown									
1	HD3428*	202	24.7	23.1	25.4	27.5	28.4	35.8	**27.5**
2	HD3059 (C)	205	26.0	23.7	27.4	29.8	28.9	31.2	**27.8**
3	PBW771 (C)	206	33.0	22.2	25.3	31.4	30.4	31.1	**28.9**
4	JKW261 (C)	207	26.5	25.0	22.8	23.8	26.6	38.0	**27.1**
5	DBW173 (C)	212	25.6	24.8	28.8	28.6	29.4	35.2	**28.7**
Mean			**27.2**	**23.7**	**25.9**	**28.2**	**28.7**	**34.3**	**28.0**

North Eastern Plain Zone

S. No	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	19.5	28.5	23.4	23.7	**23.8**
2	DBW222 (C)	105	20.9	33.7	25.9	26.9	**26.8**
3	PBW826 (C)	106	19.6	29.9	22.7	27.4	**24.9**
4	HD3249 (C)	113	23.2	34.0	23.7	23.2	**26.0**
5	DBW187 (C)	117	20.5	32.1	23.7	28.3	**26.1**
6	HD3388(I) (C)	107	23.7	36.7	25.5	30.4	**29.1**
Mean			**21.2**	**32.5**	**24.1**	**26.6**	**26.1**

Central Zone

S. No	Entries	Code	Vijapur	Junagarh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	HI1669*	112	27.0	31.9	29.7	29.0	**29.4**
2	HI1650 (C)	115	26.1	32.9	31.4	28.5	**29.7**
3	MACS6768 (C)	116	30.4	39.6	33.8	34.4	**34.5**
4	GW322 (C)	118	23.9	27.5	25.1	24.9	**25.3**
5	GW547(I) (C)	101	30.2	33.2	32.7	33.7	**32.5**
Mean			**27.5**	**33.0**	**30.5**	**30.1**	**30.3**
Irrigated, late sown							
1	HI1674*	206	29.6	37.5	26.8	29.4	**30.8**
2	HI1634 (C)	203	31.2	39.3	32.0	30.1	**33.1**
3	MP4010 (C)	204	30.7	39.1	31.1	30.0	**32.7**
4	HD2932 (C)	207	27.8	38.2	29.8	31.7	**31.9**
5	CG1029 (C)	208	31.1	38.1	28.4	29.2	**31.7**
Mean			**30.1**	**38.4**	**29.6**	**30.1**	**32.0**
Restricted Irrigated, timely sown							
1	DBW441M*	312	31.2	32.4	24.2	28.3	**29.0**
2	DBW110 (C)	302	27.5	32.0	25.5	28.6	**28.4**
3	CG1036 (C)	304	30.9	37.9	28.5	31.8	**32.3**
4	HI1655 (C)	306	34.5	39.0	29.1	31.1	**33.4**
5	CG1040(I) (C)	301	27.4	32.6	23.4	26.9	**27.6**
6	DBW359(I) (C)	317	22.6	33.6	21.6	25.9	**25.9**
Mean			**29.0**	**34.6**	**25.4**	**28.8**	**29.4**

Peninsular Zone

S. No	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
1	PBW891*	104	37.6	32.1	28.2	**32.6**
2	AKAW5100*	108	29.4	28.9	25.9	**28.1**
3	WH1306*	110	28.5	27.7	28.4	**28.2**
4	NWS2222*	116	32.8	31.0	26.8	**30.2**
5	DBW443*	123	32.2	35.0	29.3	**32.2**
6	GW322 (C)	118	28.9	29.1	24.9	**27.6**
7	MACS6222 (C)	122	40.5	35.1	30.2	**35.3**
8	MP1378(I) (C)	124	35.1	31.8	27.3	**31.4**
Mean			**33.1**	**31.3**	**27.6**	**30.7**
Irrigated, late sown						
1	LOK79*	202	34.7	36.0	35.0	**35.2**
2	NIAW4114*	206	36.3	31.2	38.4	**35.3**
3	HI1674*	213	32.6	32.1	32.1	**32.3**
4	NIAW4120*	215	33.6	32.3	35.8	**33.9**
5	HD3090 (C)	203	29.8	34.3	31.1	**31.7**
6	HD2932 (C)	208	33.3	33.0	32.5	**32.9**
7	RAJ4083 (C)	209	31.8	31.0	31.6	**31.5**
8	HI1633 (C)	214	32.4	30.8	32.4	**31.8**
Mean			**33.0**	**32.6**	**33.6**	**33.1**

Table 73: Dry Gluten (%) of *T. aestivum* genotypes in AVTs

North Western Plain Zone

S. No	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.pura	Mean
Irrigated, timely sown									
1	HI1668*	104	7.2	8.8	10.0	7.2	10.6	8.3	**8.7**
2	HD3471M*	108	7.8	9.5	10.1	6.3	10.1	10.0	**9.0**
3	DBW386*	109	6.4	8.5	9.0	6.4	9.3	8.2	**8.0**
4	PBW725 (C)	101	7.7	8.6	10.1	9.0	10.6	10.2	**9.3**
5	DBW88 (C)	103	7.4	10.2	9.6	7.4	11.0	10.0	**9.3**
6	HD2967 (C)	106	6.6	8.5	9.1	8.3	10.3	8.7	**8.6**
7	HD3086 (C)	110	7.5	9.0	10.1	7.5	9.9	9.2	**8.9**
8	DBW187 (C)	111	6.8	9.8	9.7	7.6	11.3	8.7	**9.0**
9	DBW222 (C)	112	7.6	8.3	8.6	7.8	9.2	9.9	**8.6**
10	PBW826 (C)	116	6.9	8.0	9.1	6.8	8.8	8.4	**8.0**
11	HD3386(I) (C)	115	6.1	7.0	8.7	6.9	9.6	8.4	**7.8**
Mean			**7.1**	**8.7**	**9.5**	**7.4**	**10.1**	**9.1**	**8.6**
Irrigated, late sown									
1	HD3428*	202	8.3	7.7	8.4	9.1	9.5	12.0	**9.2**
2	HD3059 (C)	205	8.6	7.9	9.2	9.9	9.7	10.6	**9.3**
3	PBW771 (C)	206	11.5	6.8	8.3	10.7	10.3	10.2	**9.6**
4	JKW261 (C)	207	8.5	8.2	7.3	7.8	8.6	12.1	**8.8**
5	DBW173 (C)	212	8.5	8.4	9.0	9.7	10.1	11.9	**9.6**
Mean			**9.1**	**7.8**	**8.4**	**9.4**	**9.7**	**11.4**	**9.3**

North Eastern Plain Zone

S. No	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	6.6	9.7	7.9	8.7	**8.2**
2	DBW222 (C)	105	7.0	11.0	8.6	8.8	**8.8**
3	PBW826 (C)	106	6.4	9.8	7.4	9.0	**8.2**
4	HD3249 (C)	113	7.7	11.4	8.0	8.0	**8.8**
5	DBW187 (C)	117	6.9	10.9	8.1	9.6	**8.9**
6	HD3388(I) (C)	107	7.6	11.9	8.8	10.2	**9.6**
Mean			**7.0**	**10.8**	**8.1**	**9.0**	**8.7**

Central Zone

S. No	Entries	Code	Vijapur	Junagarh	Indore	Powerkheda	Mean
Irrigated, timely sown							
1	HI1669*	112	9.0	10.5	9.5	9.4	**9.6**
2	HI1650 (C)	115	8.5	10.5	10.8	9.7	**9.9**
3	MACS6768 (C)	116	10.4	13.0	11.3	11.8	**11.6**
4	GW322 (C)	118	7.9	8.9	8.3	7.9	**8.2**
5	GW547(I) (C)	101	9.8	11.1	10.7	10.9	**10.6**
Mean			**9.1**	**10.8**	**10.1**	**10.0**	**10.0**
Irrigated, late sown							
1	HI1674*	206	10.3	12.1	8.4	9.4	**10.1**
2	HI1634 (C)	203	9.9	12.2	9.3	9.7	**10.3**
3	MP4010 (C)	204	9.7	12.3	11.0	9.9	**10.7**
4	HD2932 (C)	207	9.1	12.4	9.4	10.0	**10.2**
5	CG1029 (C)	208	9.7	12.0	9.1	9.2	**10.0**
Mean			**9.8**	**12.2**	**9.4**	**9.6**	**10.3**
Restricted Irrigated, timely sown							
1	DBW441M*	312	10.4	10.9	8.1	9.3	**9.7**
2	DBW110 (C)	302	9.2	11.0	8.5	9.5	**9.5**
3	CG1036 (C)	304	9.8	12.1	9.7	10.0	**10.4**
4	HI1655 (C)	306	11.9	13.9	7.1	11.1	**11.0**
5	CG1040(I) (C)	301	9.3	10.5	7.8	8.1	**8.9**
6	DBW359(I) (C)	317	7.7	11.5	7.3	8.7	**8.8**
Mean			**9.7**	**11.7**	**8.1**	**9.4**	**9.7**

Peninsular Zone

S. No	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
1	PBW891*	104	10.0	9.7	9.2	**9.6**
2	AKAW5100*	108	11.5	10.7	9.2	**10.5**
3	WH1306*	110	9.9	9.4	9.4	**9.6**
4	NWS2222*	116	11.0	10.4	8.8	**10.1**
5	DBW443*	123	10.5	11.7	9.7	**10.6**
6	GW322 (C)	118	9.2	9.1	8.0	**8.8**
7	MACS6222 (C)	122	13.1	11.6	10.2	**11.6**
8	MP1378(I) (C)	124	11.6	10.3	8.7	**10.2**
Mean			**10.9**	**10.4**	**9.1**	**10.1**
Irrigated, late sown						
1	LOK79*	202	11.0	11.2	11.0	**11.1**
2	NIAW4114*	206	10.5	10.3	10.3	**10.4**
3	HI1674*	213	11.5	10.2	13.6	**11.8**
4	NIAW4120*	215	10.5	10.1	11.6	**10.7**
5	HD3090 (C)	203	10.6	9.9	10.3	**10.3**
6	HD2932 (C)	208	9.9	11.1	10.0	**10.3**
7	RAJ4083 (C)	209	11.0	10.1	10.4	**10.5**
8	HI1633 (C)	214	10.2	10.1	10.5	**10.3**
Mean			**10.7**	**10.4**	**10.9**	**10.7**

Table 74: Gluten index (max. 100) of *T. aestivum* genotypes in AVTs

North Western Plain Zone

S. No	Entries	Code	Ludhiana	P.nagar	Delhi	Hisar	Karnal	D.pura	Mean
Irrigated, timely sown									
1	HI1668*	104	90	80	79	93	90	98	**88**
2	HD3471M*	108	92	93	79	96	91	96	**91**
3	DBW386*	109	95	84	72	94	69	90	**84**
4	PBW725 (C)	101	90	94	79	89	78	89	**86**
5	DBW88 (C)	103	92	88	83	94	83	75	**86**
6	HD2967 (C)	106	86	81	66	67	64	85	**75**
7	HD3086 (C)	110	73	59	52	71	57	83	**66**
8	DBW187 (C)	111	96	92	82	97	85	94	**91**
9	DBW222 (C)	112	71	74	51	71	56	60	**64**
10	PBW826 (C)	116	94	90	75	91	77	86	**85**
11	HD3386(I) (C)	115	94	98	87	94	75	97	**91**
Mean			**88**	**85**	**73**	**87**	**75**	**87**	**83**
Irrigated, late sown									
1	HD3428*	202	97	96	89	91	92	88	**92**
2	HD3059 (C)	205	90	96	91	87	96	92	**92**
3	PBW771 (C)	206	45	51	54	45	48	51	**49**
4	JKW261 (C)	207	69	86	90	82	71	59	**76**
5	DBW173 (C)	212	94	98	45	93	95	77	**84**
Mean			**79**	**85**	**74**	**80**	**81**	**73**	**79**

North Eastern Plain Zone

S. No	Entries	Code	Kanpur	Varanasi	Pusa	Sabour	Mean
Irrigated, timely sown							
1	DBW386*	112	98	97	98	96	**97**
2	DBW222 (C)	105	95	80	89	93	**89**
3	PBW826 (C)	106	96	91	95	96	**94**
4	HD3249 (C)	113	95	97	98	98	**97**
5	DBW187 (C)	117	97	97	98	94	**97**
6	HD3388(I) (C)	107	86	78	96	90	**87**
Mean			**94**	**90**	**96**	**94**	**94**

Central Zone

S. No	Entries	Code	Vijapur	Junagarh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	HI1669*	112	79	72	53	59	**66**
2	HI1650 (C)	115	54	43	57	49	**51**
3	MACS6768 (C)	116	50	45	45	41	**45**
4	GW322 (C)	118	66	48	62	41	**54**
5	GW547(I) (C)	101	64	73	58	43	**60**
Mean			**63**	**56**	**55**	**47**	**55**
Irrigated, late sown							
1	HI1674*	206	54	43	62	21	**45**
2	HI1634 (C)	203	49	39	32	51	**43**
3	MP4010 (C)	204	51	42	54	58	**51**
4	HD2932 (C)	207	71	64	38	51	**56**
5	CG1029 (C)	208	34	35	45	45	**40**
Mean			**52**	**45**	**46**	**45**	**47**
Restricted Irrigation, Timely Sown							
1	DBW441M*	312	82	83	92	70	**82**
2	DBW110 (C)	302	90	97	91	82	**90**
3	CG1036 (C)	304	58	46	56	41	**50**
4	HI1655 (C)	306	50	57	66	45	**55**
5	CG1040(I) (C)	301	96	94	94	87	**93**
6	DBW359(I) (C)	317	98	97	96	94	**96**
Mean			**79**	**79**	**83**	**70**	**78**

Peninsular Zone

S. No	Entries	Code	Dharwad	Pune	Niphad	Mean
Irrigated, timely sown						
1	PBW891*	104	96	94	91	**94**
2	AKAW5100*	108	44	58	59	**54**
3	WH1306*	110	99	98	91	**96**
4	NWS2222*	116	77	82	77	**79**
5	DBW443*	123	60	56	68	**61**
6	GW322 (C)	118	51	48	57	**52**
7	MACS6222 (C)	122	46	49	52	**49**
8	MP1378(I) (C)	124	45	47	45	**46**
Mean			**65**	**67**	**67**	**66**
Irrigated, late sown						
1	LOK79*	202	52	43	40	**45**
2	NIAW4114*	206	83	63	61	**69**
3	HI1674*	213	48	56	52	**52**
4	NIAW4120*	215	70	62	66	**66**
5	HD3090 (C)	203	85	61	57	**68**
6	HD2932 (C)	208	93	60	73	**75**
7	RAJ4083 (C)	209	81	65	65	**70**
8	HI1633 (C)	214	60	64	54	**59**
Mean			**72**	**59**	**58**	**63**

Table 75: Chapati score (max. 10) of *T. aestivum* genotypes in Central Zone HYPT

S. No	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	CG1044*	201	7.0	6.9	7.4	7.9	**7.3**
2	GW543*	208	7.8	7.2	8.3	8.2	**7.8**
3	DBW187 (C)	206	7.9	7.5	7.9	7.8	**7.8**
4	GW322 (C)	211	8.2	7.4	7.9	8.1	**7.9**
5	DBW303 (C)	216	7.9	7.9	7.8	7.9	**7.9**
6	DBW377(I) (C)	202	7.3	7.6	7.9	7.7	**7.6**
7	DBW327(I) (C)	214	8.3	8.0	7.6	7.9	**7.9**
Mean			**7.7**	**7.5**	**7.8**	**7.9**	**7.7**

Table 76: Bread loaf volume (cc) of *T. aestivum* genotypes in Central Zone HPYT

S. No	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	CG1044*	201	535	560	525	550	**543**
2	GW543*	208	615	590	595	630	**608**
3	DBW187 (C)	206	590	630	600	585	**601**
4	GW322 (C)	211	530	535	495	510	**518**
5	DBW303 (C)	216	595	575	550	625	**586**
6	DBW377(I) (C)	202	625	625	615	590	**614**
7	DBW327(I) (C)	214	560	550	555	575	**560**
Mean			**579**	**581**	**562**	**581**	**576**

Table 77: Bread quality score (max. 10) of *T. aestivum* genotypes in Central Zone HYPT

S. No	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	CG1044*	201	6.0	7.2	6.0	6.9	**6.5**
2	GW543*	208	7.5	7.3	7.6	8.1	**7.6**
3	DBW187 (C)	206	7.7	8.1	8.1	7.6	**7.9**
4	GW322 (C)	211	6.2	6.7	5.6	5.9	**6.1**
5	DBW303 (C)	216	7.5	6.7	7.2	8.3	**7.4**
6	DBW377(I) (C)	202	8.3	7.9	7.9	7.6	**7.9**
7	DBW327(I) (C)	214	7.0	7.2	6.8	7.4	**7.1**
Mean			**7.2**	**7.3**	**7.0**	**7.4**	**7.2**

Table 78: Biscuit spread factor of *T. aestivum* genotypes in Central Zone HYPT

S. No	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	CG1044*	201	5.9	6.9	6.5	6.2	**6.4**
2	GW543*	208	7.0	7.0	7.3	7.4	**7.2**
3	DBW187 (C)	206	7.2	6.6	7.1	7.7	**7.1**
4	GW322 (C)	211	7.1	7.0	7.5	7.9	**7.4**
5	DBW303 (C)	216	6.7	7.1	7.1	6.8	**6.9**
6	DBW377(I) (C)	202	6.0	7.0	6.6	8.2	**6.9**
7	DBW327(I) (C)	214	6.7	6.6	6.8	7.5	**6.9**
Mean			**6.6**	**6.9**	**7.0**	**7.4**	**7.0**

Table 79: Wet Gluten (%) of *T. aestivum* genotypes in Central Zone HYPT

S. No	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	CG1044*	201	30.2	29.3	28.7	25.9	**28.5**
2	GW543*	208	28.8	29.7	33.5	30.4	**30.6**
3	DBW187 (C)	206	28.8	31.2	27.9	27.4	**28.8**
4	GW322 (C)	211	28.0	30.6	26.5	26.6	**27.9**
5	DBW303 (C)	216	31.9	32.5	33.0	28.8	**31.5**
6	DBW377(I) (C)	202	31.9	30.1	30.4	29.1	**30.4**
7	DBW327(I) (C)	214	27.6	28.0	28.3	25.7	**27.4**
Mean			**29.6**	**30.2**	**29.7**	**27.7**	**29.3**

Table 80: Dry Gluten (%) of *T. aestivum* genotypes in Central Zone HYPT

S. No	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	CG1044*	201	9.7	9.8	9.3	8.5	**9.3**
2	GW543*	208	9.4	10.0	10.6	9.9	**10.0**
3	DBW187 (C)	206	9.7	10.6	9.5	9.2	**9.8**
4	GW322 (C)	211	9.0	9.8	9.2	8.6	**9.1**
5	DBW303 (C)	216	10.4	10.7	10.7	9.4	**10.3**
6	DBW377(I) (C)	202	10.1	10.0	9.7	9.5	**9.8**
7	DBW327(I) (C)	214	8.9	9.2	9.1	8.5	**8.9**
Mean			**9.6**	**10.0**	**9.7**	**9.1**	**9.6**

Table 81: Gluten index (max. 100) of *T. aestivum* genotypes in Central Zone HYPT

S. No	Entries	Code	Vijapur	Junagadh	Indore	P.kheda	Mean
Irrigated, timely sown							
1	CG1044*	201	77	90	74	88	**82**
2	GW543*	208	76	88	53	62	**70**
3	DBW187 (C)	206	94	94	93	91	**93**
4	GW322 (C)	211	48	49	58	60	**53**
5	DBW303 (C)	216	69	65	68	61	**66**
6	DBW377(I) (C)	202	67	89	63	72	**72**
7	DBW327(I) (C)	214	84	87	78	90	**85**
Mean			**73**	**80**	**69**	**75**	**74**