प्रगति प्रतिवेदन
PROGRESS REPORT
2023-24

गुणवत्ता
QUALITY

अखिल भारतीय समन्वित गेहूँ एवं जौ अनुसंधान परियोजना

AICRP on Wheat and Barley

भा.कृ.अनु.प.–भारतीय गेहूँ एवं जौ अनुसंधान संस्थान, करनाल (हरियाणा)

ICAR-Indian Institute of Wheat & Barley Research, Karnal (Haryana)

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All India Coordinated Research Project on Wheat & Barley

PROGRESS REPORT
2023-24

WHEAT QUALITY

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In the end, it is stated that although utmost care has been taken to avoid any error in presentation of the results in this report, any error/omission is unintended and may please be brought to the notice of the undersigned.

Dated: 29th August, 2024

(Sunil Kumar)
Principal Investigator
(Wheat Quality)

Number of entries evaluated under Advance Varietal Trials

Station	Zone	Condition	No. of entries	
			T. aestivum	*T. durum*
Almora	NHZ	RFTS	5	-
Shimla	NHZ	RFTS	5	-
Malan	NHZ	RFTS	5	-
Ludhiana	NWPZ	ITS, ILS, RITS	40	-
Hisar	NWPZ	ITS, ILS, RITS	40	-
Delhi	NWPZ	ITS, ILS, RITS	40	-
Pantnagar	NWPZ	ITS, ILS, RITS	40	-
Karnal	NWPZ	ITS, ILS, RITS	40	-
Durgapura	NWPZ	ITS, ILS, RITS	40	-
Kanpur	NEPZ	ITS, ILS, RITS	32	-
Pusa	NEPZ	ITS, ILS, RITS	32	-
Sabour	NEPZ	ITS, ILS, RITS	32	-
Varanasi	NEPZ	ITS, ILS, RITS	32	-
Vijapur	CZ	ITS, ILS, RITS	31	15
Junagarh	CZ	ITS, ILS, RITS	31	15
Powarkheda	CZ	ITS, ILS, RITS	31	15
Indore	CZ	ITS, ILS, RITS	31	15
Pune	PZ	ITS, ILS, RITS	36	17
Dharwad	PZ	ITS, ILS, RITS	36	17
Niphad	PZ	ITS, ILS, RITS	36	17

Number of entries evaluated in Special Trials

Number of entries evaluated under HYPT

Station	Zone	Condition	*T. aestivum*
Ludhiana	NWPZ	IR-ES	6
Hisar	NWPZ	IR-ES	6
Delhi	NWPZ	IR-ES	6
Karnal	NWPZ	IR-ES	6
Vijapur	CZ	IR-ES	16
Junagarh	CZ	IR-ES	16
Powarkheda	CZ	IR-ES	16
Indore	CZ	IR-ES	16

Number of entries evaluated in National Initial Varietal Trials

Trial	Condition	Entries	Zone	Stations
NIVT 1A	IR-TS	36	NWPZ	Ludhiana, Delhi, Hisar, Pantnagar, Karnal, Durgapura
			NEPZ	Varanasi, Kanpur, Sabour
NIVT 1B	IR-TS	36	NWPZ	Ludhiana, Delhi, Hisar, Karnal, Durgapura
			NEPZ	Sabour, Kanpur, Varanasi
NIVT 2	IR-TS	36	CZ	Indore, Vijapur, Junagarh, Powarkheda
			PZ	Pune, Niphad, Dharwad
NIVT 3A	IR-LS	36	NWPZ	Ludhiana, Hisar, Pantanagar, Delhi, Durgapura, Karnal
			NEPZ	Sabour, Varanasi, Kanpur
NIVT 3B	IR-LS	25	CZ	Indore, Vijapur, Junagarh, Powarkheda
			PZ	Pune, Niphad, Dharwad
NIVT 4	IR-TS	36	NWPZ	Ludhiana, Delhi, Hisar, Pantnagar, Karnal
			CZ	Indore, Vijapur, Junagarh, Powarkheda
			PZ	Dharwad, Niphad, Pune
NIVT 5A	RI-TS	25	NWPZ	Ludhiana, Delhi, Hisar, Durgapura, Karnal
			NEPZ	Kanpur, Sabour, Varanasi
NIVT 5B	RI-TS	25	CZ	Powarkheda, Indore, Vijapur, Junagarh
			PZ	Niphad, Pune, Dharwad
NIVT6	IR-ES	25	NWPZ	Ludhiana, Delhi, Hisar, Karnal
			CZ	Powarkheda, Indore, Vijapur, Junagarh
IVT	RF-TS	16	NHZ	Almora, Shimla, Malan
	IR-LS	14	NHZ	Almora, Shimla, Malan

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ADVANCE VARIETAL TRIALS

The traits recorded for different advanced trials were Grain Appearance Score, Hectolitre Weight, Grain Protein Content (on 12% moisture basis), Grain Hardness Index, Sedimentation Value, Phenol test, Iron and Zinc content in both bread wheat and durum wheat. Yellow pigment and yellow berry were additional traits recorded in durum wheat. One centre from each trial was used for measuring grain hardness index.

- The *Triticum aestivum* entries were tested under Rainfed Timely Sown (RF-TS) conditions in Northern Hills Zone (NHZ) and the data is given in tables 1-8.

- In North Western Plains Zone (NWPZ), the entries were tested under Irrigated Timely Sown (IR-TS), Irrigated Late Sown (IR-LS) and Restricted Irrigated Timely Sown (RI-TS) conditions and the data is given in tables 9-16.

- The trial was conducted under three conditions namely Irrigated Timely Sown (IR-TS), Irrigated Late Sown (IR-LS) and Restricted Irrigated Timely Sown (RI-TS) in North Eastern Plains Zone (NEPZ) and the data is given in tables17-24.

- The *T. aestivum* and *Triticum durum* entries were tested under Irrigated Timely Sown (IR-TS), Irrigated Late Sown (IR-LS) and Restricted Irrigated Timely Sown (RI-TS) conditions in Central Zone and the data is given in tables 25-34.

- In Peninsular Zone, the *T. aestivum* and *T. durum* entries were tested under Irrigated Timely Sown (IR-TS), Irrigated Late Sown (IR-LS) and Restricted Irrigated Timely Sown (RI-TS) conditions and the data is given in tables 35-44.

- 2nd year AVT and special trial (HYPT entries) including checks were evaluated for High Molecular Weight Glutenin Subunits (HMW-GS) encoded by *Glu-A1*, *Glu-B1* and *Glu-D1* loci and the data is given in tables 45-51.

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 1: 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 2: 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 was 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	Junagarh	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 3: Hectolitre weight (Kg/hl) of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	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	Junagarh	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	Junagarh	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 4: Phenol test (Max. 10) of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	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. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	Indore	P'khera	Mean
Irrigated, Timely Sown							
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**
Restricted Irrigated, Timely Sown							
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	Junagarh	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	Junagarh	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 5: Grain zinc content (ppm) of *T. aestivum* and *T. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	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. durum* genotypes in Central Zone (CZ) AVTs

S. No.	Entries	Code	Vijapur	Junagarh	Indore	P'khera	Mean
Irrigated, Timely Sown							
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**
Restricted Irrigated, Timely Sown							
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 6: 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) AVT

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* 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	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			**0.0**	**0.0**	**0.0**	**0.0**

***Suspected mixture so not included in 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. 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**
Restricted Irrigated, Timely Sown						
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 7: 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 8: 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. 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**
Restricted Irrigated, Timely Sown						
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.	Entries	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.	Entries	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 Irrigated, 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

Section B

SPECIAL TRIALS

High Yield Potential Trial (HYPT) (Tables 52-67)

Under this trial, 6 entries from 4 centres (Karnal, Ludhiana, Delhi and Hisar) in NWPZ and 16 entries from 4 centres in CZ (Vijapur, Junagarh, P.kheda and Indore) were evaluated for grain appearance, hectolitre weight, protein content, sedimentation value, hardness index, phenol test and Iron & Zinc content

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

S. No.	Entries	Code	Vijapur	Junagarh	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	Junagarh	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	Junagarh	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	Junagarh	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	Junagarh	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	Junagarh	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	Junagarh	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	Junagarh	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**

Section C
End-product quality (AVT and HYPT)

Chapati

Bread

Biscuit

Gluten

AVT (Tables 68-74)
HYPT CZ (Tables 75-81)

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	Junagarh	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 Irrigated, 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	Junagarh	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 Irrigated, 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	Junagarh	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 Irrigated, 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	Junagarh	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 Irrigated, 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	Junagarh	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	Junagarh	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	Junagarh	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	Junagarh	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	Junagarh	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	Junagarh	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	Junagarh	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**

Section D

NATIONAL INITIAL VARIETAL TRIALS
&
IVT, NHZ

Table from 82-129 (NIVT) and 130-134 (AVT/IVT, NHZ)

Table 82: Grain appearance score (Max. 10) of *T. aestivum* genotypes in NIVT 1A

S. No.	Entries	Trial Code	NWPZ							NEPZ				Overall Mean
			Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	DBW450	101	7.3	6.7	5.5	7.6	7.7	5.6	**6.7**	7.4	7.1	5.5	**6.7**	**6.7**
2	UP3141	102	6.9	6.6	5.7	5.5	7.3	5.8	**6.3**	6.4	5.8	5.0	**5.7**	**6.1**
3	KRL2202	103	6.8	7.1	5.8	6.0	7.5	6.2	**6.6**	6.2	6.3	5.2	**5.9**	**6.3**
4	HD3474	104	6.7	6.8	6.0	7.2	6.7	5.8	**6.5**	7.2	5.4	5.0	**5.9**	**6.3**
5	HD3086 (C)	105	7.0	6.1	7.1	6.5	6.8	5.6	**6.5**	6.8	5.6	5.4	**5.9**	**6.3**
6	NW8094	106	6.7	5.7	6.0	5.8	7.7	6.0	**6.3**	6.4	5.1	5.6	**5.7**	**6.1**
7	HP1981	107	6.8	6.0	5.8	5.8	7.3	6.2	**6.3**	6.6	6.1	5.6	**6.1**	**6.2**
8	Supreme-1122	108	6.1	4.9	4.7	6.3	6.8	6.2	**5.8**	6.6	6.1	4.7	**5.8**	**5.8**
9	WH1328	109	6.9	4.7	5.2	5.7	7.0	6.0	**5.9**	6.0	4.9	4.6	**5.2**	**5.7**
10	PBW940	110	6.9	6.9	6.0	6.2	7.5	6.4	**6.7**	7.0	6.9	5.6	**6.5**	**6.6**
11	PBW938	111	6.8	5.7	6.3	6.2	6.5	6.4	**6.3**	6.8	6.5	5.4	**6.2**	**6.3**
12	PBW936	112	5.8	5.2	4.5	5.3	5.5	5.8	**5.4**	6.8	6.2	4.5	**5.8**	**5.5**
13	K2301	113	5.9	4.9	5.5	5.6	7.4	5.8	**5.9**	6.4	6.6	5.5	**6.2**	**6.0**
14	HD3477	114	6.8	5.1	7.3	6.0	7.6	6.4	**6.5**	7.0	5.7	7.3	**6.7**	**6.6**
15	Raj4585	115	6.3	5.1	4.7	6.0	7.1	6.2	**5.9**	6.6	6.5	4.7	**5.9**	**5.9**
16	DBW447	116	7.1	6.7	7.1	7.0	7.9	6.4	**7.0**	6.8	7.3	5.8	**6.6**	**6.9**
17	DBW449	117	6.9	5.2	6.6	5.2	6.3	6.0	**6.0**	6.0	5.8	5.1	**5.6**	**5.9**
18	UP3140	118	6.5	4.9	5.5	5.1	7.3	6.2	**5.9**	6.0	5.4	5.5	**5.6**	**5.8**
19	UBW 22	119	6.3	4.7	5.3	5.0	6.9	6.2	**5.7**	6.0	5.0	5.6	**5.5**	**5.7**
20	DBW448	120	6.4	4.7	5.3	5.2	6.1	6.4	**5.7**	6.2	5.4	5.3	**5.6**	**5.7**
21	Raj4586	121	6.2	6.4	6.7	5.4	7.9	6.6	**6.5**	6.6	6.0	5.9	**6.2**	**6.4**
22	JAUW723	122	5.9	6.0	5.7	5.3	6.0	5.8	**5.8**	6.8	5.9	4.7	**5.8**	**5.8**
23	PBW937	123	6.3	4.9	5.6	6.3	6.2	6.4	**6.0**	7.0	6.5	5.1	**6.2**	**6.0**
24	DBW222 (C)	124	6.5	4.8	5.7	6.4	6.4	6.0	**6.0**	6.7	6.1	5.9	**6.2**	**6.1**
25	BCW35	125	5.6	4.7	6.4	6.2	7.0	6.0	**6.0**	6.8	5.8	5.4	**6.0**	**6.0**
26	UP3142	126	6.1	3.9	5.0	5.3	7.2	6.0	**5.6**	6.2	6.7	5.8	**6.2**	**5.8**
27	PBW939	127	7.2	5.1	6.7	6.2	6.0	6.4	**6.3**	6.2	5.7	5.9	**5.9**	**6.2**
28	NWS2124	128	5.7	5.0	6.8	5.5	7.3	6.2	**6.1**	6.6	5.6	5.2	**5.8**	**6.0**
29	HUW858	129	5.5	4.1	5.0	4.7	5.0	6.4	**5.1**	5.4	5.2	5.0	**5.2**	**5.1**
30	DBW446	130	6.3	6.5	4.7	4.4	6.5	6.2	**5.8**	6.6	6.2	5.0	**5.9**	**5.8**
31	Raj4584	131	5.5	7.0	5.0	6.9	7.3	6.6	**6.4**	6.6	6.2	5.4	**6.1**	**6.3**
32	SVPWL22-04	132	6.0	6.3	6.5	7.7	7.7	6.2	**6.7**	6.8	5.9	5.8	**6.2**	**6.5**
33	HD3475	133	6.5	4.9	6.9	7.3	6.5	6.2	**6.4**	6.6	5.5	6.0	**6.0**	**6.3**
34	WH1329	134	7.5	5.7	7.0	7.0	6.9	6.8	**6.8**	6.6	5.9	6.0	**6.2**	**6.6**
35	DBW187 (C)	135	6.6	4.9	6.7	6.9	5.9	6.4	**6.2**	6.4	5.8	5.9	**6.0**	**6.2**
36	HD3476	136	6.7	4.7	5.9	6.9	5.8	5.6	**5.9**	6.2	5.2	4.8	**5.4**	**5.8**
Mean			**6.5**	**5.5**	**5.9**	**6.0**	**6.8**	**6.2**	**6.2**	**6.5**	**5.9**	**5.4**	**6.0**	**6.1**

Table 83: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in NIVT 1A

S. No.	Entries	Trial Code	NWPZ							NEPZ				Overall Mean
			Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	DBW450	101	80.0	78.5	79.5	81.5	80.3	78.1	**79.7**	79.5	80.0	78.0	**79.2**	**79.5**
2	UP3141	102	78.5	77.5	77.5	78.8	78.0	76.1	**77.7**	79.5	75.8	74.0	**76.4**	**77.3**
3	KRL2202	103	78.8	77.8	76.8	81.5	80.3	80.2	**79.2**	80.5	77.8	75.0	**77.8**	**78.7**
4	HD3474	104	76.8	76.5	77.0	80.3	79.5	75.0	**77.5**	81.0	75.0	72.0	**76.0**	**77.0**
5	HD3086(C)	105	79.3	74.8	80.5	79.5	78.8	77.7	**78.4**	79.5	76.3	75.5	**77.1**	**78.0**
6	NW8094	106	79.5	78.0	78.0	80.8	79.5	77.6	**78.9**	80.0	75.0	74.5	**76.5**	**78.1**
7	HP1981	107	77.8	78.3	78.5	79.3	78.3	76.3	**78.1**	79.0	76.3	75.0	**76.8**	**77.6**
8	Supreme-1122	108	74.8	76.8	76.5	79.5	78.5	74.9	**76.8**	77.5	76.3	74.0	**75.9**	**76.5**
9	WH1328	109	78.0	75.8	78.0	77.8	78.8	77.3	**77.6**	79.5	74.5	73.0	**75.7**	**77.0**
10	PBW940	110	78.8	78.5	79.8	80.5	80.3	80.7	**79.8**	80.5	77.3	75.0	**77.6**	**79.0**
11	PBW938	111	78.3	76.5	77.8	79.0	76.0	78.0	**77.6**	77.5	78.5	74.0	**76.7**	**77.3**
12	PBW936	112	74.5	72.3	74.0	75.5	69.0	75.1	**73.4**	76.0	74.3	68.0	**72.8**	**73.2**
13	K2301	113	77.0	76.5	76.8	79.3	78.8	75.7	**77.4**	80.0	78.0	75.5	**77.8**	**77.5**
14	HD3477	114	78.0	74.3	79.0	81.5	79.0	77.2	**78.2**	80.0	73.8	73.5	**75.8**	**77.4**
15	Raj4585	115	77.8	78.5	78.0	78.0	79.0	78.0	**78.2**	76.0	77.5	75.0	**76.2**	**77.5**
16	DBW447	116	80.0	80.8	79.0	81.5	80.0	80.5	**80.3**	78.5	79.3	75.5	**77.8**	**79.5**
17	DBW449	117	78.3	75.8	78.8	77.8	77.3	75.6	**77.3**	77.5	75.8	71.0	**74.8**	**76.4**
18	UP3140	118	78.0	76.3	77.8	78.5	78.0	76.1	**77.5**	77.5	74.8	75.0	**75.8**	**76.9**
19	UBW 22	119	78.0	77.0	79.3	77.8	78.8	76.8	**78.0**	77.5	74.5	75.5	**75.8**	**77.2**
20	DBW448	120	78.8	77.8	79.8	79.5	78.8	78.8	**78.9**	80.5	76.8	75.0	**77.4**	**78.4**
21	Raj4586	121	79.5	79.5	81.3	80.8	81.0	82.3	**80.7**	79.5	79.5	76.0	**78.3**	**79.9**
22	JAUW723	122	74.8	76.0	75.8	78.3	77.0	72.5	**75.7**	78.0	72.5	69.5	**73.3**	**74.9**
23	PBW937	123	77.5	76.3	76.8	77.5	75.8	77.1	**76.8**	78.0	76.3	73.0	**75.8**	**76.5**
24	DBW222 (C)	124	78.0	77.8	76.8	78.8	77.0	76.9	**77.6**	77.0	75.8	76.5	**76.4**	**77.2**
25	BCW35	125	77.3	75.8	78.8	79.3	78.5	75.2	**77.5**	78.5	75.5	74.5	**76.2**	**77.0**
26	UP3142	126	77.3	75.5	78.5	76.5	77.0	74.2	**76.5**	77.5	76.8	75.0	**76.4**	**76.5**
27	PBW939	127	80.5	77.5	79.8	80.3	76.5	79.3	**79.0**	78.0	76.0	75.5	**76.5**	**78.2**
28	NWS2124	128	78.3	76.8	77.8	78.8	77.8	76.8	**77.7**	78.5	76.5	72.5	**75.8**	**77.1**
29	HUW858	129	75.5	72.0	75.3	77.3	78.5	76.1	**75.8**	76.0	76.0	74.5	**75.5**	**75.7**
30	DBW446	130	78.3	75.8	77.3	79.0	77.8	74.6	**77.1**	78.5	77.3	74.5	**76.8**	**77.0**
31	Raj4584	131	78.3	79.0	78.3	81.0	80.0	81.5	**79.7**	79.5	79.5	76.0	**78.3**	**79.2**
32	SVPWL22-04	132	78.0	75.8	78.8	79.3	79.5	77.4	**78.1**	79.5	77.5	74.0	**77.0**	**77.8**
33	HD3475	133	78.5	76.3	79.3	81.3	78.8	80.5	**79.1**	78.0	76.3	75.5	**76.6**	**78.3**
34	WH1329	134	80.3	76.3	80.3	80.5	79.5	79.0	**79.3**	80.0	77.3	76.5	**77.9**	**78.9**
35	DBW187 (C)	135	78.3	77.0	77.8	80.3	78.5	77.6	**78.3**	80.0	77.3	75.5	**77.6**	**78.0**
36	HD3476	136	77.5	77.3	77.0	79.0	78.5	74.3	**77.3**	77.0	75.5	72.3	**74.9**	**76.5**
Mean			**78.0**	**76.8**	**78.1**	**79.3**	**78.3**	**77.3**	**78.0**	**78.6**	**76.5**	**74.3**	**76.5**	**77.5**

Table 84: Protein content (%) of *T. aestivum* genotypes in NIVT 1A

S. No.	Entries	Trial Code	NWPZ							NEPZ				Overall Mean
			Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	DBW450	101	10.1	9.8	12.9	10.7	11.0	13.4	**11.3**	9.9	10.2	11.1	**10.4**	**11.0**
2	UP3141	102	9.6	8.5	11.1	10.1	10.7	12.4	**10.4**	9.2	10.7	10.5	**10.1**	**10.3**
3	KRL2202	103	9.4	8.7	11.8	11.3	10.7	12.5	**10.7**	9.4	10.6	10.6	**10.2**	**10.5**
4	HD3474	104	10.0	9.3	12.1	10.9	9.8	12.6	**10.8**	10.4	10.4	11.2	**10.7**	**10.7**
5	HD3086 (C)	105	9.7	11.0	11.6	10.0	10.4	13.0	**10.9**	10.3	11.7	11.7	**11.2**	**11.0**
6	NW8094	106	9.8	8.8	12.1	9.3	9.9	12.6	**10.4**	8.9	10.5	10.6	**10.0**	**10.3**
7	HP1981	107	10.7	9.6	11.7	9.7	11.4	13.6	**11.1**	10.1	11.0	11.3	**10.8**	**11.0**
8	Supreme-1122	108	11.6	11.2	11.9	11.2	11.3	12.7	**11.7**	9.3	10.4	10.5	**10.1**	**11.1**
9	WH1328	109	10.2	8.5	12.2	9.3	10.2	12.0	**10.4**	9.8	11.0	11.0	**10.6**	**10.5**
10	PBW940	110	9.7	9.5	11.0	9.5	10.6	11.1	**10.2**	9.4	11.2	11.1	**10.6**	**10.3**
11	PBW938	111	10.7	9.8	13.0	11.5	12.7	13.5	**11.9**	10.6	11.0	11.0	**10.9**	**11.5**
12	PBW936	112	10.9	10.8	12.5	10.8	13.2	12.9	**11.8**	11.8	11.8	11.2	**11.6**	**11.8**
13	K2301	113	11.2	9.5	12.8	10.7	10.5	12.9	**11.3**	10.4	10.8	10.5	**10.6**	**11.0**
14	HD3477	114	9.3	11.5	12.0	11.1	10.9	13.3	**11.3**	10.4	11.8	11.5	**11.2**	**11.3**
15	Raj4585	115	11.7	10.9	14.4	12.6	11.9	13.9	**12.6**	11.5	11.4	11.5	**11.5**	**12.2**
16	DBW447	116	9.6	9.8	13.4	12.0	12.0	12.9	**11.6**	10.3	11.1	11.0	**10.8**	**11.3**
17	DBW449	117	10.2	11.2	12.5	8.9	11.5	12.5	**11.1**	10.1	10.3	10.2	**10.2**	**10.8**
18	UP3140	118	10.0	9.6	11.1	10.2	10.4	12.6	**10.7**	10.4	11.2	11.1	**10.9**	**10.7**
19	UBW 22	119	8.6	8.1	11.1	9.8	10.1	11.2	**9.8**	9.5	10.2	9.3	**9.7**	**9.8**
20	DBW448	120	9.3	8.2	11.0	9.1	10.6	12.5	**10.1**	9.2	11.0	10.1	**10.1**	**10.1**
21	Raj4586	121	9.3	9.8	11.8	10.0	10.9	12.0	**10.6**	9.7	10.3	10.1	**10.0**	**10.4**
22	JAUW723	122	11.4	10.1	12.1	9.8	11.2	12.9	**11.2**	9.5	11.3	10.3	**10.4**	**11.0**
23	PBW937	123	9.4	10.1	13.5	11.9	13.2	13.6	**11.9**	10.2	11.4	10.9	**10.8**	**11.6**
24	DBW222 (C)	124	8.7	9.8	11.9	9.8	11.0	12.7	**10.7**	9.9	10.4	10.1	**10.1**	**10.5**
25	BCW35	125	9.0	9.4	11.6	9.5	10.6	13.0	**10.5**	8.8	11.1	10.9	**10.2**	**10.4**
26	UP3142	126	9.3	9.7	12.3	10.5	11.4	13.3	**11.1**	10.7	10.8	10.3	**10.6**	**10.9**
27	PBW939	127	9.0	10.1	12.1	10.0	12.8	12.3	**11.0**	10.3	10.3	10.1	**10.2**	**10.8**
28	NWS2124	128	9.2	8.3	12.2	9.1	10.0	11.8	**10.1**	8.8	10.2	10.0	**9.7**	**10.0**
29	HUW858	129	11.7	14.0	13.6	12.0	11.9	13.3	**12.7**	11.3	13.1	12.9	**12.4**	**12.6**
30	DBW446	130	9.5	10.1	12.8	11.3	10.5	13.8	**11.3**	9.8	10.3	10.2	**10.1**	**10.9**
31	Raj4584	131	11.4	10.0	13.0	10.8	10.6	13.6	**11.5**	10.6	11.5	11.0	**11.0**	**11.4**
32	SVPWL22-04	132	9.4	11.1	11.9	11.1	11.4	12.8	**11.3**	9.8	10.8	10.1	**10.2**	**10.9**
33	HD3475	133	11.5	11.1	12.9	12.0	10.7	13.2	**11.9**	10.5	11.6	11.1	**11.1**	**11.6**
34	WH1329	134	9.5	10.1	12.6	9.5	10.6	11.5	**10.6**	9.2	10.8	10.1	**10.0**	**10.4**
35	DBW187 (C)	135	9.7	10.4	12.4	9.3	11.6	12.5	**11.0**	9.2	10.6	10.4	**10.1**	**10.7**
36	HD3476	136	9.3	9.1	11.5	9.1	10.1	12.5	**10.3**	9.6	11.0	10.6	**10.4**	**10.3**
Mean			**10.0**	**9.9**	**12.2**	**10.4**	**11.1**	**12.8**	**11.1**	**10.0**	**10.9**	**10.7**	**10.5**	**10.9**

Table 85: Sedimentation value (ml) of *T. aestivum* genotypes in NIVT 1A

S. No.	Entries	Trial Code	NWPZ							NEPZ				Overall Mean
			Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	DBW450	101	36.0	44.0	42.0	43.0	51.0	58.2	**45.7**	49.0	59.0	45.0	**51.0**	**47.5**
2	UP3141	102	35.0	35.0	39.0	41.0	43.0	56.0	**41.5**	43.0	51.0	41.0	**45.0**	**42.7**
3	KRL2202	103	29.0	42.0	38.0	38.0	41.0	54.3	**40.4**	42.0	53.0	40.0	**45.0**	**41.9**
4	HD3474	104	38.0	48.0	46.0	54.0	50.0	58.2	**49.0**	48.0	65.0	57.0	**56.7**	**51.6**
5	HD3086 (C)	105	33.0	48.0	42.0	41.0	47.0	55.1	**44.4**	43.0	60.0	40.0	**47.7**	**45.5**
6	NW8094	106	40.0	41.0	48.0	43.0	58.0	56.9	**47.8**	44.0	58.0	44.0	**48.7**	**48.1**
7	HP1981	107	47.0	53.0	48.0	47.0	52.0	57.3	**50.7**	50.0	65.0	46.0	**53.7**	**51.7**
8	Supreme-1122	108	40.0	44.0	41.0	49.0	50.0	51.6	**45.9**	41.0	54.0	50.0	**48.3**	**46.7**
9	WH1328	109	40.0	45.0	41.0	49.0	49.0	62.5	**47.8**	47.0	52.0	51.0	**50.0**	**48.5**
10	PBW940	110	38.0	44.0	44.0	42.0	47.0	54.7	**44.9**	44.0	60.0	44.0	**49.3**	**46.4**
11	PBW938	111	40.0	52.0	44.0	50.0	52.0	54.3	**48.7**	48.0	54.0	54.0	**52.0**	**49.8**
12	PBW936	112	39.0	50.0	51.0	50.0	50.0	63.0	**50.5**	50.0	58.0	50.0	**52.7**	**51.2**
13	K2301	113	33.0	44.0	47.0	45.0	41.0	53.4	**43.9**	42.0	54.0	43.0	**46.3**	**44.7**
14	HD3477	114	32.0	43.0	38.0	45.0	42.0	56.0	**42.7**	50.0	44.0	48.0	**47.3**	**44.2**
15	Raj4585	115	36.0	45.0	42.0	48.0	56.0	60.4	**47.9**	49.0	53.0	46.0	**49.3**	**48.4**
16	DBW447	116	35.0	46.0	40.0	53.0	47.0	58.2	**46.5**	50.0	56.0	50.0	**52.0**	**48.4**
17	DBW449	117	32.0	51.0	45.0	45.0	54.0	56.9	**47.3**	50.0	52.0	45.0	**49.0**	**47.9**
18	UP3140	118	35.0	48.0	45.0	47.0	53.0	50.3	**46.4**	49.0	51.0	45.0	**48.3**	**47.0**
19	UBW 22	119	29.0	36.0	37.0	36.0	38.0	45.1	**36.9**	35.0	45.0	35.0	**38.3**	**37.3**
20	DBW448	120	34.0	38.0	44.0	40.0	53.0	56.0	**44.2**	46.0	47.0	40.0	**44.3**	**44.2**
21	Raj4586	121	35.0	45.0	42.0	43.0	46.0	51.6	**43.8**	45.0	49.0	42.0	**45.3**	**44.3**
22	JAUW723	122	38.0	40.0	43.0	46.0	46.0	55.1	**44.7**	47.0	48.0	44.0	**46.3**	**45.2**
23	PBW937	123	42.0	46.0	51.0	55.0	57.0	60.4	**51.9**	48.0	57.0	52.0	**52.3**	**52.0**
24	DBW222 (C)	124	37.0	46.0	44.0	45.0	54.0	53.8	**46.6**	46.0	49.0	48.0	**47.7**	**47.0**
25	BCW35	125	32.0	35.0	41.0	39.0	49.0	53.0	**41.5**	43.0	46.0	40.0	**43.0**	**42.0**
26	UP3142	126	32.0	37.0	35.0	43.0	45.0	50.3	**40.4**	40.0	42.0	43.0	**41.7**	**40.8**
27	PBW939	127	30.0	41.0	42.0	40.0	59.0	54.3	**44.4**	40.0	41.0	35.0	**38.7**	**42.5**
28	NWS2124	128	28.0	33.0	40.0	39.0	46.0	51.6	**39.6**	37.0	41.0	40.0	**39.3**	**39.5**
29	HUW858	129	30.0	39.0	38.0	39.0	48.0	49.0	**40.5**	43.0	38.0	39.0	**40.0**	**40.3**
30	DBW446	130	40.0	49.0	49.0	51.0	62.0	61.2	**52.0**	50.0	54.0	52.0	**52.0**	**52.0**
31	Raj4584	131	27.0	38.0	35.0	39.0	41.0	43.8	**37.3**	48.0	50.0	39.0	**45.7**	**40.1**
32	SVPWL22-04	132	34.0	51.0	44.0	46.0	56.0	54.3	**47.5**	45.0	54.0	45.0	**48.0**	**47.7**
33	HD3475	133	29.0	45.0	35.0	44.0	44.0	53.0	**41.7**	42.0	46.0	46.0	**44.7**	**42.7**
34	WH1329	134	35.0	47.0	42.0	45.0	48.0	53.8	**45.1**	46.0	52.0	43.0	**47.0**	**45.8**
35	DBW187 (C)	135	40.0	49.0	44.0	49.0	60.0	64.7	**51.1**	50.0	57.0	53.0	**53.3**	**51.9**
36	HD3476	136	34.0	42.0	40.0	45.0	45.0	53.4	**43.2**	47.0	48.0	47.0	**47.3**	**44.6**
Mean			**35.1**	**43.9**	**42.4**	**44.8**	**49.4**	**55.0**	**45.1**	**45.5**	**51.8**	**45.1**	**47.4**	**45.9**

Table 86: Phenol reaction score (Max. 10) of *T. aestivum* genotypes in NIVT 1A

S. No.	Entries	Trial Code	NWPZ							NEPZ				Overall Mean
			Ludhiana	Hisar	Delhi	Pantnagar	Durgapura	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	DBW450	101	5.1	6.0	6.1	6.3	5.3	9.0	**6.3**	6.6	5.7	6.2	**6.2**	**6.3**
2	UP3141	102	3.6	4.0	3.9	5.1	4.1	7.5	**4.7**	5.0	3.7	4.8	**4.5**	**4.6**
3	KRL2202	103	3.7	4.3	4.8	5.5	3.5	8.0	**5.0**	5.4	3.6	4.6	**4.5**	**4.8**
4	HD3474	104	3.6	4.2	5.8	5.6	6.1	8.0	**5.6**	6.2	3.8	5.6	**5.2**	**5.4**
5	HD3086 (C)	105	3.3	4.4	5.5	6.1	5.1	8.5	**5.5**	6.2	4.3	5.9	**5.5**	**5.5**
6	NW8094	106	4.1	5.7	6.0	6.0	4.7	9.0	**5.9**	6.2	3.6	5.8	**5.2**	**5.7**
7	HP1981	107	3.7	4.7	2.3	5.7	4.3	9.0	**5.0**	6.2	4.3	5.6	**5.4**	**5.1**
8	Supreme-1122	108	2.3	1.7	1.7	2.7	4.5	5.5	**3.1**	2.8	2.5	2.8	**2.7**	**2.9**
9	WH1328	109	4.3	4.8	6.0	4.7	6.3	7.5	**5.6**	5.8	5.7	4.8	**5.4**	**5.5**
10	PBW940	110	4.0	4.4	4.7	5.2	4.8	8.0	**5.2**	5.8	5.4	5.2	**5.5**	**5.3**
11	PBW938	111	4.2	3.7	4.6	4.9	4.3	8.0	**5.0**	6.2	5.4	4.8	**5.5**	**5.1**
12	PBW936	112	4.3	4.7	4.2	4.7	4.0	8.5	**5.1**	5.6	5.3	4.6	**5.2**	**5.1**
13	K2301	113	1.6	1.3	1.9	2.1	1.7	5.5	**2.4**	1.8	1.6	2.2	**1.9**	**2.2**
14	HD3477	114	1.7	1.6	1.9	3.0	1.5	5.5	**2.5**	1.2	1.5	2.0	**1.6**	**2.2**
15	Raj4585	115	5.7	6.1	4.9	4.6	3.6	7.0	**5.3**	4.6	5.0	4.6	**4.7**	**5.1**
16	DBW447	116	3.1	3.3	3.7	4.7	3.9	6.0	**4.1**	4.8	3.5	4.6	**4.3**	**4.2**
17	DBW449	117	3.7	6.7	6.1	6.3	5.0	8.0	**6.0**	5.2	5.5	6.2	**5.6**	**5.9**
18	UP3140	118	3.9	3.9	4.5	5.6	4.2	7.5	**4.9**	6.6	5.1	5.0	**5.6**	**5.1**
19	UBW 22	119	4.1	3.8	6.0	5.6	4.1	8.0	**5.3**	4.6	5.0	5.6	**5.1**	**5.2**
20	DBW448	120	3.8	3.2	5.0	4.7	4.1	7.5	**4.7**	5.0	4.5	4.8	**4.8**	**4.7**
21	Raj4586	121	3.8	3.6	5.0	5.0	4.0	8.0	**4.9**	5.8	4.7	5.0	**5.2**	**5.0**
22	JAUW723	122	4.2	4.0	6.3	5.0	4.6	8.5	**5.4**	4.8	4.3	5.2	**4.8**	**5.2**
23	PBW937	123	4.3	3.5	4.0	3.9	4.6	8.0	**4.7**	4.2	4.6	4.0	**4.3**	**4.6**
24	DBW222 (C)	124	5.0	3.9	5.0	5.0	4.6	9.5	**5.5**	5.0	4.8	5.0	**4.9**	**5.3**
25	BCW35	125	2.4	2.9	1.7	1.7	2.5	8.0	**3.2**	1.6	1.6	1.8	**1.7**	**2.7**
26	UP3142	126	4.3	2.9	5.0	4.7	4.7	9.0	**5.1**	4.6	3.0	4.8	**4.1**	**4.8**
27	PBW939	127	4.0	4.3	4.6	1.3	6.0	8.5	**4.8**	4.0	3.7	3.2	**3.6**	**4.4**
28	NWS2124	128	4.2	4.3	5.4	4.6	4.0	9.0	**5.3**	4.2	5.0	4.6	**4.6**	**5.0**
29	HUW858	129	1.3	2.7	1.4	1.2	1.2	4.5	**2.1**	1.2	1.3	1.2	**1.2**	**1.8**
30	DBW446	130	5.4	5.6	5.8	4.7	4.2	8.5	**5.7**	4.8	5.1	4.8	**4.9**	**5.4**
31	Raj4584	131	3.8	3.7	4.5	4.6	4.5	8.0	**4.9**	4.6	4.3	4.6	**4.5**	**4.7**
32	SVPWL22-04	132	4.2	4.0	5.0	5.0	4.3	9.5	**5.3**	4.6	4.6	5.0	**4.7**	**5.1**
33	HD3475	133	1.8	1.4	1.5	5.9	1.5	6.0	**3.0**	1.6	1.5	4.4	**2.5**	**2.8**
34	WH1329	134	4.2	4.1	5.0	4.6	4.3	8.0	**5.0**	4.6	4.4	4.4	**4.5**	**4.8**
35	DBW187 (C)	135	4.0	5.7	6.5	5.4	4.6	9.5	**6.0**	5.0	4.3	5.4	**4.9**	**5.6**
36	HD3476	136	4.2	5.5	5.9	4.7	3.9	8.0	**5.4**	4.4	4.5	4.6	**4.5**	**5.1**
Mean			**3.7**	**4.0**	**4.5**	**4.6**	**4.1**	**7.8**	**4.8**	**4.6**	**4.1**	**4.5**	**4.4**	**4.7**

Table 87: Grain appearance score (Max. 10) of *T. aestivum* genotypes in NIVT 1B

S. No.	Entries	Trial Code	NWPZ						NEPZ				Overall Mean
			Ludhiana	Delhi	Durgapura	Hisar	Karnal	Mean	Kanpur	Sabour	Varanasi	Mean	
1	DBW187 (C)	201	5.0	6.0	7.0	6.0	5.4	**5.9**	7.0	6.0	7.0	**6.7**	**6.2**
2	HUW859	202	6.0	5.0	7.0	7.0	5.4	**6.1**	6.0	7.0	6.0	**6.3**	**6.2**
3	JKW317	203	7.0	5.0	6.0	6.0	5.6	**5.9**	7.0	6.0	5.0	**6.0**	**6.0**
4	K2304	204	6.0	6.0	7.0	5.0	5.6	**5.9**	7.0	6.0	6.0	**6.3**	**6.1**
5	Raj4587	205	7.0	7.0	8.0	6.0	6.6	**6.9**	8.0	8.0	8.0	**8.0**	**7.3**
6	SVPWL22-10	206	8.0	6.0	8.0	7.0	5.8	**7.0**	8.0	6.0	6.0	**6.7**	**6.9**
7	HP1982	207	6.0	7.0	7.0	6.0	5.6	**6.3**	7.0	6.0	7.0	**6.7**	**6.5**
8	K2303	208	7.0	6.0	6.0	6.0	5.8	**6.2**	6.0	7.0	5.0	**6.0**	**6.1**
9	UP3144	209	6.0	7.0	7.0	7.0	5.4	**6.5**	6.0	4.0	6.0	**5.3**	**6.1**
10	PBW945	210	6.0	8.0	8.0	7.0	6.4	**7.1**	7.0	6.0	7.0	**6.7**	**6.9**
11	NW8089	211	7.0	7.0	8.0	6.0	6.2	**6.8**	7.0	5.0	6.0	**6.0**	**6.5**
12	DBW455	212	7.0	6.0	8.0	5.0	5.4	**6.3**	6.0	6.0	7.0	**6.3**	**6.3**
13	BRW3967	213	7.0	7.0	7.0	6.0	5.8	**6.6**	7.0	6.0	6.0	**6.3**	**6.5**
14	RAUW107	214	8.0	7.0	7.0	7.0	6.2	**7.0**	7.0	7.0	7.0	**7.0**	**7.0**
15	WH1331	215	6.0	6.0	7.0	6.0	5.8	**6.2**	6.0	6.0	7.0	**6.3**	**6.2**
16	HD3479	216	7.0	7.0	7.0	4.0	5.6	**6.1**	5.0	7.0	5.0	**5.7**	**6.0**
17	BRW3964	217	7.0	7.0	8.0	6.0	5.8	**6.8**	7.0	5.0	6.0	**6.0**	**6.5**
18	BCW32	218	6.0	6.0	8.0	7.0	5.4	**6.5**	6.0	6.0	7.0	**6.3**	**6.4**
19	PBW943	219	7.0	7.0	7.0	6.0	5.6	**6.5**	5.0	5.0	6.0	**5.3**	**6.1**
20	PBW944	220	6.0	6.0	7.0	7.0	5.2	**6.2**	7.0	5.0	7.0	**6.3**	**6.3**
21	NW8095	221	6.0	7.0	7.0	7.0	6.2	**6.6**	6.0	6.0	6.0	**6.0**	**6.4**
22	DBW454	222	5.0	7.0	6.0	6.0	5.0	**5.8**	6.0	7.0	6.0	**6.3**	**6.0**
23	DBW452	223	7.0	7.0	8.0	6.0	6.0	**6.8**	6.0	8.0	7.0	**7.0**	**6.9**
24	BW20R105	224	7.0	6.0	7.0	6.0	5.8	**6.4**	7.0	6.0	7.0	**6.7**	**6.5**
25	PBW941	225	6.0	6.0	6.0	5.0	5.6	**5.7**	6.0	7.0	6.0	**6.3**	**6.0**
26	DBW451	226	7.0	7.0	7.0	7.0	5.2	**6.6**	7.0	5.0	7.0	**6.3**	**6.5**
27	DBW222 (C)	227	7.0	6.0	7.0	6.0	6.2	**6.4**	6.0	6.0	6.0	**6.0**	**6.3**
28	PBW942	228	7.0	7.0	8.0	7.0	6.0	**7.0**	8.0	6.0	7.0	**7.0**	**7.0**
29	HD3480	229	6.0	6.0	7.0	6.0	5.2	**6.0**	7.0	7.0	8.0	**7.3**	**6.5**
30	UP3143	230	6.0	7.0	6.0	7.0	4.8	**6.2**	7.0	5.0	6.0	**6.0**	**6.1**
31	HD3478	231	6.0	6.0	6.0	5.0	5.4	**5.7**	8.0	6.0	5.0	**6.3**	**5.9**
32	HD3086 (C)	232	7.0	7.0	7.0	6.0	5.8	**6.6**	8.0	7.0	6.0	**7.0**	**6.7**
33	WH1330	233	6.0	7.0	7.0	7.0	5.4	**6.5**	7.0	6.0	6.0	**6.3**	**6.4**
34	DBW453	234	7.0	7.0	6.0	7.0	6.4	**6.7**	7.0	5.0	7.0	**6.3**	**6.6**
35	KRL2101	235	7.0	6.0	7.0	6.0	5.4	**6.3**	8.0	5.0	6.0	**6.3**	**6.3**
36	NWS2124	236	6.0	7.0	7.0	5.0	5.2	**6.0**	6.0	6.0	7.0	**6.3**	**6.2**
Mean			**6.5**	**6.5**	**7.1**	**6.2**	**5.7**	**6.4**	**6.7**	**6.1**	**6.4**	**6.4**	**6.4**

Table 88: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in NIVT 1B

S. No.	Entries	Trial Code	NWPZ						NEPZ				Overall Mean
			Ludhiana	Delhi	Durgapura	Hisar	Karnal	Mean	Kanpur	Sabour	Varanasi	Mean	
1	DBW187 (C)	201	79.3	79.7	79.6	81.8	71.5	**78.4**	79.9	72.5	79.0	**77.1**	**77.9**
2	HUW859	202	79.8	75.2	76.9	79.6	75.1	**77.3**	79.7	69.6	77.0	**75.4**	**76.6**
3	JKW317	203	78.9	78.5	75.9	84.1	75.2	**78.5**	80.7	67.9	75.2	**74.6**	**77.1**
4	K2304	204	79.8	79.5	78.0	82.8	74.6	**78.9**	80.5	73.1	79.5	**77.7**	**78.5**
5	Raj4587	205	75.1	78.9	80.6	82.6	78.8	**79.2**	78.5	74.7	80.2	**77.8**	**78.7**
6	SVPWL22-10	206	81.0	81.7	80.5	83.1	76.3	**80.5**	81.5	72.0	79.6	**77.7**	**79.5**
7	HP1982	207	75.7	78.6	76.2	79.4	72.3	**76.4**	77.7	71.2	77.2	**75.4**	**76.0**
8	K2303	208	80.3	82.1	79.5	81.2	76.8	**80.0**	80.7	73.3	81.2	**78.4**	**79.4**
9	UP3144	209	81.2	80.5	78.5	83.5	71.7	**79.1**	80.4	68.2	72.2	**73.6**	**77.0**
10	PBW945	210	80.7	81.3	80.2	83.8	78.6	**80.9**	79.2	70.7	79.3	**76.4**	**79.2**
11	NW8089	211	79.5	81.4	80.0	82.4	79.3	**80.5**	80.2	72.6	75.8	**76.2**	**78.9**
12	DBW455	212	77.5	77.3	75.6	82.5	74.1	**77.4**	79.1	68.9	75.8	**74.6**	**76.4**
13	BRW3967	213	79.2	80.7	80.6	83.1	79.4	**80.6**	81.6	77.1	80.6	**79.8**	**80.3**
14	RAUW107	214	79.8	81.3	80.0	76.8	78.2	**79.2**	80.7	72.2	78.9	**77.3**	**78.5**
15	WH1331	215	80.1	78.2	80.3	82.5	75.6	**79.3**	80.1	73.7	78.1	**77.3**	**78.6**
16	HD3479	216	79.3	80.0	79.3	79.7	76.0	**78.9**	80.8	70.4	78.0	**76.4**	**77.9**
17	BRW3964	217	79.1	79.8	80.9	82.5	75.7	**79.6**	78.4	73.0	77.8	**76.4**	**78.4**
18	BCW32	218	79.5	79.9	80.1	82.7	75.1	**79.5**	80.0	74.9	78.1	**77.7**	**78.8**
19	PBW943	219	79.0	80.8	78.8	83.0	77.1	**79.7**	80.3	71.8	76.5	**76.2**	**78.4**
20	PBW944	220	79.3	80.3	78.9	81.8	71.1	**78.3**	79.4	70.4	79.2	**76.3**	**77.6**
21	NW8095	221	81.4	79.4	78.9	80.4	76.7	**79.4**	78.5	70.4	76.7	**75.2**	**77.8**
22	DBW454	222	77.7	77.9	77.2	82.1	71.2	**77.2**	77.6	72.0	76.3	**75.3**	**76.5**
23	DBW452	223	77.1	78.2	78.1	81.2	75.0	**77.9**	78.9	68.2	74.6	**73.9**	**76.4**
24	BW20R105	224	81.7	80.8	79.6	84.2	76.2	**80.5**	80.2	72.7	79.1	**77.3**	**79.3**
25	PBW941	225	79.3	79.9	78.5	82.8	76.3	**79.4**	80.5	76.0	76.9	**77.8**	**78.8**
26	DBW451	226	79.2	79.2	76.8	81.4	73.4	**78.0**	79.5	68.3	76.0	**74.6**	**76.7**
27	DBW222 (C)	227	77.7	79.7	79.3	81.7	75.2	**78.7**	78.9	71.6	75.9	**75.5**	**77.5**
28	PBW942	228	79.6	80.5	80.8	84.8	79.4	**81.0**	81.6	75.1	80.3	**79.0**	**80.3**
29	HD3480	229	78.8	82.4	79.1	73.9	74.4	**77.7**	80.3	70.7	77.3	**76.1**	**77.1**
30	UP3143	230	79.5	78.5	81.7	82.8	73.1	**79.1**	80.3	72.5	77.2	**76.7**	**78.2**
31	HD3478	231	78.0	79.2	76.0	77.7	72.6	**76.7**	80.2	70.9	74.7	**75.3**	**76.2**
32	HD3086 (C)	232	80.4	81.0	78.2	80.7	76.5	**79.4**	79.8	72.0	77.6	**76.5**	**78.3**
33	WH1330	233	77.6	80.1	78.7	81.5	73.3	**78.2**	79.7	68.8	77.3	**75.3**	**77.1**
34	DBW453	234	79.5	80.0	77.8	82.9	78.2	**79.7**	77.5	74.7	78.6	**76.9**	**78.7**
35	KRL2101	235	79.1	79.0	75.6	79.5	72.1	**77.1**	79.1	68.6	75.8	**74.5**	**76.1**
36	NWS2124	236	77.1	78.9	78.9	81.4	70.7	**77.4**	79.5	70.8	77.4	**75.9**	**76.8**
Mean			**79.1**	**79.7**	**78.8**	**81.6**	**75.2**	**78.9**	**79.8**	**71.7**	**77.5**	**76.3**	**77.9**

Table 89: Protein content (%) of *T. aestivum* genotypes in NIVT 1B

S. No.	Entries	Trial Code	NWPZ						NEPZ				Overall Mean
			Ludhiana	Delhi	Durgapura	Hisar	Karnal	Mean	Kanpur	Sabour	Varanasi	Mean	
1	DBW187 (C)	201	10.6	10.4	11.2	9.0	14.1	**11.1**	10.9	11.4	8.1	**10.1**	**10.7**
2	HUW859	202	9.4	11.3	11.6	8.8	13.5	**10.9**	11.0	10.7	8.0	**9.9**	**10.5**
3	JKW317	203	8.2	9.6	11.3	8.3	13.0	**10.1**	9.6	12.0	8.0	**9.9**	**10.0**
4	K2304	204	10.0	10.3	11.7	8.2	13.6	**10.8**	11.0	11.8	8.2	**10.3**	**10.6**
5	Raj4587	205	13.4	10.5	10.7	10.5	13.5	**11.7**	11.0	12.1	8.6	**10.6**	**11.3**
6	SVPWL22-10	206	10.1	9.8	11.1	11.6	14.6	**11.4**	10.8	12.6	8.9	**10.8**	**11.2**
7	HP1982	207	12.5	9.2	10.9	10.1	13.0	**11.1**	12.1	11.2	9.1	**10.8**	**11.0**
8	K2303	208	10.5	9.7	11.0	11.4	14.1	**11.3**	10.9	12.2	7.7	**10.3**	**10.9**
9	UP3144	209	9.6	9.5	10.9	8.1	14.6	**10.5**	10.1	12.2	8.7	**10.3**	**10.5**
10	PBW945	210	9.4	9.8	10.9	10.1	12.8	**10.6**	12.8	12.1	9.0	**11.3**	**10.9**
11	NW8089	211	12.1	9.0	11.2	11.1	12.6	**11.2**	11.9	11.7	9.0	**10.9**	**11.1**
12	DBW455	212	8.8	10.2	12.0	9.0	13.6	**10.7**	10.9	11.9	8.4	**10.4**	**10.6**
13	BRW3967	213	10.1	10.3	10.5	10.9	13.5	**11.1**	10.3	10.5	8.4	**9.7**	**10.6**
14	RAUW107	214	8.9	10.4	10.9	13.0	13.0	**11.2**	11.2	11.0	8.0	**10.1**	**10.8**
15	WH1331	215	10.3	10.6	11.4	9.9	13.8	**11.2**	11.7	11.5	8.8	**10.7**	**11.0**
16	HD3479	216	8.6	8.8	10.6	10.4	12.5	**10.2**	10.0	11.2	7.6	**9.6**	**10.0**
17	BRW3964	217	11.2	11.6	11.8	10.6	14.3	**11.9**	11.2	12.4	9.1	**10.9**	**11.5**
18	BCW32	218	9.1	9.1	10.8	9.4	13.6	**10.4**	10.9	10.4	8.4	**9.9**	**10.2**
19	PBW943	219	8.5	8.6	10.2	8.0	12.2	**9.5**	10.5	11.9	8.3	**10.2**	**9.8**
20	PBW944	220	10.3	8.8	10.9	10.3	14.6	**11.0**	11.7	11.8	7.8	**10.4**	**10.8**
21	NW8095	221	9.8	10.0	11.1	8.5	12.9	**10.5**	10.0	12.3	8.2	**10.2**	**10.4**
22	DBW454	222	9.5	10.2	11.5	8.9	13.7	**10.8**	12.1	10.7	7.8	**10.2**	**10.6**
23	DBW452	223	8.9	8.4	10.8	8.9	13.0	**10.0**	11.7	12.0	8.7	**10.8**	**10.3**
24	BW20R105	224	8.8	9.6	10.7	9.2	13.1	**10.3**	10.1	10.9	8.3	**9.8**	**10.1**
25	PBW941	225	9.9	10.2	11.2	9.4	13.5	**10.8**	10.3	10.2	8.8	**9.8**	**10.4**
26	DBW451	226	11.2	9.6	12.0	10.4	13.9	**11.4**	11.5	12.9	8.5	**11.0**	**11.3**
27	DBW222 (C)	227	11.3	9.4	11.0	11.0	12.9	**11.1**	11.5	10.6	8.8	**10.3**	**10.8**
28	PBW942	228	10.5	11.4	11.8	11.1	14.0	**11.8**	11.1	12.5	9.3	**11.0**	**11.5**
29	HD3480	229	10.6	8.3	10.0	13.6	13.5	**11.2**	10.6	11.7	7.3	**9.9**	**10.7**
30	UP3143	230	8.7	11.1	11.2	10.3	14.3	**11.1**	11.0	12.4	9.0	**10.8**	**11.0**
31	HD3478	231	10.0	9.3	11.2	9.2	13.9	**10.7**	10.2	11.5	9.1	**10.3**	**10.5**
32	HD3086 (C)	232	9.6	9.5	11.3	11.6	13.8	**11.2**	10.2	12.1	8.4	**10.2**	**10.8**
33	WH1330	233	10.0	9.1	11.0	7.3	13.4	**10.2**	10.6	12.0	8.2	**10.3**	**10.2**
34	DBW453	234	10.5	10.2	11.6	9.4	13.4	**11.0**	12.6	12.7	8.8	**11.4**	**11.1**
35	KRL2101	235	9.4	10.9	11.4	9.2	13.3	**10.8**	10.2	12.3	8.2	**10.2**	**10.6**
36	NWS2124	236	8.5	9.8	10.4	8.3	13.8	**10.2**	10.4	11.8	8.1	**10.1**	**10.1**
Mean			**10.0**	**9.8**	**11.1**	**9.9**	**13.5**	**10.9**	**11.0**	**11.7**	**8.4**	**10.4**	**10.7**

Table 90: Sedimentation value (ml) of *T. aestivum* genotypes in NIVT 1B

S. No.	Entries	Trial Code	NWPZ						NEPZ				Overall Mean
			Ludhiana	Delhi	Durgapura	Hisar	Karnal	Mean	Kanpur	Sabour	Varanasi	Mean	
1	DBW187 (C)	201	43.0	42.0	53.0	43.0	64.3	**49.1**	46.0	48.0	51.0	**48.3**	**48.8**
2	HUW859	202	46.0	42.0	52.0	37.0	61.2	**47.6**	36.0	41.0	40.0	**39.0**	**44.4**
3	JKW317	203	44.0	38.0	50.0	40.0	59.5	**46.3**	40.0	41.0	45.0	**42.0**	**44.7**
4	K2304	204	48.0	42.0	58.0	43.0	63.8	**51.0**	57.0	60.0	46.0	**54.3**	**52.2**
5	Raj4587	205	44.0	45.0	44.0	45.0	39.9	**43.6**	35.0	40.0	42.0	**39.0**	**41.9**
6	SVPWL22-10	206	37.0	39.0	43.0	46.0	46.4	**42.3**	37.0	35.0	43.0	**38.3**	**40.8**
7	HP1982	207	38.0	45.0	48.0	35.0	53.4	**43.9**	49.0	37.0	45.0	**43.7**	**43.8**
8	K2303	208	48.0	45.0	48.0	45.0	64.7	**50.1**	46.0	49.0	50.0	**48.3**	**49.5**
9	UP3144	209	45.0	44.0	41.0	42.0	55.6	**45.5**	47.0	41.0	40.0	**42.7**	**44.4**
10	PBW945	210	45.0	43.0	52.0	47.0	59.5	**49.3**	47.0	40.0	40.0	**42.3**	**46.7**
11	NW8089	211	45.0	40.0	46.0	37.0	48.6	**43.3**	42.0	44.0	42.0	**42.7**	**43.1**
12	DBW455	212	50.0	40.0	58.0	38.0	56.0	**48.4**	50.0	50.0	39.0	**46.3**	**47.6**
13	BRW3967	213	54.0	48.0	56.0	47.0	53.8	**51.8**	46.0	39.0	41.0	**42.0**	**48.1**
14	RAUW107	214	41.0	42.0	44.0	35.0	49.0	**42.2**	44.0	43.0	41.0	**42.7**	**42.4**
15	WH1331	215	54.0	37.0	55.0	43.0	55.1	**48.8**	49.0	56.0	48.0	**51.0**	**49.6**
16	HD3479	216	39.0	34.0	40.0	43.0	43.8	**40.0**	36.0	34.0	38.0	**36.0**	**38.5**
17	BRW3964	217	47.0	52.0	55.0	38.0	52.1	**48.8**	38.0	37.0	43.0	**39.3**	**45.3**
18	BCW32	218	50.0	40.0	49.0	35.0	55.1	**45.8**	48.0	40.0	46.0	**44.7**	**45.4**
19	PBW943	219	45.0	39.0	43.0	37.0	48.2	**42.4**	50.0	41.0	40.0	**43.7**	**42.9**
20	PBW944	220	54.0	39.0	51.0	38.0	63.0	**49.0**	54.0	54.0	39.0	**49.0**	**49.0**
21	NW8095	221	50.0	46.0	48.0	38.0	56.0	**47.6**	42.0	39.0	43.0	**41.3**	**45.3**
22	DBW454	222	42.0	45.0	51.0	39.0	58.2	**47.0**	53.0	36.0	40.0	**43.0**	**45.5**
23	DBW452	223	40.0	44.0	51.0	35.0	53.4	**44.7**	40.0	38.0	40.0	**39.3**	**42.7**
24	BW20R105	224	50.0	38.0	48.0	38.0	48.2	**44.4**	48.0	33.0	45.0	**42.0**	**43.5**
25	PBW941	225	44.0	47.0	57.0	40.0	51.6	**47.9**	47.0	38.0	47.0	**44.0**	**46.5**
26	DBW451	226	54.0	47.0	53.0	35.0	64.7	**50.7**	51.0	45.0	50.0	**48.7**	**50.0**
27	DBW222 (C)	227	46.0	38.0	50.0	38.0	48.6	**44.1**	52.0	48.0	43.0	**47.7**	**45.4**
28	PBW942	228	50.0	43.0	60.0	48.0	56.0	**51.4**	51.0	45.0	50.0	**48.7**	**50.4**
29	HD3480	229	45.0	47.0	55.0	37.0	49.0	**46.6**	48.0	54.0	47.0	**49.7**	**47.8**
30	UP3143	230	34.0	46.0	43.0	40.0	50.3	**42.7**	44.0	40.0	43.0	**42.3**	**42.5**
31	HD3478	231	41.0	35.0	44.0	40.0	50.8	**42.2**	49.0	48.0	41.0	**46.0**	**43.6**
32	HD3086 (C)	232	44.0	47.0	54.0	48.0	46.0	**47.8**	50.0	48.0	43.0	**47.0**	**47.5**
33	WH1330	233	45.0	42.0	51.0	40.0	56.9	**47.0**	45.0	41.0	45.0	**43.7**	**45.7**
34	DBW453	234	50.0	49.0	54.0	40.0	66.9	**52.0**	50.0	57.0	48.0	**51.7**	**51.9**
35	KRL2101	235	41.0	50.0	40.0	43.0	63.4	**47.5**	41.0	42.0	39.0	**40.7**	**44.9**
36	NWS2124	236	40.0	43.0	41.0	35.0	54.7	**42.7**	44.0	34.0	40.0	**39.3**	**41.5**
Mean			**45.4**	**42.9**	**49.6**	**40.2**	**54.7**	**46.5**	**45.9**	**43.2**	**43.4**	**44.2**	**45.7**

Table 91: Phenol reaction score (Max. 10) of *T. aestivum* genotypes in NIVT 1B

S. No.	Entries	Trial Code	NWPZ						NEPZ				Overall Mean
			Ludhiana	Delhi	Durgapura	Hisar	Karnal	Mean	Kanpur	Sabour	Varanasi	Mean	
1	DBW187 (C)	201	6.0	7.0	7.0	6.0	8.5	**6.9**	6.0	6.0	6.0	**6.0**	**6.6**
2	HUW859	202	7.0	6.0	7.0	6.0	7.5	**6.7**	7.0	6.0	7.0	**6.7**	**6.7**
3	JKW317	203	6.0	7.0	6.0	5.0	7.5	**6.3**	6.0	5.0	6.0	**5.7**	**6.1**
4	K2304	204	6.0	7.0	8.0	6.0	9.0	**7.2**	6.0	7.0	6.0	**6.3**	**6.9**
5	Raj4587	205	7.0	8.0	8.0	7.0	3.5	**6.7**	7.0	6.0	8.0	**7.0**	**6.8**
6	SVPWL22-10	206	7.0	8.0	8.0	7.0	4.0	**6.8**	7.0	7.0	7.0	**7.0**	**6.9**
7	HP1982	207	6.0	7.0	7.0	6.0	9.5	**7.1**	6.0	6.0	7.0	**6.3**	**6.8**
8	K2303	208	7.0	6.0	8.0	7.0	8.0	**7.2**	7.0	6.0	7.0	**6.7**	**7.0**
9	UP3144	209	7.0	7.0	8.0	7.0	6.5	**7.1**	7.0	6.0	6.0	**6.3**	**6.8**
10	PBW945	210	6.0	8.0	8.0	6.0	5.5	**6.7**	6.0	7.0	7.0	**6.7**	**6.7**
11	NW8089	211	6.0	7.0	7.0	7.0	4.0	**6.2**	5.0	5.0	6.0	**5.3**	**5.9**
12	DBW455	212	7.0	7.0	6.0	6.0	9.0	**7.0**	7.0	5.0	7.0	**6.3**	**6.8**
13	BRW3967	213	6.0	6.0	7.0	6.0	6.5	**6.3**	6.0	6.0	7.0	**6.3**	**6.3**
14	RAUW107	214	6.0	7.0	8.0	7.0	4.0	**6.4**	6.0	6.0	6.0	**6.0**	**6.3**
15	WH1331	215	7.0	7.0	6.0	6.0	8.5	**6.9**	7.0	5.0	7.0	**6.3**	**6.7**
16	HD3479	216	7.0	6.0	7.0	6.0	7.5	**6.7**	7.0	7.0	6.0	**6.7**	**6.7**
17	BRW3964	217	6.0	7.0	7.0	7.0	4.0	**6.2**	6.0	6.0	6.0	**6.0**	**6.1**
18	BCW32	218	6.0	7.0	7.0	7.0	8.5	**7.1**	7.0	5.0	7.0	**6.3**	**6.8**
19	PBW943	219	7.0	7.0	6.0	6.0	7.0	**6.6**	6.0	7.0	6.0	**6.3**	**6.5**
20	PBW944	220	6.0	6.0	7.0	7.0	8.0	**6.8**	6.0	6.0	6.0	**6.0**	**6.5**
21	NW8095	221	7.0	7.0	8.0	7.0	4.5	**6.7**	6.0	6.0	7.0	**6.3**	**6.6**
22	DBW454	222	7.0	7.0	7.0	7.0	9.0	**7.4**	7.0	6.0	7.0	**6.7**	**7.1**
23	DBW452	223	7.0	6.0	6.0	6.0	5.0	**6.0**	5.0	6.0	7.0	**6.0**	**6.0**
24	BW20R105	224	6.0	7.0	7.0	7.0	8.0	**7.0**	6.0	7.0	6.0	**6.3**	**6.8**
25	PBW941	225	7.0	6.0	7.0	6.0	8.0	**6.8**	7.0	5.0	7.0	**6.3**	**6.6**
26	DBW451	226	7.0	7.0	6.0	6.0	7.5	**6.7**	7.0	6.0	7.0	**6.7**	**6.7**
27	DBW222 (C)	227	6.0	6.0	6.0	7.0	8.0	**6.6**	4.0	6.0	6.0	**5.3**	**6.1**
28	PBW942	228	6.0	6.0	7.0	6.0	8.5	**6.7**	7.0	6.0	7.0	**6.7**	**6.7**
29	HD3480	229	7.0	7.0	7.0	7.0	7.5	**7.1**	6.0	5.0	7.0	**6.0**	**6.7**
30	UP3143	230	7.0	6.0	7.0	6.0	7.5	**6.7**	6.0	6.0	7.0	**6.3**	**6.6**
31	HD3478	231	7.0	7.0	7.0	6.0	8.0	**7.0**	7.0	6.0	6.0	**6.3**	**6.8**
32	HD3086 (C)	232	6.0	7.0	6.0	7.0	7.5	**6.7**	7.0	5.0	7.0	**6.3**	**6.6**
33	WH1330	233	7.0	6.0	6.0	6.0	7.0	**6.4**	6.0	7.0	6.0	**6.3**	**6.4**
34	DBW453	234	6.0	7.0	6.0	6.0	9.5	**6.9**	7.0	5.0	6.0	**6.0**	**6.6**
35	KRL2101	235	6.0	7.0	7.0	7.0	9.5	**7.3**	7.0	6.0	7.0	**6.7**	**7.1**
36	NWS2124	236	7.0	6.0	6.0	6.0	9.0	**6.8**	7.0	7.0	7.0	**7.0**	**6.9**
Mean			**6.5**	**6.8**	**6.9**	**6.4**	**7.2**	**6.8**	**6.4**	**6.0**	**6.6**	**6.3**	**6.6**

Table 92: Grain appearance score (Max. 10) of *T. aestivum* genotypes in NIVT 2

S. No	Entries	Code	CZ					PZ				Overall Mean
			Indore	Junagarh	P. kheda	Vijapur	Mean	Pune	Niphad	Dharwad	Mean	
1	MACS6862	301	6.6	6.5	5.6	6.2	**6.2**	6.4	6.8	6.2	**6.5**	**6.3**
2	MACS6858	302	6.2	6.3	5.7	6.0	**6.1**	5.8	6.1	6.0	**6.0**	**6.0**
3	PWU13	303	6.9	6.5	5.6	7.1	**6.5**	6.2	7.1	6.8	**6.7**	**6.6**
4	MP1401	304	5.8	5.9	5.6	5.8	**5.8**	5.6	5.7	6.2	**5.8**	**5.8**
5	GW561	305	7.3	7.0	6.7	7.4	**7.1**	7.6	7.7	7.5	**7.6**	**7.3**
6	MACS6222 (C)	306	6.6	6.4	5.9	6.3	**6.3**	5.8	6.5	6.8	**6.4**	**6.3**
7	MACS6864	307	6.7	6.6	5.9	6.1	**6.3**	6.0	6.7	6.7	**6.5**	**6.4**
8	Raj4590	308	6.8	6.8	6.2	6.8	**6.7**	6.3	6.9	6.6	**6.6**	**6.6**
9	GW565	309	7.5	7.0	6.6	7.1	**7.1**	7.0	7.7	7.3	**7.3**	**7.2**
10	PBW946	310	6.0	5.7	6.0	5.9	**5.9**	5.9	6.0	4.1	**5.3**	**5.7**
11	CG1050	311	6.9	6.6	6.1	6.5	**6.5**	6.4	6.9	5.7	**6.3**	**6.4**
12	GW566	312	7.6	7.3	6.4	7.6	**7.2**	7.0	7.4	7.3	**7.2**	**7.2**
13	UAS3030	313	5.9	5.9	5.0	6.1	**5.7**	6.2	6.0	5.0	**5.7**	**5.7**
14	GW560	314	6.2	6.1	5.3	6.2	**6.0**	6.1	6.0	6.7	**6.3**	**6.1**
15	MP3583	315	6.8	6.7	6.1	6.4	**6.5**	6.6	6.8	6.1	**6.5**	**6.5**
16	LOK82	316	5.9	5.7	5.1	5.5	**5.6**	5.7	6.1	6.0	**5.9**	**5.7**
17	AKAW4764	317	6.2	6.2	5.2	5.7	**5.8**	6.2	5.9	5.8	**6.0**	**5.9**
18	DBW457	318	6.7	6.6	6.2	6.9	**6.6**	6.7	6.9	6.1	**6.6**	**6.6**
19	GW559	319	7.5	6.9	6.4	7.6	**7.1**	7.0	7.7	6.9	**7.2**	**7.1**
20	JWS1528	320	6.8	6.5	6.0	6.0	**6.3**	5.2	6.7	4.8	**5.6**	**6.0**
21	MP1400	321	6.4	6.6	5.9	6.6	**6.4**	6.5	6.5	5.4	**6.1**	**6.3**
22	WH1332	322	6.6	6.8	6.0	6.2	**6.4**	6.2	6.6	4.0	**5.6**	**6.1**
23	NIAW4516	323	6.5	6.5	5.7	6.3	**6.3**	6.0	6.5	4.0	**5.5**	**5.9**
24	HI1694	324	7.2	6.9	6.3	7.8	**7.1**	7.0	7.2	7.5	**7.2**	**7.1**
25	PWU52	325	6.8	7.0	5.6	6.5	**6.5**	6.7	6.8	5.7	**6.4**	**6.4**
26	DBW187 (C)	326	6.3	6.6	6.0	5.9	**6.2**	6.4	6.1	6.9	**6.5**	**6.3**
27	MP3584	327	6.9	6.5	6.2	6.8	**6.6**	6.5	7.1	7.4	**7.0**	**6.8**
28	UAS3031	328	6.2	6.2	5.7	6.3	**6.1**	6.1	6.2	4.0	**5.4**	**5.8**
29	NWS2237	329	6.5	6.2	6.0	6.2	**6.2**	6.3	6.5	6.6	**6.5**	**6.3**
30	HI1695	330	6.2	6.6	6.0	6.4	**6.3**	6.8	6.9	6.9	**6.9**	**6.5**
31	HI1650 (C)	331	6.4	6.7	5.9	6.8	**6.5**	6.4	6.9	6.8	**6.7**	**6.6**
32	GW322 (C)	332	6.7	6.0	5.3	5.6	**5.9**	6.1	6.7	6.6	**6.5**	**6.1**
33	NIAW4581	333	6.2	6.2	5.4	5.9	**5.9**	5.9	6.0	6.9	**6.3**	**6.1**
34	HW3298-1	334	6.9	6.4	5.8	6.7	**6.5**	6.6	6.8	6.7	**6.7**	**6.6**
35	DBW456	335	5.7	6.2	5.4	6.2	**5.9**	6.1	6.6	6.4	**6.4**	**6.1**
36	HD3481	336	6.1	5.6	5.4	5.8	**5.7**	5.8	6.3	6.3	**6.1**	**5.9**
		Mean	**6.6**	**6.5**	**5.8**	**6.4**	**6.3**	**6.3**	**6.6**	**6.2**	**6.4**	**6.3**

Table 93: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in NIVT 2

S. No	Entries	Code	CZ					PZ				Overall Mean
			Indore	Junagarh	P. kheda	Vijapur	Mean	Pune	Niphad	Dharwad	Mean	
1	MACS6862	301	80.7	80.7	76.2	78.3	**79.0**	79.7	81.8	77.3	**79.6**	**79.2**
2	MACS6858	302	79.6	79.5	76.8	77.6	**78.4**	77.7	79.9	78.3	**78.6**	**78.5**
3	PWU13	303	64.8	79.7	76.6	79.4	**75.1**	77.9	81.5	78.6	**79.3**	**76.9**
4	MP1401	304	77.1	77.5	72.8	74.3	**75.4**	76.0	78.8	77.1	**77.3**	**76.2**
5	GW561	305	82.6	82.8	78.8	81.7	**81.5**	81.9	82.9	81.8	**82.2**	**81.8**
6	MACS6222 (C)	306	81.2	80.3	75.9	78.4	**79.0**	77.7	81.5	78.0	**79.1**	**79.0**
7	MACS6864	307	80.4	80.7	76.3	77.2	**78.7**	79.2	81.3	77.1	**79.2**	**78.9**
8	Raj4590	308	81.0	79.6	75.7	78.3	**78.7**	77.9	81.1	77.2	**78.7**	**78.7**
9	GW565	309	81.0	80.3	76.6	78.4	**79.1**	77.5	81.1	78.8	**79.1**	**79.1**
10	PBW946	310	77.4	76.0	74.0	74.0	**75.4**	76.0	77.6	66.2	**73.3**	**74.5**
11	CG1050	311	78.3	77.0	73.1	76.7	**76.3**	76.2	78.3	73.3	**75.9**	**76.1**
12	GW566	312	80.6	79.4	76.4	78.4	**78.7**	77.1	80.8	77.0	**78.3**	**78.5**
13	UAS3030	313	79.3	77.6	72.6	76.2	**76.4**	76.7	78.4	74.0	**76.4**	**76.4**
14	GW560	314	79.9	79.9	76.2	78.7	**78.7**	78.1	80.5	78.5	**79.0**	**78.8**
15	MP3583	315	82.1	81.9	78.9	79.3	**80.6**	80.5	82.8	77.9	**80.4**	**80.5**
16	LOK82	316	79.0	78.6	74.2	77.1	**77.2**	75.1	79.7	76.2	**77.0**	**77.1**
17	AKAW4764	317	80.3	79.5	73.8	77.4	**77.8**	78.0	80.7	73.8	**77.5**	**77.6**
18	DBW457	318	79.5	80.4	75.1	78.1	**78.3**	78.4	80.8	76.7	**78.6**	**78.4**
19	GW559	319	82.1	82.0	77.4	81.0	**80.6**	80.0	82.3	80.3	**80.9**	**80.7**
20	JWS1528	320	79.2	78.5	73.8	77.1	**77.2**	77.3	81.3	67.8	**75.5**	**76.4**
21	MP1400	321	79.3	80.2	74.7	78.5	**78.2**	79.3	81.0	75.7	**78.7**	**78.4**
22	WH1332	322	80.0	80.6	77.5	78.1	**79.1**	78.4	80.9	53.3	**70.9**	**75.5**
23	NIAW4516	323	81.8	80.5	76.4	79.5	**79.6**	78.8	82.0	62.5	**74.4**	**77.4**
24	HI1694	324	81.7	80.3	78.2	80.0	**80.1**	78.0	81.7	78.1	**79.3**	**79.7**
25	PWU52	325	82.3	81.0	78.1	80.4	**80.5**	79.9	82.5	74.1	**78.8**	**79.8**
26	DBW187 (C)	326	78.8	79.9	75.5	77.3	**77.9**	78.5	81.2	77.0	**78.9**	**78.3**
27	MP3584	327	82.6	82.0	77.7	80.2	**80.6**	77.9	83.1	79.7	**80.2**	**80.5**
28	UAS3031	328	79.1	78.8	75.6	77.3	**77.7**	77.3	80.4	62.4	**73.4**	**75.8**
29	NWS2237	329	81.3	80.7	76.4	78.6	**79.3**	79.7	82.5	76.9	**79.7**	**79.4**
30	HI1695	330	81.9	80.9	77.1	80.0	**80.0**	80.0	82.3	79.3	**80.5**	**80.2**
31	HI1650 (C)	331	82.3	82.2	76.7	80.3	**80.4**	80.7	82.2	79.1	**80.7**	**80.5**
32	GW322 (C)	332	80.4	80.2	75.5	75.1	**77.8**	78.0	81.0	75.6	**78.2**	**78.0**
33	NIAW4581	333	78.4	78.0	72.6	76.1	**76.3**	77.7	79.9	75.6	**77.7**	**76.9**
34	HW3298-1	334	80.3	80.1	75.9	77.8	**78.5**	76.5	79.7	77.3	**77.8**	**78.2**
35	DBW456	335	80.9	80.7	76.5	79.2	**79.3**	79.9	81.1	78.5	**79.8**	**79.5**
36	HD3481	336	78.8	77.7	73.8	76.3	**76.7**	75.3	78.9	74.8	**76.3**	**76.5**
		Mean	**79.9**	**79.9**	**75.8**	**78.1**	**78.4**	**78.2**	**80.9**	**75.2**	**78.1**	**78.3**

Table 94: Grain protein content (%) of *T. aestivum* genotypes in NIVT 2

S. No	Entries	Code	CZ					PZ				Overall Mean
			Indore	Junagarh	P. kheda	Vijapur	Mean	Pune	Niphad	Dharwad	Mean	
1	MACS6862	301	11.1	12.7	10.7	10.7	**11.3**	12.4	12.5	13.1	**12.7**	**11.9**
2	MACS6858	302	11.2	13.0	11.5	12.0	**11.9**	12.4	11.6	13.1	**12.4**	**12.1**
3	PWU13	303	12.0	13.2	11.7	11.5	**12.1**	12.4	11.3	12.6	**12.1**	**12.1**
4	MP1401	304	11.1	12.7	11.2	11.2	**11.6**	12.0	10.4	12.5	**11.6**	**11.6**
5	GW561	305	12.6	13.3	11.3	11.5	**12.2**	13.6	12.1	13.0	**12.9**	**12.5**
6	MACS6222 (C)	306	11.4	12.8	11.0	11.7	**11.7**	12.0	11.5	13.5	**12.3**	**12.0**
7	MACS6864	307	10.8	12.8	10.7	11.5	**11.5**	12.4	10.9	12.7	**12.0**	**11.7**
8	Raj4590	308	12.4	13.6	11.7	11.5	**12.3**	12.9	11.4	13.5	**12.6**	**12.4**
9	GW565	309	11.0	11.7	11.4	11.2	**11.3**	11.5	10.1	11.7	**11.1**	**11.2**
10	PBW946	310	12.0	13.4	11.9	10.7	**12.0**	12.7	12.1	12.5	**12.4**	**12.2**
11	CG1050	311	10.6	12.0	10.9	11.4	**11.2**	11.3	10.3	12.3	**11.3**	**11.3**
12	GW566	312	11.7	11.7	11.2	11.1	**11.4**	11.7	11.2	12.5	**11.8**	**11.6**
13	UAS3030	313	11.3	13.0	11.0	11.5	**11.7**	11.9	11.7	12.9	**12.2**	**11.9**
14	GW560	314	11.5	11.9	11.4	11.2	**11.5**	11.8	10.7	12.5	**11.7**	**11.6**
15	MP3583	315	10.8	12.1	10.2	10.6	**10.9**	12.0	10.3	12.1	**11.5**	**11.2**
16	LOK82	316	11.1	12.3	10.8	10.6	**11.2**	11.8	11.3	12.2	**11.8**	**11.4**
17	AKAW4764	317	10.2	11.7	9.9	10.6	**10.6**	11.4	10.2	12.3	**11.3**	**10.9**
18	DBW457	318	11.3	11.7	11.4	11.2	**11.4**	12.9	10.8	13.2	**12.3**	**11.8**
19	GW559	319	11.1	12.1	10.9	10.3	**11.1**	11.9	11.0	12.1	**11.7**	**11.3**
20	JWS1528	320	10.9	12.3	10.3	10.5	**11.0**	11.4	10.4	12.2	**11.3**	**11.1**
21	MP1400	321	12.3	13.4	12.0	12.1	**12.5**	12.5	11.8	13.5	**12.6**	**12.5**
22	WH1332	322	11.1	12.5	11.3	11.3	**11.6**	12.3	12.4	13.0	**12.6**	**12.0**
23	NIAW4516	323	11.7	12.9	11.1	12.9	**12.2**	12.1	11.4	12.0	**11.8**	**12.0**
24	HI1694	324	10.9	13.9	11.3	12.0	**12.0**	12.0	11.4	12.6	**12.0**	**12.0**
25	PWU52	325	11.8	13.7	11.6	11.6	**12.2**	13.0	11.6	13.0	**12.5**	**12.3**
26	DBW187 (C)	326	12.2	12.9	10.8	11.7	**11.9**	12.9	11.5	13.6	**12.7**	**12.2**
27	MP3584	327	11.1	12.3	11.1	11.2	**11.4**	12.2	11.5	13.2	**12.3**	**11.8**
28	UAS3031	328	11.2	12.3	11.9	10.7	**11.5**	11.8	10.3	12.4	**11.5**	**11.5**
29	NWS2237	329	11.7	12.3	11.0	11.8	**11.7**	12.6	11.5	12.9	**12.3**	**12.0**
30	HI1695	330	11.0	12.2	10.6	10.8	**11.2**	11.6	11.5	11.8	**11.6**	**11.4**
31	HI1650 (C)	331	11.2	12.5	11.6	11.4	**11.7**	12.2	10.5	12.5	**11.7**	**11.7**
32	GW322 (C)	332	10.6	11.7	10.1	10.4	**10.7**	11.0	10.5	12.0	**11.2**	**10.9**
33	NIAW4581	333	11.2	12.8	12.5	10.9	**11.9**	11.6	10.5	12.8	**11.6**	**11.8**
34	HW3298-1	334	11.4	12.3	11.1	11.5	**11.6**	12.0	11.4	12.8	**12.1**	**11.8**
35	DBW456	335	11.7	13.1	11.2	11.7	**11.9**	11.8	12.0	13.1	**12.3**	**12.1**
36	HD3481	336	11.4	13.7	11.3	12.1	**12.1**	13.4	11.9	13.8	**13.0**	**12.5**
		Mean	**11.4**	**12.6**	**11.2**	**11.3**	**11.6**	**12.2**	**11.2**	**12.7**	**12.0**	**11.8**

Table 95: Sedimentation value (ml) of *T. aestivum* genotypes in NIVT 2

S. No	Entries	Code	CZ					PZ				Overall Mean
			Indore	Junagarh	P. kheda	Vijapur	Mean	Pune	Niphad	Dharwad	Mean	
1	MACS6862	301	40.0	46.0	40.0	40.0	**41.5**	46.0	46.0	48.0	**46.7**	**43.7**
2	MACS6858	302	43.0	46.0	42.0	40.0	**42.8**	43.0	39.0	47.0	**43.0**	**42.9**
3	PWU13	303	41.0	47.0	40.0	39.0	**41.8**	44.0	39.0	46.0	**43.0**	**42.3**
4	MP1401	304	43.0	47.0	43.0	42.0	**43.8**	45.0	39.0	46.0	**43.3**	**43.6**
5	GW561	305	45.0	47.0	40.0	41.0	**43.3**	50.0	44.0	50.0	**48.0**	**45.3**
6	MACS6222 (C)	306	37.0	43.0	37.0	39.0	**39.0**	41.0	39.0	49.0	**43.0**	**40.7**
7	MACS6864	307	40.0	49.0	39.0	43.0	**42.8**	46.0	39.0	49.0	**44.7**	**43.6**
8	Raj4590	308	39.0	49.0	40.0	40.0	**42.0**	45.0	41.0	51.0	**45.7**	**43.6**
9	GW565	309	37.0	39.0	40.0	38.0	**38.5**	41.0	35.0	43.0	**39.7**	**39.0**
10	PBW946	310	42.0	49.0	43.0	40.0	**43.5**	46.0	44.0	46.0	**45.3**	**44.3**
11	CG1050	311	37.0	42.0	41.0	42.0	**40.5**	40.0	38.0	46.0	**41.3**	**40.9**
12	GW566	312	39.0	38.0	38.0	37.0	**38.0**	41.0	38.0	45.0	**41.3**	**39.4**
13	UAS3030	313	41.0	48.0	41.0	42.0	**43.0**	45.0	44.0	48.0	**45.7**	**44.1**
14	GW560	314	41.0	42.0	42.0	40.0	**41.3**	42.0	39.0	47.0	**42.7**	**41.9**
15	MP3583	315	37.0	42.0	37.0	37.0	**38.3**	43.0	37.0	44.0	**41.3**	**39.6**
16	LOK82	316	37.0	41.0	35.0	35.0	**37.0**	40.0	38.0	42.0	**40.0**	**38.3**
17	AKAW4764	317	34.0	39.0	33.0	35.0	**35.3**	40.0	34.0	44.0	**39.3**	**37.0**
18	DBW457	318	42.0	40.0	43.0	42.0	**41.8**	48.0	40.0	49.0	**45.7**	**43.4**
19	GW559	319	37.0	42.0	40.0	35.0	**38.5**	41.0	38.0	50.0	**43.0**	**40.4**
20	JWS1528	320	40.0	43.0	39.0	39.0	**40.3**	43.0	38.0	47.0	**42.7**	**41.3**
21	MP1400	321	47.0	50.0	45.0	45.0	**46.8**	48.0	44.0	51.0	**47.7**	**47.1**
22	WH1332	322	36.0	41.0	39.0	38.0	**38.5**	42.0	42.0	47.0	**43.7**	**40.7**
23	NIAW4516	323	43.0	48.0	42.0	43.0	**44.0**	45.0	43.0	47.0	**45.0**	**44.4**
24	HI1694	324	38.0	46.0	39.0	42.0	**41.3**	42.0	39.0	48.0	**43.0**	**42.0**
25	PWU52	325	40.0	50.0	39.0	39.0	**42.0**	45.0	41.0	48.0	**44.7**	**43.1**
26	DBW187 (C)	326	46.0	48.0	40.0	42.0	**44.0**	46.0	41.0	50.0	**45.7**	**44.7**
27	MP3584	327	38.0	45.0	40.0	41.0	**41.0**	45.0	42.0	50.0	**45.7**	**43.0**
28	UAS3031	328	39.0	43.0	42.0	38.0	**40.5**	42.0	38.0	46.0	**42.0**	**41.1**
29	NWS2237	329	40.0	42.0	41.0	41.0	**41.0**	44.0	41.0	46.0	**43.7**	**42.1**
30	HI1695	330	38.0	42.0	38.0	38.0	**39.0**	42.0	41.0	44.0	**42.3**	**40.4**
31	HI1650 (C)	331	37.0	42.0	38.0	38.0	**38.8**	42.0	36.0	43.0	**40.3**	**39.4**
32	GW322 (C)	332	35.0	40.0	35.0	36.0	**36.5**	39.0	38.0	44.0	**40.3**	**38.1**
33	NIAW4581	333	41.0	46.0	45.0	40.0	**43.0**	43.0	40.0	48.0	**43.7**	**43.3**
34	HW3298-1	334	38.0	41.0	38.0	39.0	**39.0**	41.0	39.0	46.0	**42.0**	**40.3**
35	DBW456	335	43.0	48.0	41.0	44.0	**44.0**	43.0	44.0	49.0	**45.3**	**44.6**
36	HD3481	336	39.0	49.0	38.0	41.0	**41.8**	48.0	41.0	49.0	**46.0**	**43.6**
		Mean	**39.7**	**44.4**	**39.8**	**39.8**	**40.9**	**43.5**	**40.0**	**47.0**	**43.5**	**42.0**

Table 96: Phenol colour test (0-10 scale) of *T. aestivum* genotypes in NIVT 2

S. No	Entries	Code	CZ					PZ				Overall Mean
			Indore	Junagarh	P. kheda	Vijapur	Mean	Pune	Niphad	Dharwad	Mean	
1	MACS6862	301	1.5	1.5	1.8	2.0	**1.7**	1.5	1.3	1.4	**1.4**	**1.6**
2	MACS6858	302	6.8	5.8	6.8	6.0	**6.4**	6.4	5.8	5.2	**5.8**	**6.1**
3	PWU13	303	4.3	3.8	4.3	3.5	**4.0**	2.8	2.5	3.5	**2.9**	**3.5**
4	MP1401	304	5.8	6.0	6.0	5.9	**5.9**	5.0	6.3	5.0	**5.4**	**5.7**
5	GW561	305	1.3	1.0	1.3	1.3	**1.2**	1.0	1.5	1.2	**1.2**	**1.2**
6	MACS6222 (C)	306	5.3	5.3	5.3	5.6	**5.4**	6.0	5.8	5.8	**5.9**	**5.6**
7	MACS6864	307	6.8	5.8	6.3	7.5	**6.6**	7.3	7.8	7.0	**7.4**	**6.9**
8	Raj4590	308	1.0	1.3	1.0	1.1	**1.1**	1.3	1.0	1.3	**1.2**	**1.1**
9	GW565	309	2.8	2.7	2.8	2.9	**2.8**	3.0	2.7	2.9	**2.9**	**2.8**
10	PBW946	310	6.0	6.8	6.1	6.5	**6.4**	6.0	6.3	6.8	**6.4**	**6.4**
11	CG1050	311	1.0	1.0	1.3	1.0	**1.1**	1.1	1.0	0.8	**1.0**	**1.0**
12	GW566	312	1.0	1.5	1.5	1.4	**1.4**	2.0	1.3	1.5	**1.6**	**1.5**
13	UAS3030	313	5.8	4.5	5.3	4.6	**5.1**	5.5	6.0	5.0	**5.5**	**5.2**
14	GW560	314	2.0	2.0	2.5	2.8	**2.3**	2.6	2.3	2.8	**2.6**	**2.4**
15	MP3583	315	2.0	2.3	2.8	2.3	**2.4**	2.5	2.4	2.5	**2.5**	**2.4**
16	LOK82	316	7.0	6.3	6.5	6.8	**6.7**	6.8	6.8	7.5	**7.0**	**6.8**
17	AKAW4764	317	6.0	5.8	6.0	5.8	**5.9**	6.3	6.0	5.9	**6.1**	**6.0**
18	DBW457	318	7.8	7.8	7.8	7.5	**7.7**	8.0	8.0	8.0	**8.0**	**7.8**
19	GW559	319	3.8	4.3	3.8	3.8	**3.9**	3.7	3.8	4.3	**3.9**	**3.9**
20	JWS1528	320	5.3	6.0	5.3	6.4	**5.8**	5.0	5.1	5.0	**5.0**	**5.4**
21	MP1400	321	7.8	7.8	7.8	7.0	**7.6**	6.8	6.8	7.0	**6.9**	**7.3**
22	WH1332	322	5.3	5.3	5.5	6.5	**5.7**	6.3	6.0	6.8	**6.4**	**6.0**
23	NIAW4516	323	1.5	1.3	1.3	1.5	**1.4**	1.5	1.3	1.0	**1.3**	**1.3**
24	HI1694	324	4.3	4.3	3.8	5.5	**4.5**	3.8	2.8	4.4	**3.7**	**4.1**
25	PWU52	325	1.3	1.3	1.0	1.8	**1.4**	2.5	2.0	2.3	**2.3**	**1.7**
26	DBW187 (C)	326	7.8	7.3	7.5	7.8	**7.6**	7.5	7.8	8.0	**7.8**	**7.7**
27	MP3584	327	6.8	6.3	6.8	6.8	**6.7**	7.3	7.0	7.0	**7.1**	**6.9**
28	UAS3031	328	7.0	7.3	7.3	7.8	**7.4**	7.0	7.8	7.9	**7.6**	**7.4**
29	NWS2237	329	8.0	8.0	7.8	8.0	**8.0**	8.0	8.0	8.0	**8.0**	**8.0**
30	HI1695	330	1.0	1.3	1.5	1.5	**1.3**	1.3	1.3	1.5	**1.4**	**1.3**
31	HI1650 (C)	331	5.5	6.0	6.0	6.7	**6.1**	6.1	6.3	6.9	**6.4**	**6.2**
32	GW322 (C)	332	6.3	6.8	7.3	6.5	**6.7**	6.3	6.0	6.5	**6.3**	**6.5**
33	NIAW4581	333	2.0	1.5	2.0	1.9	**1.9**	2.0	1.8	1.8	**1.9**	**1.9**
34	HW3298-1	334	5.8	5.8	6.3	6.0	**6.0**	6.0	5.8	4.3	**5.4**	**5.7**
35	DBW456	335	7.3	7.5	7.8	8.0	**7.7**	7.0	7.3	7.3	**7.2**	**7.5**
36	HD3481	336	8.0	7.3	8.0	7.8	**7.8**	8.0	7.8	8.0	**7.9**	**7.8**
		Mean	**4.7**	**4.6**	**4.8**	**4.9**	**4.7**	**4.8**	**4.7**	**4.8**	**4.7**	**4.7**

Table 97: Grain appearance score (Max-10) of *T. aestivum* genotypes in NIVT 3A

S. No.	Entries	Trial Code	NWPZ							NEPZ				Overall Mean
			Pantnagar	Ludhiana	Hisar	Delhi	Durgapura	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	DBW458	401	5.5	6.0	5.5	5.5	6.0	6.0	**5.8**	5.5	4.5	5.0	**5.0**	**5.5**
2	PBW947	402	5.5	5.0	5.5	5.5	5.0	6.0	**5.4**	5.5	5.0	5.0	**5.2**	**5.3**
3	WH1337	403	5.5	5.5	5.5	6.0	5.0	6.4	**5.7**	5.5	4.5	5.5	**5.2**	**5.5**
4	DBW459	404	6.0	6.0	6.0	6.0	5.0	6.6	**5.9**	6.0	5.0	5.5	**5.5**	**5.8**
5	NW8084	405	5.5	6.0	6.0	5.5	5.5	6.2	**5.8**	6.0	4.0	5.0	**5.0**	**5.5**
6	HD3484	406	5.5	5.5	6.0	5.5	5.0	5.8	**5.6**	6.0	5.0	5.5	**5.5**	**5.5**
7	PBW949	407	5.5	6.0	5.5	5.5	5.5	5.8	**5.6**	5.5	4.5	5.5	**5.2**	**5.5**
8	WH1336	408	6.0	6.5	6.5	6.0	5.5	6.6	**6.2**	6.0	5.5	6.0	**5.8**	**6.1**
9	DBW461	409	6.0	6.5	6.5	6.0	5.5	6.8	**6.2**	6.0	5.5	5.5	**5.7**	**6.0**
10	WH1335	410	6.0	6.0	5.5	6.0	4.5	6.2	**5.7**	5.5	4.5	5.5	**5.2**	**5.5**
11	DBW462	411	6.5	6.5	6.0	6.0	5.0	6.2	**6.0**	6.0	5.0	6.0	**5.7**	**5.9**
12	UBW21	412	6.5	5.5	5.5	5.5	5.0	6.6	**5.8**	5.5	4.5	5.5	**5.2**	**5.6**
13	PBW948	413	6.0	5.5	6.0	5.5	5.5	5.8	**5.7**	5.5	4.0	5.0	**4.8**	**5.4**
14	HI1621 (C)	414	6.0	5.0	5.5	6.0	6.0	6.2	**5.8**	5.5	5.0	6.0	**5.5**	**5.7**
15	DBW173 (C)	415	6.5	5.5	6.0	6.0	5.5	6.6	**6.0**	5.0	5.0	5.0	**5.0**	**5.7**
16	HP1983	416	6.0	6.0	5.5	6.0	5.5	6.6	**5.9**	5.5	5.5	6.0	**5.7**	**5.8**
17	HD3483	417	5.5	6.0	5.5	5.5	5.0	6.0	**5.6**	5.5	5.0	4.5	**5.0**	**5.4**
18	UP3145	418	5.5	6.0	5.5	6.5	6.0	6.4	**6.0**	6.0	5.0	6.0	**5.7**	**5.9**
19	SVPWL22-02	419	5.5	5.5	5.5	5.0	6.0	5.4	**5.5**	5.5	5.0	5.0	**5.2**	**5.4**
20	K2306	420	6.0	5.5	5.5	5.0	6.0	5.6	**5.6**	6.0	5.5	5.0	**5.5**	**5.6**
21	RAUW 111	421	5.0	5.0	5.0	4.5	5.0	5.4	**5.0**	5.5	4.5	5.0	**5.0**	**5.0**
22	JKW319	422	6.0	5.5	6.5	6.0	5.5	5.6	**5.9**	6.0	4.5	5.5	**5.3**	**5.7**
23	K2307	423	5.5	5.5	5.5	6.0	6.0	5.8	**5.7**	5.5	5.5	5.0	**5.3**	**5.6**
24	DBW460	424	7.0	6.5	6.0	6.0	5.0	6.6	**6.2**	6.5	5.5	5.5	**5.8**	**6.1**
25	PBW950	425	4.5	5.0	5.0	5.0	4.5	5.6	**4.9**	5.5	5.0	5.0	**5.2**	**5.0**
26	BRW3954	426	5.5	6.0	5.5	5.5	6.5	6.4	**5.9**	6.5	5.5	5.5	**5.8**	**5.9**
27	BCW31	427	6.0	6.0	6.0	6.5	6.0	6.4	**6.2**	6.5	5.0	5.5	**5.7**	**6.0**
28	NW8081	428	6.0	6.5	5.5	6.0	5.5	6.8	**6.1**	6.0	5.0	5.5	**5.5**	**5.9**
29	HD3482	429	6.0	7.0	6.0	6.5	6.0	7.0	**6.4**	6.0	5.5	6.5	**6.0**	**6.3**
30	Raj4588	430	6.0	6.0	6.0	6.0	5.5	6.8	**6.1**	5.5	5.0	5.0	**5.2**	**5.8**
31	PBW951	431	6.5	6.0	5.5	6.5	5.0	6.4	**6.0**	5.5	4.5	5.0	**5.0**	**5.7**
32	PBW771 (C)	432	6.0	6.0	5.5	5.5	5.0	6.8	**5.8**	6.0	5.0	5.5	**5.5**	**5.7**
33	HUW860	433	5.0	5.5	5.5	5.5	5.0	5.4	**5.3**	5.5	5.0	5.0	**5.2**	**5.3**
34	HI1563 (C)	434	6.0	5.0	5.5	6.5	6.0	5.6	**5.8**	6.0	5.5	5.0	**5.5**	**5.7**
35	UP3146	435	6.0	6.0	5.5	6.0	5.5	5.8	**5.8**	5.5	5.0	5.5	**5.3**	**5.6**
36	Raj4589	436	5.5	6.0	5.5	5.5	5.5	6.0	**5.7**	5.5	5.0	5.5	**5.3**	**5.6**
Mean			**5.8**	**5.8**	**5.7**	**5.8**	**5.4**	**6.2**	**5.8**	**5.8**	**5.0**	**5.4**	**5.4**	**5.6**

Table 98: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in NIVT 3A

S. No.	Entries	Trial Code	NWPZ							NEPZ				Overall Mean
			Pantnagar	Ludhiana	Hisar	Delhi	Durgapura	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	DBW458	401	78.2	77.3	77.6	78.8	72.4	78.7	**77.2**	78.1	69.3	75.5	**74.3**	**76.2**
2	PBW947	402	78.7	77.2	78.9	77.9	71.3	77.8	**77.0**	78.1	74.1	76.0	**76.1**	**76.7**
3	WH1337	403	79.2	77.8	78.0	78.4	71.4	77.6	**77.1**	78.8	67.8	75.3	**74.0**	**76.0**
4	DBW459	404	79.8	78.5	78.8	78.9	74.7	81.0	**78.6**	77.8	72.2	75.4	**75.1**	**77.5**
5	NW8084	405	78.1	76.3	78.2	78.6	71.4	77.4	**76.7**	77.9	62.4	72.0	**70.8**	**74.7**
6	HD3484	406	81.0	79.1	80.2	79.9	76.2	80.7	**79.5**	78.9	76.0	76.8	**77.2**	**78.8**
7	PBW949	407	78.9	76.7	78.6	78.6	73.7	79.0	**77.6**	77.0	73.0	76.3	**75.4**	**76.9**
8	WH1336	408	77.4	76.2	77.1	78.0	70.4	79.1	**76.4**	77.8	70.4	73.4	**73.9**	**75.5**
9	DBW461	409	79.9	77.8	79.0	79.3	72.7	80.2	**78.2**	78.3	70.5	76.0	**74.9**	**77.1**
10	WH1335	410	77.5	75.6	76.5	76.6	68.6	76.6	**75.2**	75.9	69.4	74.5	**73.3**	**74.6**
11	DBW462	411	78.3	77.6	79.1	79.0	72.4	79.9	**77.7**	78.2	69.5	76.5	**74.7**	**76.7**
12	UBW21	412	78.2	77.3	78.2	79.3	70.7	78.6	**77.1**	76.5	69.3	77.2	**74.3**	**76.1**
13	PBW948	413	77.7	75.8	77.3	77.8	73.4	78.0	**76.7**	76.0	66.9	71.7	**71.5**	**75.0**
14	HI1621 (C)	414	79.2	77.0	77.6	79.1	75.1	79.9	**78.0**	78.1	74.9	76.6	**76.5**	**77.5**
15	DBW173 (C)	415	77.5	77.2	78.8	78.4	71.9	79.6	**77.2**	76.0	71.3	78.6	**75.3**	**76.6**
16	HP1983	416	79.1	77.8	78.4	79.4	70.1	79.7	**77.4**	78.3	76.6	77.8	**77.6**	**77.5**
17	HD3483	417	79.2	76.3	78.0	79.2	69.5	77.8	**76.7**	77.8	72.3	73.4	**74.5**	**75.9**
18	UP3145	418	78.3	76.1	78.2	78.7	71.6	77.9	**76.8**	76.3	68.3	76.4	**73.7**	**75.8**
19	SVPWL22-02	419	79.1	78.2	78.8	78.8	75.7	76.2	**77.8**	79.2	73.8	75.8	**76.3**	**77.3**
20	K2306	420	79.3	73.8	77.0	76.9	75.0	77.3	**76.6**	78.3	76.7	76.7	**77.2**	**76.8**
21	RAUW 111	421	79.9	76.6	80.4	79.4	73.8	79.6	**78.3**	80.0	78.6	79.3	**79.3**	**78.6**
22	JKW319	422	77.3	75.9	78.2	77.7	74.9	78.0	**77.0**	77.3	69.0	74.6	**73.6**	**75.9**
23	K2307	423	79.6	75.9	77.5	79.1	75.6	78.5	**77.7**	77.8	71.6	72.5	**74.0**	**76.5**
24	DBW460	424	80.9	79.6	80.7	81.1	72.5	81.6	**79.4**	80.1	75.4	79.0	**78.2**	**79.0**
25	PBW950	425	78.6	76.3	77.1	77.4	69.6	79.0	**76.3**	78.4	77.3	76.7	**77.5**	**76.7**
26	BRW3954	426	79.1	77.4	78.8	79.6	75.5	79.0	**78.2**	78.8	71.4	76.8	**75.7**	**77.4**
27	BCW31	427	78.1	75.5	75.6	76.9	69.9	78.0	**75.7**	76.3	67.4	71.3	**71.7**	**74.3**
28	NW8081	428	77.1	76.0	75.6	77.6	70.2	77.4	**75.7**	75.0	64.5	73.3	**70.9**	**74.1**
29	HD3482	429	80.0	78.9	78.2	80.9	77.0	81.2	**79.4**	80.2	74.2	79.8	**78.1**	**78.9**
30	Raj4588	430	79.1	77.3	77.7	79.4	76.4	88.1	**79.7**	77.0	68.8	72.9	**72.9**	**77.4**
31	PBW951	431	79.3	78.7	78.5	80.7	72.8	88.1	**79.7**	80.2	75.5	78.1	**77.9**	**79.1**
32	PBW771 (C)	432	78.7	77.1	78.5	79.9	73.8	81.7	**78.3**	78.1	76.2	76.3	**76.9**	**77.8**
33	HUW860	433	77.9	75.1	77.1	76.9	72.9	77.0	**76.2**	78.0	73.3	72.4	**74.6**	**75.6**
34	HI1563 (C)	434	81.7	76.7	78.3	78.4	78.1	79.3	**78.8**	80.3	78.1	74.8	**77.7**	**78.4**
35	UP3146	435	79.0	77.2	78.8	76.6	69.8	78.5	**76.7**	75.9	72.1	75.8	**74.6**	**76.0**
36	Raj4589	436	79.6	79.2	79.1	80.4	70.9	77.4	**77.8**	79.2	68.0	77.7	**75.0**	**76.8**
Mean			**78.9**	**77.0**	**78.2**	**78.7**	**72.8**	**79.3**	**77.5**	**77.9**	**71.8**	**75.6**	**75.1**	**76.7**

Table 99: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes in NIVT 3A

S. No.	Entries	Trial Code	NWPZ							NEPZ				Overall Mean
			Pantnagar	Ludhiana	Hisar	Delhi	Durgapura	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	DBW458	401	9.4	10.3	10.3	11.0	13.9	11.7	**11.1**	11.1	13.1	12.5	**12.2**	**11.5**
2	PBW947	402	9.7	9.1	11.4	11.6	14.2	12.5	**11.4**	11.1	14.1	14.1	**13.1**	**12.0**
3	WH1337	403	10.4	10.3	10.8	11.9	13.1	12.2	**11.5**	10.7	13.9	13.6	**12.7**	**11.9**
4	DBW459	404	10.6	10.0	11.1	10.1	13.5	12.4	**11.3**	12.1	13.7	13.1	**13.0**	**11.8**
5	NW8084	405	10.9	10.8	10.8	11.6	12.6	12.0	**11.4**	11.6	13.9	13.6	**13.0**	**12.0**
6	HD3484	406	9.8	9.7	10.8	11.8	12.4	11.8	**11.1**	11.6	12.1	11.8	**11.8**	**11.3**
7	PBW949	407	11.8	11.8	11.1	11.9	14.8	12.2	**12.3**	12.3	13.8	14.6	**13.6**	**12.7**
8	WH1336	408	10.5	10.4	11.5	11.3	13.4	12.1	**11.5**	11.1	13.3	13.2	**12.5**	**11.9**
9	DBW461	409	11.0	11.3	10.5	10.9	13.3	12.3	**11.5**	12.4	12.3	13.3	**12.7**	**11.9**
10	WH1335	410	11.5	10.8	11.4	12.1	14.3	13.0	**12.2**	13.0	13.7	13.5	**13.4**	**12.6**
11	DBW462	411	11.2	9.5	11.9	11.2	13.3	12.4	**11.6**	12.4	13.2	13.7	**13.1**	**12.1**
12	UBW21	412	10.0	10.4	12.2	10.9	13.7	11.6	**11.5**	11.6	13.6	13.2	**12.8**	**11.9**
13	PBW948	413	12.0	11.5	12.3	12.2	14.4	12.3	**12.4**	12.1	14.9	15.5	**14.2**	**13.0**
14	HI1621 (C)	414	9.7	10.4	10.4	10.8	12.4	11.4	**10.9**	11.4	12.1	12.4	**12.0**	**11.2**
15	DBW173 (C)	415	10.5	11.1	11.2	11.9	14.3	12.1	**11.9**	12.6	13.2	13.7	**13.2**	**12.3**
16	HP1983	416	10.1	9.9	11.2	11.1	13.8	12.1	**11.4**	12.2	13.0	13.0	**12.7**	**11.8**
17	HD3483	417	11.2	10.0	10.4	10.8	14.3	12.1	**11.5**	11.4	12.9	13.4	**12.6**	**11.8**
18	UP3145	418	10.2	11.1	10.6	11.4	13.6	12.1	**11.5**	11.8	13.0	12.5	**12.4**	**11.8**
19	SVPWL22-02	419	9.6	10.2	11.7	11.8	13.4	11.5	**11.4**	10.4	11.7	12.4	**11.5**	**11.4**
20	K2306	420	10.8	12.1	10.9	12.1	13.3	11.7	**11.8**	12.5	12.4	12.8	**12.6**	**12.1**
21	RAUW 111	421	11.2	11.1	10.5	11.0	14.5	12.1	**11.7**	11.4	13.4	13.8	**12.9**	**12.1**
22	JKW319	422	10.1	9.7	10.0	11.1	13.4	11.6	**11.0**	11.8	13.3	12.8	**12.6**	**11.5**
23	K2307	423	11.0	11.1	10.8	12.7	12.6	12.5	**11.8**	11.7	13.7	13.8	**13.1**	**12.2**
24	DBW460	424	10.6	11.3	11.4	10.8	13.9	12.5	**11.7**	12.8	13.5	13.9	**13.4**	**12.3**
25	PBW950	425	10.7	10.0	10.7	11.3	14.7	11.9	**11.6**	10.8	12.4	11.8	**11.7**	**11.6**
26	BRW3954	426	10.1	10.8	9.7	10.4	12.5	11.4	**10.8**	11.4	12.3	12.1	**11.9**	**11.2**
27	BCW31	427	10.9	10.8	11.6	11.6	14.2	12.1	**11.9**	12.3	14.0	13.9	**13.4**	**12.4**
28	NW8081	428	10.0	10.5	12.0	11.0	12.8	11.6	**11.3**	11.6	13.2	13.0	**12.6**	**11.7**
29	HD3482	429	10.7	11.2	11.9	11.1	13.2	11.5	**11.6**	11.6	12.4	11.5	**11.8**	**11.7**
30	Raj4588	430	11.7	9.0	11.2	12.8	14.1	12.3	**11.8**	12.0	13.6	14.3	**13.3**	**12.3**
31	PBW951	431	11.2	10.5	11.6	11.1	14.1	11.9	**11.7**	11.6	13.0	14.1	**12.9**	**12.1**
32	PBW771 (C)	432	10.9	11.7	11.1	11.5	13.3	12.0	**11.7**	12.5	12.8	12.9	**12.7**	**12.1**
33	HUW860	433	11.0	10.7	11.1	12.2	14.0	12.0	**11.8**	11.7	12.8	13.8	**12.8**	**12.1**
34	HI1563 (C)	434	10.3	11.5	11.7	11.3	12.9	11.6	**11.5**	11.6	12.0	12.7	**12.1**	**11.7**
35	UP3146	435	11.0	10.6	11.7	10.3	13.3	11.7	**11.4**	11.8	12.8	12.9	**12.5**	**11.8**
36	Raj4589	436	11.1	11.1	11.3	10.5	13.1	12.2	**11.6**	11.1	13.0	12.6	**12.2**	**11.8**
Mean			**10.7**	**10.6**	**11.1**	**11.4**	**13.6**	**12.0**	**11.6**	**11.8**	**13.1**	**13.2**	**12.7**	**11.9**

Table 100: Sedimentation value (ml) of *T. aestivum* genotypes in NIVT 3A

S. No.	Entries	Trial Code	NWPZ							NEPZ				Overall Mean
			Pantnagar	Ludhiana	Hisar	Delhi	Durgapura	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	DBW458	401	49.0	54.0	40.0	50.0	50.0	52.5	**49.3**	57.0	58.0	50.0	**55.0**	**51.2**
2	PBW947	402	51.0	55.0	47.0	45.0	69.0	56.0	**53.8**	60.0	57.0	64.0	**60.3**	**56.0**
3	WH1337	403	59.0	57.0	53.0	60.0	58.0	60.4	**57.9**	58.0	58.0	65.0	**60.3**	**58.7**
4	DBW459	404	58.0	50.0	42.0	49.0	52.0	55.1	**51.0**	56.0	53.0	66.0	**58.3**	**53.5**
5	NW8084	405	47.0	52.0	49.0	50.0	60.0	58.2	**52.7**	51.0	62.0	63.0	**58.7**	**54.7**
6	HD3484	406	50.0	47.0	38.0	46.0	52.0	52.1	**47.5**	57.0	59.0	58.0	**58.0**	**51.0**
7	PBW949	407	64.0	62.0	48.0	60.0	67.0	58.6	**59.9**	64.0	60.0	60.0	**61.3**	**60.4**
8	WH1336	408	51.0	55.0	44.0	50.0	55.0	53.8	**51.5**	57.0	58.0	66.0	**60.3**	**54.4**
9	DBW461	409	65.0	60.0	49.0	55.0	73.0	52.1	**59.0**	62.0	60.0	68.0	**63.3**	**60.5**
10	WH1335	410	57.0	59.0	42.0	50.0	60.0	56.0	**54.0**	58.0	59.0	66.0	**61.0**	**56.3**
11	DBW462	411	61.0	49.0	42.0	46.0	62.0	55.1	**52.5**	64.0	58.0	69.0	**63.7**	**56.2**
12	UBW21	412	60.0	61.0	54.0	62.0	73.0	63.8	**62.3**	62.0	66.0	76.0	**68.0**	**64.2**
13	PBW948	413	47.0	60.0	46.0	48.0	58.0	53.8	**52.1**	65.0	70.0	68.0	**67.7**	**57.3**
14	HI1621 (C)	414	50.0	61.0	45.0	50.0	45.0	48.6	**49.9**	54.0	55.0	54.0	**54.3**	**51.4**
15	DBW173 (C)	415	62.0	65.0	47.0	51.0	66.0	58.2	**58.2**	68.0	60.0	54.0	**60.7**	**59.0**
16	HP1983	416	57.0	65.0	47.0	49.0	59.0	52.1	**54.8**	56.0	58.0	54.0	**56.0**	**55.2**
17	HD3483	417	59.0	63.0	56.0	54.0	63.0	64.3	**59.9**	67.0	74.0	67.0	**69.3**	**63.0**
18	UP3145	418	55.0	42.0	50.0	50.0	60.0	59.5	**52.7**	58.0	60.0	56.0	**58.0**	**54.5**
19	SVPWL22-02	419	49.0	50.0	49.0	49.0	72.0	55.1	**54.0**	62.0	61.0	48.0	**57.0**	**55.0**
20	K2306	420	45.0	57.0	45.0	39.0	61.0	43.8	**48.5**	57.0	50.0	57.0	**54.7**	**50.5**
21	RAUW 111	421	44.0	56.0	43.0	47.0	65.0	53.0	**51.3**	53.0	52.0	53.0	**52.7**	**51.8**
22	JKW319	422	56.0	50.0	53.0	51.0	74.0	54.7	**56.4**	61.0	65.0	58.0	**61.3**	**58.1**
23	K2307	423	54.0	67.0	55.0	53.0	68.0	64.7	**60.3**	65.0	58.0	60.0	**61.0**	**60.5**
24	DBW460	424	55.0	47.0	46.0	53.0	69.0	54.3	**54.0**	50.0	55.0	52.0	**52.3**	**53.5**
25	PBW950	425	59.0	57.0	52.0	54.0	75.0	50.3	**57.9**	66.0	63.0	67.0	**65.3**	**60.4**
26	BRW3954	426	42.0	48.0	40.0	39.0	63.0	44.7	**46.1**	45.0	52.0	53.0	**50.0**	**47.4**
27	BCW31	427	49.0	56.0	49.0	48.0	70.0	48.6	**53.4**	52.0	58.0	58.0	**56.0**	**54.3**
28	NW8081	428	53.0	53.0	46.0	41.0	62.0	49.9	**50.8**	53.0	60.0	54.0	**55.7**	**52.4**
29	HD3482	429	48.0	44.0	43.0	42.0	72.0	44.7	**48.9**	50.0	54.0	46.0	**50.0**	**49.3**
30	Raj4588	430	45.0	42.0	38.0	49.0	60.0	50.8	**47.5**	51.0	57.0	54.0	**54.0**	**49.6**
31	PBW951	431	53.0	47.0	51.0	42.0	70.0	55.1	**53.0**	58.0	63.0	60.0	**60.3**	**55.5**
32	PBW771 (C)	432	38.0	41.0	32.0	38.0	52.0	39.4	**40.1**	36.0	38.0	46.0	**40.0**	**40.0**
33	HUW860	433	53.0	58.0	49.0	52.0	77.0	53.4	**57.1**	55.0	56.0	57.0	**56.0**	**56.7**
34	HI1563 (C)	434	45.0	48.0	45.0	46.0	54.0	45.5	**47.3**	46.0	54.0	62.0	**54.0**	**49.5**
35	UP3146	435	51.0	50.0	44.0	49.0	57.0	52.5	**50.6**	52.0	54.0	62.0	**56.0**	**52.4**
36	Raj4589	436	57.0	45.0	50.0	55.0	61.0	51.6	**53.3**	55.0	66.0	69.0	**63.3**	**56.6**
Mean			**52.7**	**53.7**	**46.4**	**49.2**	**62.9**	**53.4**	**53.0**	**56.7**	**58.4**	**59.4**	**58.2**	**54.8**

Table 101: Phenol test (Max score 10) of *T. aestivum* genotypes in NIVT 3A

S. No.	Entries	Trial Code	NWPZ							NEPZ				Overall Mean
			Pantnagar	Ludhiana	Hisar	Delhi	Durgapura	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	DBW458	401	6.0	6.0	6.0	7.0	7.0	6.5	**6.4**	6.0	6.0	6.0	**6.0**	**6.3**
2	PBW947	402	7.0	7.0	8.0	8.0	7.0	8.0	**7.5**	7.0	7.0	6.0	**6.7**	**7.2**
3	WH1337	403	8.0	8.0	8.0	8.0	9.0	8.5	**8.3**	7.0	7.0	6.0	**6.7**	**7.7**
4	DBW459	404	5.0	5.0	5.0	6.0	5.0	3.5	**4.9**	5.0	5.0	4.0	**4.7**	**4.8**
5	NW8084	405	6.0	6.0	6.0	6.0	6.0	8.0	**6.3**	7.0	7.0	7.0	**7.0**	**6.6**
6	HD3484	406	6.0	5.0	6.0	6.0	6.0	7.5	**6.1**	6.0	6.0	6.0	**6.0**	**6.1**
7	PBW949	407	8.0	8.0	8.0	8.0	7.0	9.0	**8.0**	7.0	7.0	7.0	**7.0**	**7.7**
8	WH1336	408	7.0	7.0	8.0	7.0	8.0	8.0	**7.5**	7.0	7.0	6.0	**6.7**	**7.2**
9	DBW461	409	7.0	8.0	8.0	7.0	8.0	8.5	**7.8**	7.0	7.0	7.0	**7.0**	**7.5**
10	WH1335	410	8.0	9.0	9.0	8.0	9.0	8.0	**8.5**	7.0	7.0	7.0	**7.0**	**8.0**
11	DBW462	411	7.0	7.0	8.0	7.0	8.0	7.5	**7.4**	8.0	7.0	7.0	**7.3**	**7.4**
12	UBW21	412	8.0	9.0	9.0	8.0	7.0	9.5	**8.4**	7.0	8.0	8.0	**7.7**	**8.2**
13	PBW948	413	7.0	7.0	8.0	8.0	7.0	7.0	**7.3**	8.0	7.0	8.0	**7.7**	**7.4**
14	HI1621 (C)	414	7.0	8.0	7.0	8.0	7.0	7.0	**7.3**	7.0	7.0	8.0	**7.3**	**7.3**
15	DBW173 (C)	415	6.0	7.0	7.0	7.0	7.0	9.0	**7.2**	7.0	7.0	8.0	**7.3**	**7.2**
16	HP1983	416	7.0	7.0	7.0	7.0	8.0	4.5	**6.8**	6.0	5.0	6.0	**5.7**	**6.4**
17	HD3483	417	7.0	8.0	8.0	7.0	8.0	9.5	**7.9**	7.0	8.0	7.0	**7.3**	**7.7**
18	UP3145	418	5.0	6.0	5.0	6.0	6.0	4.0	**5.3**	5.0	6.0	6.0	**5.7**	**5.4**
19	SVPWL22-02	419	7.0	7.0	8.0	8.0	7.0	7.0	**7.3**	7.0	8.0	7.0	**7.3**	**7.3**
20	K2306	420	8.0	7.0	8.0	9.0	8.0	8.0	**8.0**	8.0	7.0	8.0	**7.7**	**7.9**
21	RAUW 111	421	6.0	6.0	6.0	6.0	5.0	6.0	**5.8**	6.0	6.0	6.0	**6.0**	**5.9**
22	JKW319	422	6.0	6.0	6.0	7.0	6.0	6.5	**6.3**	6.0	5.0	6.0	**5.7**	**6.1**
23	K2307	423	7.0	7.0	8.0	8.0	7.0	9.0	**7.7**	7.0	7.0	8.0	**7.3**	**7.6**
24	DBW460	424	7.0	8.0	8.0	7.0	8.0	9.5	**7.9**	8.0	8.0	8.0	**8.0**	**7.9**
25	PBW950	425	8.0	7.0	8.0	7.0	9.0	8.5	**7.9**	7.0	8.0	8.0	**7.7**	**7.8**
26	BRW3954	426	5.0	6.0	6.0	6.0	6.0	5.5	**5.8**	6.0	6.0	6.0	**6.0**	**5.8**
27	BCW31	427	8.0	9.0	9.0	8.0	8.0	8.0	**8.3**	7.0	8.0	7.0	**7.3**	**8.0**
28	NW8081	428	7.0	8.0	7.0	8.0	7.0	8.5	**7.6**	7.0	8.0	8.0	**7.7**	**7.6**
29	HD3482	429	6.0	6.0	7.0	7.0	7.0	6.0	**6.5**	7.0	7.0	6.0	**6.7**	**6.6**
30	Raj4588	430	7.0	7.0	7.0	6.0	6.0	6.5	**6.6**	7.0	7.0	7.0	**7.0**	**6.7**
31	PBW951	431	7.0	8.0	7.0	7.0	8.0	6.0	**7.2**	7.0	8.0	8.0	**7.7**	**7.3**
32	PBW771 (C)	432	7.0	8.0	8.0	8.0	8.0	7.5	**7.8**	7.0	8.0	7.0	**7.3**	**7.6**
33	HUW860	433	7.0	7.0	7.0	8.0	8.0	6.5	**7.3**	7.0	8.0	8.0	**7.7**	**7.4**
34	HI1563 (C)	434	5.0	5.0	4.0	5.0	4.0	5.5	**4.8**	6.0	6.0	7.0	**6.3**	**5.3**
35	UP3146	435	6.0	6.0	7.0	6.0	6.0	7.0	**6.3**	7.0	7.0	8.0	**7.3**	**6.7**
36	Raj4589	436	7.0	7.0	7.0	7.0	6.0	9.5	**7.3**	7.0	8.0	8.0	**7.7**	**7.4**
Mean			**6.8**	**7.0**	**7.2**	**7.1**	**7.1**	**7.3**	**7.1**	**6.8**	**7.0**	**7.0**	**6.9**	**7.0**

Table 102: Grain appearance score (Max. 10) of *T. aestivum* genotypes in NIVT 3B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Indore	Vijapur	P.kheda	Junagarh	Mean	Dharwad	Niphad	Pune	Mean	
1.	HD2864 (C)	501	6.9	6.1	5.9	6.1	**6.2**	6.5	5.8	5.5	**5.9**	**6.1**
2.	DBW464	502	8.1	8.9	6.4	8.1	**7.9**	6.8	7.5	7.3	**7.2**	**7.6**
3.	HD2932 (C)	503	6.9	7.1	6.1	6.1	**6.5**	5.8	4.5	6.5	**5.6**	**6.1**
4.	HI1697	504	6.4	6.6	6.4	6.6	**6.5**	7.3	6.8	6.3	**6.8**	**6.6**
5.	WH1338	505	5.6	6.6	5.6	6.4	**6.0**	5.8	5.3	5.0	**5.3**	**5.7**
6.	GW567	506	6.6	7.4	5.9	7.1	**6.7**	6.5	6.8	5.5	**6.3**	**6.5**
7.	WSM141	507	6.4	6.6	6.1	6.4	**6.4**	6.3	6.8	6.0	**6.3**	**6.3**
8.	DBW463	508	7.6	6.6	6.1	7.4	**6.9**	6.5	6.8	5.8	**6.3**	**6.7**
9.	MACS6868	509	6.6	5.4	6.1	6.4	**6.1**	6.5	5.3	6.0	**5.9**	**6.0**
10.	GW562	510	7.1	6.9	6.4	6.6	**6.7**	6.0	5.3	5.8	**5.7**	**6.3**
11.	MP3599	511	7.6	7.1	6.1	6.1	**6.7**	6.8	6.5	6.0	**6.4**	**6.6**
12.	NIAW4621	512	7.1	7.1	6.1	6.6	**6.7**	4.5	5.5	5.8	**5.3**	**6.1**
13.	CG1061	513	6.9	7.4	6.4	6.9	**6.9**	6.5	6.8	5.8	**6.3**	**6.6**
14.	NIAW4624	514	7.9	8.1	7.4	7.1	**7.6**	4.8	6.5	6.8	**6.0**	**6.9**
15.	LOK83	515	7.1	7.4	6.6	6.6	**6.9**	5.8	4.8	5.8	**5.4**	**6.3**
16.	HI1698	516	7.1	7.1	5.1	7.1	**6.6**	7.5	6.3	6.8	**6.8**	**6.7**
17.	HI1696	517	6.1	6.4	6.4	7.1	**6.5**	6.5	6.5	6.0	**6.3**	**6.4**
18.	MP3598	518	6.1	6.6	6.4	6.4	**6.4**	4.8	6.5	5.8	**5.7**	**6.1**
19.	HI1699	519	8.4	7.9	7.4	7.1	**7.7**	7.3	6.8	6.3	**6.8**	**7.3**
20.	HI1633 (C)	520	7.6	6.1	5.9	6.1	**6.4**	6.8	6.3	6.5	**6.5**	**6.5**
21.	UAS3033	521	7.1	6.4	6.1	6.1	**6.4**	5.8	6.0	5.8	**5.8**	**6.2**
22.	UAS3032	522	6.4	6.4	5.6	5.6	**6.0**	5.8	6.0	6.5	**6.1**	**6.0**
23.	MACS6854	523	7.6	6.9	6.4	7.4	**7.0**	6.5	6.5	6.8	**6.6**	**6.8**
24.	PBW952	524	6.4	6.1	6.4	5.6	**6.1**	6.3	6.3	6.5	**6.3**	**6.2**
25.	MP1402	525	6.9	6.1	6.4	6.9	**6.5**	5.8	5.5	6.5	**5.9**	**6.3**
		Mean	**7.0**	**6.8**	**6.2**	**6.6**	**6.7**	**6.2**	**6.1**	**6.1**	**6.1**	**6.4**

Table 103: Hectoliter weight (Kg/hl.) of *T. aestivum* genotypes in NIVT 3B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Indore	Vijapur	P.kheda	Junagarh	Mean	Dharwad	Niphad	Pune	Mean	
1.	HD2864 (C)	501	85.6	82.2	75.5	82.3	**81.4**	81.4	83.2	84.8	**83.1**	**82.1**
2.	DBW464	502	81.0	79.5	72.8	79.5	**78.2**	66.2	76.7	76.1	**73.0**	**75.9**
3.	HD2932 (C)	503	82.6	82.3	75.2	80.8	**80.2**	65.0	76.2	80.4	**73.9**	**77.5**
4.	HI1697	504	85.7	83.2	79.0	82.7	**82.6**	81.2	83.8	84.0	**83.0**	**82.8**
5.	WH1338	505	80.9	80.7	73.3	79.8	**78.7**	73.2	78.3	78.9	**76.8**	**77.9**
6.	GW567	506	82.3	81.7	72.5	82.3	**79.7**	77.2	81.2	81.2	**79.9**	**79.8**
7.	WSM141	507	82.5	83.7	75.2	81.8	**80.8**	75.8	80.7	79.6	**78.7**	**79.9**
8.	DBW463	508	84.4	81.0	76.8	79.8	**80.5**	64.2	77.0	79.8	**73.7**	**77.6**
9.	MACS6868	509	84.3	76.1	74.4	79.6	**78.6**	76.4	78.8	80.6	**78.6**	**78.6**
10.	GW562	510	82.4	81.5	74.1	79.6	**79.4**	79.3	80.1	79.8	**79.7**	**79.5**
11.	MP3599	511	84.5	83.9	77.1	81.9	**81.8**	76.4	79.6	80.5	**78.8**	**80.6**
12.	NIAW4621	512	81.8	82.5	75.6	78.9	**79.7**	78.6	81.0	79.4	**79.6**	**79.7**
13.	CG1061	513	84.9	84.3	77.8	82.5	**82.4**	79.2	79.8	84.7	**81.2**	**81.9**
14.	NIAW4624	514	82.7	82.0	75.5	80.0	**80.0**	78.3	81.5	80.8	**80.2**	**80.1**
15.	LOK83	515	81.8	82.8	76.6	82.1	**80.8**	71.1	74.7	80.7	**75.5**	**78.5**
16.	HI1698	516	83.4	82.9	77.9	81.1	**81.3**	81.8	83.4	82.6	**82.6**	**81.9**
17.	HI1696	517	83.4	81.0	74.2	79.6	**79.6**	75.6	81.8	82.2	**79.9**	**79.7**
18.	MP3598	518	81.1	81.5	74.6	79.3	**79.1**	58.5	77.5	81.1	**72.4**	**76.2**
19.	HI1699	519	85.1	84.4	77.6	80.1	**81.8**	77.3	82.4	82.8	**80.8**	**81.4**
20.	HI1633 (C)	520	85.5	75.6	76.2	81.2	**79.6**	78.6	80.4	80.9	**80.0**	**79.7**
21.	UAS3033	521	77.8	82.5	71.3	77.4	**77.3**	73.1	75.7	77.7	**75.5**	**76.5**
22.	UAS3032	522	81.2	80.8	72.4	80.4	**78.7**	55.8	71.5	79.6	**69.0**	**74.5**
23.	MACS6854	523	81.5	82.1	75.0	79.2	**79.5**	79.1	80.3	79.1	**79.5**	**79.5**
24.	PBW952	524	79.5	78.8	75.6	80.3	**78.6**	77.4	76.8	79.7	**78.0**	**78.3**
25.	MP1402	525	80.2	80.2	69.4	78.6	**77.1**	60.7	74.9	79.2	**71.6**	**74.7**
		Mean	**82.6**	**81.5**	**75.0**	**80.4**	**79.9**	**73.7**	**79.1**	**80.7**	**77.8**	**79.0**

Table 104: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes in NIVT 3B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Indore	Vijapur	P.kheda	Junagarh	Mean	Dharwad	Niphad	Pune	Mean	
1.	HD2864 (C)	501	12.3	12.4	9.7	11.9	**11.6**	11.5	11.9	10.3	**11.2**	**11.4**
2.	DBW464	502	12.4	12.1	10.8	12.4	**11.9**	8.8	12.3	11.7	**10.9**	**11.5**
3.	HD2932 (C)	503	11.6	12.0	11.2	12.6	**11.9**	8.2	11.4	10.6	**10.0**	**11.1**
4.	HI1697	504	12.2	12.9	10.0	10.7	**11.4**	12.1	12.4	11.2	**11.9**	**11.6**
5.	WH1338	505	11.5	11.4	10.9	12.8	**11.6**	12.1	12.3	12.4	**12.3**	**11.9**
6.	GW567	506	11.2	10.5	10.6	11.4	**10.9**	7.6	12.3	11.1	**10.3**	**10.6**
7.	WSM141	507	11.1	10.1	10.8	10.0	**10.5**	9.8	11.2	12.1	**11.0**	**10.7**
8.	DBW463	508	9.7	11.9	10.0	13.0	**11.1**	8.1	12.8	11.8	**10.9**	**11.0**
9.	MACS6868	509	11.7	11.3	10.9	9.1	**10.7**	12.1	12.7	11.4	**12.0**	**11.3**
10.	GW562	510	12.6	11.7	11.9	8.7	**11.2**	8.2	9.6	12.9	**10.2**	**10.8**
11.	MP3599	511	11.0	11.0	11.5	12.6	**11.5**	7.0	11.2	11.6	**9.9**	**10.8**
12.	NIAW4621	512	10.1	10.7	12.0	12.7	**11.4**	12.6	11.3	11.1	**11.7**	**11.5**
13.	CG1061	513	12.3	12.0	11.6	12.1	**12.0**	10.9	12.3	11.7	**11.6**	**11.8**
14.	NIAW4624	514	12.8	9.2	12.2	11.9	**11.6**	12.2	11.4	11.4	**11.7**	**11.6**
15.	LOK83	515	12.9	12.9	10.5	11.5	**12.0**	12.5	11.3	11.3	**11.7**	**11.8**
16.	HI1698	516	9.6	12.8	12.8	12.5	**11.9**	12.8	12.4	11.2	**12.1**	**12.0**
17.	HI1696	517	10.2	12.0	10.2	11.8	**11.1**	11.7	12.1	11.3	**11.7**	**11.3**
18.	MP3598	518	9.1	12.9	9.8	9.7	**10.4**	10.7	11.0	11.0	**10.9**	**10.6**
19.	HI1699	519	11.4	10.3	11.1	11.6	**11.1**	12.3	11.6	12.4	**12.1**	**11.5**
20.	HI1633 (C)	520	10.8	12.9	10.2	13.3	**11.8**	12.0	13.0	11.5	**12.2**	**12.0**
21.	UAS3033	521	11.8	12.7	9.4	12.1	**11.5**	12.9	11.9	11.5	**12.1**	**11.8**
22.	UAS3032	522	12.5	12.0	12.1	11.3	**12.0**	9.3	11.2	11.0	**10.5**	**11.3**
23.	MACS6854	523	11.1	11.9	10.8	12.5	**11.6**	12.7	11.5	13.0	**12.4**	**11.9**
24.	PBW952	524	12.0	11.8	11.9	12.4	**12.0**	10.0	10.9	10.9	**10.6**	**11.4**
25.	MP1402	525	10.4	11.2	11.8	11.9	**11.3**	11.2	12.1	11.7	**11.7**	**11.5**
		Mean	**11.4**	**11.7**	**11.0**	**11.7**	**11.4**	**10.8**	**11.8**	**11.5**	**11.4**	**11.4**

Table 105: Sedimentation value (ml) of *T. aestivum* genotypes in NIVT 3B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Indore	Vijapur	P.kheda	Junagarh	Mean	Dharwad	Niphad	Pune	Mean	
1.	HD2864 (C)	501	45.0	45.0	42.0	51.5	**45.9**	56.0	47.0	39.0	**47.3**	**46.5**
2.	DBW464	502	46.0	43.0	40.5	46.5	**44.0**	44.5	50.5	51.5	**48.8**	**46.1**
3.	HD2932 (C)	503	50.5	50.5	52.0	51.5	**51.1**	51.0	57.5	51.5	**53.3**	**52.1**
4.	HI1697	504	43.0	43.5	47.0	46.0	**44.9**	47.5	46.0	44.0	**45.8**	**45.3**
5.	WH1338	505	45.5	48.0	49.5	47.0	**47.5**	52.5	51.0	46.0	**49.8**	**48.5**
6.	GW567	506	37.0	40.0	54.5	43.5	**43.8**	45.5	47.0	39.0	**43.8**	**43.8**
7.	WSM141	507	40.0	40.0	40.0	38.5	**39.6**	44.5	51.0	38.0	**44.5**	**41.7**
8.	DBW463	508	56.5	58.5	55.5	60.5	**57.8**	65.0	57.0	59.5	**60.5**	**58.9**
9.	MACS6868	509	44.5	47.5	48.5	47.0	**46.9**	55.5	54.5	51.0	**53.7**	**49.8**
10.	GW562	510	36.5	40.0	45.0	39.5	**40.3**	48.0	36.0	41.0	**41.7**	**40.9**
11.	MP3599	511	36.5	42.0	40.0	43.5	**40.5**	46.5	40.0	36.0	**40.8**	**40.6**
12.	NIAW4621	512	52.5	56.5	56.0	49.5	**53.6**	66.0	55.5	46.0	**55.8**	**54.6**
13.	CG1061	513	45.5	46.0	48.0	42.0	**45.4**	54.5	45.5	43.0	**47.7**	**46.4**
14.	NIAW4624	514	63.5	56.5	65.5	55.5	**60.3**	57.5	51.0	48.5	**52.3**	**56.9**
15.	LOK83	515	46.5	46.5	52.0	47.0	**48.0**	45.5	51.0	44.5	**47.0**	**47.6**
16.	HI1698	516	43.0	41.5	47.0	41.0	**43.1**	45.5	43.5	40.0	**43.0**	**43.1**
17.	HI1696	517	42.0	47.5	47.0	46.0	**45.6**	47.0	43.0	43.5	**44.5**	**45.1**
18.	MP3598	518	48.0	48.5	47.0	50.0	**48.4**	51.0	50.0	50.0	**50.3**	**49.2**
19.	HI1699	519	43.5	43.5	50.5	47.5	**46.3**	42.5	47.5	41.5	**43.8**	**45.2**
20.	HI1633 (C)	520	45.5	45.0	50.5	49.0	**47.5**	48.0	57.0	44.0	**49.7**	**48.4**
21.	UAS3033	521	56.0	50.0	62.0	51.5	**54.9**	63.5	56.0	55.5	**58.3**	**56.4**
22.	UAS3032	522	49.5	40.5	54.0	52.5	**49.1**	44.5	46.0	51.5	**47.3**	**48.4**
23.	MACS6854	523	42.5	47.5	43.5	36.0	**42.4**	42.0	51.0	39.0	**44.0**	**43.1**
24.	PBW952	524	56.5	54.0	65.0	52.0	**56.9**	54.0	63.0	50.5	**55.8**	**56.4**
25.	MP1402	525	53.5	55.0	63.0	45.5	**54.3**	47.0	58.5	48.0	**51.2**	**52.9**
		Mean	**46.8**	**47.1**	**50.6**	**47.2**	**47.9**	**50.6**	**50.2**	**45.7**	**48.8**	**48.3**

Table 106: Phenol test of *T. aestivum* genotypes in NIVT 3B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Indore	Vijapur	P.kheda	Junagarh	Mean	Dharwad	Niphad	Pune	Mean	
1.	HD2864 (C)	501	3.5	3.5	4.0	4.0	**3.8**	3.0	3.5	4.3	**3.6**	**3.7**
2.	DBW464	502	7.5	7.5	8.0	6.5	**7.4**	6.5	8.5	7.5	**7.5**	**7.4**
3.	HD2932 (C)	503	3.8	4.5	3.5	4.0	**3.9**	4.3	3.8	4.0	**4.0**	**4.0**
4.	HI1697	504	4.0	5.0	4.3	4.0	**4.3**	3.5	3.8	4.3	**3.8**	**4.1**
5.	WH1338	505	4.3	5.5	4.3	4.0	**4.5**	3.5	4.0	3.5	**3.7**	**4.1**
6.	GW567	506	7.5	8.0	8.0	8.5	**8.0**	7.5	7.0	7.3	**7.3**	**7.7**
7.	WSM141	507	4.8	6.0	6.0	6.0	**5.7**	4.5	5.3	7.8	**5.8**	**5.8**
8.	DBW463	508	8.0	9.0	9.0	8.5	**8.6**	8.0	9.0	9.0	**8.7**	**8.6**
9.	MACS6868	509	7.0	8.5	7.0	7.0	**7.4**	8.0	8.5	8.0	**8.2**	**7.7**
10.	GW562	510	7.5	8.5	8.3	5.5	**7.4**	5.8	8.5	8.5	**7.6**	**7.5**
11.	MP3599	511	3.8	5.0	3.5	7.0	**4.8**	3.8	4.8	3.8	**4.1**	**4.5**
12.	NIAW4621	512	8.0	8.0	9.0	8.0	**8.3**	8.0	8.5	8.5	**8.3**	**8.3**
13.	CG1061	513	4.0	4.5	4.8	4.0	**4.3**	4.3	5.3	4.0	**4.5**	**4.4**
14.	NIAW4624	514	7.3	8.5	8.0	7.5	**7.8**	7.0	8.5	7.3	**7.6**	**7.7**
15.	LOK83	515	7.5	7.5	8.5	7.5	**7.8**	8.0	7.5	7.8	**7.8**	**7.8**
16.	HI1698	516	6.0	6.0	6.5	6.0	**6.1**	5.5	6.3	7.0	**6.3**	**6.2**
17.	HI1696	517	6.3	7.5	8.0	7.5	**7.3**	7.0	7.8	7.0	**7.3**	**7.3**
18.	MP3598	518	7.0	7.5	8.5	7.5	**7.6**	7.0	8.0	7.5	**7.5**	**7.6**
19.	HI1699	519	3.5	5.0	5.0	3.0	**4.1**	7.0	3.8	4.0	**4.9**	**4.5**
20.	HI1633 (C)	520	7.5	8.0	8.5	8.0	**8.0**	7.5	8.0	8.0	**7.8**	**7.9**
21.	UAS3033	521	8.5	8.5	4.5	8.5	**7.5**	8.0	8.5	8.5	**8.3**	**7.9**
22.	UAS3032	522	7.5	7.5	8.5	6.5	**7.5**	6.0	8.0	7.3	**7.1**	**7.3**
23.	MACS6854	523	5.5	5.0	6.5	6.0	**5.8**	5.0	4.8	4.8	**4.8**	**5.4**
24.	PBW952	524	8.5	7.0	9.0	4.5	**7.3**	7.5	9.0	8.5	**8.3**	**7.7**
25.	MP1402	525	3.8	3.0	4.5	3.5	**3.7**	4.3	5.3	5.0	**4.8**	**4.2**
		Mean	**6.1**	**6.6**	**6.6**	**6.1**	**6.4**	**6.0**	**6.6**	**6.5**	**6.4**	**6.4**

Table 107: Grain appearance score (Max. 10) of *T. durum* and *T. dicoccum* genotypes in NIVT 4

S. No.	Entries	Code	NWPZ					
			Ludhiana	Pantnagar	Delhi	Hisar	Karnal	Mean
1.	MACS4146	601	5.8	6.4	6.2	5.6	5.8	**6.0**
2.	HI8854	602	5.8	6.2	6.4	5.8	5.8	**6.0**
3.	NIDW1557	603	5.6	5.8	6.2	5.6	5.6	**5.8**
4.	DDK1067(Dic)	604	4.8	5.2	5.0	5.0	4.8	**5.0**
5.	UAS485	605	5.0	5.6	6.0	5.6	5.4	**5.5**
6.	PDW368	606	6.0	6.6	6.2	6.0	6.4	**6.2**
7.	MACS5064(Dic)	607	4.8	5.2	5.4	4.8	4.8	**5.0**
8.	HI8855	608	5.2	6.4	5.8	6.2	5.6	**5.8**
9.	MACS3949 (C)	609	5.6	6.4	6.4	6.4	6.4	**6.2**
10.	GW1369	610	5.4	6.0	6.0	6.4	6.6	**6.1**
11.	AKDW5520	611	5.4	5.8	5.8	6.2	5.8	**5.8**
12.	GW1370	612	5.6	5.6	5.6	6.2	5.4	**5.7**
13.	PDW366	613	6.2	6.6	6.4	6.6	6.8	**6.5**
14.	PDW314 (C)	614	5.4	6.2	6.2	6.2	6.0	**6.0**
15.	MACS5065(Dic)	615	5.0	5.2	5.6	5.2	4.8	**5.2**
16.	PDW367	616	5.8	6.4	6.8	6.2	6.4	**6.3**
17.	MPO1403	617	5.2	5.6	5.6	5.6	5.2	**5.4**
18.	MPO1404	618	5.6	6.2	6.2	5.8	5.8	**5.9**
19.	WHD969	619	5.8	5.8	6.2	6.2	5.8	**6.0**
20.	NIDW1542	620	5.2	5.6	6.0	6.0	5.8	**5.7**
21.	DDW66	621	5.4	5.4	6.0	5.8	5.2	**5.6**
22.	HI8853	622	5.8	6.4	6.4	6.2	6.4	**6.2**
23.	HW5306 (Dic)	623	4.8	5.2	5.4	5.4	4.8	**5.1**
24.	HI8737 (C)	624	6.0	6.0	6.4	7.0	6.6	**6.4**
25.	UAS486	625	6.2	5.8	6.8	6.6	6.2	**6.3**
26.	DDK1029 (Dic. C)	626	4.8	5.2	5.2	4.8	4.2	**4.8**
27.	HI8713 (C)	627	5.4	5.6	6.2	6.0	5.4	**5.7**
28.	GW1371	628	6.0	6.4	6.6	6.6	6.4	**6.4**
29.	HI8858	629	6.0	5.6	6.4	6.4	5.8	**6.0**
30.	DDK 1066(Dic)	630	5.0	5.2	5.2	5.4	5.0	**5.2**
31.	HW5305 (Dic)	631	4.8	5.4	5.2	5.0	4.8	**5.0**
32.	PBN1841	632	6.2	6.0	6.8	6.8	5.6	**6.3**
33.	MACS4147	633	6.0	6.2	6.4	6.0	6.2	**6.2**
34.	DDW67	634	6.0	6.2	6.6	6.0	5.8	**6.1**
35.	PWU8	635	6.0	6.0	6.2	6.2	5.6	**6.0**
36.	DDW65	636	6.4	6.8	6.6	6.6	6.4	**6.6**
		Mean	**5.6**	**5.9**	**6.1**	**6.0**	**5.7**	**5.8**

Continued Table 107 (NIVT 4)

S. No.	Entries	Code	CZ					PZ				Overall Mean
			P.kheda	Indore	Junagarh	Vijapur	Mean	Pune	Dharwad	Niphad	Mean	
1.	MACS4146	601	4.0	7.0	5.0	5.0	**5.3**	5.0	5.0	8.0	**6.0**	**5.7**
2.	HI8854	602	5.0	7.0	5.0	6.0	**5.8**	6.0	6.0	6.0	**6.0**	**5.9**
3.	NIDW1557	603	5.0	6.0	5.0	5.0	**5.3**	5.0	5.0	7.0	**5.7**	**5.6**
4.	DDK1067(Dic)	604	5.0	7.0	5.0	6.0	**5.8**	6.0	4.0	6.0	**5.3**	**5.3**
5.	UAS485	605	5.0	6.0	5.0	5.0	**5.3**	5.0	4.0	6.0	**5.0**	**5.3**
6.	PDW368	606	6.0	7.0	5.0	5.0	**5.8**	5.0	5.0	7.0	**5.7**	**5.9**
7.	MACS5064(Dic)	607	5.0	7.0	5.0	6.0	**5.8**	5.0	5.0	6.0	**5.3**	**5.3**
8.	HI8855	608	5.0	7.0	6.0	5.0	**5.8**	5.0	5.0	7.0	**5.7**	**5.8**
9.	MACS3949 (C)	609	6.0	7.0	7.0	6.0	**6.5**	5.0	5.0	7.0	**5.7**	**6.2**
10.	GW1369	610	6.0	7.0	7.0	6.0	**6.5**	6.0	6.0	7.0	**6.3**	**6.3**
11.	AKDW5520	611	5.0	7.0	6.0	6.0	**6.0**	5.0	5.0	7.0	**5.7**	**5.8**
12.	GW1370	612	5.0	7.0	6.0	5.0	**5.8**	6.0	5.0	7.0	**6.0**	**5.8**
13.	PDW366	613	6.0	7.0	6.0	6.0	**6.3**	5.0	4.0	7.0	**5.3**	**6.1**
14.	PDW314 (C)	614	6.0	7.0	6.0	5.0	**6.0**	5.0	4.0	7.0	**5.3**	**5.8**
15.	MACS5065(Dic)	615	6.0	7.0	6.0	5.0	**6.0**	6.0	4.0	6.0	**5.3**	**5.5**
16.	PDW367	616	5.0	7.0	7.0	6.0	**6.3**	6.0	4.0	8.0	**6.0**	**6.2**
17.	MPO1403	617	5.0	7.0	5.0	5.0	**5.5**	5.0	4.0	6.0	**5.0**	**5.4**
18.	MPO1404	618	4.0	7.0	4.0	5.0	**5.0**	5.0	4.0	6.0	**5.0**	**5.4**
19.	WHD969	619	6.0	7.0	5.0	6.0	**6.0**	6.0	5.0	7.0	**6.0**	**6.0**
20.	NIDW1542	620	5.0	7.0	6.0	5.0	**5.8**	5.0	4.0	6.0	**5.0**	**5.6**
21.	DDW66	621	4.0	7.0	4.0	4.0	**4.8**	5.0	4.0	6.0	**5.0**	**5.2**
22.	HI8853	622	4.0	7.0	5.0	6.0	**5.5**	6.0	5.0	7.0	**6.0**	**5.9**
23.	HW5306 (Dic)	623	5.0	7.0	5.0	6.0	**5.8**	6.0	4.0	6.0	**5.3**	**5.4**
24.	HI8737 (C)	624	5.0	7.0	7.0	6.0	**6.3**	6.0	5.0	6.0	**5.7**	**6.2**
25.	UAS486	625	5.0	7.0	6.0	6.0	**6.0**	5.0	5.0	7.0	**5.7**	**6.1**
26.	DDK1029 (Dic. C)	626	5.0	7.0	5.0	6.0	**5.8**	6.0	5.0	6.0	**5.7**	**5.4**
27.	HI8713 (C)	627	6.0	6.0	5.0	5.0	**5.5**	5.0	5.0	7.0	**5.7**	**5.6**
28.	GW1371	628	5.0	6.0	5.0	6.0	**5.5**	5.0	5.0	7.0	**5.7**	**5.9**
29.	HI8858	629	6.0	7.0	6.0	5.0	**6.0**	6.0	5.0	7.0	**6.0**	**6.0**
30.	DDK 1066(Dic)	630	5.0	7.0	5.0	6.0	**5.8**	6.0	4.0	7.0	**5.7**	**5.5**
31.	HW5305 (Dic)	631	5.0	7.0	5.0	6.0	**5.8**	6.0	4.0	6.0	**5.3**	**5.4**
32.	PBN1841	632	5.0	7.0	6.0	6.0	**6.0**	6.0	5.0	7.0	**6.0**	**6.1**
33.	MACS4147	633	6.0	7.0	6.0	6.0	**6.3**	5.0	5.0	7.0	**5.7**	**6.1**
34.	DDW67	634	5.0	7.0	6.0	6.0	**6.0**	6.0	5.0	7.0	**6.0**	**6.1**
35.	PWU8	635	5.0	7.0	5.0	6.0	**5.8**	5.0	4.0	7.0	**5.3**	**5.8**
36.	DDW65	636	6.0	7.0	6.0	6.0	**6.3**	6.0	5.0	7.0	**6.0**	**6.3**
		Mean	**5.2**	**6.9**	**5.5**	**5.6**	**5.8**	**5.5**	**4.7**	**6.7**	**5.6**	**5.8**

Table 108: Hectoliter weight (Kg/hl) of *T. durum* and *T. dicoccum* genotypes in NIVT 4

S. No.	Entries	Code	NWPZ					
			Ludhiana	Pantnagar	Delhi	Hisar	Karnal	Mean
1.	MACS4146	601	78.7	82.7	83.0	80.0	80.2	**80.9**
2.	HI8854	602	77.8	80.4	81.5	79.6	80.6	**80.0**
3.	NIDW1557	603	78.0	80.3	82.4	79.9	81.7	**80.5**
4.	DDK1067(Dic)	604	72.2	75.3	73.1	71.3	73.9	**73.2**
5.	UAS485	605	78.2	82.5	82.6	78.8	81.0	**80.6**
6.	PDW368	606	80.7	82.7	83.6	82.2	83.2	**82.5**
7.	MACS5064(Dic)	607	70.7	75.5	75.5	71.0	74.4	**73.4**
8.	HI8855	608	73.6	81.8	81.1	79.3	78.7	**78.9**
9.	MACS3949 (C)	609	81.4	83.5	84.3	82.6	83.0	**83.0**
10.	GW1369	610	76.8	76.6	78.3	76.6	79.5	**77.6**
11.	AKDW5520	611	76.7	80.7	81.2	77.4	79.9	**79.2**
12.	GW1370	612	75.8	78.9	77.4	78.4	78.5	**77.8**
13.	PDW366	613	82.2	82.3	82.8	83.0	82.6	**82.6**
14.	PDW314 (C)	614	78.9	81.5	82.0	80.8	81.3	**80.9**
15.	MACS5065(Dic)	615	71.9	75.4	75.8	75.3	71.6	**74.0**
16.	PDW367	616	79.5	82.6	82.7	80.6	82.1	**81.5**
17.	MPO1403	617	78.7	83.6	81.6	83.2	82.1	**81.8**
18.	MPO1404	618	76.6	78.8	80.2	78.6	79.4	**78.7**
19.	WHD969	619	78.2	80.3	81.3	79.0	80.4	**79.8**
20.	NIDW1542	620	79.0	82.6	83.0	81.2	79.9	**81.1**
21.	DDW66	621	73.9	77.9	80.9	82.0	78.1	**78.6**
22.	HI8853	622	78.6	81.7	80.6	80.1	81.3	**80.5**
23.	HW5306 (Dic)	623	70.2	74.7	75.6	75.1	74.0	**73.9**
24.	HI8737 (C)	624	79.7	82.4	83.8	80.7	82.4	**81.8**
25.	UAS486	625	77.0	80.4	83.1	80.6	81.7	**80.6**
26.	DDK1029 (Dic. C)	626	68.8	74.7	71.1	68.4	69.1	**70.4**
27.	HI8713 (C)	627	77.0	80.6	80.7	80.8	80.7	**80.0**
28.	GW1371	628	78.4	81.8	81.9	81.1	81.5	**80.9**
29.	HI8858	629	77.8	82.6	82.2	80.7	80.9	**80.8**
30.	DDK 1066(Dic)	630	72.1	74.8	76.1	77.2	74.0	**74.8**
31.	HW5305 (Dic)	631	67.5	74.5	72.7	70.4	72.6	**71.5**
32.	PBN1841	632	78.3	81.0	82.7	80.1	78.8	**80.2**
33.	MACS4147	633	79.0	82.3	82.4	79.7	80.4	**80.8**
34.	DDW67	634	80.3	82.6	83.9	80.4	82.4	**81.9**
35.	PWU8	635	80.2	82.6	83.7	81.9	81.3	**81.9**
36.	DDW65	636	78.3	82.5	83.5	81.1	82.1	**81.5**
		Mean	**76.7**	**80.1**	**80.5**	**78.9**	**79.3**	**79.1**

Continued Table 108 (NIVT 4)

S. No.	Entries	Code	CZ					PZ				Overall Mean
			P.kheda	Indore	Junagarh	Vijapur	Mean	Pune	Dharwad	Niphad	Mean	
1.	MACS4146	601	78.9	82.9	80.2	80.6	**80.7**	77.0	75.0	83.0	**78.3**	**80.2**
2.	HI8854	602	77.8	81.9	80.1	79.3	**79.8**	80.3	76.3	80.9	**79.2**	**79.7**
3.	NIDW1557	603	79.1	82.6	80.1	79.0	**80.2**	79.8	72.8	82.2	**78.3**	**79.8**
4.	DDK1067(Dic)	604	75.5	74.1	71.8	71.8	**73.3**	75.5	53.7	79.0	**69.4**	**72.3**
5.	UAS485	605	79.2	81.8	80.7	80.9	**80.6**	78.9	73.1	81.7	**77.9**	**79.9**
6.	PDW368	606	79.8	83.5	82.7	81.1	**81.8**	77.8	76.4	82.0	**78.7**	**81.3**
7.	MACS5064(Dic)	607	76.9	74.7	70.3	71.9	**73.5**	73.6	67.1	78.5	**73.1**	**73.3**
8.	HI8855	608	77.1	82.5	79.9	79.9	**79.8**	77.7	73.4	82.2	**77.8**	**78.9**
9.	MACS3949 (C)	609	79.6	82.2	81.7	81.4	**81.2**	76.1	72.7	80.5	**76.4**	**80.8**
10.	GW1369	610	76.1	77.5	78.8	77.1	**77.4**	73.2	72.0	78.4	**74.5**	**76.7**
11.	AKDW5520	611	77.0	78.2	76.5	80.5	**78.0**	77.3	71.3	81.3	**76.6**	**78.2**
12.	GW1370	612	77.7	79.7	79.7	79.2	**79.1**	76.0	75.9	81.6	**77.8**	**78.2**
13.	PDW366	613	79.1	84.8	80.1	80.8	**81.2**	78.8	71.8	82.0	**77.5**	**80.9**
14.	PDW314 (C)	614	81.8	82.0	82.8	81.4	**82.0**	78.8	54.9	82.3	**72.0**	**79.0**
15.	MACS5065(Dic)	615	78.3	71.4	70.3	74.0	**73.5**	74.0	61.1	79.8	**71.6**	**73.2**
16.	PDW367	616	78.5	84.5	81.3	82.2	**81.6**	76.4	71.4	84.0	**77.3**	**80.5**
17.	MPO1403	617	80.1	83.7	80.6	71.1	**78.9**	81.0	70.5	83.6	**78.4**	**80.0**
18.	MPO1404	618	76.3	81.3	75.1	77.5	**77.5**	75.0	68.6	83.1	**75.6**	**77.5**
19.	WHD969	619	78.6	83.8	80.7	80.8	**81.0**	78.9	76.2	81.9	**79.0**	**80.0**
20.	NIDW1542	620	78.7	83.0	79.8	79.3	**80.2**	76.4	71.0	82.5	**76.6**	**79.7**
21.	DDW66	621	73.4	79.9	77.5	76.6	**76.9**	76.6	68.4	80.4	**75.1**	**77.1**
22.	HI8853	622	78.0	81.1	80.7	80.7	**80.1**	76.3	67.9	81.7	**75.3**	**79.1**
23.	HW5306 (Dic)	623	78.3	72.8	68.8	72.6	**73.1**	74.0	68.8	78.4	**73.7**	**73.6**
24.	HI8737 (C)	624	78.9	83.6	82.3	80.7	**81.4**	80.0	75.7	77.0	**77.6**	**80.6**
25.	UAS486	625	74.8	83.1	78.9	79.4	**79.1**	72.8	75.7	81.6	**76.7**	**79.1**
26.	DDK1029 (Dic. C)	626	74.6	71.6	62.7	69.6	**69.6**	73.3	60.9	78.5	**70.9**	**70.3**
27.	HI8713 (C)	627	78.2	84.5	78.2	81.2	**80.5**	77.8	75.3	76.2	**76.4**	**79.3**
28.	GW1371	628	77.9	81.1	81.5	81.3	**80.5**	77.6	75.2	81.1	**78.0**	**80.0**
29.	HI8858	629	78.5	82.1	79.2	82.3	**80.5**	78.0	75.8	81.4	**78.4**	**80.1**
30.	DDK 1066(Dic)	630	78.8	72.8	68.3	72.8	**73.2**	75.8	59.2	78.4	**71.1**	**73.4**
31.	HW5305 (Dic)	631	74.9	72.0	62.8	68.9	**69.6**	73.6	59.7	76.3	**69.9**	**70.5**
32.	PBN1841	632	78.9	82.8	80.0	80.5	**80.5**	78.3	77.4	81.4	**79.0**	**80.0**
33.	MACS4147	633	78.3	82.5	81.3	81.6	**80.9**	78.9	76.6	81.1	**78.9**	**80.3**
34.	DDW67	634	79.0	83.9	80.8	81.5	**81.3**	79.0	74.5	82.5	**78.7**	**80.9**
35.	PWU8	635	80.0	83.1	80.6	82.2	**81.5**	76.6	62.1	79.0	**72.6**	**79.4**
36.	DDW65	636	78.8	84.3	80.9	82.3	**81.6**	78.0	76.9	81.3	**78.7**	**80.8**
		Mean	**78.0**	**80.5**	**77.7**	**78.4**	**78.7**	**76.9**	**70.4**	**80.7**	**76.0**	**78.2**

Table 109: Protein content (%) at 12% moisture basis of *T. durum* and *T. dicoccum* genotypes in NIVT 4

S. No.	Entries	Code	NWPZ					
			Ludhiana	Pantnagar	Delhi	Hisar	Karnal	Mean
1.	MACS4146	601	9.8	9.3	10.2	7.6	12.0	**9.8**
2.	HI8854	602	8.8	8.6	9.5	8.5	8.8	**8.8**
3.	NIDW1557	603	10.9	8.5	10.5	7.7	8.8	**9.3**
4.	DDK1067(Dic)	604	8.0	9.7	11.4	7.4	9.0	**9.1**
5.	UAS485	605	10.3	10.3	10.9	8.9	9.8	**10.0**
6.	PDW368	606	9.9	9.3	10.4	8.0	10.2	**9.6**
7.	MACS5064(Dic)	607	12.0	9.9	11.7	8.2	8.9	**10.1**
8.	HI8855	608	8.7	9.2	8.7	7.7	9.6	**8.8**
9.	MACS3949 (C)	609	9.3	9.6	10.1	8.7	9.8	**9.5**
10.	GW1369	610	10.5	11.2	11.7	10.7	10.8	**11.0**
11.	AKDW5520	611	8.6	9.8	9.4	10.1	9.4	**9.4**
12.	GW1370	612	9.0	9.1	10.4	7.6	8.9	**9.0**
13.	PDW366	613	9.9	9.5	12.1	9.9	10.5	**10.4**
14.	PDW314 (C)	614	8.7	8.7	10.4	9.0	10.5	**9.5**
15.	MACS5065(Dic)	615	10.5	10.2	11.8	8.3	11.0	**10.4**
16.	PDW367	616	9.5	9.6	10.9	9.0	10.5	**9.9**
17.	MPO1403	617	10.2	9.9	11.7	8.2	9.9	**10.0**
18.	MPO1404	618	9.3	10.1	10.1	8.8	9.3	**9.5**
19.	WHD969	619	9.4	9.2	9.5	8.8	9.4	**9.3**
20.	NIDW1542	620	8.7	9.3	10.3	7.1	10.6	**9.2**
21.	DDW66	621	9.0	8.6	9.4	8.2	9.3	**8.9**
22.	HI8853	622	9.6	9.8	10.1	8.8	9.3	**9.5**
23.	HW5306 (Dic)	623	10.3	9.4	11.2	9.6	9.3	**9.9**
24.	HI8737 (C)	624	9.5	10.0	9.9	11.4	10.2	**10.2**
25.	UAS486	625	11.5	11.7	10.6	9.1	10.8	**10.7**
26.	DDK1029 (Dic. C)	626	10.4	9.7	12.5	12.2	12.6	**11.5**
27.	HI8713 (C)	627	8.1	8.6	10.6	9.0	10.0	**9.2**
28.	GW1371	628	10.0	9.8	10.9	9.5	9.4	**9.9**
29.	HI8858	629	9.5	11.0	10.1	9.7	9.5	**10.0**
30.	DDK 1066(Dic)	630	8.4	9.6	10.0	9.2	10.0	**9.4**
31.	HW5305 (Dic)	631	11.2	10.1	11.4	9.0	10.1	**10.3**
32.	PBN1841	632	9.8	9.1	10.5	10.0	12.0	**10.3**
33.	MACS4147	633	9.2	9.6	8.8	8.6	9.7	**9.2**
34.	DDW67	634	9.2	9.4	10.6	7.8	10.5	**9.5**
35.	PWU8	635	9.8	9.3	10.4	9.0	10.2	**9.8**
36.	DDW65	636	9.8	10.7	10.5	10.1	11.1	**10.4**
		Mean	**9.6**	**9.6**	**10.5**	**8.9**	**10.1**	**9.8**

Continued Table 109 (NIVT 4)

S. No.	Entries	Code	CZ					PZ				Overall Mean
			P.kheda	Indore	Junagarh	Vijapur	Mean	Pune	Dharwad	Niphad	Mean	
1.	MACS4146	601	10.7	10.7	12.2	9.6	**10.8**	11.0	12.8	11.3	**11.7**	**10.6**
2.	HI8854	602	10.3	11.6	11.5	10.6	**11.0**	11.0	12.2	11.2	**11.5**	**10.2**
3.	NIDW1557	603	10.0	10.8	11.9	10.1	**10.7**	11.4	12.9	10.7	**11.7**	**10.3**
4.	DDK1067(Dic)	604	9.9	11.0	12.6	10.8	**11.1**	11.2	12.7	10.2	**11.4**	**10.3**
5.	UAS485	605	10.6	11.9	12.2	10.4	**11.3**	12.2	13.3	10.9	**12.1**	**11.0**
6.	PDW368	606	11.0	11.9	12.0	9.4	**11.1**	11.7	13.0	11.7	**12.1**	**10.7**
7.	MACS5064(Dic)	607	10.4	12.7	13.6	10.3	**11.7**	12.8	14.4	10.9	**12.7**	**11.3**
8.	HI8855	608	11.0	11.3	11.8	9.4	**10.9**	11.4	11.9	10.4	**11.2**	**10.1**
9.	MACS3949 (C)	609	11.0	12.2	12.8	9.9	**11.5**	11.6	13.1	11.2	**12.0**	**10.8**
10.	GW1369	610	11.1	11.6	12.2	10.2	**11.3**	11.6	12.2	10.8	**11.5**	**11.2**
11.	AKDW5520	611	10.3	11.8	13.1	9.9	**11.3**	11.5	14.7	10.7	**12.3**	**10.8**
12.	GW1370	612	11.0	11.8	12.2	10.4	**11.3**	11.6	11.9	10.8	**11.5**	**10.4**
13.	PDW366	613	11.1	12.0	13.5	11.8	**12.1**	11.8	14.5	11.3	**12.5**	**11.5**
14.	PDW314 (C)	614	10.4	11.7	12.2	9.9	**11.1**	11.7	12.4	11.0	**11.7**	**10.6**
15.	MACS5065(Dic)	615	10.8	13.3	14.7	10.0	**12.2**	12.4	14.9	11.2	**12.8**	**11.6**
16.	PDW367	616	11.3	12.0	12.3	10.3	**11.5**	12.1	12.7	11.2	**12.0**	**10.9**
17.	MPO1403	617	11.0	11.5	12.5	10.3	**11.3**	11.0	12.6	10.5	**11.4**	**10.8**
18.	MPO1404	618	10.9	11.7	14.1	11.0	**11.9**	12.1	14.5	11.2	**12.6**	**11.1**
19.	WHD969	619	10.6	11.6	12.1	10.7	**11.3**	11.1	11.9	10.3	**11.1**	**10.4**
20.	NIDW1542	620	10.5	11.9	12.5	10.2	**11.3**	11.6	14.3	11.2	**12.4**	**10.7**
21.	DDW66	621	10.7	11.5	12.2	9.9	**11.1**	11.2	14.6	10.6	**12.1**	**10.4**
22.	HI8853	622	10.3	12.8	12.4	10.1	**11.4**	12.1	12.6	10.8	**11.8**	**10.7**
23.	HW5306 (Dic)	623	10.1	13.1	15.0	11.2	**12.3**	12.4	14.5	11.1	**12.7**	**11.4**
24.	HI8737 (C)	624	10.9	12.0	12.0	10.6	**11.4**	11.1	11.9	11.2	**11.4**	**10.9**
25.	UAS486	625	11.7	12.0	12.1	10.8	**11.6**	12.3	12.7	11.4	**12.1**	**11.4**
26.	DDK1029 (Dic. C)	626	11.5	12.7	14.7	11.5	**12.6**	12.7	14.5	12.2	**13.1**	**12.3**
27.	HI8713 (C)	627	10.3	11.5	12.6	10.1	**11.1**	10.6	11.9	10.7	**11.0**	**10.3**
28.	GW1371	628	11.5	11.3	11.9	10.8	**11.4**	11.4	12.0	11.0	**11.5**	**10.8**
29.	HI8858	629	10.9	11.8	12.2	10.5	**11.4**	11.2	12.1	10.2	**11.2**	**10.7**
30.	DDK 1066(Dic)	630	10.4	12.0	13.9	10.3	**11.7**	11.8	13.3	10.5	**11.9**	**10.8**
31.	HW5305 (Dic)	631	10.8	12.5	14.0	10.7	**12.0**	11.9	14.9	10.4	**12.4**	**11.4**
32.	PBN1841	632	11.0	12.0	12.3	10.6	**11.5**	11.6	13.2	11.3	**12.1**	**11.1**
33.	MACS4147	633	10.0	11.4	11.4	10.5	**10.8**	11.0	11.8	10.2	**11.0**	**10.2**
34.	DDW67	634	10.9	11.9	12.4	10.8	**11.5**	11.5	12.6	11.3	**11.8**	**10.7**
35.	PWU8	635	10.4	12.0	12.6	10.1	**11.3**	11.9	10.8	10.7	**11.1**	**10.6**
36.	DDW65	636	12.3	12.2	12.8	11.9	**12.3**	12.6	13.0	11.8	**12.5**	**11.6**
		Mean	**10.8**	**11.9**	**12.7**	**10.4**	**11.4**	**11.7**	**13.0**	**10.9**	**11.9**	**10.8**

Table 110: Sedimentation value (ml) of *T. durum* and *T. dicoccum* genotypes in NIVT 4

S. No.	Entries	Code	NWPZ					
			Ludhiana	Pantnagar	Delhi	Hisar	Karnal	Mean
1.	MACS4146	601	32.5	32.9	33.3	29.9	42.5	**34.2**
2.	HI8854	602	32.0	26.4	30.7	27.7	30.7	**29.5**
3.	NIDW1557	603	44.2	33.8	40.3	36.0	38.6	**38.6**
4.	DDK1067(Dic)	604	23.8	24.6	24.6	24.2	23.8	**24.2**
5.	UAS485	605	36.4	34.6	35.5	32.9	36.4	**35.2**
6.	PDW368	606	38.6	31.2	36.0	32.5	38.6	**35.3**
7.	MACS5064(Dic)	607	28.1	23.8	28.1	23.8	23.8	**25.5**
8.	HI8855	608	33.3	26.8	27.2	30.3	31.6	**29.9**
9.	MACS3949 (C)	609	40.7	31.6	38.1	34.2	42.1	**37.4**
10.	GW1369	610	36.4	25.9	30.7	29.0	29.9	**30.4**
11.	AKDW5520	611	29.9	27.2	27.7	29.9	30.3	**29.0**
12.	GW1370	612	35.1	32.5	36.4	31.2	38.1	**34.6**
13.	PDW366	613	24.6	24.6	25.9	29.0	31.2	**27.1**
14.	PDW314 (C)	614	33.8	30.7	39.4	33.8	37.7	**35.1**
15.	MACS5065(Dic)	615	24.6	25.1	27.2	23.3	31.6	**26.4**
16.	PDW367	616	24.6	36.4	47.3	36.4	46.9	**38.3**
17.	MPO1403	617	31.2	29.9	36.4	32.5	35.1	**33.0**
18.	MPO1404	618	39.4	38.6	41.2	40.3	44.2	**40.7**
19.	WHD969	619	34.2	30.7	33.3	32.5	39.9	**34.1**
20.	NIDW1542	620	32.0	31.2	39.4	34.2	35.1	**34.4**
21.	DDW66	621	34.2	31.6	36.4	27.7	36.0	**33.2**
22.	HI8853	622	34.2	34.6	38.6	34.6	36.8	**35.8**
23.	HW5306 (Dic)	623	23.3	22.9	24.6	26.4	25.5	**24.5**
24.	HI8737 (C)	624	36.8	25.1	32.5	32.5	36.8	**32.7**
25.	UAS486	625	31.6	26.4	26.8	26.8	31.2	**28.5**
26.	DDK1029 (Dic. C)	626	21.6	22.0	21.1	23.8	23.8	**22.4**
27.	HI8713 (C)	627	25.1	23.3	29.9	26.4	33.3	**27.6**
28.	GW1371	628	26.4	26.8	25.5	25.9	25.1	**25.9**
29.	HI8858	629	26.8	27.7	31.6	28.1	29.9	**28.8**
30.	DDK 1066(Dic)	630	22.4	24.6	24.6	27.2	27.7	**25.3**
31.	HW5305 (Dic)	631	23.3	24.6	24.6	23.8	23.8	**24.0**
32.	PBN1841	632	27.2	26.8	24.6	26.4	28.5	**26.7**
33.	MACS4147	633	34.2	30.7	29.9	27.7	38.6	**32.2**
34.	DDW67	634	38.6	33.3	36.8	32.0	40.3	**36.2**
35.	PWU8	635	32.9	29.9	36.0	32.0	37.3	**33.6**
36.	DDW65	636	38.6	30.7	36.4	33.8	38.6	**35.6**
		Mean	**31.5**	**28.9**	**32.2**	**30.0**	**33.9**	**31.3**

Continued Table 110 (NIVT 4)

S. No.	Entries	Code	CZ					PZ				Overall Mean
			P.kheda	Indore	Junagarh	Vijapur	Mean	Pune	Dharwad	Niphad	Mean	
1.	MACS4146	601	39.0	45.0	36.0	35.0	**38.8**	36.0	48.0	32.0	**38.7**	**36.8**
2.	HI8854	602	35.0	43.0	34.0	39.0	**37.8**	32.0	43.0	29.0	**34.7**	**33.5**
3.	NIDW1557	603	44.0	53.0	44.0	41.0	**45.5**	43.0	51.0	43.0	**45.7**	**42.7**
4.	DDK1067(Dic)	604	27.0	28.0	31.0	25.0	**27.8**	25.0	30.0	26.0	**27.0**	**26.1**
5.	UAS485	605	44.0	53.0	42.0	41.0	**45.0**	41.0	49.0	45.0	**45.0**	**40.9**
6.	PDW368	606	38.0	50.0	37.0	39.0	**41.0**	35.0	49.0	38.0	**40.7**	**38.6**
7.	MACS5064(Dic)	607	28.0	30.0	35.0	26.0	**29.8**	29.0	36.0	30.0	**31.7**	**28.5**
8.	HI8855	608	42.0	48.0	39.0	39.0	**42.0**	39.0	45.0	39.0	**41.0**	**36.7**
9.	MACS3949 (C)	609	42.0	53.0	46.0	43.0	**46.0**	44.0	51.0	38.0	**44.3**	**42.0**
10.	GW1369	610	43.0	44.0	26.0	37.0	**37.5**	38.0	41.0	35.0	**38.0**	**34.7**
11.	AKDW5520	611	40.0	45.0	42.0	35.0	**40.5**	41.0	49.0	43.0	**44.3**	**36.7**
12.	GW1370	612	39.0	48.0	38.0	42.0	**41.8**	38.0	41.0	39.0	**39.3**	**38.2**
13.	PDW366	613	29.0	38.0	29.0	31.0	**31.8**	28.0	46.0	28.0	**34.0**	**30.4**
14.	PDW314 (C)	614	41.0	46.0	39.0	46.0	**43.0**	44.0	50.0	44.0	**46.0**	**40.5**
15.	MACS5065(Dic)	615	28.0	34.0	36.0	28.0	**31.5**	30.0	35.0	28.0	**31.0**	**29.2**
16.	PDW367	616	42.0	55.0	43.0	44.0	**46.0**	45.0	53.0	50.0	**49.3**	**43.6**
17.	MPO1403	617	39.0	42.0	44.0	40.0	**41.3**	35.0	44.0	41.0	**40.0**	**37.5**
18.	MPO1404	618	46.0	46.0	51.0	43.0	**46.5**	48.0	52.0	48.0	**49.3**	**44.8**
19.	WHD969	619	35.0	42.0	37.0	40.0	**38.5**	39.0	49.0	39.0	**42.3**	**37.6**
20.	NIDW1542	620	39.0	42.0	44.0	42.0	**41.8**	44.0	49.0	41.0	**44.7**	**39.4**
21.	DDW66	621	39.0	44.0	43.0	31.0	**39.3**	39.0	49.0	44.0	**44.0**	**37.9**
22.	HI8853	622	49.0	55.0	48.0	45.0	**49.3**	46.0	49.0	45.0	**46.7**	**43.0**
23.	HW5306 (Dic)	623	25.0	30.0	35.0	26.0	**29.0**	28.0	30.0	29.0	**29.0**	**27.1**
24.	HI8737 (C)	624	40.0	46.0	39.0	43.0	**42.0**	38.0	39.0	38.0	**38.3**	**37.2**
25.	UAS486	625	30.0	38.0	35.0	39.0	**35.5**	38.0	40.0	38.0	**38.7**	**33.4**
26.	DDK1029 (Dic. C)	626	25.0	25.0	34.0	25.0	**27.3**	24.0	29.0	24.0	**25.7**	**24.9**
27.	HI8713 (C)	627	36.0	39.0	39.0	28.0	**35.5**	31.0	39.0	28.0	**32.7**	**31.5**
28.	GW1371	628	35.0	26.0	25.0	26.0	**28.0**	28.0	31.0	30.0	**29.7**	**27.6**
29.	HI8858	629	36.0	39.0	34.0	29.0	**34.5**	35.0	44.0	35.0	**38.0**	**33.0**
30.	DDK 1066(Dic)	630	27.0	26.0	31.0	25.0	**27.3**	28.0	34.0	28.0	**30.0**	**27.1**
31.	HW5305 (Dic)	631	25.0	27.0	35.0	25.0	**28.0**	30.0	39.0	26.0	**31.7**	**27.3**
32.	PBN1841	632	38.0	36.0	38.0	39.0	**37.8**	39.0	40.0	38.0	**39.0**	**33.5**
33.	MACS4147	633	40.0	48.0	39.0	41.0	**42.0**	40.0	45.0	41.0	**42.0**	**37.9**
34.	DDW67	634	50.0	51.0	42.0	45.0	**47.0**	42.0	48.0	45.0	**45.0**	**42.0**
35.	PWU8	635	43.0	48.0	42.0	36.0	**42.3**	44.0	42.0	43.0	**43.0**	**38.8**
36.	DDW65	636	50.0	46.0	43.0	44.0	**45.8**	44.0	45.0	45.0	**44.7**	**41.3**
		Mean	**37.4**	**41.9**	**38.2**	**36.2**	**38.4**	**36.9**	**43.2**	**37.0**	**39.0**	**35.6**

Table 111: Yellow pigment content (ppm) of *T. durum* and *T. dicoccum* genotypes in NIVT 4

S. No.	Entries	Code	NWPZ					
			Ludhiana	Pantnagar	Delhi	Hisar	Karnal	Mean
1.	MACS4146	601	7.7	7.9	7.5	7.9	9.9	**8.2**
2.	HI8854	602	8.6	7.7	7.8	7.9	9.9	**8.4**
3.	NIDW1557	603	7.1	7.2	7.5	7.4	10.1	**7.9**
4.	DDK1067(Dic)	604	4.7	4.2	5.7	4.5	5.0	**4.8**
5.	UAS485	605	8.7	7.8	8.3	9.4	10.4	**8.9**
6.	PDW368	606	5.9	7.0	8.2	8.7	9.8	**7.9**
7.	MACS5064(Dic)	607	5.0	4.1	4.7	4.1	4.2	**4.4**
8.	HI8855	608	8.3	7.0	8.6	7.2	10.1	**8.2**
9.	MACS3949 (C)	609	6.5	7.2	7.6	7.9	9.8	**7.8**
10.	GW1369	610	7.4	6.3	7.7	8.2	8.4	**7.6**
11.	AKDW5520	611	7.2	5.6	7.2	8.3	8.4	**7.3**
12.	GW1370	612	6.1	5.8	6.3	6.5	7.4	**6.4**
13.	PDW366	613	6.8	5.5	6.7	6.8	7.6	**6.7**
14.	PDW314 (C)	614	5.6	5.6	6.4	7.0	7.8	**6.5**
15.	MACS5065(Dic)	615	4.8	3.7	4.1	4.3	5.0	**4.4**
16.	PDW367	616	7.0	5.1	5.7	6.8	7.6	**6.4**
17.	MPO1403	617	8.7	7.5	9.4	8.2	9.6	**8.7**
18.	MPO1404	618	7.2	7.3	7.0	8.3	9.5	**7.9**
19.	WHD969	619	6.6	7.0	7.7	8.2	9.4	**7.8**
20.	NIDW1542	620	7.4	7.2	7.9	8.2	9.7	**8.1**
21.	DDW66	621	10.0	9.7	10.2	8.0	10.5	**9.7**
22.	HI8853	622	7.5	7.0	8.5	7.9	10.0	**8.2**
23.	HW5306 (Dic)	623	4.9	3.9	4.1	3.9	5.0	**4.4**
24.	HI8737 (C)	624	6.6	6.7	5.7	6.3	7.8	**6.6**
25.	UAS486	625	6.6	7.7	5.9	6.5	7.8	**6.9**
26.	DDK1029 (Dic. C)	626	4.7	3.8	4.7	4.0	4.9	**4.4**
27.	HI8713 (C)	627	8.4	7.5	9.2	8.8	10.5	**8.9**
28.	GW1371	628	7.6	5.2	8.9	8.2	10.3	**8.0**
29.	HI8858	629	8.0	7.2	7.7	9.2	9.6	**8.3**
30.	DDK 1066(Dic)	630	5.0	4.5	5.0	4.9	5.0	**4.9**
31.	HW5305 (Dic)	631	5.3	4.1	4.3	3.8	4.8	**4.5**
32.	PBN1841	632	5.8	4.4	4.6	6.3	7.3	**5.7**
33.	MACS4147	633	8.1	7.9	8.2	9.6	10.0	**8.8**
34.	DDW67	634	8.5	7.7	9.2	9.9	10.5	**9.2**
35.	PWU8	635	8.1	7.4	8.2	9.2	9.8	**8.5**
36.	DDW65	636	8.3	7.1	8.6	9.2	10.2	**8.7**
		Mean	**7.0**	**6.3**	**7.1**	**7.3**	**8.4**	**7.2**

Continued Table 111 (NIVT 4)

S. No.	Entries	Code	CZ					PZ				Overall Mean
			P.kheda	Indore	Junagarh	Vijapur	Mean	Pune	Dharwad	Niphad	Mean	
1.	MACS4146	601	5.2	4.3	5.8	4.7	**5.0**	5.4	5.9	2.5	**4.6**	**6.2**
2.	HI8854	602	4.9	4.8	5.1	4.0	**4.7**	4.7	5.5	3.3	**4.5**	**6.2**
3.	NIDW1557	603	5.2	4.6	6.2	4.2	**5.0**	5.4	6.4	3.4	**5.1**	**6.2**
4.	DDK1067(Dic)	604	3.2	3.0	4.8	1.7	**3.2**	4.0	7.2	2.5	**4.5**	**4.2**
5.	UAS485	605	5.5	4.9	6.9	5.1	**5.6**	5.8	8.0	4.0	**5.9**	**7.1**
6.	PDW368	606	4.8	4.2	6.3	3.1	**4.6**	4.8	6.3	3.3	**4.8**	**6.0**
7.	MACS5064(Dic)	607	3.3	3.1	5.3	2.7	**3.6**	4.6	5.7	4.9	**5.1**	**4.3**
8.	HI8855	608	5.8	4.3	6.3	6.3	**5.7**	5.5	7.2	4.8	**5.8**	**6.8**
9.	MACS3949 (C)	609	5.1	3.9	6.7	3.4	**4.8**	5.5	7.2	3.2	**5.3**	**6.2**
10.	GW1369	610	4.6	4.9	5.7	2.5	**4.4**	5.8	5.9	5.2	**5.6**	**6.0**
11.	AKDW5520	611	4.8	4.4	5.9	3.3	**4.6**	4.8	6.9	4.5	**5.4**	**5.9**
12.	GW1370	612	3.2	3.9	5.6	1.9	**3.6**	4.3	7.3	5.1	**5.6**	**5.3**
13.	PDW366	613	4.1	4.1	5.5	2.7	**4.1**	5.8	7.2	5.5	**6.2**	**5.7**
14.	PDW314 (C)	614	4.2	4.2	4.7	3.0	**4.0**	4.6	7.5	5.2	**5.8**	**5.5**
15.	MACS5065(Dic)	615	4.3	3.0	3.7	4.0	**3.8**	3.3	6.7	4.7	**4.9**	**4.3**
16.	PDW367	616	6.2	4.6	4.9	3.9	**4.9**	3.9	6.3	5.4	**5.2**	**5.6**
17.	MPO1403	617	5.3	5.4	8.0	3.9	**5.6**	5.2	9.0	5.0	**6.4**	**7.1**
18.	MPO1404	618	5.2	3.8	6.5	3.4	**4.7**	6.2	6.3	5.4	**6.0**	**6.3**
19.	WHD969	619	5.2	4.5	6.7	2.7	**4.8**	5.5	5.2	5.8	**5.5**	**6.2**
20.	NIDW1542	620	5.4	5.1	7.2	3.0	**5.2**	5.7	7.8	5.6	**6.3**	**6.7**
21.	DDW66	621	5.2	6.2	7.9	5.0	**6.1**	6.7	7.6	4.8	**6.4**	**7.7**
22.	HI8853	622	4.6	5.0	5.9	3.4	**4.7**	6.4	6.4	4.0	**5.6**	**6.4**
23.	HW5306 (Dic)	623	6.1	3.3	4.2	2.4	**4.0**	3.9	6.4	4.9	**5.0**	**4.4**
24.	HI8737 (C)	624	5.8	3.9	5.3	3.8	**4.7**	3.7	7.4	5.8	**5.6**	**5.7**
25.	UAS486	625	4.9	4.4	5.9	2.7	**4.5**	4.7	4.0	5.0	**4.5**	**5.5**
26.	DDK1029 (Dic. C)	626	5.4	2.3	5.5	2.5	**3.9**	4.4	3.1	5.2	**4.2**	**4.2**
27.	HI8713 (C)	627	7.7	4.7	7.3	4.0	**5.9**	4.5	6.0	4.3	**4.9**	**6.9**
28.	GW1371	628	7.5	4.6	6.7	4.7	**5.9**	6.0	6.3	4.3	**5.5**	**6.7**
29.	HI8858	629	7.5	4.6	7.2	2.1	**5.3**	6.5	5.5	5.2	**5.7**	**6.7**
30.	DDK 1066(Dic)	630	4.5	2.5	5.0	1.7	**3.4**	3.9	3.9	5.7	**4.5**	**4.3**
31.	HW5305 (Dic)	631	4.1	2.6	4.4	3.3	**3.6**	2.6	3.3	5.5	**3.8**	**4.0**
32.	PBN1841	632	3.9	2.5	5.4	3.7	**3.9**	2.8	3.4	6.1	**4.1**	**4.7**
33.	MACS4147	633	5.9	5.3	6.9	3.9	**5.5**	4.9	6.0	7.6	**6.1**	**7.0**
34.	DDW67	634	6.7	5.3	7.9	4.2	**6.1**	6.0	7.4	4.8	**6.1**	**7.4**
35.	PWU8	635	6.8	4.4	6.8	3.2	**5.3**	5.8	7.6	4.9	**6.1**	**6.9**
36.	DDW65	636	6.8	5.0	6.7	3.1	**5.4**	5.5	5.5	5.4	**5.5**	**6.8**
		Mean	**5.2**	**4.2**	**6.0**	**3.4**	**4.7**	**5.0**	**6.3**	**4.8**	**5.3**	**5.9**

Table 112: Yellow berry content (%) of *T. durum* genotypes in NIVT 4

S. No.	Entries	Code	NWPZ					
			Ludhiana	Pantnagar	Delhi	Hisar	Karnal	Mean
1.	MACS4146	601	30.0	60.0	10.0	70.0	10.0	**36.0**
2.	HI8854	602	50.0	80.0	30.0	60.0	30.0	**50.0**
3.	NIDW1557	603	20.0	40.0	0.0	50.0	20.0	**26.0**
4.	DDK1067(Dic)	604	20.0	30.0	0.0	30.0	10.0	**18.0**
5.	UAS485	605	30.0	20.0	10.0	70.0	20.0	**30.0**
6.	PDW368	606	30.0	30.0	20.0	50.0	20.0	**30.0**
7.	MACS5064(Dic)	607	10.0	30.0	0.0	30.0	30.0	**20.0**
8.	HI8855	608	40.0	40.0	50.0	70.0	40.0	**48.0**
9.	MACS3949 (C)	609	10.0	30.0	10.0	40.0	10.0	**20.0**
10.	GW1369	610	10.0	20.0	0.0	10.0	10.0	**10.0**
11.	AKDW5520	611	40.0	40.0	20.0	10.0	30.0	**28.0**
12.	GW1370	612	20.0	60.0	20.0	60.0	50.0	**42.0**
13.	PDW366	613	10.0	30.0	0.0	10.0	10.0	**12.0**
14.	PDW314 (C)	614	40.0	50.0	10.0	20.0	10.0	**26.0**
15.	MACS5065(Dic)	615	10.0	20.0	0.0	40.0	10.0	**16.0**
16.	PDW367	616	30.0	40.0	0.0	40.0	20.0	**26.0**
17.	MPO1403	617	20.0	40.0	0.0	50.0	20.0	**26.0**
18.	MPO1404	618	40.0	30.0	20.0	50.0	40.0	**36.0**
19.	WHD969	619	30.0	60.0	30.0	30.0	20.0	**34.0**
20.	NIDW1542	620	50.0	30.0	10.0	60.0	20.0	**34.0**
21.	DDW66	621	40.0	50.0	20.0	40.0	30.0	**36.0**
22.	HI8853	622	20.0	20.0	10.0	20.0	20.0	**18.0**
23.	HW5306 (Dic)	623	10.0	30.0	0.0	20.0	20.0	**16.0**
24.	HI8737 (C)	624	20.0	40.0	10.0	10.0	20.0	**20.0**
25.	UAS486	625	10.0	0.0	10.0	20.0	10.0	**10.0**
26.	DDK1029 (Dic. C)	626	10.0	20.0	0.0	10.0	0.0	**8.0**
27.	HI8713 (C)	627	40.0	60.0	10.0	20.0	10.0	**28.0**
28.	GW1371	628	20.0	20.0	20.0	30.0	20.0	**22.0**
29.	HI8858	629	40.0	20.0	30.0	30.0	40.0	**32.0**
30.	DDK 1066(Dic)	630	20.0	30.0	20.0	20.0	20.0	**22.0**
31.	HW5305 (Dic)	631	0.0	20.0	10.0	20.0	10.0	**12.0**
32.	PBN1841	632	10.0	30.0	10.0	10.0	0.0	**12.0**
33.	MACS4147	633	50.0	30.0	50.0	40.0	20.0	**38.0**
34.	DDW67	634	20.0	30.0	10.0	30.0	10.0	**20.0**
35.	PWU8	635	30.0	40.0	20.0	40.0	30.0	**32.0**
36.	DDW65	636	10.0	10.0	10.0	10.0	10.0	**10.0**
		Mean	**24.7**	**34.2**	**13.3**	**33.9**	**19.4**	**25.1**

Continued Table 112 (NIVT 4)

S. No.	Entries	Code	CZ					PZ				Overall Mean
			P.kheda	Indore	Junagarh	Vijapur	Mean	Pune	Dharwad	Niphad	Mean	
1.	MACS4146	601	25.0	1.0	6.0	25.0	**14.3**	5.0	0.0	0.0	**1.7**	**20.2**
2.	HI8854	602	25.0	0.0	3.5	1.0	**7.4**	2.0	0.0	0.0	**0.7**	**23.5**
3.	NIDW1557	603	7.0	0.0	0.0	0.0	**1.8**	0.0	0.0	0.0	**0.0**	**11.4**
4.	DDK1067(Dic)	604	20.0	0.0	0.0	0.0	**5.0**	3.0	0.0	0.0	**1.0**	**9.4**
5.	UAS485	605	5.0	0.0	0.0	0.0	**1.3**	0.0	0.0	0.0	**0.0**	**12.9**
6.	PDW368	606	3.0	0.0	0.0	5.0	**2.0**	0.0	0.0	0.0	**0.0**	**13.2**
7.	MACS5064(Dic)	607	10.0	0.0	0.0	0.0	**2.5**	0.0	0.0	0.0	**0.0**	**9.2**
8.	HI8855	608	5.0	0.0	0.0	0.0	**1.3**	3.0	0.0	0.0	**1.0**	**20.7**
9.	MACS3949 (C)	609	5.0	0.0	0.0	3.0	**2.0**	0.0	0.0	0.0	**0.0**	**9.0**
10.	GW1369	610	8.0	0.0	0.0	0.0	**2.0**	0.0	0.0	0.0	**0.0**	**4.8**
11.	AKDW5520	611	8.0	0.0	0.0	0.0	**2.0**	0.0	0.0	0.0	**0.0**	**12.3**
12.	GW1370	612	15.0	0.0	0.0	0.0	**3.8**	0.0	0.0	0.0	**0.0**	**18.8**
13.	PDW366	613	1.0	0.0	0.0	0.0	**0.3**	0.0	0.0	0.0	**0.0**	**5.1**
14.	PDW314 (C)	614	2.0	0.0	0.0	0.0	**0.5**	0.0	0.0	0.0	**0.0**	**11.0**
15.	MACS5065(Dic)	615	5.0	0.0	0.0	5.0	**2.5**	0.0	0.0	0.0	**0.0**	**7.5**
16.	PDW367	616	8.0	0.0	0.0	3.0	**2.8**	0.0	0.0	0.0	**0.0**	**11.8**
17.	MPO1403	617	2.0	0.0	0.0	0.0	**0.5**	4.0	0.0	0.0	**1.3**	**11.3**
18.	MPO1404	618	1.0	0.0	0.0	7.0	**2.0**	0.0	0.0	0.0	**0.0**	**15.7**
19.	WHD969	619	6.0	1.0	0.0	1.0	**2.0**	10.0	0.0	0.0	**3.3**	**15.7**
20.	NIDW1542	620	5.0	0.0	0.0	6.0	**2.8**	0.0	0.0	0.0	**0.0**	**15.1**
21.	DDW66	621	3.0	0.0	0.0	3.0	**1.5**	0.0	0.0	0.0	**0.0**	**15.5**
22.	HI8853	622	5.0	0.0	0.0	0.0	**1.3**	0.0	0.0	0.0	**0.0**	**7.9**
23.	HW5306 (Dic)	623	7.0	0.0	0.0	0.0	**1.8**	0.0	0.0	0.0	**0.0**	**7.3**
24.	HI8737 (C)	624	6.0	0.0	0.0	2.0	**2.0**	0.0	0.0	0.0	**0.0**	**9.0**
25.	UAS486	625	5.0	0.0	0.0	0.0	**1.3**	0.0	0.0	0.0	**0.0**	**4.6**
26.	DDK1029 (Dic. C)	626	4.0	0.0	0.0	0.0	**1.0**	0.0	0.0	0.0	**0.0**	**3.7**
27.	HI8713 (C)	627	5.0	0.0	0.0	5.0	**2.5**	20.0	0.0	0.0	**6.7**	**14.2**
28.	GW1371	628	5.0	0.0	0.0	4.0	**2.3**	0.0	0.0	0.0	**0.0**	**9.9**
29.	HI8858	629	4.0	0.0	0.0	6.0	**2.5**	5.0	0.0	0.0	**1.7**	**14.6**
30.	DDK 1066(Dic)	630	6.0	0.0	0.0	0.0	**1.5**	3.0	0.0	0.0	**1.0**	**9.9**
31.	HW5305 (Dic)	631	5.0	0.0	0.0	0.0	**1.3**	0.0	0.0	0.0	**0.0**	**5.4**
32.	PBN1841	632	7.0	0.0	0.0	0.0	**1.8**	0.0	0.0	0.0	**0.0**	**5.6**
33.	MACS4147	633	7.0	0.0	0.0	6.0	**3.3**	2.0	0.0	0.0	**0.7**	**17.1**
34.	DDW67	634	6.0	0.0	0.0	0.0	**1.5**	0.0	0.0	0.0	**0.0**	**8.8**
35.	PWU8	635	4.0	0.0	0.0	7.0	**2.8**	0.0	0.0	0.0	**0.0**	**14.3**
36.	DDW65	636	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	**0.0**	**4.2**
		Mean	**6.8**	**0.1**	**0.3**	**2.5**	**2.4**	**1.6**	**0.0**	**0.0**	**0.5**	**11.4**

Table 113: Grain appearance score (Max.10) of *T. aestivum* genotypes in NIVT 5A

S. No.	Entries	Trial Code	NWPZ						NEPZ				Overall Mean
			Ludhiana	Hisar	Durgapura	Delhi	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	NIAW3170 (C)	701	6.1	5.9	7.1	7.3	6.4	**6.6**	6.0	6.0	5.5	**5.8**	**6.3**
2	PBW956	702	6.7	6.2	7.6	7.6	6.8	**7.0**	6.0	5.5	5.0	**5.5**	**6.4**
3	BRW3959	703	6.8	5.3	7.9	7.8	7.0	**7.0**	6.5	6.0	6.0	**6.2**	**6.7**
4	HD3485	704	5.8	5.5	7.7	7.5	6.8	**6.7**	6.5	5.5	5.5	**5.8**	**6.4**
5	HI1612 (C)	705	6.3	6.7	7.9	7.8	6.6	**7.1**	6.0	5.5	5.5	**5.7**	**6.5**
6	WH1340	706	5.3	6.1	7.7	7.7	6.8	**6.7**	6.0	5.5	5.0	**5.5**	**6.3**
7	DBW468	707	5.4	6.3	7.6	7.5	6.8	**6.7**	6.5	6.0	6.0	**6.2**	**6.5**
8	JAUW719	708	5.2	5.8	5.9	7.1	6.2	**6.0**	6.0	5.0	5.0	**5.3**	**5.8**
9	HD3487	709	5.7	6.0	6.9	6.9	6.6	**6.4**	6.0	6.0	5.5	**5.8**	**6.2**
10	UP3147	710	6.1	5.5	7.8	7.9	6.4	**6.7**	6.5	5.5	4.5	**5.5**	**6.3**
11	PBW953	711	6.2	5.4	7.7	7.8	6.8	**6.8**	7.0	6.0	6.0	**6.3**	**6.6**
12	K1317 (C)	712	7.1	6.5	8.0	8.0	7.2	**7.4**	6.5	5.5	5.5	**5.8**	**6.8**
13	DBW465	713	6.8	5.5	7.9	7.5	6.8	**6.9**	6.0	5.5	5.5	**5.7**	**6.4**
14	PBW954	714	7.1	7.2	7.6	7.9	6.6	**7.3**	6.5	6.0	5.5	**6.0**	**6.8**
15	PBW955	715	7.3	6.7	7.5	7.9	6.8	**7.2**	6.5	5.5	6.0	**6.0**	**6.8**
16	PBW644 (C)	716	7.0	6.7	7.0	8.0	6.8	**7.1**	6.5	5.5	5.5	**5.8**	**6.6**
17	WH1339	717	5.4	5.5	6.3	7.7	6.6	**6.3**	6.0	6.0	5.0	**5.7**	**6.1**
18	HUW861	718	5.5	5.6	6.1	7.1	6.2	**6.1**	6.5	5.5	5.5	**5.8**	**6.0**
19	DBW467	719	6.1	6.9	8.0	7.0	7.2	**7.0**	6.5	5.0	5.5	**5.7**	**6.5**
20	HD3488	720	6.2	5.6	7.7	7.7	7.0	**6.8**	6.0	5.0	5.0	**5.3**	**6.3**
21	KRL2203	721	6.4	5.7	7.9	7.5	6.8	**6.9**	5.5	4.5	5.5	**5.2**	**6.2**
22	JKW320	722	6.4	6.0	7.8	7.6	6.8	**6.9**	5.5	5.5	5.5	**5.5**	**6.4**
23	K2310	723	6.7	6.7	7.6	7.8	6.8	**7.1**	5.5	5.5	5.5	**5.5**	**6.5**
24	DBW466	724	6.5	6.9	7.7	7.9	7.4	**7.3**	6.5	6.0	6.0	**6.2**	**6.9**
25	HD3486	725	6.5	6.3	7.4	7.6	7.6	**7.1**	6.5	6.0	5.0	**5.8**	**6.6**
Mean			**6.3**	**6.1**	**7.5**	**7.6**	**6.8**	**6.8**	**6.2**	**5.6**	**5.4**	**5.7**	**6.4**

Table 114: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in NIVT 5A

S. No.	Entries	Trial Code	NWPZ						NEPZ				Overall Mean
			Ludhiana	Hisar	Durgapura	Delhi	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	NIAW3170 (C)	701	77.0	76.5	80.5	80.0	79.8	**78.8**	80.1	76.8	71.3	**76.1**	**77.8**
2	PBW956	702	78.3	76.5	80.0	80.0	79.2	**78.8**	80.5	76.8	72.3	**76.5**	**78.0**
3	BRW3959	703	79.0	77.3	80.8	81.5	81.5	**80.0**	81.4	76.6	74.9	**77.6**	**79.1**
4	HD3485	704	78.0	76.5	79.8	80.3	79.4	**78.8**	78.9	74.0	71.9	**74.9**	**77.4**
5	HI1612 (C)	705	78.3	80.0	78.8	81.3	81.1	**79.9**	81.0	76.8	72.7	**76.8**	**78.8**
6	WH1340	706	77.5	77.3	79.5	81.5	80.9	**79.3**	80.3	75.3	70.5	**75.4**	**77.9**
7	DBW468	707	78.8	78.0	79.5	81.5	82.9	**80.1**	81.4	78.9	75.4	**78.6**	**79.6**
8	JAUW719	708	75.8	76.5	74.0	79.3	78.6	**76.8**	79.6	71.6	67.9	**73.0**	**75.4**
9	HD3487	709	77.8	77.5	78.3	80.0	80.1	**78.7**	80.0	77.0	72.1	**76.4**	**77.9**
10	UP3147	710	78.3	78.3	79.5	82.8	80.7	**79.9**	80.6	76.7	69.7	**75.7**	**78.3**
11	PBW953	711	79.3	78.5	81.3	80.8	82.2	**80.4**	79.9	78.5	75.1	**77.8**	**79.5**
12	K1317 (C)	712	81.3	78.5	81.3	81.5	83.3	**81.2**	82.9	79.4	74.0	**78.8**	**80.3**
13	DBW465	713	77.5	77.3	81.3	79.8	80.7	**79.3**	79.5	76.3	73.5	**76.4**	**78.2**
14	PBW954	714	80.8	79.5	80.0	81.3	80.7	**80.5**	78.9	78.6	75.8	**77.8**	**79.5**
15	PBW955	715	79.5	78.8	78.8	79.0	81.1	**79.4**	79.1	76.8	74.8	**76.9**	**78.5**
16	PBW644 (C)	716	78.5	77.0	75.8	80.0	79.7	**78.2**	81.0	75.8	75.6	**77.5**	**77.9**
17	WH1339	717	78.3	77.3	77.3	80.5	81.1	**78.9**	80.8	76.0	69.6	**75.5**	**77.6**
18	HUW861	718	77.8	76.8	77.0	79.5	79.1	**78.0**	80.1	76.9	75.0	**77.3**	**77.8**
19	DBW467	719	77.3	78.5	80.3	76.8	81.8	**78.9**	80.8	74.8	69.7	**75.1**	**77.5**
20	HD3488	720	77.8	77.5	80.0	79.5	81.9	**79.3**	82.1	74.1	74.3	**76.8**	**78.4**
21	KRL2203	721	79.3	79.3	80.5	81.3	80.8	**80.2**	81.8	72.7	71.3	**75.3**	**78.4**
22	JKW320	722	79.8	78.3	80.8	81.8	80.3	**80.2**	81.0	75.1	71.3	**75.8**	**78.6**
23	K2310	723	78.5	78.5	80.0	82.0	82.2	**80.2**	81.1	76.5	74.5	**77.4**	**79.2**
24	DBW466	724	79.3	78.8	79.8	80.8	82.0	**80.1**	80.1	76.6	73.1	**76.6**	**78.8**
25	HD3486	725	79.3	80.0	79.3	80.8	82.3	**80.3**	82.9	76.3	70.6	**76.6**	**78.9**
Mean			**78.5**	**78.0**	**79.4**	**80.5**	**80.9**	**79.5**	**80.6**	**76.2**	**72.7**	**76.5**	**78.4**

Table 115: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes in NIVT 5A

S. No.	Entries	Trial Code	NWPZ						NEPZ				Overall Mean
			Ludhiana	Hisar	Durgapura	Delhi	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	NIAW3170 (C)	701	11.6	9.0	11.8	13.9	13.4	**11.9**	10.8	11.9	12.3	**11.7**	**11.8**
2	PBW956	702	10.6	9.4	14.1	12.8	15.1	**12.4**	10.9	11.6	13.7	**12.1**	**12.3**
3	BRW3959	703	9.5	7.8	10.5	10.5	12.4	**10.1**	10.0	10.2	12.2	**10.8**	**10.4**
4	HD3485	704	10.2	8.7	12.4	11.7	13.1	**11.2**	11.2	12.0	13.7	**12.3**	**11.6**
5	HI1612 (C)	705	9.6	8.7	12.0	12.5	11.4	**10.8**	10.2	10.6	11.8	**10.9**	**10.9**
6	WH1340	706	9.5	8.5	11.7	12.1	12.3	**10.8**	11.1	10.7	12.0	**11.3**	**11.0**
7	DBW468	707	10.8	9.6	11.9	12.4	12.4	**11.4**	11.8	11.8	13.2	**12.3**	**11.7**
8	JAUW719	708	9.4	8.5	11.1	10.8	12.4	**10.5**	10.5	10.7	12.0	**11.1**	**10.7**
9	HD3487	709	9.5	8.5	11.3	12.2	13.8	**11.0**	11.2	10.9	12.5	**11.5**	**11.2**
10	UP3147	710	11.2	8.8	12.3	12.5	11.5	**11.3**	11.1	10.5	13.5	**11.7**	**11.4**
11	PBW953	711	9.5	8.8	12.5	11.5	12.7	**11.0**	11.6	11.5	11.8	**11.6**	**11.2**
12	K1317 (C)	712	10.2	9.8	11.5	12.0	12.4	**11.2**	10.9	11.5	12.9	**11.8**	**11.4**
13	DBW465	713	9.8	8.2	13.0	12.8	12.5	**11.2**	10.5	10.9	12.6	**11.3**	**11.3**
14	PBW954	714	9.7	9.6	13.1	12.5	13.6	**11.7**	12.3	11.4	13.7	**12.5**	**12.0**
15	PBW955	715	9.8	10.4	12.3	13.0	12.8	**11.7**	12.0	11.8	13.6	**12.5**	**12.0**
16	PBW644 (C)	716	9.2	8.8	12.0	13.0	12.8	**11.1**	10.0	10.4	10.9	**10.4**	**10.9**
17	WH1339	717	8.7	8.5	11.3	11.1	11.5	**10.2**	9.5	10.5	13.1	**11.0**	**10.5**
18	HUW861	718	11.4	10.8	12.8	14.8	14.1	**12.8**	11.1	12.5	12.6	**12.1**	**12.5**
19	DBW467	719	10.7	9.1	11.6	13.3	11.2	**11.2**	10.6	11.4	14.2	**12.1**	**11.5**
20	HD3488	720	10.3	8.0	12.3	12.3	11.6	**10.9**	10.3	11.5	12.5	**11.4**	**11.1**
21	KRL2203	721	9.6	8.2	11.9	11.7	12.3	**10.7**	9.9	11.8	12.2	**11.3**	**11.0**
22	JKW320	722	9.5	7.9	12.8	11.6	13.0	**11.0**	11.1	11.7	12.9	**11.9**	**11.3**
23	K2310	723	14.2	9.9	14.6	12.2	13.1	**12.8**	12.2	12.7	13.8	**12.9**	**12.8**
24	DBW466	724	9.5	9.2	13.7	12.7	11.8	**11.4**	11.3	10.8	13.0	**11.7**	**11.5**
25	HD3486	725	10.1	9.1	12.9	11.7	13.0	**11.4**	10.7	11.4	12.8	**11.6**	**11.5**
Mean			**10.2**	**9.0**	**12.3**	**12.3**	**12.7**	**11.3**	**10.9**	**11.3**	**12.8**	**11.7**	**11.4**

Table 116: Sedimentation value (ml) of *T. aestivum* genotypes in NIVT 5A

S. No.	Entries	Trial Code	NWPZ						NEPZ				Overall Mean
			Ludhiana	Hisar	Durgapura	Delhi	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	NIAW3170 (C)	701	45	42	40	53	49	**46**	39	52	49	**47**	**46**
2	PBW956	702	44	41	48	51	49	**47**	50	60	57	**56**	**50**
3	BRW3959	703	34	31	39	49	46	**40**	34	49	50	**44**	**41**
4	HD3485	704	43	40	43	55	51	**46**	48	62	63	**58**	**51**
5	HI1612 (C)	705	52	44	60	59	58	**55**	51	60	68	**60**	**56**
6	WH1340	706	34	32	60	48	46	**44**	40	49	52	**47**	**45**
7	DBW468	707	53	45	49	59	54	**52**	51	54	58	**54**	**53**
8	JAUW719	708	53	48	55	54	57	**53**	53	62	60	**58**	**55**
9	HD3487	709	45	47	48	57	58	**51**	52	61	61	**58**	**54**
10	UP3147	710	52	45	56	54	56	**53**	57	56	65	**59**	**55**
11	PBW953	711	43	36	47	53	54	**47**	51	60	54	**55**	**50**
12	K1317 (C)	712	39	38	48	50	46	**44**	44	47	50	**47**	**45**
13	DBW465	713	47	41	49	58	55	**50**	48	60	65	**58**	**53**
14	PBW954	714	43	40	53	49	56	**48**	54	55	64	**58**	**52**
15	PBW955	715	56	56	66	59	63	**60**	60	74	65	**66**	**62**
16	PBW644 (C)	716	41	40	48	46	43	**44**	44	49	51	**48**	**45**
17	WH1339	717	41	44	54	46	49	**47**	47	51	66	**55**	**50**
18	HUW861	718	43	52	59	64	53	**54**	59	61	62	**61**	**57**
19	DBW467	719	48	50	44	65	55	**52**	49	67	70	**62**	**56**
20	HD3488	720	44	43	49	53	52	**48**	54	49	51	**51**	**49**
21	KRL2203	721	44	49	54	55	56	**52**	50	61	64	**58**	**54**
22	JKW320	722	47	44	50	55	57	**51**	56	57	74	**62**	**55**
23	K2310	723	31	33	28	39	41	**34**	38	44	40	**41**	**37**
24	DBW466	724	53	50	52	59	58	**54**	60	60	65	**62**	**57**
25	HD3486	725	41	39	65	47	52	**49**	48	50	54	**51**	**49**
Mean			**45**	**43**	**51**	**53**	**53**	**49**	**49**	**56**	**59**	**55**	**51**

Table 117: Phenol test (Max. 10) of *T. aestivum* genotypes in NIVT 5A

S. No.	Entries	Trial Code	NWPZ						NEPZ				Overall Mean
			Ludhiana	Hisar	Durgapura	Delhi	Karnal	Mean	Kanpur	Varanasi	Sabour	Mean	
1	NIAW3170 (C)	701	4.9	4.3	4.1	4.0	8.0	**5.1**	8.0	7.0	7.0	**7.3**	**5.9**
2	PBW956	702	4.5	4.7	4.5	4.0	9.0	**5.3**	8.0	8.0	6.0	**7.3**	**6.1**
3	BRW3959	703	1.3	1.3	1.9	1.8	6.5	**2.6**	6.0	6.0	5.0	**5.7**	**3.7**
4	HD3485	704	2.7	1.9	2.4	2.3	7.5	**3.4**	6.0	7.0	6.0	**6.3**	**4.5**
5	HI1612 (C)	705	4.3	4.2	5.5	3.5	7.5	**5.0**	8.0	6.0	7.0	**7.0**	**5.8**
6	WH1340	706	4.6	3.9	4.9	4.0	8.5	**5.2**	7.0	7.0	7.0	**7.0**	**5.9**
7	DBW468	707	4.1	3.7	5.2	4.3	7.5	**5.0**	8.0	7.0	6.0	**7.0**	**5.7**
8	JAUW719	708	4.6	3.6	3.0	4.5	8.0	**4.7**	7.0	6.0	7.0	**6.7**	**5.5**
9	HD3487	709	5.3	4.1	3.8	4.5	8.0	**5.1**	8.0	7.0	7.0	**7.3**	**6.0**
10	UP3147	710	4.3	4.0	4.1	3.1	8.5	**4.8**	8.0	7.0	7.0	**7.3**	**5.8**
11	PBW953	711	6.0	4.5	3.8	4.1	9.0	**5.5**	8.0	8.0	7.0	**7.7**	**6.3**
12	K1317 (C)	712	1.3	1.2	1.3	1.2	4.5	**1.9**	6.0	6.0	6.0	**6.0**	**3.4**
13	DBW465	713	4.9	4.4	4.2	4.0	10.0	**5.5**	7.0	8.0	8.0	**7.7**	**6.3**
14	PBW954	714	5.9	4.2	5.0	4.4	10.0	**5.9**	8.0	7.0	6.0	**7.0**	**6.3**
15	PBW955	715	5.1	3.5	3.5	4.5	9.5	**5.2**	8.0	8.0	7.0	**7.7**	**6.1**
16	PBW644 (C)	716	5.0	3.6	4.7	3.8	7.5	**4.9**	8.0	6.0	7.0	**7.0**	**5.7**
17	WH1339	717	5.0	3.5	5.0	4.1	8.0	**5.1**	7.0	6.0	6.0	**6.3**	**5.6**
18	HUW861	718	6.6	3.6	5.5	4.0	8.5	**5.6**	7.0	7.0	7.0	**7.0**	**6.2**
19	DBW467	719	6.5	3.9	6.3	4.2	9.0	**6.0**	7.0	8.0	8.0	**7.7**	**6.6**
20	HD3488	720	5.8	3.5	4.9	3.9	8.5	**5.3**	6.0	8.0	7.0	**7.0**	**6.0**
21	KRL2203	721	5.7	3.5	5.0	4.1	8.5	**5.4**	7.0	7.0	7.0	**7.0**	**6.0**
22	JKW320	722	5.6	3.7	4.7	4.5	10.0	**5.7**	7.0	7.0	7.0	**7.0**	**6.2**
23	K2310	723	1.5	1.6	1.9	2.5	6.5	**2.8**	6.0	5.0	5.0	**5.3**	**3.8**
24	DBW466	724	5.5	5.3	5.9	4.5	9.5	**6.1**	7.0	7.0	7.0	**7.0**	**6.5**
25	HD3486	725	7.1	5.5	5.0	5.3	9.5	**6.5**	8.0	7.0	7.0	**7.3**	**6.8**
Mean			**4.7**	**3.6**	**4.2**	**3.8**	**8.3**	**4.9**	**7.2**	**6.9**	**6.7**	**6.9**	**5.7**

Table 118: Grain appearance score (Max-10) of *T. aestivum* and *T. durum* genotypes in NIVT 5B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Vijapur	Junagarh	Indore	P.kheda	Mean	Dharwad	Pune	Niphad	Mean	
T. aestivum												
1.	HI1700	N-803	6.4	6.2	6.8	6.8	**6.5**	5.2	6.3	6.0	**5.8**	**6.2**
2.	DBW469	N-805	6.3	6.5	6.5	6.5	**6.4**	4.0	5.2	5.2	**4.8**	**5.7**
3.	MP3601	N-806	5.8	6.2	6.3	6.0	**6.1**	4.5	5.5	6.5	**5.5**	**5.8**
4.	DBW470	N-808	6.3	8.0	6.4	6.2	**6.7**	4.3	5.5	6.3	**5.3**	**6.1**
5.	MP1405	N-809	5.2	6.4	7.0	6.2	**6.2**	4.2	5.1	6.0	**5.1**	**5.7**
6.	MACS6851	N-810	6.4	6.4	7.2	6.5	**6.6**	4.5	6.3	5.5	**5.4**	**6.1**
7.	GW563	N-811	6.5	6.3	7.0	6.0	**6.5**	5.5	7.0	6.5	**6.3**	**6.4**
8.	AKAW5441	N-812	5.0	6.5	6.8	6.8	**6.3**	5.0	6.5	6.0	**5.8**	**6.1**
9.	CG1052	N-813	7.0	8.0	8.2	6.5	**7.4**	4.5	5.5	8.0	**6.0**	**6.8**
10.	MACS6850	N-815	6.0	6.8	6.8	6.5	**6.5**	7.0	7.0	7.0	**7.0**	**6.7**
11.	PBN 2115	N-817	5.5	6.5	6.8	6.8	**6.4**	5.0	6.0	6.0	**5.7**	**6.1**
12.	HI1605 (C)	N-819	5.0	6.5	7.0	7.0	**6.4**	5.0	6.3	6.7	**6.0**	**6.2**
13.	HI1702	N-820	6.0	7.0	6.5	6.8	**6.6**	5.2	5.8	7.0	**6.0**	**6.3**
14.	DBW110 (C)	N-821	5.3	6.5	6.8	6.5	**6.3**	4.8	6.0	6.5	**5.8**	**6.0**
15.	NIAW4533	N-822	5.5	6.8	6.5	6.2	**6.2**	5.3	6.0	6.5	**5.9**	**6.1**
16.	HI1701	N-823	6.0	6.8	7.0	6.2	**6.5**	4.3	6.5	7.0	**5.9**	**6.3**
17.	UAS3034	N-824	6.5	6.5	6.7	6.0	**6.4**	4.0	5.5	6.4	**5.3**	**5.9**
	Mean		**5.9**	**6.7**	**6.8**	**6.4**	**6.5**	**4.8**	**6.0**	**6.4**	**5.7**	**6.2**
T. durum												
1.	HI8856(d)	N-801	6.5	7.0	6.0	6.0	**6.4**	4.0	5.5	6.8	**5.4**	**6.0**
2.	UAS446(d) (C)	N-802	6.2	7.2	7.0	6.2	**6.7**	5.0	6.5	6.5	**6.0**	**6.4**
3.	HI8857(d)	N-804	7.0	6.5	6.8	7.0	**6.8**	4.2	5.5	5.0	**4.9**	**6.0**
4.	HI8627(d) (C)	N-807	6.8	6.3	7.2	6.2	**6.6**	4.8	6.5	7.0	**6.1**	**6.4**
5.	UAS487(d)	N-814	5.5	6.5	6.5	6.5	**6.3**	4.6	6.4	6.5	**5.8**	**6.1**
6.	DDW68(d)	N-816	5.8	6.2	6.8	6.5	**6.3**	4.5	6.0	6.5	**5.7**	**6.0**
7.	GW1372(d)	N-818	6.0	6.5	7.4	6.5	**6.6**	4.8	6.5	6.4	**5.9**	**6.3**
8.	NIDW1561(d)	N-825	4.8	6.5	6.8	6.2	**6.1**	4.5	6.8	6.8	**6.0**	**6.0**
	Mean		**6.1**	**6.6**	**6.8**	**6.4**	**6.5**	**4.5**	**6.2**	**6.4**	**5.7**	**6.1**

Table 119: Hectolitre weight (Kg/hl) of *T. aestivum* and *T. durum* genotypes in NIVT 5B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Vijapur	Junagarh	Indore	P.kheda	Mean	Dharwad	Pune	Niphad	Mean	
T. aestivum												
1.	HI1700	N-803	86	88	86	82	**86**	80	84	86	**83**	**85**
2.	DBW469	N-805	82	84	84	80	**83**	76	78	86	**80**	**81**
3.	MP3601	N-806	86	82	86	86	**85**	78	82	88	**83**	**84**
4.	DBW470	N-808	84	84	86	80	**84**	72	74	84	**77**	**81**
5.	MP1405	N-809	80	78	84	84	**82**	74	74	82	**77**	**79**
6.	MACS6851	N-810	86	84	82	84	**84**	72	78	86	**79**	**82**
7.	GW563	N-811	84	82	88	80	**84**	82	80	90	**84**	**84**
8.	AKAW5441	N-812	84	82	84	82	**83**	76	80	86	**81**	**82**
9.	CG1052	N-813	84	82	80	84	**83**	68	76	86	**77**	**80**
10.	MACS6850	N-815	82	84	84	82	**83**	80	80	84	**81**	**82**
11.	PBN 2115	N-817	80	86	86	82	**84**	78	74	88	**80**	**82**
12.	HI1605 (C)	N-819	84	86	86	86	**86**	80	80	88	**83**	**84**
13.	HI1702	N-820	86	84	88	84	**86**	76	80	86	**81**	**83**
14.	DBW110 (C)	N-821	84	84	86	82	**84**	70	80	86	**79**	**82**
15.	NIAW4533	N-822	84	84	84	82	**84**	78	80	86	**81**	**83**
16.	HI1701	N-823	84	88	84	80	**84**	70	78	86	**78**	**81**
17.	UAS3034	N-824	82	86	80	82	**83**	70	72	86	**76**	**80**
	Mean		**84**	**84**	**85**	**82**	**84**	**75**	**78**	**86**	**80**	**82**
T. durum												
1.	HI8856(d)	N-801	88	86	88	84	**87**	70	82	88	**80**	**84**
2.	UAS446(d) (C)	N-802	84	86	84	84	**85**	74	84	88	**82**	**83**
3.	HI8857(d)	N-804	84	82	84	82	**83**	74	82	88	**81**	**82**
4.	HI8627(d) (C)	N-807	86	84	90	80	**85**	76	78	88	**81**	**83**
5.	UAS487(d)	N-814	86	86	82	82	**84**	78	80	86	**81**	**83**
6.	DDW68(d)	N-816	78	82	82	84	**82**	76	80	88	**81**	**81**
7.	GW1372(d)	N-818	84	80	84	76	**81**	70	78	82	**77**	**79**
8.	NIDW1561(d)	N-825	86	88	86	84	**86**	76	78	90	**81**	**84**
	Mean		**85**	**84**	**85**	**82**	**84**	**74**	**80**	**87**	**81**	**83**

Table 120: Protein content (%) at 12% moisture basis of *T. aestivum* and *T. durum* genotypes in NIVT 5B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Vijapur	Junagarh	Indore	P.kheda	Mean	Dharwad	Pune	Niphad	Mean	
T. aestivum												
1.	HI1700	N-803	11.2	12.9	9.4	12.5	**11.5**	13.4	12.9	13.3	**13.2**	**12.2**
2.	DBW469	N-805	11.7	14.0	9.7	11.7	**11.8**	15.8	15.2	12.8	**14.6**	**13.0**
3.	MP3601	N-806	10.3	14.1	9.4	11.2	**11.3**	14.7	13.9	12.7	**13.8**	**12.3**
4.	DBW470	N-808	11.0	14.2	9.0	12.6	**11.7**	16.0	14.8	13.6	**14.8**	**13.0**
5.	MP1405	N-809	12.3	14.1	10.0	12.5	**12.2**	16.9	16.7	14.4	**16.0**	**13.8**
6.	MACS6851	N-810	10.2	13.3	9.7	11.2	**11.1**	15.5	12.7	11.4	**13.2**	**12.0**
7.	GW563	N-811	10.7	13.3	9.1	10.9	**11.0**	13.9	14.4	13.1	**13.8**	**12.2**
8.	AKAW5441	N-812	11.3	12.8	9.6	11.8	**11.4**	15.4	15.0	12.2	**14.2**	**12.6**
9.	CG1052	N-813	10.9	14.0	10.5	11.4	**11.7**	14.2	15.5	12.5	**14.1**	**12.7**
10.	MACS6850	N-815	12.3	14.1	9.0	11.4	**11.7**	14.1	13.1	12.9	**13.4**	**12.4**
11.	PBN 2115	N-817	11.9	13.3	9.2	11.0	**11.4**	14.9	14.4	12.6	**14.0**	**12.5**
12.	HI1605 (C)	N-819	11.8	14.4	9.5	12.2	**12.0**	15.0	14.2	13.5	**14.2**	**12.9**
13.	HI1702	N-820	10.3	15.2	9.1	12.0	**11.7**	14.4	14.1	13.3	**13.9**	**12.6**
14.	DBW110 (C)	N-821	12.2	13.3	8.8	11.7	**11.5**	14.7	13.6	12.3	**13.5**	**12.4**
15.	NIAW4533	N-822	12.7	14.9	9.5	12.2	**12.3**	16.6	14.4	13.0	**14.7**	**13.3**
16.	HI1701	N-823	12.2	12.1	10.2	11.8	**11.6**	14.7	15.1	11.5	**13.8**	**12.5**
17.	UAS3034	N-824	12.2	14.0	10.0	10.8	**11.7**	14.6	14.9	12.9	**14.1**	**12.8**
	Mean		**11.5**	**13.8**	**9.5**	**11.7**	**11.6**	**15.0**	**14.4**	**12.8**	**14.1**	**12.7**
T. durum												
1.	HI8856(d)	N-801	12.7	13.0	8.3	11.4	**11.4**	15.9	16.1	11.6	**14.5**	**12.7**
2.	UAS446(d) (C)	N-802	10.0	13.6	10.4	11.9	**11.5**	16.5	14.8	13.4	**14.9**	**13.0**
3.	HI8857(d)	N-804	12.1	13.0	9.2	11.9	**11.5**	14.5	14.3	12.6	**13.8**	**12.5**
4.	HI8627(d) (C)	N-807	12.5	13.6	9.4	12.8	**12.1**	17.1	14.7	11.4	**14.4**	**13.1**
5.	UAS487(d)	N-814	10.4	12.4	8.4	11.3	**10.6**	14.7	14.3	11.9	**13.6**	**11.9**
6.	DDW68(d)	N-816	11.3	13.6	8.7	11.9	**11.4**	15.6	15.2	12.1	**14.3**	**12.6**
7.	GW1372(d)	N-818	11.5	13.2	10.5	11.8	**11.8**	16.0	15.5	12.8	**14.8**	**13.0**
8.	NIDW1561(d)	N-825	9.6	13.1	10.1	11.3	**11.0**	17.4	15.5	12.4	**15.1**	**12.8**
	Mean		**11.3**	**13.2**	**9.4**	**11.8**	**11.4**	**16.0**	**15.0**	**12.3**	**14.4**	**12.7**

Table 121: Sedimentation value (ml) of *T. aestivum* and *T. durum* genotypes in NIVT 5B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Vijapur	Junagarh	Indore	P.kheda	Mean	Dharwad	Pune	Niphad	Mean	
T. aestivum												
1.	HI1700	N-803	48	45	42	43	**45**	46	43	41	**43**	**44**
2.	DBW469	N-805	65	65	62	62	**64**	67	64	64	**65**	**64**
3.	MP3601	N-806	45	42	41	38	**42**	45	41	36	**41**	**41**
4.	DBW470	N-808	59	58	54	57	**57**	56	57	53	**55**	**56**
5.	MP1405	N-809	55	57	52	52	**54**	59	56	57	**57**	**55**
6.	MACS6851	N-810	45	53	44	50	**48**	47	47	43	**46**	**47**
7.	GW563	N-811	43	45	41	40	**42**	45	44	47	**45**	**44**
8.	AKAW5441	N-812	51	54	44	52	**50**	48	54	52	**51**	**51**
9.	CG1052	N-813	57	56	51	51	**54**	54	55	57	**55**	**54**
10.	MACS6850	N-815	51	46	34	42	**43**	49	46	46	**47**	**45**
11.	PBN 2115	N-817	46	48	31	34	**40**	46	33	38	**39**	**39**
12.	HI1605 (C)	N-819	54	60	54	58	**57**	65	57	55	**59**	**58**
13.	HI1702	N-820	47	49	37	41	**44**	52	50	48	**50**	**46**
14.	DBW110 (C)	N-821	54	62	49	45	**53**	58	61	54	**58**	**55**
15.	NIAW4533	N-822	46	48	39	40	**43**	47	52	49	**49**	**46**
16.	HI1701	N-823	54	55	45	47	**50**	52	63	47	**54**	**52**
17.	UAS3034	N-824	61	63	52	52	**57**	62	61	52	**58**	**58**
	Mean		**52**	**53**	**45**	**47**	**49**	**53**	**52**	**49**	**51**	**50**
T. durum												
1.	HI8856(d)	N-801	28	32	28	29	**29**	36	26	25	**29**	**29**
2.	UAS446(d) (C)	N-802	34	36	35	32	**34**	41	36	34	**37**	**35**
3.	HI8857(d)	N-804	26	29	25	27	**27**	27	26	23	**25**	**26**
4.	HI8627(d) (C)	N-807	30	29	23	26	**27**	30	29	31	**30**	**28**
5.	UAS487(d)	N-814	32	35	27	31	**31**	36	35	34	**35**	**33**
6.	DDW68(d)	N-816	37	38	30	31	**34**	36	36	37	**36**	**35**
7.	GW1372(d)	N-818	21	21	21	15	**20**	22	22	23	**22**	**21**
8.	NIDW1561(d)	N-825	35	39	31	35	**35**	39	42	34	**38**	**36**
	Mean		**30**	**32**	**28**	**28**	**30**	**33**	**32**	**30**	**32**	**31**

Table 122: Phenol score (Max. 10) of *T. aestivum* and *T. durum* genotypes in NIVT 5B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Vijapur	Junagarh	Indore	P.kheda	Mean	Dharwad	Pune	Niphad	Mean	
T. aestivum												
1.	HI1700	N-803	4.5	4.0	4.5	4.0	**4.3**	4.5	3.5	4.0	**4.0**	**4.1**
2.	DBW469	N-805	9.0	8.5	8.5	8.5	**8.6**	9.0	8.0	8.5	**8.5**	**8.6**
3.	MP3601	N-806	5.5	5.0	6.5	6.5	**5.9**	6.0	5.5	6.0	**5.8**	**5.9**
4.	DBW470	N-808	9.0	9.0	8.0	9.0	**8.8**	8.0	8.0	7.0	**7.7**	**8.3**
5.	MP1405	N-809	9.0	9.0	7.5	8.0	**8.4**	7.0	7.0	7.0	**7.0**	**7.8**
6.	MACS6851	N-810	8.0	8.5	7.5	8.5	**8.1**	7.5	7.0	7.0	**7.2**	**7.7**
7.	GW563	N-811	4.0	4.5	4.0	5.0	**4.4**	4.5	4.0	4.5	**4.3**	**4.4**
8.	AKAW5441	N-812	7.0	7.5	7.0	7.5	**7.3**	7.0	7.5	7.0	**7.2**	**7.2**
9.	CG1052	N-813	8.5	9.0	7.5	8.0	**8.3**	7.5	8.0	7.5	**7.7**	**8.0**
10.	MACS6850	N-815	5.0	5.0	5.0	5.0	**5.0**	5.0	5.5	5.0	**5.2**	**5.1**
11.	PBN 2115	N-817	4.5	5.0	5.0	4.0	**4.6**	4.0	4.5	4.5	**4.3**	**4.5**
12.	HI1605 (C)	N-819	5.0	5.0	5.0	5.5	**5.1**	4.0	4.5	4.0	**4.2**	**4.7**
13.	HI1702	N-820	9.0	9.0	7.0	8.5	**8.4**	7.5	8.0	7.0	**7.5**	**8.0**
14.	DBW110 (C)	N-821	8.5	8.5	7.5	8.5	**8.3**	8.0	7.5	8.0	**7.8**	**8.1**
15.	NIAW4533	N-822	8.0	8.0	7.5	7.5	**7.8**	7.0	7.5	7.0	**7.2**	**7.5**
16.	HI1701	N-823	4.5	5.0	4.5	4.0	**4.5**	3.5	5.0	4.0	**4.2**	**4.4**
17.	UAS3034	N-824	9.5	9.0	9.0	9.0	**9.1**	8.5	9.0	8.0	**8.5**	**8.9**
	Mean		**7.0**	**7.0**	**6.6**	**6.9**	**6.9**	**6.4**	**6.5**	**6.2**	**6.4**	**6.6**
T. durum												
1.	HI8856(d)	N-801	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	**0.0**	**0.0**
2.	UAS446(d) (C)	N-802	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	**0.0**	**0.0**
3.	HI8857(d)	N-804	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	**0.0**	**0.0**
4.	HI8627(d) (C)	N-807	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	**0.0**	**0.0**
5.	UAS487(d)	N-814	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	**0.0**	**0.0**
6.	DDW68(d)	N-816	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	**0.0**	**0.0**
7.	GW1372(d)	N-818	8.5	9.0	7.0	8.5	**8.3***	7.0	6.5	7.0	**6.8**	**7.6***
8.	NIDW1561(d)	N-825	0.0	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	**0.0**	**0.0**
	Mean		0.0	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	**0.0**	**0.0**

***Suspected mixture, so not included in average**

Table 123: Yellow pigment (ppm) of *T. aestivum* and *T. durum* genotypes in NIVT 5B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Vijapur	Junagarh	Indore	P.kheda	Mean	Dharwad	Pune	Niphad	Mean	
T. aestivum												
1.	HI1700	N-803	3.0	3.2	3.1	3.5	**3.2**	3.3	3.4	3.2	**3.3**	**3.3**
2.	DBW469	N-805	3.3	3.2	3.2	3.6	**3.3**	3.7	4.9	3.3	**4.0**	**3.6**
3.	MP3601	N-806	4.4	3.6	4.2	4.7	**4.2**	4.6	3.8	4.1	**4.2**	**4.2**
4.	DBW470	N-808	3.2	3.1	3.3	3.7	**3.3**	3.9	3.6	3.4	**3.6**	**3.5**
5.	MP1405	N-809	3.9	4.1	4.0	4.8	**4.2**	5.3	4.0	4.0	**4.4**	**4.3**
6.	MACS6851	N-810	3.8	3.3	3.7	4.5	**3.8**	5.0	3.6	3.6	**4.1**	**3.9**
7.	GW563	N-811	3.3	3.4	3.3	4.2	**3.5**	4.0	6.6	2.7	**4.5**	**4.0**
8.	AKAW5441	N-812	3.5	3.5	3.5	4.2	**3.7**	5.2	4.1	3.3	**4.2**	**3.9**
9.	CG1052	N-813	2.9	2.9	3.1	3.7	**3.1**	5.1	3.9	2.8	**3.9**	**3.5**
10.	MACS6850	N-815	3.2	3.6	3.3	4.2	**3.6**	4.3	4.3	3.4	**4.0**	**3.8**
11.	PBN 2115	N-817	3.7	3.7	3.5	4.1	**3.8**	4.7	4.3	3.7	**4.2**	**4.0**
12.	HI1605 (C)	N-819	3.3	3.3	3.2	3.8	**3.4**	4.9	4.7	3.0	**4.2**	**3.8**
13.	HI1702	N-820	4.4	4.2	4.6	5.4	**4.6**	4.8	5.8	4.3	**4.9**	**4.8**
14.	DBW110 (C)	N-821	3.2	3.4	2.9	4.2	**3.4**	4.8	5.0	2.9	**4.2**	**3.8**
15.	NIAW4533	N-822	4.6	3.7	4.4	5.6	**4.6**	5.3	4.7	4.2	**4.7**	**4.6**
16.	HI1701	N-823	4.5	4.0	4.2	5.6	**4.6**	5.7	5.4	4.0	**5.0**	**4.8**
17.	UAS3034	N-824	3.9	3.1	4.4	4.7	**4.0**	5.1	4.9	3.6	**4.5**	**4.3**
	Mean		**3.7**	**3.5**	**3.6**	**4.4**	**3.8**	**4.7**	**4.5**	**3.5**	**4.2**	**4.0**
T. durum												
1.	HI8856(d)	N-801	8.1	8.0	7.9	8.6	**8.2**	8.6	8.9	8.2	**8.6**	**8.4**
2.	UAS446(d) (C)	N-802	7.1	6.4	6.5	6.5	**6.6**	6.6	6.8	5.9	**6.4**	**6.5**
3.	HI8857(d)	N-804	5.2	5.0	5.0	5.6	**5.2**	3.6	4.2	4.7	**4.1**	**4.7**
4.	HI8627(d) (C)	N-807	7.4	7.3	7.2	8.2	**7.5**	7.6	6.0	7.0	**6.9**	**7.2**
5.	UAS487(d)	N-814	8.6	8.3	7.9	8.6	**8.3**	8.8	8.8	7.4	**8.3**	**8.3**
6.	DDW68(d)	N-816	8.2	7.3	7.5	8.4	**7.9**	8.7	8.6	7.1	**8.1**	**8.0**
7.	GW1372(d)	N-818	5.6	5.5	5.3	6.4	**5.7**	5.0	6.7	6.0	**5.9**	**5.8**
8.	NIDW1561(d)	N-825	8.2	8.2	8.4	9.1	**8.5**	9.1	8.9	7.1	**8.3**	**8.4**
	Mean		**7.3**	**7.0**	**7.0**	**7.7**	**7.2**	**7.3**	**7.4**	**6.7**	**7.1**	**7.2**

Table 124: Yellow berry incidence (%) of *T. aestivum* and *T. durum* genotypes in NIVT 5B

S. No	Entries	Code	CZ					PZ				Overall Mean
			Vijapur	Junagarh	Indore	P.kheda	Mean	Dharwad	Pune	Niphad	Mean	
T. aestivum												
1.	HI1700	N-803	0.0	7.0	50.0	5.0	**15.5**	0.0	3.0	0.0	**1.0**	**9.3**
2.	DBW469	N-805	0.0	0.0	13.0	0.0	**3.3**	0.0	5.0	0.0	**1.7**	**2.6**
3.	MP3601	N-806	0.0	0.0	22.0	8.0	**7.5**	0.0	0.0	0.0	**0.0**	**4.3**
4.	DBW470	N-808	0.0	0.0	52.0	10.0	**15.5**	0.0	0.0	1.0	**0.3**	**9.0**
5.	MP1405	N-809	3.0	2.0	31.0	1.0	**9.3**	0.0	0.0	0.0	**0.0**	**5.3**
6.	MACS6851	N-810	0.0	4.0	26.0	8.0	**9.5**	0.0	1.0	0.0	**0.3**	**5.6**
7.	GW563	N-811	0.0	4.0	12.0	1.0	**4.3**	0.0	0.0	1.0	**0.3**	**2.6**
8.	AKAW5441	N-812	1.0	7.0	28.0	1.0	**9.3**	1.0	0.0	0.0	**0.3**	**5.4**
9.	CG1052	N-813	0.0	0.0	0.0	1.0	**0.3**	0.0	0.0	0.0	**0.0**	**0.1**
10.	MACS6850	N-815	0.0	2.0	40.0	4.0	**11.5**	0.0	0.0	1.0	**0.3**	**6.7**
11.	PBN 2115	N-817	0.0	1.0	28.0	0.0	**7.3**	0.0	5.0	0.0	**1.7**	**4.9**
12.	HI1605 (C)	N-819	4.0	2.0	45.0	0.0	**12.8**	0.0	0.0	1.0	**0.3**	**7.4**
13.	HI1702	N-820	0.0	7.0	27.0	0.0	**8.5**	0.0	1.0	0.0	**0.3**	**5.0**
14.	DBW110 (C)	N-821	0.0	5.0	70.0	1.0	**19.0**	0.0	2.0	6.0	**2.7**	**12.0**
15.	NIAW4533	N-822	7.0	9.0	40.0	0.0	**14.0**	0.0	9.0	4.0	**4.3**	**9.9**
16.	HI1701	N-823	0.0	2.0	10.0	0.0	**3.0**	0.0	0.0	0.0	**0.0**	**1.7**
17.	UAS3034	N-824	0.0	2.0	29.0	0.0	**7.8**	0.0	0.0	0.0	**0.0**	**4.4**
	Mean		**0.9**	**3.2**	**30.8**	**2.4**	**9.3**	**0.1**	**1.5**	**0.8**	**0.8**	**5.7**
T. durum												
1.	HI8856(d)	N-801	7.0	5.0	74.0	3.0	**22.3**	0.0	0.0	1.0	**0.3**	**12.9**
2.	UAS446(d) (C)	N-802	11.0	1.0	21.0	9.0	**10.5**	0.0	2.0	2.0	**1.3**	**6.6**
3.	HI8857(d)	N-804	1.0	3.0	40.0	0.0	**11.0**	0.0	0.0	1.0	**0.3**	**6.4**
4.	HI8627(d) (C)	N-807	0.0	4.0	24.0	2.0	**7.5**	0.0	0.0	4.0	**1.3**	**4.9**
5.	UAS487(d)	N-814	7.0	5.0	85.0	32.0	**32.3**	0.0	2.0	9.0	**3.7**	**20.0**
6.	DDW68(d)	N-816	7.0	10.0	74.0	5.0	**24.0**	1.0	0.0	5.0	**2.0**	**14.6**
7.	GW1372(d)	N-818	12.0	14.0	26.0	7.0	**14.8**	0.0	2.0	1.0	**1.0**	**8.9**
8.	NIDW1561(d)	N-825	15.0	8.0	43.0	8.0	**18.5**	0.0	1.0	2.0	**1.0**	**11.0**
	Mean		**7.5**	**6.3**	**48.4**	**8.3**	**17.6**	**0.1**	**0.9**	**3.1**	**1.4**	**10.6**

Table 125: Grain appearance score (Max-10) of *T. aestivum* genotypes in NIVT 6

S. No	Entries	Code	NWPZ					CZ					Overall Mean
			Ludhiana	Delhi	Karnal	Hisar	Mean	Indore	Junagarh	P' khera	Vijapur	Mean	
1.	UP3148	901	6.0	6.0	6.6	6.0	**6.2**	6.1	4.3	5.3	4.8	**5.1**	**5.6**
2.	DBW473	902	7.0	6.0	6.2	5.0	**6.1**	6.6	6.6	6.7	5.8	**6.4**	**6.2**
3.	PBW934	903	6.0	7.0	6.2	7.0	**6.6**	6.2	6.8	6.6	6.0	**6.4**	**6.5**
4.	PBW931	904	7.0	6.0	6.4	6.0	**6.4**	6.7	6.7	6.5	6.3	**6.6**	**6.5**
5.	DBW474	905	7.0	7.0	7.0	6.0	**6.8**	6.6	6.4	6.8	6.5	**6.6**	**6.7**
6.	DBW327 (C)	906	6.0	7.0	6.4	7.0	**6.6**	6.6	6.6	6.7	6.1	**6.5**	**6.6**
7.	DBW187 (C)	907	7.0	7.0	6.2	5.0	**6.3**	6.1	6.1	6.2	5.8	**6.1**	**6.2**
8.	PBW932	908	6.0	6.0	5.8	6.0	**6.0**	6.0	5.6	5.9	5.5	**5.8**	**5.9**
9.	MP1406	909	7.0	6.0	6.6	8.0	**6.9**	6.6	6.4	6.5	6.3	**6.5**	**6.7**
10.	HD3489	910	7.0	7.0	6.2	6.0	**6.6**	5.1	6.2	5.6	5.9	**5.7**	**6.1**
11.	WH1334	911	6.0	8.0	6.4	6.0	**6.6**	6.4	6.5	6.3	6.0	**6.3**	**6.5**
12.	GW322 (C)	912	6.0	5.0	6.0	7.0	**6.0**	6.5	6.4	6.0	6.2	**6.3**	**6.1**
13.	DBW475	913	7.0	6.0	5.8	6.0	**6.2**	6.8	6.4	6.8	6.3	**6.6**	**6.4**
14.	GW568	914	8.0	4.0	5.6	7.0	**6.2**	7.1	7.0	7.0	7.0	**7.0**	**6.6**
15.	DBW471	915	7.0	4.0	5.8	7.0	**6.0**	6.4	6.4	6.2	5.9	**6.2**	**6.1**
16.	PBW935	916	7.0	6.0	6.0	6.0	**6.3**	6.8	6.7	6.8	6.3	**6.7**	**6.5**
17.	DBW472	917	6.0	4.0	5.8	6.0	**5.5**	6.0	6.0	5.8	6.0	**6.0**	**5.7**
18.	HD3492	918	8.0	5.0	6.0	5.0	**6.0**	5.9	6.3	5.9	6.0	**6.0**	**6.0**
19.	DBW303 (C)	919	7.0	7.0	6.4	6.0	**6.6**	6.3	6.3	6.2	4.9	**5.9**	**6.3**
20.	HD3491	920	7.0	6.0	6.2	6.0	**6.3**	6.4	5.8	6.4	6.4	**6.3**	**6.3**
21.	Raj4591	921	8.0	6.0	6.2	7.0	**6.8**	7.5	7.5	7.1	7.3	**7.4**	**7.1**
22.	WH1333	922	6.0	7.0	6.4	7.0	**6.6**	6.2	6.3	6.2	5.9	**6.2**	**6.4**
23.	PBW933	923	7.0	6.0	6.4	6.0	**6.4**	6.3	6.4	6.4	5.6	**6.2**	**6.3**
24.	HD3490	924	7.0	6.0	5.8	7.0	**6.5**	6.1	5.2	6.2	5.4	**5.7**	**6.1**
25.	GW564	925	8.0	7.0	6.6	8.0	**7.4**	6.8	6.9	6.8	6.5	**6.8**	**7.1**
		Mean	**6.8**	**6.1**	**6.2**	**6.4**	**6.4**	**6.4**	**6.3**	**6.4**	**6.0**	**6.3**	**6.3**

Table 126: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in NIVT 6

S. No	Entries	Code	NWPZ					CZ					Overall Mean
			Ludhiana	Delhi	Karnal	Hisar	Mean	Indore	Junagarh	P' khera	Vijapur	Mean	
1.	UP3148	901	77.6	76.4	77.0	73.1	**76.0**	78.5	73.5	73.6	71.8	**74.4**	**75.2**
2.	DBW473	902	79.8	80.5	77.4	79.6	**79.3**	80.8	80.1	80.8	78.6	**80.1**	**79.7**
3.	PBW934	903	77.5	79.8	78.7	79.0	**78.8**	79.9	80.2	80.1	78.0	**79.6**	**79.2**
4.	PBW931	904	79.9	81.5	78.4	82.8	**80.7**	81.8	80.9	81.6	79.3	**80.9**	**80.8**
5.	DBW474	905	80.7	81.7	82.1	81.8	**81.6**	81.6	80.6	81.5	79.6	**80.8**	**81.2**
6.	DBW327(C)	906	81.1	81.1	78.4	79.5	**80.0**	81.5	80.5	81.4	78.8	**80.6**	**80.3**
7.	DBW187(C)	907	79.0	78.9	77.5	79.3	**78.7**	80.3	79.7	80.1	77.4	**79.4**	**79.0**
8.	PBW932	908	79.1	79.7	77.4	76.9	**78.3**	79.9	78.3	79.5	77.2	**78.7**	**78.5**
9.	MP1406	909	80.6	80.3	78.2	81.0	**80.0**	79.6	79.4	79.9	77.7	**79.2**	**79.6**
10.	HD3489	910	77.5	78.9	79.8	80.6	**79.2**	80.4	79.7	80.0	78.8	**79.7**	**79.5**
11.	WH1334	911	78.4	80.0	77.3	77.8	**78.4**	79.8	79.4	79.5	77.0	**78.9**	**78.7**
12.	GW322 (C)	912	78.8	80.0	77.9	78.6	**78.8**	80.5	79.4	80.4	78.8	**79.8**	**79.3**
13.	DBW475	913	79.6	81.2	78.7	76.8	**79.1**	80.4	79.4	80.3	78.0	**79.5**	**79.3**
14.	GW568	914	77.0	79.3	80.3	80.8	**79.4**	81.8	80.5	82.0	80.1	**81.1**	**80.2**
15.	DBW471	915	79.2	78.6	78.1	81.0	**79.2**	79.6	79.1	80.2	76.4	**78.8**	**79.0**
16.	PBW935	916	80.1	80.9	79.2	81.5	**80.4**	82.0	80.9	81.9	79.7	**81.1**	**80.8**
17.	DBW472	917	78.9	77.5	75.3	79.9	**77.9**	78.9	78.6	78.4	77.8	**78.4**	**78.2**
18.	HD3492	918	75.7	77.5	78.2	76.9	**77.1**	78.8	79.1	78.9	77.9	**78.7**	**77.9**
19.	DBW303(C)	919	80.3	79.7	80.5	79.6	**80.0**	81.8	80.9	81.7	77.6	**80.5**	**80.3**
20.	HD3491	920	79.2	80.2	77.6	78.6	**78.9**	80.1	78.4	79.2	78.6	**79.1**	**79.0**
21.	Raj4591	921	80.2	82.3	82.0	82.6	**81.8**	82.1	81.1	81.8	81.2	**81.6**	**81.7**
22.	WH1333	922	78.1	78.2	77.9	78.4	**78.2**	79.3	78.9	79.7	76.9	**78.7**	**78.4**
23.	PBW933	923	78.4	79.8	77.9	78.3	**78.6**	78.7	79.0	78.7	75.9	**78.1**	**78.3**
24.	HD3490	924	78.1	80.2	77.8	79.1	**78.8**	81.4	80.6	81.8	78.6	**80.6**	**79.7**
25.	GW564	925	79.3	80.2	80.1	80.3	**80.0**	82.0	81.3	81.9	80.3	**81.4**	**80.7**
		Mean	**79.0**	**79.8**	**78.5**	**79.4**	**79.2**	**80.5**	**79.6**	**80.2**	**78.1**	**79.6**	**79.4**

Table 127: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes in NIVT 6

S. No	Entries	Code	NWPZ					CZ					Overall Mean
			Ludhiana	Delhi	Karnal	Hisar	Mean	Indore	Junagarh	P' khera	Vijapur	Mean	
1.	UP3148	901	11.4	13.4	12.8	13.7	**12.8**	10.9	14.0	11.9	13.1	**12.5**	**12.6**
2.	DBW473	902	-	12.6	13.0	10.6	**12.1**	11.7	13.2	11.0	11.6	**11.9**	**12.0**
3.	PBW934	903	11.3	12.5	13.8	12.3	**12.5**	12.0	12.8	12.0	11.7	**12.1**	**12.3**
4.	PBW931	904	11.4	14.0	14.4	11.8	**12.9**	13.3	14.1	11.9	12.6	**13.0**	**12.9**
5.	DBW474	905	10.6	11.2	12.3	11.0	**11.3**	11.4	11.5	10.9	11.2	**11.3**	**11.3**
6.	DBW327(C)	906	-	11.5	12.5	11.1	**11.7**	11.6	11.9	11.4	11.6	**11.6**	**11.7**
7.	DBW187(C)	907	11.6	12.6	13.2	11.1	**12.1**	12.4	13.1	12.1	13.0	**12.7**	**12.4**
8.	PBW932	908	10.3	14.0	13.6	11.7	**12.4**	11.8	13.2	11.9	12.1	**12.3**	**12.3**
9.	MP1406	909	11.3	12.7	12.8	11.7	**12.1**	11.8	13.2	10.3	12.6	**12.0**	**12.1**
10.	HD3489	910	13.1	13.6	14.3	12.7	**13.4**	12.5	13.7	12.3	12.8	**12.8**	**13.1**
11.	WH1334	911	-	11.0	11.8	11.5	**11.4**	11.2	11.7	11.0	11.2	**11.3**	**11.3**
12.	GW322 (C)	912	10.9	11.2	12.7	-	**11.6**	11.4	11.6	10.7	11.1	**11.2**	**11.4**
13.	DBW475	913	10.2	11.8	12.7	13.0	**11.9**	11.4	12.5	10.8	12.1	**11.7**	**11.8**
14.	GW568	914	12.5	13.0	13.9	11.7	**12.8**	11.1	11.9	11.2	11.5	**11.4**	**12.1**
15.	DBW471	915	11.5	14.3	14.8	11.4	**13.0**	11.9	13.9	12.5	12.7	**12.8**	**12.9**
16.	PBW935	916	11.3	13.3	13.4	12.2	**12.6**	11.8	12.6	11.0	12.4	**12.0**	**12.3**
17.	DBW472	917	11.7	14.2	14.8	12.7	**13.4**	12.8	14.4	13.0	13.5	**13.4**	**13.4**
18.	HD3492	918	12.4	-	14.6	12.6	**13.2**	12.1	13.2	12.5	12.4	**12.6**	**12.8**
19.	DBW303(C)	919	11.3	-	14.0	12.3	**12.5**	11.4	12.8	11.4	12.8	**12.1**	**12.3**
20.	HD3491	920	11.8	13.2	13.0	12.3	**12.6**	11.5	13.6	10.9	11.7	**11.9**	**12.2**
21.	Raj4591	921	12.6	13.1	13.6	12.1	**12.9**	12.4	13.2	12.9	11.8	**12.6**	**12.7**
22.	WH1333	922	10.2	13.2	12.8	12.9	**12.3**	12.9	13.5	12.3	13.2	**13.0**	**12.6**
23.	PBW933	923	11.7	12.8	12.6	-	**12.4**	11.0	14.4	11.4	12.0	**12.2**	**12.3**
24.	HD3490	924	11.3	12.2	13.4	11.4	**12.1**	12.0	12.9	11.0	11.1	**11.8**	**11.9**
25.	GW564	925	13.0	11.9	13.7	11.0	**12.4**	11.5	12.3	11.1	11.8	**11.7**	**12.0**
		Mean	**11.5**	**12.8**	**13.4**	**11.9**	**12.4**	**11.8**	**13.0**	**11.6**	**12.1**	**12.1**	**12.3**

Table 128: Sedimentation value (ml) of *T. aestivum* genotypes in NIVT 6

S. No	Entries	Code	NWPZ					CZ					Overall Mean
			Ludhiana	Delhi	Karnal	Hisar	Mean	Indore	Junagarh	P' khera	Vijapur	Mean	
1.	UP3148	901	45.0	46.0	58.2	48.0	**49.3**	41.0	52.0	43.0	46.0	**45.5**	**47.4**
2.	DBW473	902	43.0	46.0	54.3	40.0	**45.8**	42.0	48.0	39.0	41.0	**42.5**	**44.2**
3.	PBW934	903	42.0	48.0	51.2	43.0	**46.1**	44.0	47.0	43.0	43.0	**44.3**	**45.2**
4.	PBW931	904	47.0	50.0	56.0	52.0	**51.3**	49.0	55.0	43.0	46.0	**48.3**	**49.8**
5.	DBW474	905	35.0	41.0	51.6	37.0	**41.2**	36.0	38.0	36.0	36.0	**36.5**	**38.8**
6.	DBW327(C)	906	37.0	39.0	49.5	43.0	**42.1**	38.0	37.0	38.0	39.0	**38.0**	**40.1**
7.	DBW187(C)	907	43.0	42.0	58.6	43.0	**46.7**	43.0	47.0	42.0	45.0	**44.3**	**45.5**
8.	PBW932	908	35.0	41.0	59.1	45.0	**45.0**	42.0	46.0	43.0	43.0	**43.5**	**44.3**
9.	MP1406	909	35.0	43.0	52.5	38.0	**42.1**	42.0	46.0	41.0	44.0	**43.3**	**42.7**
10.	HD3489	910	37.0	47.0	48.6	40.0	**43.1**	43.0	49.0	41.0	39.0	**43.0**	**43.1**
11.	WH1334	911	45.0	49.0	53.4	51.0	**49.6**	36.0	38.0	36.0	41.0	**37.8**	**43.7**
12.	GW322 (C)	912	37.0	36.0	42.5	40.0	**38.9**	38.0	38.0	34.0	37.0	**36.8**	**37.8**
13.	DBW475	913	42.0	43.0	49.5	49.0	**45.9**	40.0	43.0	37.0	42.0	**40.5**	**43.2**
14.	GW568	914	30.0	34.0	49.9	35.0	**37.2**	37.0	39.0	36.0	39.0	**37.8**	**37.5**
15.	DBW471	915	37.0	42.0	55.6	39.0	**43.4**	43.0	50.0	45.0	45.0	**45.8**	**44.6**
16.	PBW935	916	44.0	53.0	56.0	41.0	**48.5**	42.0	46.0	38.0	44.0	**42.5**	**45.5**
17.	DBW472	917	43.0	45.0	55.6	58.0	**50.4**	46.0	53.0	46.0	49.0	**48.5**	**49.4**
18.	HD3492	918	42.0	34.0	51.6	36.0	**40.9**	40.0	45.0	43.0	41.0	**42.3**	**41.6**
19.	DBW303(C)	919	37.0	40.0	53.8	48.0	**44.7**	40.0	47.0	42.0	46.0	**43.8**	**44.2**
20.	HD3491	920	45.0	50.0	66.5	51.0	**53.1**	42.0	46.0	42.0	43.0	**43.3**	**48.2**
21.	Raj4591	921	42.0	32.0	45.5	35.0	**38.6**	40.0	45.0	44.0	39.0	**42.0**	**40.3**
22.	WH1333	922	40.0	41.0	57.7	48.0	**46.7**	47.0	49.0	44.0	47.0	**46.8**	**46.7**
23.	PBW933	923	43.0	45.0	59.5	48.0	**48.9**	38.0	53.0	39.0	43.0	**43.3**	**46.1**
24.	HD3490	924	39.0	43.0	51.2	48.0	**45.3**	40.0	44.0	37.0	37.0	**39.5**	**42.4**
25.	GW564	925	41.0	42.0	46.9	35.0	**41.2**	40.0	43.0	40.0	42.0	**41.3**	**41.2**
		Mean	**40.2**	**42.9**	**53.4**	**43.6**	**45.0**	**41.2**	**45.8**	**40.5**	**42.3**	**42.4**	**43.7**

Table 129: Phenol score (Max-10) of *T. aestivum* genotypes in NIVT 6

S. No	Entries	Code	NWPZ					CZ					Overall Mean
			Ludhiana	Delhi	Karnal	Hisar	Mean	Indore	Junagarh	P' khera	Vijapur	Mean	
1.	UP3148	901	7.0	7.0	8.5	5.0	**6.9**	6.0	6.0	6.3	5.3	**5.9**	**6.9**
2.	DBW473	902	6.0	7.0	8.5	7.0	**7.1**	7.8	6.8	7.3	6.5	**7.1**	**7.1**
3.	PBW934	903	6.0	6.0	8.0	7.0	**6.8**	6.0	5.8	7.0	6.3	**6.3**	**6.8**
4.	PBW931	904	6.0	7.0	8.0	6.0	**6.8**	5.8	5.8	6.3	6.0	**6.0**	**6.8**
5.	DBW474	905	7.0	6.0	8.5	7.0	**7.1**	5.0	4.8	6.0	4.8	**5.2**	**7.1**
6.	DBW327 (C)	906	7.0	6.0	8.0	8.0	**7.3**	4.8	3.8	5.3	5.3	**4.8**	**7.3**
7.	DBW187 (C)	907	7.0	6.0	9.5	7.0	**7.4**	7.8	6.8	6.8	7.0	**7.1**	**7.4**
8.	PBW932	908	6.0	7.0	8.0	7.0	**7.0**	7.0	7.3	7.8	7.3	**7.4**	**7.0**
9.	MP1406	909	6.0	6.0	8.0	6.0	**6.5**	6.0	5.8	6.0	4.8	**5.7**	**6.5**
10.	HD3489	910	7.0	5.0	6.5	7.0	**6.4**	1.8	2.0	2.0	1.3	**1.8**	**6.4**
11.	WH1334	911	7.0	7.0	7.5	7.0	**7.1**	5.8	5.0	5.8	5.5	**5.5**	**7.1**
12.	GW322 (C)	912	7.0	6.0	7.5	7.0	**6.9**	5.0	3.8	4.3	5.0	**4.5**	**6.9**
13.	DBW475	913	6.0	7.0	7.0	6.0	**6.5**	3.8	2.8	3.0	3.3	**3.2**	**6.5**
14.	GW568	914	7.0	6.0	5.5	7.0	**6.4**	1.3	1.0	1.0	1.0	**1.1**	**6.4**
15.	DBW471	915	6.0	6.0	7.0	6.0	**6.3**	6.0	7.0	6.3	7.5	**6.7**	**6.3**
16.	PBW935	916	6.0	7.0	8.0	5.0	**6.5**	6.8	7.8	6.3	6.3	**6.8**	**6.5**
17.	DBW472	917	7.0	6.0	7.0	6.0	**6.5**	5.3	4.8	5.8	4.8	**5.2**	**6.5**
18.	HD3492	918	7.0	6.0	5.0	7.0	**6.3**	2.0	1.3	1.3	1.5	**1.5**	**6.3**
19.	DBW303 (C)	919	6.0	6.0	8.0	6.0	**6.5**	4.8	5.8	6.5	6.8	**6.0**	**6.5**
20.	HD3491	920	7.0	7.0	9.0	7.0	**7.5**	5.8	6.0	5.8	7.0	**6.2**	**7.5**
21.	Raj4591	921	6.0	7.0	5.5	6.0	**6.1**	1.0	1.0	1.0	1.3	**1.1**	**6.1**
22.	WH1333	922	7.0	6.0	9.5	7.0	**7.4**	8.0	7.0	6.8	6.8	**7.2**	**7.4**
23.	PBW933	923	6.0	6.0	7.0	6.0	**6.3**	3.3	4.8	3.3	4.3	**3.9**	**6.3**
24.	HD3490	924	7.0	7.0	8.0	7.0	**7.3**	5.3	4.8	3.3	4.0	**4.4**	**7.3**
25.	GW564	925	6.0	8.0	5.5	7.0	**6.6**	1.5	1.5	1.3	1.3	**1.4**	**6.6**
		Mean	**6.5**	**6.4**	**7.5**	**6.6**	**6.8**	**4.9**	**4.8**	**4.9**	**4.8**	**4.9***	**6.8**

***Data of CZ has erratic phenol scores, therefore has not been included in overall mean**

Table 130: Grain appearance score (Max-10) of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVT/IVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
IVT Rainfed, Timely Sown						
1	HS507 (C)	201	6.8	5.8	6.2	**6.3**
2	HS562 (C)	216	6.4	6.0	6.6	**6.3**
3	HPW500	202	6.8	6.2	6.4	**6.5**
4	VL2056	203	6.6	5.6	6.2	**6.1**
5	UP3149	204	6.8	6.2	6.8	**6.6**
6	VL2057	205	6.6	5.6	6.4	**6.2**
7	SKW367	206	6.6	5.8	6.4	**6.3**
8	VL2055	207	6.8	6.2	6.8	**6.6**
9	HPW502	208	7.0	6.0	6.6	**6.5**
10	HS701	209	7.0	6.2	6.8	**6.7**
11	HS702	210	6.8	6.4	6.4	**6.5**
12	HS700	211	7.4	6.2	6.6	**6.7**
13	HPW499	212	6.4	5.8	5.2	**5.8**
14	VL2058	213	6.4	5.4	6.2	**6.0**
15	HD3493	214	6.6	5.8	6.2	**6.2**
16	HPW501	215	6.4	5.6	5.6	**5.9**
Mean			**6.7**	**5.9**	**6.3**	**6.3**
AVT/IVT Irrigated, Late Sown						
1	HS490 (C)	301	6.6	5.4	6.2	**6.1**
2	VL892 (C)	306	6.6	6.0	6.6	**6.4**
3	VL3031	302	6.6	5.4	7.0	**6.3**
4	HS703	303	6.4	5.6	6.8	**6.3**
5	VL3033	304	6.4	6.0	6.8	**6.4**
6	HPW504	305	6.6	5.8	6.6	**6.3**
7	VL3036M	307	6.4	5.8	6.2	**6.1**
8	HS704	308	6.8	5.8	7.0	**6.5**
9	HPW503	309	6.8	5.8	6.6	**6.4**
10	VL3035	310	7.2	6.6	7.2	**7.0**
11	HS705	311	6.8	6.4	6.8	**6.7**
12	VL3034	312	6.8	6.2	6.6	**6.5**
13	HPW505	313	6.6	6.4	6.4	**6.5**
14	HS698	314	6.6	6.2	6.6	**6.5**
Mean			**6.7**	**6.0**	**6.7**	**6.4**

Table 131: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVT/IVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
IVT Rainfed, Timely Sown						
1	HS507 (C)	201	80.2	82.1	80.4	**80.9**
2	HS562 (C)	216	80.5	81.8	80.7	**81.0**
3	HPW500	202	79.5	80.3	77.9	**79.2**
4	VL2056	203	82.3	83.1	79.5	**81.6**
5	UP3149	204	81.1	83.0	79.5	**81.2**
6	VL2057	205	79.5	82.3	78.3	**80.0**
7	SKW367	206	81.3	79.6	79.5	**80.1**
8	VL2055	207	78.7	84.2	78.7	**80.5**
9	HPW502	208	83.4	82.1	81.8	**82.4**
10	HS701	209	80.6	82.6	80.5	**81.2**
11	HS702	210	81.5	82.4	78.7	**80.9**
12	HS700	211	83.1	78.9	79.4	**80.5**
13	HPW499	212	76.9	78.9	74.8	**76.9**
14	VL2058	213	79.7	82.0	78.3	**80.0**
15	HD3493	214	79.3	79.0	77.5	**78.6**
16	HPW501	215	78.2	80.0	79.1	**79.1**
Mean			**80.4**	**81.4**	**79.0**	**80.3**
AVT/IVT Irrigated, Late Sown						
1	HS490 (C)	301	76.8	75.9	78.6	**77.1**
2	VL892 (C)	306	80.5	81.4	82.0	**81.3**
3	VL3031	302	79.8	77.6	82.4	**79.9**
4	HS703	303	77.0	77.8	78.8	**77.9**
5	VL3033	304	79.8	83.0	83.1	**82.0**
6	HPW504	305	78.5	80.9	80.6	**80.0**
7	VL3036M	307	79.9	80.6	81.7	**80.7**
8	HS704	308	79.0	78.6	81.0	**79.5**
9	HPW503	309	78.0	77.3	80.4	**78.6**
10	VL3035	310	79.2	80.0	82.3	**80.5**
11	HS705	311	80.6	80.2	82.0	**80.9**
12	VL3034	312	78.7	79.8	81.6	**80.0**
13	HPW505	313	79.6	80.4	80.3	**80.1**
14	HS698	314	79.0	78.0	80.2	**79.1**
Mean			**79.0**	**79.4**	**81.1**	**79.8**

Table 132: Protein content (%) at 12% moisture basis of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVT/IVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
IVT Rainfed, Timely Sown						
1	HS507 (C)	201	11.9	8.3	8.5	**9.6**
2	HS562 (C)	216	12.8	7.7	9.2	**9.9**
3	HPW500	202	11.6	9.5	9.6	**10.3**
4	VL2056	203	11.9	7.7	8.7	**9.5**
5	UP3149	204	15.3	10.2	12.2	**12.6**
6	VL2057	205	12.6	8.0	9.3	**10.0**
7	SKW367	206	13.5	10.0	13.0	**12.2**
8	VL2055	207	14.4	12.9	11.4	**12.9**
9	HPW502	208	13.4	8.9	10.5	**10.9**
10	HS701	209	13.3	9.1	10.1	**10.8**
11	HS702	210	12.7	10.2	10.7	**11.2**
12	HS700	211	12.2	10.1	11.8	**11.4**
13	HPW499	212	12.7	8.7	11.6	**11.0**
14	VL2058	213	13.7	9.1	9.6	**10.8**
15	HD3493	214	13.5	8.6	8.8	**10.3**
16	HPW501	215	13.1	9.4	9.8	**10.8**
Mean			**13.0**	**9.3**	**10.3**	**10.9**
AVT/IVT Irrigated, Late Sown						
1	HS490 (C)	301	10.9	10.1	9.9	**10.3**
2	VL892 (C)	306	12.1	8.6	10.4	**10.4**
3	VL3031	302	11.0	9.6	11.4	**10.7**
4	HS703	303	11.4	10.8	10.8	**11.0**
5	VL3033	304	10.9	10.0	9.6	**10.2**
6	HPW504	305	10.9	10.2	11.2	**10.8**
7	VL3036M	307	11.0	9.9	10.0	**10.3**
8	HS704	308	11.1	10.2	10.7	**10.7**
9	HPW503	309	11.1	10.0	10.6	**10.6**
10	VL3035	310	11.9	10.7	12.3	**11.7**
11	HS705	311	10.3	10.6	10.7	**10.5**
12	VL3034	312	11.6	10.3	11.3	**11.0**
13	HPW505	313	12.2	12.1	13.9	**12.7**
14	HS698	314	10.8	9.5	11.0	**10.5**
Mean			**11.2**	**10.2**	**11.0**	**10.8**

Table 133: Sedimentation value (ml) of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVT/IVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
IVT Rainfed, Timely Sown						
1	HS507 (C)	201	42	38	38	**40**
2	HS562 (C)	216	53	39	49	**47**
3	HPW500	202	38	36	42	**39**
4	VL2056	203	46	37	43	**42**
5	UP3149	204	47	45	56	**49**
6	VL2057	205	41	34	41	**39**
7	SKW367	206	47	37	50	**45**
8	VL2055	207	47	50	55	**51**
9	HPW502	208	52	47	51	**50**
10	HS701	209	49	40	46	**45**
11	HS702	210	49	44	52	**48**
12	HS700	211	34	25	43	**34**
13	HPW499	212	42	38	48	**42**
14	VL2058	213	49	41	46	**45**
15	HD3493	214	53	46	50	**50**
16	HPW501	215	47	40	50	**46**
Mean			**46**	**40**	**47**	**44**
AVT/IVT Irrigated, Late Sown						
1	HS490 (C)	301	43	38	38	**40**
2	VL892 (C)	306	41	34	43	**39**
3	VL3031	302	42	42	41	**41**
4	HS703	303	53	52	51	**52**
5	VL3033	304	50	51	55	**52**
6	HPW504	305	39	39	46	**41**
7	VL3036M	307	41	32	39	**38**
8	HS704	308	45	38	48	**44**
9	HPW503	309	45	45	54	**48**
10	VL3035	310	47	49	54	**50**
11	HS705	311	42	43	46	**44**
12	VL3034	312	57	50	59	**55**
13	HPW505	313	49	49	58	**52**
14	HS698	314	42	38	51	**44**
Mean			**46**	**43**	**49**	**46**

Table 134: Phenol test (Max-10) of *T. aestivum* genotypes in Northern Hills Zone (NHZ) AVT/IVTs

S. No.	Entries	Code	Almora	Shimla	Malan	Mean
IVT Rainfed, Timely Sown						
1	HS507 (C)	201	7.0	6.0	6.5	**6.5**
2	HS562 (C)	216	7.5	7.0	8.0	**7.5**
3	HPW500	202	7.5	6.0	7.5	**7.0**
4	VL2056	203	8.0	7.0	7.0	**7.3**
5	UP3149	204	7.5	7.0	7.5	**7.3**
6	VL2057	205	8.5	7.0	7.5	**7.7**
7	SKW367	206	7.5	6.5	7.5	**7.2**
8	VL2055	207	7.0	6.0	6.5	**6.5**
9	HPW502	208	6.5	6.0	7.0	**6.5**
10	HS701	209	6.5	6.0	6.0	**6.2**
11	HS702	210	8.5	7.0	8.0	**7.8**
12	HS700	211	7.0	6.0	7.0	**6.7**
13	HPW499	212	7.5	7.0	7.5	**7.3**
14	VL2058	213	8.0	7.5	8.5	**8.0**
15	HD3493	214	8.0	7.0	7.5	**7.5**
16	HPW501	215	8.0	7.0	8.0	**7.7**
Mean			**7.5**	**6.6**	**7.3**	**7.2**
AVT/IVT Irrigated, Late Sown						
1	HS490 (C)	301	7.5	6.5	6.5	**6.8**
2	VL892 (C)	306	8.5	7.0	7.5	**7.7**
3	VL3031	302	7.0	6.5	6.0	**6.5**
4	HS703	303	3.5	4.5	5.0	**4.3**
5	VL3033	304	6.5	6.5	7.0	**6.7**
6	HPW504	305	8.5	7.0	7.0	**7.5**
7	VL3036M	307	8.0	7.0	7.5	**7.5**
8	HS704	308	3.0	4.0	4.5	**3.8**
9	HPW503	309	9.5	7.5	8.0	**8.3**
10	VL3035	310	9.0	7.5	8.0	**8.2**
11	HS705	311	9.5	7.0	8.5	**8.3**
12	VL3034	312	7.0	7.0	7.0	**7.0**
13	HPW505	313	7.5	7.0	7.0	**7.2**
14	HS698	314	3.0	5.0	5.0	**4.3**
Mean			**7.0**	**6.4**	**6.8**	**6.7**

Section E

Nurseries
QCWBN Tables 135-140
SATSN Tables 141-145

Table 135: Grain appearance score (Max. 10) of *T. aestivum* and *T. durum* genotypes in QCWBN entries

S. No.	Entries	Code	NWPZ					NEPZ		
			Ludhiana	Hisar	Karnal	Pantnagar	Mean	Kanpur	Varanasi	Mean
1	NIAW4114	QC-1	5.8	5.8	7.0	5.6	**6.1**	6.2	5.0	**5.6**
2	UASQ337(d)	QC-2	6.2	5.8	6.8	6.0	**6.2**	6.4	5.2	**5.8**
3	BST23-1	QC-3	6.0	5.8	6.6	5.6	**6.0**	6.6	5.2	**5.9**
4	QBP2308	QC-4	6.6	5.8	5.4	5.6	**5.9**	6.8	5.4	**6.1**
5	RWP2196	QC-5	6.0	6.0	5.6	5.6	**5.8**	6.2	5.6	**5.9**
6	UP3127	QC-6	5.8	6.0	5.8	5.8	**5.9**	6.4	5.0	**5.7**
7	GW322 (C)	QC-7	5.8	5.6	6.6	5.6	**5.9**	5.4	5.2	**5.3**
8	WBL9966	QC-8	6.4	6.0	6.4	5.8	**6.2**	5.4	5.6	**5.5**
9	GW1028	QC-9	6.0	5.8	5.4	6.6	**6.0**	6.4	5.8	**6.1**
10	IBW2022-22	QC-10	5.8	6.2	5.4	6.2	**5.9**	5.6	5.8	**5.7**
11	BSP2328	QC-11	6.0	5.8	6.2	5.8	**6.0**	6.8	5.6	**6.2**
12	QBP2310	QC-12	6.6	6.2	5.4	5.8	**6.0**	6.6	5.4	**6.0**
13	K2001	QC-13	6.2	5.8	6.2	6.0	**6.1**	6.6	5.2	**5.9**
14	MACS6892	QC-14	6.2	6.0	6.2	6.2	**6.2**	6.4	5.6	**6.0**
15	DBW187 (C)	QC-15	6.2	6.0	6.4	6.0	**6.2**	5.6	4.8	**5.2**
16	LBP2023-26	QC-16	6.2	5.6	5.8	5.8	**5.9**	6.4	5.0	**5.7**
17	WHB2	QC-17	6.8	6.0	6.2	5.6	**6.2**	6.2	5.0	**5.6**
18	GW1367	QC-18	7.2	6.2	5.8	5.8	**6.3**	7.0	4.6	**5.8**
19	QBP2311	QC-19	6.2	6.0	6.4	5.4	**6.0**	5.6	4.8	**5.2**
20	HI8777(d) (C)	QC-20	6.8	6.4	6.2	5.6	**6.3**	6.8	4.4	**5.6**
21	WBL0028	QC-21	6.6	6.4	6.2	5.6	**6.2**	6.2	5.0	**5.6**
22	UASQ336(d)	QC-22	6.2	5.8	6.4	5.4	**6.0**	5.6	4.4	**5.0**
23	QBP2309	QC-23	6.2	6.2	6.2	5.6	**6.1**	6.4	5.6	**6.0**
24	DDW55(d) (C)	QC-24	6.6	6.4	6.2	5.4	**6.2**	6.8	5.2	**6.0**
25	QYT2322	QC-25	6.4	6.0	6.4	5.8	**6.2**	6.4	5.2	**5.8**
26	GW1029	QC-26	6.6	6.2	6.6	5.8	**6.3**	6.6	4.4	**5.5**
27	HDHG2022-52(d)	QC-27	6.4	6.6	5.8	5.6	**6.1**	6.6	5.4	**6.0**
28	QYT2325	QC-28	6.2	6.4	5.8	6.2	**6.2**	6.4	5.4	**5.9**
29	DBW327 (C)	QC-29	6.0	6.2	5.8	6.4	**6.1**	7.0	5.6	**6.3**
30	WBL1747	QC-30	6.2	5.8	6.2	5.4	**5.9**	6.2	5.2	**5.7**
31	NIAW4120	QC-31	6.4	5.8	6.8	5.6	**6.2**	6.0	4.6	**5.3**
32	CG2213	QC-32	6.2	6.0	6.6	6.2	**6.3**	6.2	4.8	**5.5**
33	WHB1	QC-33	6.8	6.4	5.6	6.0	**6.2**	6.6	5.8	**6.2**
34	UP3102	QC-34	6.4	6.2	6.2	6.2	**6.3**	6.4	5.2	**5.8**
35	K2101	QC-35	6.2	6.4	5.6	5.8	**6.0**	6.2	5.2	**5.7**
36	MACS6893	QC-36	6.2	6.2	6.2	6.4	**6.3**	6.6	5.2	**5.9**
	Mean		**6.3**	**6.1**	**6.1**	**5.8**	**6.1**	**6.3**	**5.2**	**5.8**

Continued Table 135 (QCWBN Grain appearance score)

S. No.	Entries	Code	CZ					PZ			
			Vijapur	Junagarh	Indore	Powarkheda	Mean	Dharwad	Pune	Niphad	Mean
1	NIAW4114	QC-1	7.0	5.8	6.8	5.6	**6.3**	7.2	7.8	6.4	**7.1**
2	UASQ337(d)	QC-2	6.2	6.0	6.6	5.2	**6.0**	6.2	6.8	7.4	**6.8**
3	BST23-1	QC-3	7.6	6.8	6.6	5.4	**6.6**	4.8	6.2	7.6	**6.2**
4	QBP2308	QC-4	7.0	6.2	5.8	6.2	**6.3**	6.4	8.0	6.8	**7.1**
5	RWP2196	QC-5	7.4	6.6	6.6	6.4	**6.8**	6.6	6.4	7.4	**6.8**
6	UP3127	QC-6	6.8	5.8	6.8	5.2	**6.2**	6.4	7.2	6.4	**6.7**
7	GW322 (C)	QC-7	6.6	5.2	6.4	5.6	**6.0**	5.8	6.8	6.8	**6.5**
8	WBL9966	QC-8	7.0	5.8	6.0	5.6	**6.1**	5.8	7.0	6.4	**6.4**
9	GW1028	QC-9	7.2	5.8	6.2	6.0	**6.3**	6.2	5.0	6.6	**5.9**
10	IBW2022-22	QC-10	6.2	6.0	6.6	6.2	**6.3**	6.2	6.4	5.8	**6.1**
11	BSP2328	QC-11	6.8	6.2	6.2	6.2	**6.4**	6.6	6.4	6.2	**6.4**
12	QBP2310	QC-12	7.6	6.6	6.4	6.2	**6.7**	6.2	7.4	6.6	**6.7**
13	K2001	QC-13	5.8	6.6	6.2	5.8	**6.1**	5.6	6.8	6.4	**6.3**
14	MACS6892	QC-14	7.2	6.8	6.6	6.2	**6.7**	5.8	7.6	6.8	**6.7**
15	DBW187 (C)	QC-15	7.0	6.4	6.4	5.8	**6.4**	6.6	7.8	6.6	**7.0**
16	LBP2023-26	QC-16	5.2	6.4	6.2	5.6	**5.9**	6.8	7.2	6.8	**6.9**
17	WHB2	QC-17	7.0	6.0	6.4	6.0	**6.4**	5.8	7.4	7.4	**6.9**
18	GW1367	QC-18	8.4	7.4	7.2	6.6	**7.4**	8.0	5.8	7.8	**7.2**
19	QBP2311	QC-19	6.2	6.0	6.0	5.8	**6.0**	5.6	6.8	6.4	**6.3**
20	HI8777(d) (C)	QC-20	7.8	5.6	6.6	6.2	**6.6**	7.2	5.8	7.6	**6.9**
21	WBL0028	QC-21	6.6	5.6	6.0	5.6	**6.0**	6.6	7.4	6.8	**6.9**
22	UASQ336(d)	QC-22	6.2	4.6	6.2	6.0	**5.8**	5.4	6.0	7.0	**6.1**
23	QBP2309	QC-23	6.0	5.8	6.2	6.0	**6.0**	5.8	6.0	6.6	**6.1**
24	DDW55(d) (C)	QC-24	8.2	6.4	7.0	6.4	**7.0**	4.2	5.8	7.6	**5.9**
25	QYT2322	QC-25	5.6	6.4	6.2	6.0	**6.1**	5.6	6.6	6.6	**6.3**
26	GW1029	QC-26	7.6	6.4	7.0	6.4	**6.9**	7.2	6.8	7.8	**7.3**
27	HDHG2022-52(d)	QC-27	8.0	6.6	6.8	6.4	**7.0**	7.4	6.8	8.2	**7.5**
28	QYT2325	QC-28	7.4	6.8	6.6	6.2	**6.8**	5.4	5.6	6.8	**5.9**
29	DBW327 (C)	QC-29	7.0	6.2	6.6	6.4	**6.6**	6.0	6.2	6.8	**6.3**
30	WBL1747	QC-30	6.8	6.2	6.4	6.0	**6.4**	6.8	6.0	6.8	**6.5**
31	NIAW4120	QC-31	7.2	6.6	6.2	6.4	**6.6**	7.2	6.6	7.6	**7.1**
32	CG2213	QC-32	6.8	5.8	6.0	6.0	**6.2**	6.6	6.6	6.8	**6.7**
33	WHB1	QC-33	7.2	6.2	6.4	6.2	**6.5**	6.6	5.0	7.0	**6.2**
34	UP3102	QC-34	5.6	6.2	6.4	6.0	**6.1**	5.4	6.0	7.0	**6.1**
35	K2101	QC-35	5.4	6.2	6.2	5.6	**5.9**	7.0	6.0	6.4	**6.5**
36	MACS6893	QC-36	7.0	6.0	6.4	6.0	**6.4**	6.8	7.2	6.6	**6.9**
	Mean		**6.9**	**6.2**	**6.4**	**6.0**	**6.4**	**6.3**	**6.6**	**6.9**	**6.6**

Table 136: Hectolitre weight (Kg/hl) of *T. aestivum* and *T. durum* genotypes in QCWBN entries

S. No.	Entries	Code	NWPZ					NEPZ		
			Ludhiana	Hisar	Karnal	Pantnagar	Mean	Kanpur	Varanasi	Mean
1	NIAW4114	QC-1	78.8	80.4	82.8	79.6	**80.4**	80.9	67.1	**74.0**
2	UASQ337(d)	QC-2	80.0	80.2	82.4	78.4	**80.3**	80.6	75.1	**77.9**
3	BST23-1	QC-3	81.0	78.2	83.1	75.8	**79.5**	76.8	75.7	**76.3**
4	QBP2308	QC-4	80.3	79.7	82.6	79.9	**80.6**	80.8	71.2	**76.0**
5	RWP2196	QC-5	79.2	78.8	75.9	77.8	**77.9**	81.2	74.8	**78.0**
6	UP3127	QC-6	76.2	76.7	82.3	74.7	**77.5**	76.3	62.3	**69.3**
7	GW322 (C)	QC-7	78.6	78.9	83.5	78.1	**79.8**	77.7	72.3	**75.0**
8	WBL9966	QC-8	80.3	80.5	81.2	79.3	**80.3**	80.7	78.8	**79.8**
9	GW1028	QC-9	78.3	78.1	79.6	78.8	**78.7**	78.8	75.2	**77.0**
10	IBW2022-22	QC-10	82.0	82.4	81.1	82.1	**81.9**	81.8	79.2	**80.5**
11	BSP2328	QC-11	77.3	78.9	77.6	79.3	**78.3**	79.1	73.9	**76.5**
12	QBP2310	QC-12	81.6	81.0	80.0	80.0	**80.7**	79.9	75.8	**77.9**
13	K2001	QC-13	79.5	77.7	83.2	79.0	**79.9**	80.4	71.4	**75.9**
14	MACS6892	QC-14	78.2	78.9	82.0	79.0	**79.5**	78.5	71.7	**75.1**
15	DBW187 (C)	QC-15	75.8	78.1	80.7	74.6	**77.3**	78.2	67.9	**73.1**
16	LBP2023-26	QC-16	78.5	78.0	83.1	80.0	**79.9**	79.9	71.5	**75.7**
17	WHB2	QC-17	82.4	80.9	81.9	78.8	**81.0**	80.2	69.0	**74.6**
18	GW1367	QC-18	80.5	81.7	82.5	79.6	**81.1**	80.1	74.3	**77.2**
19	QBP2311	QC-19	79.9	80.1	82.5	78.8	**80.3**	79.2	67.7	**73.5**
20	HI8777(d) (C)	QC-20	81.2	81.4	81.6	80.2	**81.1**	82.9	66.2	**74.6**
21	WBL0028	QC-21	80.9	81.3	81.2	79.0	**80.6**	80.7	71.2	**76.0**
22	UASQ336(d)	QC-22	79.1	78.5	83.0	77.4	**79.5**	79.4	65.7	**72.6**
23	QBP2309	QC-23	80.1	80.2	82.4	81.4	**81.0**	81.3	76.9	**79.1**
24	DDW55(d) (C)	QC-24	80.9	79.1	81.3	79.7	**80.3**	82.6	75.0	**78.8**
25	QYT2322	QC-25	80.5	80.0	79.4	80.6	**80.1**	80.1	70.4	**75.3**
26	GW1029	QC-26	81.1	81.4	80.9	80.0	**80.9**	82.3	70.1	**76.2**
27	HDHG2022-52(d)	QC-27	80.4	80.8	82.5	80.2	**81.0**	81.5	76.6	**79.1**
28	QYT2325	QC-28	79.5	80.5	81.6	80.7	**80.6**	79.7	72.8	**76.3**
29	DBW327 (C)	QC-29	78.7	78.7	80.9	79.7	**79.5**	79.6	75.1	**77.4**
30	WBL1747	QC-30	76.1	76.9	82.3	76.3	**77.9**	77.3	68.6	**73.0**
31	NIAW4120	QC-31	80.7	75.2	81.7	79.3	**79.2**	71.1	65.5	**68.3**
32	CG2213	QC-32	80.1	78.2	80.4	79.4	**79.5**	78.1	70.9	**74.5**
33	WHB1	QC-33	79.6	81.7	82.8	80.1	**81.1**	80.2	77.9	**79.1**
34	UP3102	QC-34	77.8	77.6	81.7	77.0	**78.5**	78.4	69.9	**74.2**
35	K2101	QC-35	78.9	80.0	78.7	77.8	**78.9**	79.6	70.6	**75.1**
36	MACS6893	QC-36	78.2	79.3	80.5	78.3	**79.1**	78.9	72.3	**75.6**
	Mean		**79.5**	**79.4**	**81.4**	**78.9**	**79.8**	**79.6**	**72.0**	**75.8**

Continued Table 136 (QCWBN-Hectolitre weight)

S. No.	Entries	Code	CZ					PZ			
			Vijapur	Junagarh	Indore	Powarkheda	Mean	Dharwad	Pune	Niphad	Mean
1	NIAW4114	QC-1	82.6	82.1	80.6	77.6	**80.7**	82.7	82.5	83.6	**82.9**
2	UASQ337(d)	QC-2	78.7	79.4	79.6	76.8	**78.6**	78.8	82.0	83.8	**81.5**
3	BST23-1	QC-3	82.1	82.9	81.2	80.4	**81.7**	65.0	77.4	82.8	**75.1**
4	QBP2308	QC-4	80.3	80.3	78.5	78.8	**79.5**	79.3	82.7	83.1	**81.7**
5	RWP2196	QC-5	80.7	81.2	80.4	78.6	**80.2**	80.3	81.3	83.5	**81.7**
6	UP3127	QC-6	74.6	75.3	74.5	68.7	**73.3**	74.1	80.6	79.0	**77.9**
7	GW322 (C)	QC-7	79.5	76.1	75.7	76.0	**76.8**	77.6	79.3	82.0	**79.6**
8	WBL9966	QC-8	80.5	81.8	79.7	78.6	**80.2**	78.8	81.3	83.3	**81.1**
9	GW1028	QC-9	79.5	77.4	77.9	76.7	**77.9**	79.2	74.6	81.0	**78.3**
10	IBW2022-22	QC-10	83.8	84.1	82.7	78.5	**82.3**	83.2	78.8	84.7	**82.2**
11	BSP2328	QC-11	79.6	79.0	78.9	77.2	**78.7**	79.7	80.2	81.9	**80.6**
12	QBP2310	QC-12	81.0	81.2	79.8	78.4	**80.1**	77.5	79.7	81.8	**79.7**
13	K2001	QC-13	74.6	80.5	75.0	77.3	**76.9**	73.9	78.9	82.8	**78.5**
14	MACS6892	QC-14	80.0	79.8	81.6	74.6	**79.0**	72.9	81.7	83.0	**79.2**
15	DBW187 (C)	QC-15	79.9	78.9	78.2	75.2	**78.1**	76.9	75.7	81.9	**78.2**
16	LBP2023-26	QC-16	71.8	77.3	78.9	76.2	**76.1**	77.2	79.8	81.1	**79.4**
17	WHB2	QC-17	81.2	81.5	77.9	76.7	**79.3**	74.1	79.6	82.8	**78.8**
18	GW1367	QC-18	82.6	80.4	82.0	80.6	**81.4**	83.8	75.6	82.1	**80.5**
19	QBP2311	QC-19	80.0	80.8	78.2	75.7	**78.7**	75.6	79.9	82.8	**79.4**
20	HI8777(d) (C)	QC-20	81.9	77.4	81.8	77.7	**79.7**	80.4	76.0	84.2	**80.2**
21	WBL0028	QC-21	80.9	80.9	79.4	78.5	**79.9**	81.3	83.1	82.8	**82.4**
22	UASQ336(d)	QC-22	80.7	65.4	79.3	77.7	**75.8**	74.4	76.0	83.8	**78.1**
23	QBP2309	QC-23	79.4	81.8	80.3	77.5	**79.8**	80.2	75.5	83.5	**79.7**
24	DDW55(d) (C)	QC-24	83.0	79.8	82.1	80.5	**81.4**	59.2	76.8	84.8	**73.6**
25	QYT2322	QC-25	79.5	79.8	78.7	76.7	**78.7**	74.9	74.7	83.8	**77.8**
26	GW1029	QC-26	82.5	78.4	81.4	78.5	**80.2**	80.8	80.7	83.6	**81.7**
27	HDHG2022-52(d)	QC-27	81.6	78.0	83.0	79.8	**80.6**	82.4	77.8	83.5	**81.2**
28	QYT2325	QC-28	81.5	82.5	78.9	76.4	**79.8**	71.8	75.2	82.2	**76.4**
29	DBW327 (C)	QC-29	80.2	80.0	78.1	76.7	**78.8**	77.8	78.0	81.5	**79.1**
30	WBL1747	QC-30	77.9	80.0	76.6	74.7	**77.3**	78.9	76.6	80.7	**78.7**
31	NIAW4120	QC-31	76.4	78.0	72.0	70.9	**74.3**	75.9	81.6	79.9	**79.1**
32	CG2213	QC-32	80.5	79.0	78.7	77.2	**78.9**	75.4	78.0	82.5	**78.6**
33	WHB1	QC-33	81.1	82.0	80.0	77.5	**80.2**	78.4	76.2	83.1	**79.2**
34	UP3102	QC-34	74.2	80.7	77.1	75.0	**76.8**	71.3	78.3	81.6	**77.1**
35	K2101	QC-35	75.7	80.7	77.8	75.4	**77.4**	80.4	78.7	81.2	**80.1**
36	MACS6893	QC-36	79.2	76.7	78.5	75.5	**77.5**	79.1	82.5	80.8	**80.8**
	Mean		**79.7**	**79.5**	**79.0**	**76.9**	**78.8**	**77.0**	**78.8**	**82.5**	**79.5**

Table 137: Protein content (%) at 12 % moisture basis of *T. aestivum* and *T. durum* genotypes in QCWBN entries

S. No.	Entries	Code	NWPZ					NEPZ		
			Ludhiana	Hisar	Karnal	Pantnagar	Mean	Kanpur	Varanasi	Mean
1	NIAW4114	QC-1	11.3	7.8	10.5	8.1	**9.4**	11.2	14.3	**12.7**
2	UASQ337(d)	QC-2	10.0	9.4	10.6	8.7	**9.7**	11.6	14.7	**13.1**
3	BST23-1	QC-3	10.3	11.4	11.5	9.2	**10.6**	11.6	14.8	**13.2**
4	QBP2308	QC-4	11.9	7.4	9.0	8.8	**9.2**	10.8	13.8	**12.3**
5	RWP2196	QC-5	11.7	7.4	8.8	8.3	**9.1**	11.7	14.0	**12.9**
6	UP3127	QC-6	11.4	8.2	8.9	8.1	**9.2**	9.9	13.7	**11.8**
7	GW322 (C)	QC-7	10.1	8.1	11.1	6.8	**9.0**	10.0	12.8	**11.4**
8	WBL9966	QC-8	10.5	9.5	10.7	7.9	**9.7**	12.8	13.1	**12.9**
9	GW1028	QC-9	14.5	12.7	9.0	10.3	**11.6**	13.5	13.9	**13.7**
10	IBW2022-22	QC-10	9.9	7.6	8.8	7.6	**8.5**	11.3	12.6	**12.0**
11	BSP2328	QC-11	12.1	9.7	6.8	8.8	**9.3**	11.4	14.1	**12.7**
12	QBP2310	QC-12	11.3	9.6	9.0	8.1	**9.5**	12.8	13.0	**12.9**
13	K2001	QC-13	10.0	10.8	10.6	9.1	**10.1**	10.9	14.6	**12.8**
14	MACS6892	QC-14	9.1	8.1	10.5	8.8	**9.1**	11.5	13.0	**12.2**
15	DBW187 (C)	QC-15	14.2	9.8	10.7	7.6	**10.6**	12.3	14.2	**13.2**
16	LBP2023-26	QC-16	10.8	9.4	9.1	9.6	**9.7**	10.1	14.2	**12.2**
17	WHB2	QC-17	9.5	7.5	8.1	8.4	**8.4**	12.2	13.7	**12.9**
18	GW1367	QC-18	11.8	8.7	10.6	8.5	**9.9**	12.5	14.9	**13.7**
19	QBP2311	QC-19	9.3	8.7	10.5	8.0	**9.1**	11.2	14.0	**12.6**
20	HI8777(d) (C)	QC-20	10.9	7.7	10.7	8.4	**9.4**	11.0	15.1	**13.0**
21	WBL0028	QC-21	10.9	9.0	9.7	10.2	**10.0**	12.7	14.5	**13.6**
22	UASQ336(d)	QC-22	10.3	8.5	9.9	8.1	**9.2**	11.4	15.2	**13.3**
23	QBP2309	QC-23	10.9	11.5	8.2	8.7	**9.8**	12.8	13.2	**13.0**
24	DDW55(d) (C)	QC-24	10.4	8.1	10.4	7.8	**9.2**	10.2	14.0	**12.1**
25	QYT2322	QC-25	10.0	9.7	11.7	8.5	**10.0**	12.2	14.1	**13.1**
26	GW1029	QC-26	11.5	8.1	10.6	9.2	**9.8**	11.5	14.9	**13.2**
27	HDHG2022-52(d)	QC-27	9.5	11.1	9.9	8.1	**9.6**	12.3	14.3	**13.3**
28	QYT2325	QC-28	12.3	8.6	8.9	7.8	**9.4**	11.7	13.0	**12.4**
29	DBW327 (C)	QC-29	11.6	12.4	8.0	9.3	**10.3**	12.3	13.9	**13.1**
30	WBL1747	QC-30	14.3	8.2	10.0	8.7	**10.3**	12.3	14.8	**13.5**
31	NIAW4120	QC-31	9.7	7.1	11.3	8.5	**9.1**	12.3	14.2	**13.3**
32	CG2213	QC-32	9.8	10.0	12.1	8.7	**10.1**	12.0	14.0	**13.0**
33	WHB1	QC-33	12.9	7.9	10.4	9.4	**10.2**	11.8	12.9	**12.4**
34	UP3102	QC-34	11.7	8.1	10.7	8.4	**9.7**	12.4	15.2	**13.8**
35	K2101	QC-35	12.9	9.1	9.0	9.0	**10.0**	11.7	15.9	**13.8**
36	MACS6893	QC-36	10.9	7.0	10.7	8.9	**9.4**	13.2	14.5	**13.9**
	Mean		**11.1**	**9.0**	**9.9**	**8.6**	**9.6**	**11.7**	**14.1**	**12.9**

Continued Table 137 (QCWBN-Protein content)

S. No.	Entries	Code	CZ					PZ			
			Vijapur	Junagarh	Indore	Powarkheda	Mean	Dharwad	Pune	Niphad	Mean
1	NIAW4114	QC-1	11.3	14.1	11.8	11.9	**12.3**	13.3	11.2	11.9	**12.1**
2	UASQ337(d)	QC-2	11.0	14.4	11.4	12.8	**12.4**	13.8	11.6	10.7	**12.0**
3	BST23-1	QC-3	13.3	14.0	12.4	12.4	**13.0**	13.3	11.4	14.2	**13.0**
4	QBP2308	QC-4	11.1	14.6	10.0	11.6	**11.8**	15.0	11.3	12.3	**12.9**
5	RWP2196	QC-5	13.3	15.6	12.9	12.7	**13.6**	13.3	11.4	11.9	**12.2**
6	UP3127	QC-6	12.3	14.6	11.6	13.0	**12.9**	13.9	12.6	10.0	**12.2**
7	GW322 (C)	QC-7	10.4	13.1	10.9	11.4	**11.5**	11.2	9.9	9.7	**10.3**
8	WBL9966	QC-8	12.0	15.2	11.5	12.8	**12.9**	12.0	10.0	13.3	**11.8**
9	GW1028	QC-9	13.4	15.3	13.1	13.0	**13.7**	13.8	9.5	12.7	**12.0**
10	IBW2022-22	QC-10	12.6	14.1	11.5	11.3	**12.4**	13.3	10.5	13.2	**12.3**
11	BSP2328	QC-11	13.2	15.7	11.8	13.9	**13.6**	14.0	10.4	11.2	**11.9**
12	QBP2310	QC-12	12.8	14.0	10.9	12.4	**12.5**	12.6	11.6	14.0	**12.7**
13	K2001	QC-13	12.6	15.3	12.4	13.1	**13.4**	13.5	13.0	10.8	**12.4**
14	MACS6892	QC-14	12.3	14.6	10.8	12.2	**12.5**	11.8	13.1	11.2	**12.0**
15	DBW187 (C)	QC-15	13.6	15.1	11.4	11.4	**12.9**	13.2	12.6	13.3	**13.0**
16	LBP2023-26	QC-16	15.5	15.1	12.2	12.2	**13.8**	14.9	11.8	11.8	**12.8**
17	WHB2	QC-17	12.3	13.6	11.5	11.8	**12.3**	11.3	12.0	12.8	**12.0**
18	GW1367	QC-18	14.0	15.1	12.5	12.3	**13.5**	13.9	11.8	14.6	**13.5**
19	QBP2311	QC-19	12.4	14.7	11.3	12.2	**12.6**	12.4	12.4	12.2	**12.3**
20	HI8777(d) (C)	QC-20	10.4	13.2	11.0	12.8	**11.8**	14.0	11.0	11.2	**12.1**
21	WBL0028	QC-21	12.8	15.1	12.5	13.9	**13.6**	14.2	12.9	13.2	**13.4**
22	UASQ336(d)	QC-22	12.0	15.6	12.3	12.0	**13.0**	14.9	13.4	13.0	**13.8**
23	QBP2309	QC-23	11.0	14.3	11.7	12.8	**12.5**	12.7	13.8	12.9	**13.2**
24	DDW55(d) (C)	QC-24	12.6	13.9	11.8	12.2	**12.6**	13.2	14.4	9.8	**12.4**
25	QYT2322	QC-25	9.5	14.7	11.1	12.1	**11.9**	13.1	12.6	10.2	**11.9**
26	GW1029	QC-26	12.0	14.5	12.3	12.3	**12.8**	14.4	13.1	13.3	**13.6**
27	HDHG2022-52(d)	QC-27	14.4	14.0	11.5	10.8	**12.7**	13.4	13.0	12.2	**12.8**
28	QYT2325	QC-28	12.0	13.8	11.1	11.8	**12.2**	11.3	13.4	12.7	**12.5**
29	DBW327 (C)	QC-29	12.4	15.0	11.2	12.4	**12.8**	13.4	11.7	11.2	**12.1**
30	WBL1747	QC-30	14.2	16.6	13.1	13.9	**14.4**	14.3	10.9	13.9	**13.0**
31	NIAW4120	QC-31	12.5	14.3	12.4	12.1	**12.8**	13.3	11.6	11.7	**12.2**
32	CG2213	QC-32	11.7	15.1	10.9	11.8	**12.4**	12.3	11.8	12.6	**12.2**
33	WHB1	QC-33	12.3	15.1	11.6	11.7	**12.7**	11.8	11.6	11.8	**11.7**
34	UP3102	QC-34	12.5	15.4	12.6	12.8	**13.3**	13.7	10.6	13.0	**12.4**
35	K2101	QC-35	13.7	15.0	13.2	14.4	**14.1**	12.7	12.2	11.7	**12.2**
36	MACS6893	QC-36	13.6	16.0	12.4	11.8	**13.5**	14.3	11.4	12.1	**12.6**
	Mean		**12.5**	**14.7**	**11.8**	**12.4**	**12.8**	**13.3**	**11.9**	**12.2**	**12.4**

Table 138: Sedimentation value (ml) of *T. aestivum* and *T. durum* genotypes in QCWBN entries

S. No.	Entries	Code	NWPZ					NEPZ		
			Ludhiana	Hisar	Karnal	Pantnagar	Mean	Kanpur	Varanasi	Mean
1	NIAW4114	QC-1	49	36	33	41	**40**	42	56	**49**
2	UASQ337(d)	QC-2	38	33	51	36	**40**	32	38	**35**
3	BST23-1	QC-3	30	25	30	43	**32**	46	45	**45**
4	QBP2308	QC-4	52	36	47	45	**45**	46	53	**50**
5	RWP2196	QC-5	52	34	39	44	**42**	53	52	**53**
6	UP3127	QC-6	44	34	53	37	**42**	42	55	**49**
7	GW322 (C)	QC-7	38	29	49	34	**38**	45	48	**47**
8	WBL9966	QC-8	54	42	39	43	**45**	49	45	**47**
9	GW1028	QC-9	49	42	49	45	**46**	50	57	**53**
10	IBW2022-22	QC-10	41	34	45	36	**39**	41	49	**45**
11	BSP2328	QC-11	58	45	32	46	**45**	56	55	**55**
12	QBP2310	QC-12	57	45	39	47	**47**	47	58	**53**
13	K2001	QC-13	47	44	43	46	**45**	50	56	**53**
14	MACS6892	QC-14	47	41	54	46	**47**	47	54	**51**
15	DBW187 (C)	QC-15	70	49	49	36	**51**	56	71	**63**
16	LBP2023-26	QC-16	49	41	37	44	**43**	45	55	**50**
17	WHB2	QC-17	53	37	43	46	**45**	47	58	**53**
18	GW1367	QC-18	33	29	36	30	**32**	31	34	**32**
19	QBP2311	QC-19	53	45	49	47	**49**	49	58	**54**
20	HI8777(d) (C)	QC-20	40	43	36	46	**41**	31	41	**36**
21	WBL0028	QC-21	55	45	46	56	**50**	53	63	**58**
22	UASQ336(d)	QC-22	39	29	32	37	**34**	36	42	**39**
23	QBP2309	QC-23	52	44	36	46	**45**	47	50	**48**
24	DDW55(d) (C)	QC-24	37	34	48	36	**39**	33	39	**36**
25	QYT2322	QC-25	49	41	59	42	**48**	48	62	**55**
26	GW1029	QC-26	33	30	52	32	**37**	29	38	**34**
27	HDHG2022-52(d)	QC-27	37	36	53	36	**41**	37	42	**39**
28	QYT2325	QC-28	54	41	50	44	**48**	45	58	**51**
29	DBW327 (C)	QC-29	51	46	46	44	**47**	47	55	**51**
30	WBL1747	QC-30	62	40	48	42	**48**	53	67	**60**
31	NIAW4120	QC-31	33	32	53	28	**37**	50	55	**53**
32	CG2213	QC-32	53	49	53	50	**51**	54	62	**58**
33	WHB1	QC-33	56	38	47	41	**46**	45	51	**48**
34	UP3102	QC-34	52	38	49	40	**45**	50	56	**53**
35	K2101	QC-35	53	40	38	42	**43**	49	55	**52**
36	MACS6893	QC-36	44	34	52	40	**42**	42	51	**47**
	Mean		**48**	**38**	**45**	**42**	**43**	**45**	**52**	**49**

Continued Table 138 (QCWBN-Sedimentation value)

S. No.	Entries	Code	CZ					PZ			
			Vijapur	Junagarh	Indore	Powarkheda	Mean	Dharwad	Pune	Niphad	Mean
1	NIAW4114	QC-1	49	56	50	50	**51**	47	34	50	**44**
2	UASQ337(d)	QC-2	41	35	34	37	**37**	39	56	38	**44**
3	BST23-1	QC-3	32	29	27	32	**30**	31	67	26	**41**
4	QBP2308	QC-4	49	56	49	49	**51**	50	41	49	**47**
5	RWP2196	QC-5	52	60	46	50	**52**	54	52	54	**53**
6	UP3127	QC-6	47	55	44	53	**50**	54	59	46	**53**
7	GW322 (C)	QC-7	38	44	36	39	**39**	53	47	40	**47**
8	WBL9966	QC-8	55	59	51	52	**54**	49	49	50	**50**
9	GW1028	QC-9	52	58	46	49	**51**	49	51	49	**50**
10	IBW2022-22	QC-10	41	46	39	43	**42**	42	58	41	**47**
11	BSP2328	QC-11	58	65	49	57	**58**	56	54	54	**55**
12	QBP2310	QC-12	63	65	53	54	**59**	62	58	64	**61**
13	K2001	QC-13	53	41	47	48	**47**	56	52	48	**52**
14	MACS6892	QC-14	52	49	38	49	**47**	56	45	49	**50**
15	DBW187 (C)	QC-15	63	63	52	58	**59**	62	52	62	**58**
16	LBP2023-26	QC-16	58	58	50	52	**55**	56	62	49	**56**
17	WHB2	QC-17	57	59	52	56	**56**	56	58	60	**58**
18	GW1367	QC-18	30	33	30	34	**32**	34	65	31	**43**
19	QBP2311	QC-19	53	59	52	53	**54**	63	45	53	**54**
20	HI8777(d) (C)	QC-20	32	45	32	35	**36**	37	42	36	**39**
21	WBL0028	QC-21	54	62	49	58	**56**	56	46	55	**52**
22	UASQ336(d)	QC-22	37	42	36	39	**39**	44	57	37	**46**
23	QBP2309	QC-23	49	54	51	50	**51**	55	63	52	**56**
24	DDW55(d) (C)	QC-24	36	40	34	38	**37**	46	56	37	**47**
25	QYT2322	QC-25	46	53	47	52	**49**	63	51	47	**54**
26	GW1029	QC-26	34	37	32	33	**34**	40	58	33	**44**
27	HDHG2022-52(d)	QC-27	37	43	36	36	**38**	43	50	39	**44**
28	QYT2325	QC-28	49	54	41	49	**48**	55	64	49	**56**
29	DBW327 (C)	QC-29	49	49	47	49	**49**	53	58	48	**53**
30	WBL1747	QC-30	57	63	53	60	**58**	58	45	59	**54**
31	NIAW4120	QC-31	48	59	49	48	**51**	53	57	48	**52**
32	CG2213	QC-32	55	58	59	53	**56**	63	54	57	**58**
33	WHB1	QC-33	49	51	44	48	**48**	56	31	49	**45**
34	UP3102	QC-34	52	59	54	49	**54**	58	53	55	**55**
35	K2101	QC-35	49	53	46	49	**49**	59	42	49	**50**
36	MACS6893	QC-36	41	49	39	43	**43**	43	31	47	**40**
	Mean		**48**	**52**	**44**	**47**	**48**	**51**	**52**	**47**	**50**

Table 139: Fe content (ppm) of *T. aestivum* and *T. durum* genotypes in QCWBN entries

S. No.	Entries	Code	NWPZ					NEPZ		
			Ludhiana	Hisar	Karnal	Pantnagar	Mean	Kanpur	Varanasi	Mean
1	NIAW4114	QC-1	44.3	34.6	43.9	40.5	**40.8**	34.0	33.8	**33.9**
2	UASQ337(d)	QC-2	38.0	40.2	38.4	34.9	**37.9**	39.0	30.5	**34.8**
3	BST23-1	QC-3	41.1	39.0	39.8	28.7	**37.2**	38.2	36.5	**37.4**
4	QBP2308	QC-4	38.0	36.1	39.4	41.7	**38.8**	36.4	32.6	**34.5**
5	RWP2196	QC-5	46.2	43.5	38.7	38.8	**41.8**	38.6	36.4	**37.5**
6	UP3127	QC-6	36.1	33.4	37.1	31.8	**34.6**	30.8	30.9	**30.9**
7	GW322 (C)	QC-7	36.6	29.3	43.5	32.8	**35.6**	37.0	32.5	**34.8**
8	WBL9966	QC-8	42.5	37.8	39.0	39.1	**39.6**	37.6	33.0	**35.3**
9	GW1028	QC-9	44.4	43.4	29.8	42.7	**40.1**	42.5	33.1	**37.8**
10	IBW2022-22	QC-10	40.3	39.5	39.7	38.8	**39.6**	38.0	36.2	**37.1**
11	BSP2328	QC-11	42.4	34.9	32.2	35.4	**36.2**	41.1	33.8	**37.5**
12	QBP2310	QC-12	41.3	35.1	37.3	39.2	**38.2**	46.2	36.4	**41.3**
13	K2001	QC-13	39.7	33.1	40.3	33.5	**36.7**	32.3	33.9	**33.1**
14	MACS6892	QC-14	39.2	36.1	35.8	37.9	**37.3**	35.5	35.6	**35.6**
15	DBW187 (C)	QC-15	45.9	37.0	43.4	40.1	**41.6**	38.6	32.3	**35.5**
16	LBP2023-26	QC-16	34.9	39.8	37.1	32.9	**36.2**	34.2	36.0	**35.1**
17	WHB2	QC-17	40.9	33.5	34.7	32.1	**35.3**	36.1	32.5	**34.3**
18	GW1367	QC-18	38.8	38.8	38.9	40.7	**39.3**	42.8	38.0	**40.4**
19	QBP2311	QC-19	30.6	35.2	39.7	38.4	**36.0**	37.7	35.8	**36.8**
20	HI8777(d) (C)	QC-20	39.8	38.8	39.9	38.8	**39.3**	34.0	33.2	**33.6**
21	WBL0028	QC-21	39.4	35.9	41.1	39.1	**38.9**	34.8	29.3	**32.1**
22	UASQ336(d)	QC-22	39.5	36.5	38.5	35.0	**37.4**	37.0	29.5	**33.3**
23	QBP2309	QC-23	37.6	40.0	42.2	34.2	**38.5**	39.2	35.4	**37.3**
24	DDW55(d) (C)	QC-24	41.2	47.0	43.3	32.3	**41.0**	37.8	35.0	**36.4**
25	QYT2322	QC-25	36.8	44.5	36.4	37.4	**38.8**	37.9	37.1	**37.5**
26	GW1029	QC-26	35.9	38.9	41.2	38.5	**38.6**	38.8	34.7	**36.8**
27	HDHG2022-52(d)	QC-27	40.7	46.1	39.3	42.1	**42.1**	38.0	36.7	**37.4**
28	QYT2325	QC-28	40.9	42.0	34.5	43.8	**40.3**	39.3	32.2	**35.8**
29	DBW327 (C)	QC-29	39.3	40.9	31.8	40.6	**38.2**	41.0	40.6	**40.8**
30	WBL1747	QC-30	42.1	37.4	36.7	31.7	**37.0**	37.5	28.9	**33.2**
31	NIAW4120	QC-31	40.3	34.4	41.2	35.4	**37.8**	45.5	29.6	**37.6**
32	CG2213	QC-32	38.9	34.1	47.5	34.7	**38.8**	43.8	31.5	**37.7**
33	WHB1	QC-33	44.5	38.6	42.5	36.9	**40.6**	37.4	37.7	**37.6**
34	UP3102	QC-34	36.2	39.0	37.3	39.2	**37.9**	38.2	36.0	**37.1**
35	K2101	QC-35	39.2	42.2	36.6	33.0	**37.8**	37.3	34.3	**35.8**
36	MACS6893	QC-36	38.2	41.7	35.9	33.9	**37.4**	41.5	35.1	**38.3**
	Mean		**39.8**	**38.3**	**38.7**	**36.9**	**38.4**	**38.2**	**34.1**	**36.1**

Continued Table 139 (QCWBN-Fe content)

S. No.	Entries	Code	CZ					PZ			
			Vijapur	Junagarh	Indore	Powarkheda	Mean	Dharwad	Pune	Niphad	Mean
1	NIAW4114	QC-1	35.9	42.2	39.2	36.4	**38.4**	41.1	33.4	39.4	**38.0**
2	UASQ337(d)	QC-2	34.2	42.7	38.7	36.4	**38.0**	43.7	32.9	33.5	**36.7**
3	BST23-1	QC-3	41.3	48.7	46.2	37.6	**43.5**	43.8	39.8	43.9	**42.5**
4	QBP2308	QC-4	32.5	40.8	39.0	37.7	**37.5**	47.2	34.1	44.8	**42.0**
5	RWP2196	QC-5	38.0	49.8	42.4	43.8	**43.5**	48.1	38.5	48.8	**45.1**
6	UP3127	QC-6	34.9	42.2	39.7	39.0	**39.0**	42.5	28.0	34.8	**35.1**
7	GW322 (C)	QC-7	32.8	41.2	41.6	38.0	**38.4**	40.9	38.2	33.9	**37.7**
8	WBL9966	QC-8	37.6	45.7	37.5	41.6	**40.6**	39.3	32.4	42.5	**38.1**
9	GW1028	QC-9	39.8	42.6	41.1	41.4	**41.2**	49.2	30.6	44.1	**41.3**
10	IBW2022-22	QC-10	32.0	42.9	37.3	47.0	**39.8**	40.7	33.1	38.8	**37.5**
11	BSP2328	QC-11	37.1	49.2	40.2	39.3	**41.5**	45.0	35.3	37.1	**39.1**
12	QBP2310	QC-12	35.8	49.2	45.4	45.0	**43.9**	46.6	35.0	45.4	**42.3**
13	K2001	QC-13	34.1	47.2	44.1	46.3	**42.9**	48.9	35.4	39.6	**41.3**
14	MACS6892	QC-14	31.5	44.3	37.8	46.3	**40.0**	40.3	38.3	39.8	**39.5**
15	DBW187 (C)	QC-15	43.2	44.2	35.1	39.3	**40.5**	41.2	38.3	40.3	**39.9**
16	LBP2023-26	QC-16	34.5	43.5	40.3	33.5	**38.0**	42.4	38.4	42.0	**40.9**
17	WHB2	QC-17	37.8	46.2	44.2	37.4	**41.4**	38.7	35.9	43.7	**39.4**
18	GW1367	QC-18	44.0	48.1	38.4	35.9	**41.6**	41.1	44.2	39.2	**41.5**
19	QBP2311	QC-19	33.7	46.5	32.2	35.5	**37.0**	44.2	35.9	38.3	**39.5**
20	HI8777(d) (C)	QC-20	33.8	44.7	38.2	43.3	**40.0**	38.5	33.1	33.8	**35.1**
21	WBL0028	QC-21	31.9	46.5	39.5	36.7	**38.7**	38.2	32.8	38.6	**36.5**
22	UASQ336(d)	QC-22	35.9	38.1	38.9	39.7	**38.2**	40.9	35.8	41.7	**39.5**
23	QBP2309	QC-23	33.1	41.4	37.3	40.0	**38.0**	40.8	35.4	43.3	**39.8**
24	DDW55(d) (C)	QC-24	33.6	43.5	37.9	40.1	**38.8**	33.9	33.9	38.0	**35.3**
25	QYT2322	QC-25	37.9	48.1	48.5	45.1	**44.9**	48.6	38.8	40.0	**42.5**
26	GW1029	QC-26	36.0	43.9	41.8	40.3	**40.5**	43.9	39.7	47.6	**43.7**
27	HDHG2022-52(d)	QC-27	41.3	45.2	41.5	40.3	**42.1**	47.9	38.6	45.6	**44.0**
28	QYT2325	QC-28	34.8	44.4	46.0	40.2	**41.4**	39.3	40.8	44.7	**41.6**
29	DBW327 (C)	QC-29	39.0	45.7	44.3	39.7	**42.2**	42.6	32.9	43.7	**39.7**
30	WBL1747	QC-30	41.7	40.9	36.6	33.5	**38.2**	40.4	28.8	40.4	**36.5**
31	NIAW4120	QC-31	44.4	43.0	41.2	35.5	**41.0**	43.9	35.6	38.9	**39.5**
32	CG2213	QC-32	37.0	48.6	38.3	34.1	**39.5**	40.1	42.6	39.4	**40.7**
33	WHB1	QC-33	32.5	48.6	41.6	40.6	**40.8**	46.0	33.8	40.4	**40.1**
34	UP3102	QC-34	41.1	45.4	46.2	44.2	**44.2**	45.0	40.7	44.4	**43.4**
35	K2101	QC-35	38.1	47.8	43.1	41.9	**42.7**	42.8	35.2	40.8	**39.6**
36	MACS6893	QC-36	39.1	45.7	42.9	41.3	**42.3**	43.6	36.3	39.9	**39.9**
	Mean		**36.7**	**45.0**	**40.7**	**39.8**	**40.5**	**42.8**	**35.9**	**40.9**	**39.9**

Table 140: Zn content (ppm) of *T. aestivum* and *T. durum* genotypes in QCWBN entries

S. No.	Entries	Code	NWPZ					NEPZ		
			Ludhiana	Hisar	Karnal	Pantnagar	Mean	Kanpur	Varanasi	Mean
1	NIAW4114	QC-1	36.2	38.6	44.5	28.4	**37.2**	24.3	29.8	**27.1**
2	UASQ337(d)	QC-2	40.3	47.1	40.8	33.8	**40.6**	30.6	35.8	**33.2**
3	BST23-1	QC-3	38.4	44.6	40.2	26.0	**36.9**	26.8	34.2	**30.5**
4	QBP2308	QC-4	36.7	37.0	34.7	38.8	**36.8**	29.0	29.7	**29.4**
5	RWP2196	QC-5	40.1	35.7	32.1	30.3	**32.7**	35.0	32.7	**33.9**
6	UP3127	QC-6	37.3	33.7	34.0	28.4	**32.0**	25.2	34.5	**29.9**
7	GW322 (C)	QC-7	34.4	38.3	39.7	26.1	**34.7**	32.1	38.1	**35.1**
8	WBL9966	QC-8	36.7	39.5	39.1	24.7	**34.4**	26.5	35.2	**30.9**
9	GW1028	QC-9	38.3	61.3	33.7	38.3	**44.4**	35.2	38.8	**37.0**
10	IBW2022-22	QC-10	39.1	48.4	34.4	30.2	**37.7**	27.8	34.7	**31.3**
11	BSP2328	QC-11	37.3	39.2	30.7	23.3	**31.1**	34.0	37.5	**35.8**
12	QBP2310	QC-12	40.7	44.7	35.8	29.5	**36.7**	26.4	43.5	**35.0**
13	K2001	QC-13	36.5	35.9	42.8	26.6	**35.1**	30.5	37.7	**34.1**
14	MACS6892	QC-14	34.6	36.7	37.2	31.7	**35.2**	26.1	31.3	**28.7**
15	DBW187 (C)	QC-15	67.1	37.5	43.5	24.7	**35.2**	22.4	34.6	**28.5**
16	LBP2023-26	QC-16	55.1	40.9	36.6	36.7	**38.1**	33.1	40.4	**36.8**
17	WHB2	QC-17	63.1	40.5	33.8	28.6	**34.3**	27.8	40.0	**33.9**
18	GW1367	QC-18	77.2	50.5	40.6	31.5	**40.9**	34.0	38.9	**36.5**
19	QBP2311	QC-19	43.9	44.7	36.5	28.2	**36.5**	26.9	39.6	**33.3**
20	HI8777(d) (C)	QC-20	72.5	48.9	43.5	26.3	**39.6**	30.5	43.5	**37.0**
21	WBL0028	QC-21	61.9	39.2	37.8	33.6	**36.9**	33.9	31.6	**32.8**
22	UASQ336(d)	QC-22	67.7	41.9	42.8	28.6	**37.8**	27.9	39.2	**33.6**
23	QBP2309	QC-23	54.7	45.7	39.2	29.4	**38.1**	25.6	33.7	**29.7**
24	DDW55(d) (C)	QC-24	75.2	44.3	43.1	32.5	**40.0**	31.9	40.7	**36.3**
25	QYT2322	QC-25	48.3	50.4	36.0	30.1	**38.8**	31.8	45.9	**38.9**
26	GW1029	QC-26	72.1	48.0	40.4	40.1	**42.8**	30.5	47.7	**39.1**
27	HDHG2022-52(d)	QC-27	59.8	55.3	39.4	29.3	**41.3**	25.3	39.5	**32.4**
28	QYT2325	QC-28	63.5	44.2	31.9	33.5	**36.5**	28.4	36.2	**32.3**
29	DBW327 (C)	QC-29	72.0	52.3	25.6	34.7	**37.5**	26.9	47.9	**37.4**
30	WBL1747	QC-30	61.7	37.3	36.9	27.7	**34.0**	26.2	34.7	**30.5**
31	NIAW4120	QC-31	76.9	34.7	36.1	35.3	**35.4**	26.3	36.8	**31.6**
32	CG2213	QC-32	63.6	42.7	42.9	22.7	**36.1**	26.7	44.9	**35.8**
33	WHB1	QC-33	70.4	40.6	41.2	31.7	**37.8**	26.7	35.7	**31.2**
34	UP3102	QC-34	51.9	33.7	38.3	30.4	**34.1**	30.9	36.2	**33.6**
35	K2101	QC-35	65.3	47.3	37.7	36.3	**40.4**	36.9	37.8	**37.4**
36	MACS6893	QC-36	55.3	39.4	37.8	38.3	**38.5**	26.4	45.9	**36.2**
	Mean		**53.5***	**42.8**	**37.8**	**30.7**	**37.1**	**29.1**	**37.9**	**33.5**

***Data of Zn content from Ludhiana has not been included in calculating average because of exceptionally high values**

Continued Table 140 (QCWBN-Zn content)

S. No.	Entries	Code	CZ					PZ			
			Vijapur	Junagarh	Indore	Powarkheda	Mean	Dharwad	Pune	Niphad	Mean
1	NIAW4114	QC-1	47.3	32.7	39.3	32.2	**34.7**	33.1	53.3	49.2	**45.2**
2	UASQ337(d)	QC-2	37.9	48.3	44.8	35.1	**42.7**	37.8	44.6	44.9	**42.4**
3	BST23-1	QC-3	52.0	40.8	49.9	40.0	**43.6**	40.7	46.4	56.4	**47.8**
4	QBP2308	QC-4	46.7	43.6	43.3	33.9	**40.3**	35.4	48.4	47.3	**43.7**
5	RWP2196	QC-5	56.9	42.5	45.5	40.0	**42.7**	33.0	45.3	47.3	**41.9**
6	UP3127	QC-6	49.1	40.9	41.1	36.2	**39.4**	31.2	45.4	43.2	**39.9**
7	GW322 (C)	QC-7	42.9	41.6	43.9	33.7	**39.7**	31.8	45.3	39.8	**39.0**
8	WBL9966	QC-8	45.2	44.5	38.9	32.6	**38.7**	28.6	43.8	49.6	**40.7**
9	GW1028	QC-9	64.4	40.2	46.8	38.0	**41.7**	37.7	38.5	49.2	**41.8**
10	IBW2022-22	QC-10	59.1	47.1	50.5	36.9	**44.8**	34.3	32.8	50.1	**39.1**
11	BSP2328	QC-11	46.6	36.2	39.0	31.6	**35.6**	30.8	38.3	37.5	**35.5**
12	QBP2310	QC-12	57.9	36.2	40.2	33.0	**36.5**	32.1	39.5	52.8	**41.5**
13	K2001	QC-13	49.1	49.3	44.0	35.4	**42.9**	39.3	46.6	43.6	**43.2**
14	MACS6892	QC-14	51.1	47.5	46.4	35.4	**43.1**	31.8	56.0	40.7	**42.8**
15	DBW187 (C)	QC-15	49.9	38.2	34.1	30.5	**34.3**	29.3	46.3	47.8	**41.1**
16	LBP2023-26	QC-16	47.8	47.9	43.6	35.1	**42.2**	31.0	40.3	47.8	**39.7**
17	WHB2	QC-17	53.8	43.5	43.7	33.9	**40.4**	30.2	46.7	48.5	**41.8**
18	GW1367	QC-18	62.1	47.3	49.3	37.6	**44.7**	30.5	46.9	57.5	**45.0**
19	QBP2311	QC-19	46.4	42.6	36.8	30.9	**36.8**	32.9	49.1	41.0	**41.0**
20	HI8777(d) (C)	QC-20	46.4	43.6	49.1	40.0	**44.2**	32.4	46.7	40.1	**39.7**
21	WBL0028	QC-21	42.6	35.2	46.5	33.7	**38.5**	29.6	51.2	49.5	**43.4**
22	UASQ336(d)	QC-22	48.6	45.5	46.3	34.1	**42.0**	28.5	50.7	48.9	**42.7**
23	QBP2309	QC-23	45.6	39.1	39.6	33.1	**37.3**	28.0	41.7	45.5	**38.4**
24	DDW55(d) (C)	QC-24	45.6	44.1	47.0	38.2	**43.1**	32.7	45.4	44.6	**40.9**
25	QYT2322	QC-25	48.7	36.6	44.1	41.8	**40.8**	32.3	51.3	40.0	**41.2**
26	GW1029	QC-26	59.0	45.3	53.4	43.6	**47.4**	37.7	54.1	52.7	**48.2**
27	HDHG2022-52(d)	QC-27	60.5	41.3	50.2	37.0	**42.8**	34.9	51.3	47.0	**44.4**
28	QYT2325	QC-28	53.2	37.9	43.6	35.2	**38.9**	31.9	54.2	47.8	**44.6**
29	DBW327 (C)	QC-29	60.5	36.6	47.9	32.7	**39.1**	31.5	42.6	46.3	**40.1**
30	WBL1747	QC-30	48.5	44.4	39.5	31.6	**38.5**	28.5	37.9	43.2	**36.5**
31	NIAW4120	QC-31	48.0	36.9	44.2	31.3	**37.5**	31.4	41.8	38.2	**37.1**
32	CG2213	QC-32	49.5	34.0	40.1	30.7	**34.9**	33.4	48.2	45.4	**42.3**
33	WHB1	QC-33	48.8	48.4	44.1	33.2	**41.9**	31.6	49.2	48.9	**43.2**
34	UP3102	QC-34	51.4	49.9	42.3	33.0	**41.7**	37.2	42.7	44.1	**41.3**
35	K2101	QC-35	48.9	37.7	50.1	40.2	**42.7**	28.4	46.7	45.4	**40.2**
36	MACS6893	QC-36	63.8	37.7	47.5	35.5	**40.2**	36.6	46.7	49.5	**44.3**
	Mean		**51.0***	**41.8**	**44.4**	**35.2**	**40.5**	**42.8**	**35.9**	**40.9**	**39.9**

***Data of Zn content from Vijapur has not been included in calculating average because of exceptionally high values**

Table 141: Grain appearance score (Max. 10) of *T. aestivum* genotypes in SATSN trial

S. No.	Entries	Code	Lucknow	Kanpur	Ludhiana	Hisar	Karnal	Mean
1	Kharchia 65 (C)	SPL-ASNCK-01	6.5	5.3	5.1	4.7	5.3	**5.4**
2	DBW 187 (C)	SPL-ASNCK-02	6.0	6.0	5.7	6.2	5.7	**5.9**
3	KRL 210 (C)	SPL-ASNCK-03	6.3	6.3	6.3	6.1	5.7	**6.1**
4	KRL 19 (C)	SPL-ASNCK-04	6.5	5.6	5.4	5.2	5.4	**5.6**
5	GW 322 (C)	SPL-ASNCK-05	6.0	5.8	5.7	5.1	5.4	**5.6**
6	LBP-2023-23	SPL-ASN-06	5.6	5.8	5.6	6.2	5.8	**5.8**
7	WBL 2300	SPL-ASN-07	5.8	5.2	5.8	5.8	5.4	**5.6**
8	WH 1344	SPL-ASN-08	5.8	6.2	6.4	6.2	5.6	**6.0**
9	RWP 1123	SPL-ASN-09	6.2	6.2	5.6	6.4	5.6	**6.0**
10	KRL 2207	SPL-ASN-10	5.6	6.8	5.8	6.4	6.2	**6.2**
11	K 2003	SPL-ASN-11	5.7	5.8	6.0	6.0	5.8	**5.9**
12	WH 1342	SPL-ASN-12	5.8	5.4	5.2	5.8	5.6	**5.6**
13	KRL 2212	SPL-ASN-13	5.8	5.8	5.4	5.8	5.2	**5.6**
14	KRL 2302	SPL-ASN-14	6.6	5.2	5.8	5.8	6.0	**5.9**
15	NW 8082	SPL-ASN-15	6.4	5.8	6.4	5.8	5.4	**6.0**
16	SANSR-10	SPL-ASN-16	6.2	5.6	5.6	5.6	5.8	**5.8**
17	WH 1343	SPL-ASN-17	6.4	-	5.6	6.2	6.0	**6.1**
18	KRL 2303	SPL-ASN-18	6.5	6.4	6.4	6.0	5.8	**6.2**
19	NW8090	SPL-ASN-19	6.4	6.0	5.8	6.0	5.4	**5.9**
20	KRL 2213	SPL-ASN-20	6.2	5.6	5.4	5.4	5.4	**5.6**
21	WAP 2327	SPL-ASN-21	6.4	6.0	6.2	6.4	5.4	**6.1**
22	WBL 1547	SPL-ASN-22	6.6	5.8	6.0	6.2	6.0	**6.1**
23	PBS-SAL /ALK-23-01	SPL-ASN-23	5.6	5.8	5.4	5.6	5.8	**5.6**
24	BSP2301	SPL-ASN-24	6.4	6.4	6.0	6.0	5.6	**6.1**
25	KRL 2215	SPL-ASN-25	5.6	6.0	6.4	6.4	5.8	**6.0**
26	KRL 2301	SPL-ASN-26	6.2	6.2	5.8	6.4	6.2	**6.2**
27	K 2001	SPL-ASN-27	6.2	6.2	6.4	6.0	6.0	**6.2**
28	KRL 2214	SPL-ASN-28	6.0	6.6	5.4	6.2	5.8	**6.0**
29	WH 1341	SPL-ASN-29	6.6	6.2	5.8	5.8	5.6	**6.0**
		Mean	**6.1**	**5.9**	**5.8**	**5.9**	**5.7**	**5.9**

Table 142: Hectolitre weight (Kg/hl) of *T. aestivum* genotypes in SATSN trial

S. No.	Entries	Code	Lucknow	Kanpur	Ludhiana	Hisar	Karnal	Mean
1	Kharchia 65 (C)	SPL-ASNCK-01	78.2	79.9	79.5	71.7	79.9	**77.8**
2	DBW 187 (C)	SPL-ASNCK-02	77.0	78.5	79.1	78.7	79.4	**78.5**
3	KRL 210 (C)	SPL-ASNCK-03	76.0	79.8	79.7	78.1	79.8	**78.7**
4	KRL 19 (C)	SPL-ASNCK-04	77.9	79.0	79.0	72.9	78.8	**77.5**
5	GW 322 (C)	SPL-ASNCK-05	77.0	76.9	78.8	75.0	78.2	**77.2**
6	LBP-2023-23	SPL-ASN-06	80.8	77.9	79.5	78.0	78.3	**78.9**
7	WBL 2300	SPL-ASN-07	77.7	76.9	78.2	77.6	80.4	**78.2**
8	WH 1344	SPL-ASN-08	79.8	80.7	80.3	79.5	80.4	**80.1**
9	RWP 1123	SPL-ASN-09	78.4	81.5	80.3	80.5	80.8	**80.3**
10	KRL 2207	SPL-ASN-10	80.6	79.6	80.2	77.6	78.7	**79.3**
11	K 2003	SPL-ASN-11	78.9	78.2	79.0	77.8	78.9	**78.6**
12	WH 1342	SPL-ASN-12	79.5	76.2	79.9	75.7	78.5	**78.0**
13	KRL 2212	SPL-ASN-13	77.8	76.0	77.5	75.1	75.6	**76.4**
14	KRL 2302	SPL-ASN-14	79.9	75.0	76.5	74.3	74.7	**76.1**
15	NW 8082	SPL-ASN-15	77.8	77.6	78.9	76.7	77.8	**77.8**
16	SANSR-10	SPL-ASN-16	74.3	76.5	79.3	74.6	80.1	**77.0**
17	WH 1343	SPL-ASN-17	79.0	78.1	78.6	78.8	78.6	**78.6**
18	KRL 2303	SPL-ASN-18	79.5	78.2	78.5	74.9	77.2	**77.7**
19	NW8090	SPL-ASN-19	80.3	81.1	79.6	79.8	81.7	**80.5**
20	KRL 2213	SPL-ASN-20	79.0	75.4	77.1	74.6	74.4	**76.1**
21	WAP 2327	SPL-ASN-21	80.5	80.1	80.1	80.3	80.2	**80.2**
22	WBL 1547	SPL-ASN-22	79.6	74.9	79.1	78.3	79.8	**78.3**
23	PBS-SAL /ALK-23-01	SPL-ASN-23	79.9	78.2	79.1	75.5	77.3	**78.0**
24	BSP2301	SPL-ASN-24	78.1	79.2	80.1	77.5	80.1	**79.0**
25	KRL 2215	SPL-ASN-25	79.0	79.6	80.9	81.1	80.0	**80.1**
26	KRL 2301	SPL-ASN-26	79.8	78.7	79.3	77.5	79.4	**78.9**
27	K 2001	SPL-ASN-27	78.2	78.8	80.6	78.5	80.7	**79.4**
28	KRL 2214	SPL-ASN-28	79.6	77.8	79.5	77.7	79.6	**78.8**
29	WH 1341	SPL-ASN-29	77.0	77.8	80.1	76.7	81.3	**78.6**
		Mean	**78.7**	**78.2**	**79.3**	**77.1**	**79.0**	**78.4**

Table 143: Protein content (%) of *T. aestivum* genotypes in SATSN trial

S. No.	Entries	Code	Lucknow	Kanpur	Ludhiana	Hisar	Karnal	Mean
1	Kharchia 65 (C)	SPL-ASNCK-01	11.3	10.2	10.8	11.6	7.1	**10.2**
2	DBW 187 (C)	SPL-ASNCK-02	11.6	11.2	10.3	9.7	7.8	**10.1**
3	KRL 210 (C)	SPL-ASNCK-03	11.9	11.7	10.5	10.2	7.8	**10.4**
4	KRL 19 (C)	SPL-ASNCK-04	11.8	10.6	10.5	10.7	7.6	**10.2**
5	GW 322 (C)	SPL-ASNCK-05	11.1	10.5	9.9	10.3	7.6	**9.9**
6	LBP-2023-23	SPL-ASN-06	9.9	13.6	10.0	11.5	9.5	**10.9**
7	WBL 2300	SPL-ASN-07	10.9	10.9	9.8	10.2	8.3	**10.0**
8	WH 1344	SPL-ASN-08	10.5	12.6	10.5	10.3	7.6	**10.3**
9	RWP 1123	SPL-ASN-09	10.0	10.7	9.2	10.3	7.6	**9.6**
10	KRL 2207	SPL-ASN-10	11.1	11.8	10.9	9.0	8.1	**10.2**
11	K 2003	SPL-ASN-11	11.4	12.9	9.8	11.0	8.2	**10.6**
12	WH 1342	SPL-ASN-12	11.5	11.5	10.1	10.8	8.3	**10.5**
13	KRL 2212	SPL-ASN-13	10.8	9.6	9.6	9.7	7.4	**9.4**
14	KRL 2302	SPL-ASN-14	9.9	9.7	11.2	11.1	8.9	**10.2**
15	NW 8082	SPL-ASN-15	12.2	11.0	10.3	11.7	8.0	**10.6**
16	SANSR-10	SPL-ASN-16	10.7	10.0	9.8	11.7	8.0	**10.0**
17	WH 1343	SPL-ASN-17	10.2	10.3	10.3	8.6	9.0	**9.7**
18	KRL 2303	SPL-ASN-18	10.3	10.4	10.3	11.4	8.8	**10.2**
19	NW8090	SPL-ASN-19	10.6	10.3	10.0	9.6	7.9	**9.7**
20	KRL 2213	SPL-ASN-20	11.1	11.3	9.4	9.5	8.1	**9.9**
21	WAP 2327	SPL-ASN-21	11.3	9.8	10.4	9.1	8.1	**9.8**
22	WBL 1547	SPL-ASN-22	10.6	11.6	10.7	10.2	8.5	**10.3**
23	PBS-SAL /ALK-23-01	SPL-ASN-23	10.4	9.7	10.4	11.1	8.1	**10.0**
24	BSP2301	SPL-ASN-24	9.9	10.6	10.0	11.0	8.0	**9.9**
25	KRL 2215	SPL-ASN-25	9.5	10.1	10.3	11.1	8.2	**9.8**
26	KRL 2301	SPL-ASN-26	12.6	12.3	9.5	9.7	9.9	**10.8**
27	K 2001	SPL-ASN-27	11.2	10.9	8.5	11.3	8.9	**10.2**
28	KRL 2214	SPL-ASN-28	11.2	11.3	10.2	10.7	8.1	**10.3**
29	WH 1341	SPL-ASN-29	10.6	10.5	10.0	12.3	7.6	**10.2**
		Mean	**10.9**	**11.0**	**10.1**	**10.5**	**8.2**	**10.1**

Table 144: Sedimentation value (ml) of *T. aestivum* genotypes in SATSN trial

S. No.	Entries	Code	Lucknow	Kanpur	Ludhiana	Hisar	Karnal	Mean
1	Kharchia 65 (C)	SPL-ASNCK-01	53.7	45.5	47.6	40.6	33.2	**44.1**
2	DBW 187 (C)	SPL-ASNCK-02	54.7	56.9	51.8	51.5	44.4	**51.8**
3	KRL 210 (C)	SPL-ASNCK-03	51.8	50.9	45.0	46.6	37.7	**46.4**
4	KRL 19 (C)	SPL-ASNCK-04	58.5	47.6	44.5	42.1	37.1	**45.9**
5	GW 322 (C)	SPL-ASNCK-05	59.9	41.5	38.1	34.9	32.5	**41.4**
6	LBP-2023-23	SPL-ASN-06	46.9	42.9	42.1	46.0	41.2	**43.8**
7	WBL 2300	SPL-ASN-07	55.1	56.0	45.1	47.3	35.1	**47.7**
8	WH 1344	SPL-ASN-08	49.9	58.2	51.6	51.2	41.6	**50.5**
9	RWP 1123	SPL-ASN-09	53.4	49.9	49.5	51.6	42.9	**49.5**
10	KRL 2207	SPL-ASN-10	52.5	42.9	41.2	36.8	36.4	**42.0**
11	K 2003	SPL-ASN-11	51.2	49.9	47.7	44.2	40.7	**46.8**
12	WH 1342	SPL-ASN-12	46.4	53.0	46.9	49.5	43.8	**47.9**
13	KRL 2212	SPL-ASN-13	65.6	36.0	46.4	31.6	27.7	**41.4**
14	KRL 2302	SPL-ASN-14	49.5	46.9	45.1	51.6	37.7	**46.2**
15	NW 8082	SPL-ASN-15	45.1	42.9	41.6	42.5	35.5	**41.5**
16	SANSR-10	SPL-ASN-16	61.7	50.8	49.5	52.5	45.5	**52.0**
17	WH 1343	SPL-ASN-17	39.9	47.3	49.5	42.1	48.2	**45.4**
18	KRL 2303	SPL-ASN-18	49.5	49.9	46.4	49.5	42.5	**47.5**
19	NW8090	SPL-ASN-19	53.4	44.2	46.9	46.4	41.6	**46.5**
20	KRL 2213	SPL-ASN-20	50.8	49.5	40.3	39.4	39.4	**43.9**
21	WAP 2327	SPL-ASN-21	59.1	56.9	49.5	46.4	42.1	**50.8**
22	WBL 1547	SPL-ASN-22	53.0	39.9	52.5	49.0	46.4	**48.2**
23	PBS-SAL /ALK-23-01	SPL-ASN-23	59.1	52.1	43.8	39.9	35.5	**46.1**
24	BSP2301	SPL-ASN-24	53.0	49.0	49.9	52.5	40.7	**49.0**
25	KRL 2215	SPL-ASN-25	41.6	52.5	52.5	51.6	42.1	**48.1**
26	KRL 2301	SPL-ASN-26	49.9	47.3	47.3	49.5	51.2	**49.0**
27	K 2001	SPL-ASN-27	55.1	46.4	44.2	46.4	42.9	**47.0**
28	KRL 2214	SPL-ASN-28	57.3	46.0	46.4	46.4	39.0	**47.0**
29	WH 1341	SPL-ASN-29	51.2	53.8	50.8	52.5	39.4	**49.6**
		Mean	**52.7**	**48.5**	**46.7**	**45.9**	**40.1**	**46.8**

Table 145: Phenol reaction score (Max. 10) of *T. aestivum* genotypes in SATSN trial

S. No.	Entries	Code	Lucknow	Kanpur	Ludhiana	Hisar	Karnal	Mean
1	Kharchia 65 (C)	SPL-ASNCK-01	7.7	5.5	6.5	6.0	4.8	**6.1**
2	DBW 187 (C)	SPL-ASNCK-02	7.3	8.2	7.5	7.8	8.0	**7.8**
3	KRL 210 (C)	SPL-ASNCK-03	6.3	7.3	7.2	7.8	7.2	**7.2**
4	KRL 19 (C)	SPL-ASNCK-04	7.2	4.8	5.5	5.7	4.5	**5.5**
5	GW 322 (C)	SPL-ASNCK-05	6.3	7.3	7.0	6.8	6.5	**6.8**
6	LBP-2023-23	SPL-ASN-06	5.0	7.5	7.5	8.5	7.5	**7.2**
7	WBL 2300	SPL-ASN-07	8.0	8.0	7.5	8.0	6.0	**7.5**
8	WH 1344	SPL-ASN-08	4.0	7.0	7.0	8.0	6.5	**6.5**
9	RWP 1123	SPL-ASN-09	7.0	7.0	7.5	7.0	6.5	**7.0**
10	KRL 2207	SPL-ASN-10	4.0	7.5	7.5	7.5	7.5	**6.8**
11	K 2003	SPL-ASN-11	0.0	5.0	5.0	6.0	4.5	**4.1**
12	WH 1342	SPL-ASN-12	6.0	5.0	6.0	6.0	4.0	**5.4**
13	KRL 2212	SPL-ASN-13	7.0	4.5	6.0	6.5	6.0	**6.0**
14	KRL 2302	SPL-ASN-14	7.0	7.0	6.5	7.5	7.0	**7.0**
15	NW 8082	SPL-ASN-15	7.0	7.0	7.0	8.5	6.5	**7.2**
16	SANSR-10	SPL-ASN-16	8.0	7.5	7.0	8.0	7.5	**7.6**
17	WH 1343	SPL-ASN-17	6.5	5.0	6.0	5.5	5.0	**5.6**
18	KRL 2303	SPL-ASN-18	0.0	7.0	7.5	7.5	8.0	**6.0**
19	NW8090	SPL-ASN-19	7.0	7.0	7.0	7.0	7.0	**7.0**
20	KRL 2213	SPL-ASN-20	8.5	8.0	8.0	8.0	8.5	**8.2**
21	WAP 2327	SPL-ASN-21	8.5	7.5	7.5	8.5	8.0	**8.0**
22	WBL 1547	SPL-ASN-22	6.5	7.5	7.5	7.5	8.0	**7.4**
23	PBS-SAL /ALK-23-01	SPL-ASN-23	6.0	7.0	7.0	8.0	7.0	**7.0**
24	BSP2301	SPL-ASN-24	7.5	7.5	8.0	8.5	7.5	**7.8**
25	KRL 2215	SPL-ASN-25	7.5	7.5	7.5	7.5	7.5	**7.5**
26	KRL 2301	SPL-ASN-26	4.0	8.0	8.0	8.5	7.5	**7.2**
27	K 2001	SPL-ASN-27	7.5	5.5	6.0	6.5	4.0	**5.9**
28	KRL 2214	SPL-ASN-28	7.5	7.5	7.0	8.5	7.0	**7.5**
29	WH 1341	SPL-ASN-29	8.0	7.0	7.5	7.5	7.0	**7.4**
		Mean	**6.3**	**6.8**	**7.0**	**7.4**	**6.6**	**6.8**

SUMMARY

India is the second-largest producer of wheat in the world where a substantial part of human population consumes wheat grains as an energy and nutrient source. Attaining self-sufficiency in terms of production could be made possible by developing high yielding, disease resistant wheat varieties with matching production technologies. There is a continuous surge in demand of baked and other processed wheat based-products in India and worldwide. To cater the needs of different processed products having wheat as a base material, wheat quality needs utmost attention. During 2023-24, 176 AVTs, 280 NIVTs, 22 HYPTs, 36 QCWBN, 29 SATSN and 30 IVT, were analysed from different zones and growing conditions. The report includes aspects like basic quality parameters for varietal identification and promotion as well as identification of product specific genotypes. Promising genotypes showing superiority in various quality traits including iron and zinc content have been identified. Zone wise variability in wheat quality and grain nutrition parameters have been recorded. Details are given below.

AVT's:

All the second year AVT entries including checks were subjected to baking evaluation for chapati, bread, biscuit, and gluten content. All AVTs were analysed for several physico-chemical properties such as grain appearance, test weight, protein, sedimentation value, yellow pigment, phenol test, grain hardness index, wet / dry gluten, and gluten index, HMWGS and iron and zinc content. Promising product specific entries identified are given below.

Promising *T. aestivum g*enotypes for chapati (Score >8.0)

Category	Genotypes
Check	HI1650 (C) (CZ-ITS)
AVT	HD3428* (NWPZ-ILS), NWS2222* (PZ-ITS), NIAW4114* (PZ-ILS)

Promising *T. aestivum g*enotypes for bread (Loaf volume ≥600 ml)

Category	Genotypes
Check	DBW222 (C) (NWPZ-ITS), JKW261 (C) (NWPZ-ILS), DBW173 (C) (NWPZ-ILS), GW547(I) (C) (CZ-ITS), CG1040(I) (C) (CZ-RITS), MP1378(I) (C) (PZ-ITS), HD3090 (C) (PZ-ILS), DBW187 (C) (CZ-HYPT), DBW377 (I) (C) (CZ-HYPT)
AVT	PBW891* (PZ-ITS), AKAW5100* (PZ-ITS), GW543* (CZ-HYPT)

Promising *T. aestivum g*enotypes for Biscuit (SF ~10.0)

Category	Genotypes
Check	NIL
AVT	NIL

Promising Genotypes for Various Quality Parameters

Parameter	Value	Genotypes
		(*T. aestivum*)
Protein	≥12.5%	**NHZ**: NIL **NWPZ**: NIL **NEPZ:** PBW915, KRL2106, DBW107 (C), UP3124, PBW833 (C), WH1323, WH1324 **CZ**: GW547(I) (C), MACS6768 (C), HI1634 (C), MP4010 (C), MACS6830, DBW428 **PZ**: AKAW5100*, DBW443*, CG1045, LOK79*, NIAW4114*, HI1674*, HD3090(C), Raj4083 (C), HI1633 (C), NIAW4432, MACS6830, HI1687, DBW426, MACS6829, HI1605 (C), NIAW3170 (C), DBW359 (I) (C), CG1047, NIAW4267 **HYPT (NWPZ):** NIL **HYPT (CZ):** DBW434
Sedimentation value	> 60 ml	**NHZ**: NIL **NWPZ**: NIL **NEPZ**: WH1323 **CZ**: NIL **PZ:** MACS6842, DBW359 (I)(C) **HYPT (NWPZ):** NIL **HYPT (CZ):** DBW187 (C), WH1320
Hardness Index	< 35	**NHZ**: VL2041 (C) **NWPZ**: NIAW3170 (C) **NEPZ:** NIL **CZ:** NIL **PZ:** NIL **HYPT (NWPZ):** NIL **HYPT (CZ):** DBW445
Iron	≥40ppm	**NHZ**: HS562 (C), VL907 (C), VL2041 (C), HPW349 (C), VL2059M **NWPZ:** HI1668*, HD3086 (C), PBW957M, HD3428*, DBW173 (C), NW8071, DBW422, HI1653 (C), HD3369 (C), PBW644 (C), NIAW3170 (C), DBW296 (C), PBW927 **NEPZ**: HI1563 (C), HD3171 (C), JKW 304 **CZ**: HI1650 (C), MACS6768 (C), HI1683, MACS6830, DBW110 (C), CG1036 (C), NIAW4267, UAS3029, DBW432 **PZ**: PBW891*, WH1306*, NWS2222*, DBW443*, MACS6222 (C), MP1378(I) (C), UAS3026, MACS6844, CG1045, LOK79*, NIAW4120*, RAJ4083 (C), DBW425, MACS6830, HI1687, DBW426, MACS6829, HI1605 (C), HI1665(I) (C), DBW359(I) (C), CG1047, NIAW4267 **HYPT (NWPZ):** DBW327 (C) **HYPT (CZ):** CG1044*, DBW377(I) (C), DBW327(I) (C), MP1399, PBW906, DBW436

Zinc	≥40ppm	**NHZ**: VL907 (C), VL2059M **NWPZ**: DBW417, HD3494M **NEPZ**: NIL **CZ**: HI1669*, GW547(I) (C), MACS6768 (C), GW555, HI1634 (C), MP4010 (C), CG1029 (C), UAS3029 **PZ**: WH1306*, DBW443*, GW322 (C), MACS6222 (C), MP1378(I) (C), MP3570, CG1045, LOK79*, HI1674*, HD3090 (C), RAJ4083 (C), HI1633 (C), DBW425, MACS6830, HI1687, DBW426, MACS6829, DBW359(I) (C), CG1047, NIAW4267 **HYPT (NWPZ):** NIL **HYPT (CZ):** NIL
(*T. durum*)		
Protein	>13.0%	**CZ:** NIL **PZ**: UAS446(d) (C), UAS478(d)(I) (C), MACS4131(d), GW1368(d), HI8852(d), UAS484(d), HI8851(d)
Sedimentation value	≥ 40ml	**CZ:** MPO1395(d), MACS4135(d), MPO1398(d) **PZ**: MACS3949(d) (C), DDW62(d), MPO1395(d), MACS4135(d), UAS446(d)(C), UAS484(d)
Yellow Pigment	>7.0ppm	**CZ:** UAS484(d) **PZ:** HI8848(d), MACS4135(d), UAS478(d)(I) (C), HI8852(d), UAS484(d)
Iron	≥ 40ppm	**CZ:** MACS4125(d), MP01395(d), HI8851(d) **PZ:** DDW62(d), HI8852(d), HI8851(d)
Zinc	≥ 40ppm	**CZ:** HI8737(d) (C), HI8713(d) (C), MACS4125(d), MACS4135(d), HI8850(d), HI8848(d) **PZ:** HI8737(d) (C), MACS3949(d) (C), HI8849(d), HI8850(d), HI8848(d), MACS4135(d), UAS446(d) (C), UAS478(d)(I) (C), MACS4131(d), GW1368(d), HI8852(d), HI8851(d)

Variability in the quality parameters of *T. aestivum* in AVT's

Parameter	NWPZ	NEPZ	CZ	PZ	NHZ	Overall
GAS (Max. 10.0)	6.2 (5.7-6.6)	5.8 (5.2-6.4)	6.6 (6.3-7.2)	6.6 (5.9-7.4)	6.3 (6.1-6.5)	**6.3 (5.2-7.4)**
Hectolitre Weight (Kg/hl)	80.0 (77.0-82.3)	75.6 (70.5-79.9)	81.4 (79.4-83.8)	79.5 (75.3-83.1)	80.6 (78.8-82.0)	**79.4 (70.5-83.8)**
Protein content (%)	11.2 (10.2-11.9)	12.0 (10.9-13.0)	11.9 (10.5-13.1)	12.7 (11.0-13.9)	10.1 (8.8-11.3)	**11.6 (8.8-13.9)**
Sedimentation value (ml)	51.7 (39-60)	51.0 (42-61)	46.3 (37-57)	50.7 (36-63)	44.0 (38-48)	**48.7 (36-63)**
Grain hardness index	78.9 (33.5-96.7)	77.3 (66.3-87.4)	76.1 (66.6-88.5)	75.4 (39.9-85.4)	62.9 (32.5-82.9)	**74.1 (32.5-96.7)**
Iron (ppm)	39.2 (34.9-42.3)	37.3 (32.7-44.1)	38.0 (34.2-41.7)	40.9 (34.8-47.0)	45.5 (40.4-48.2)	**40.2 (32.7-48.2)**
Zinc (ppm)	35.6 (28.9-44.7)	29.7 (25.1-35.9)	38.0 (33.2-43.4)	40.3 (35.7-48.9)	37.7 (32.4-43.0)	**36.3 (25.1-48.9)**
Wet gluten (%)	27.2 (23.9-28.9)	26.1 (23.8-29.1)	30.6 (25.3-34.5)	31.9 (27.6-35.3)	-	**29.0 (23.8-35.3)**
Dry gluten (%)	9.0 (7.8-9.6)	8.7 (8.2-9.6)	10.0 (8.2-11.6)	10.4 (8.8-11.8)	-	**9.5 (7.8-11.8)**

Variability in the quality parameters of *T. durum* in AVT's

Parameter	CZ	PZ	Overall
Grain Appearance score (Max. 10.0)	7.3 (6.2-8.0)	6.9 (6.1-7.5)	**7.1 (6.1-8.0)**
Hectolitre Weight (Kg/hl)	83.1 (81.7-84.4)	80.4 (69.2-83.7)	**81.8 (69.7-84.4)**
Protein content (%)	11.7 (11.2-12.2)	12.6 (10.9-14.4)	**12.2 (10.9-14.4)**
Sedimentation value (ml)	37.0 (31-43)	38.5 (31-46)	**37.8 (31-46)**
Grain hardness index	90.5 (76.2-100.2)	82.0 (77.2-88.5)	**86.3 (76.2-100.2)**
Iron (ppm)	38.6 (36.4-42.0)	38.7 (35.2-43.7)	**38.7 (35.2-43.7)**
Zinc (ppm)	39.5 (36.0-44.3)	40.9 (37.3-43.2)	**40.2 (36.0-44.3)**
Yellow pigment (ppm)	6.1 (4.7-7.3)	6.6 (5.1-8.2)	**6.4 (4.7-8.2)**

Average values of different quality parameters in NIVT Trials
T. aestivum

Trial	Zone	Grain Appearance Score (Max 10)	Hectolitre Weight (Kg/hl)	Protein (%)	Sedimentation value (ml)	Phenol test (Max 10)
NIVT 1A	NWPZ	6.2	78.0	11.1	45.1	4.8
NIVT 1A	NEPZ	6.0	76.5	10.5	47.4	4.4
NIVT 1A	**Overall**	**6.1**	**77.5**	**10.9**	**45.9**	**4.7**
NIVT 1B	NWPZ	6.4	78.9	10.9	46.5	6.8
NIVT 1B	NEPZ	6.4	76.3	10.4	44.2	6.3
NIVT 1B	**Overall**	**6.4**	**77.9**	**10.7**	**45.7**	**6.6**
NIVT 2	CZ	6.3	78.4	11.6	40.9	4.7
NIVT 2	PZ	6.4	78.1	12.0	43.5	4.7
NIVT 2	**Overall**	**6.3**	**78.3**	**11.8**	**42.0**	**4.7**
NIVT 3A	NWPZ	5.8	77.5	11.6	53.0	7.1
NIVT 3A	NEPZ	5.4	75.1	12.7	58.2	6.9
NIVT 3A	**Overall**	**5.6**	**76.7**	**11.9**	**54.8**	**7.0**
NIVT 3B	CZ	6.7	79.9	11.4	47.9	6.4
NIVT 3B	PZ	6.1	77.8	11.4	48.8	6.4
NIVT 3B	**Overall**	**6.4**	**79.0**	**11.4**	**48.3**	**6.4**
NIVT 5A	NWPZ	6.8	79.5	11.3	49.0	4.9
NIVT 5A	NEPZ	5.7	76.5	11.7	55.0	6.9
NIVT 5A	**Overall**	**6.4**	**78.4**	**11.4**	**51.0**	**5.7**
NIVT 6	NWPZ	6.4	79.2	12.4	45.0	6.8
NIVT 6	CZ	6.3	79.6	12.1	42.4	-
NIVT 6	**Overall**	**6.3**	**79.4**	**12.3**	43.7	**6.8**

T. durum

	Zone	GAS (Max 10)	Hectolitre Weight (Kg/hl)	Protein (%)	Sed. value (ml)	Yellow Berry (%)	Yellow Pigment (ppm)
NIVT 4	NWPZ	5.8	79.1	9.8	31.3	25.1	7.2
NIVT 4	CZ	5.8	78.7	11.4	38.4	2.4	4.7
NIVT 4	PZ	5.6	76.0	11.9	39.0	0.5	5.3
NIVT 4	**Overall**	**5.8**	**78.2**	**10.8**	**35.6**	**11.4**	**5.9**
NIVT 5B	CZ	6.5	84.0	11.4	30.0	17.6	7.2
NIVT 5B	PZ	5.7	81.0	14.4	32.0	1.4	7.1
NIVT 5B	**Overall**	**6.1**	**83.0**	**12.7**	**31.0**	**10.6**	**7.2**

High Molecular Weight Glutenin subunits (HMWGS) of T. *aestivum*

Seventy (70) 2nd year AVT and HYPT entries including checks were evaluated for HMWGS composition from various sowing conditions of different zones of the country. Subunit 5+10 was present in 48.6% of the total entries whereas 2+12 in 51.4% entries, indicating greater frequency of 2+12 subunits in all the zones (Fig. 1). Subunits 1, 2* and N were present in 14.3, 77.1 and 8.6% of the total entries, respectively. The subunits 7, 7+8, 7+9, and 17+18 were present in 17.1, 21.4, 20.0 and 41.4%, respectively. Subunit 17+18 was present in greater frequency across all zones. The percent entries having Glu-1 score 5, 6, 7, 8, 9 and 10 were 1.4, 5.7, 17.1, 45.7, 1.4 and 28.6, respectively. Maximum entries had score of 8 and 10.

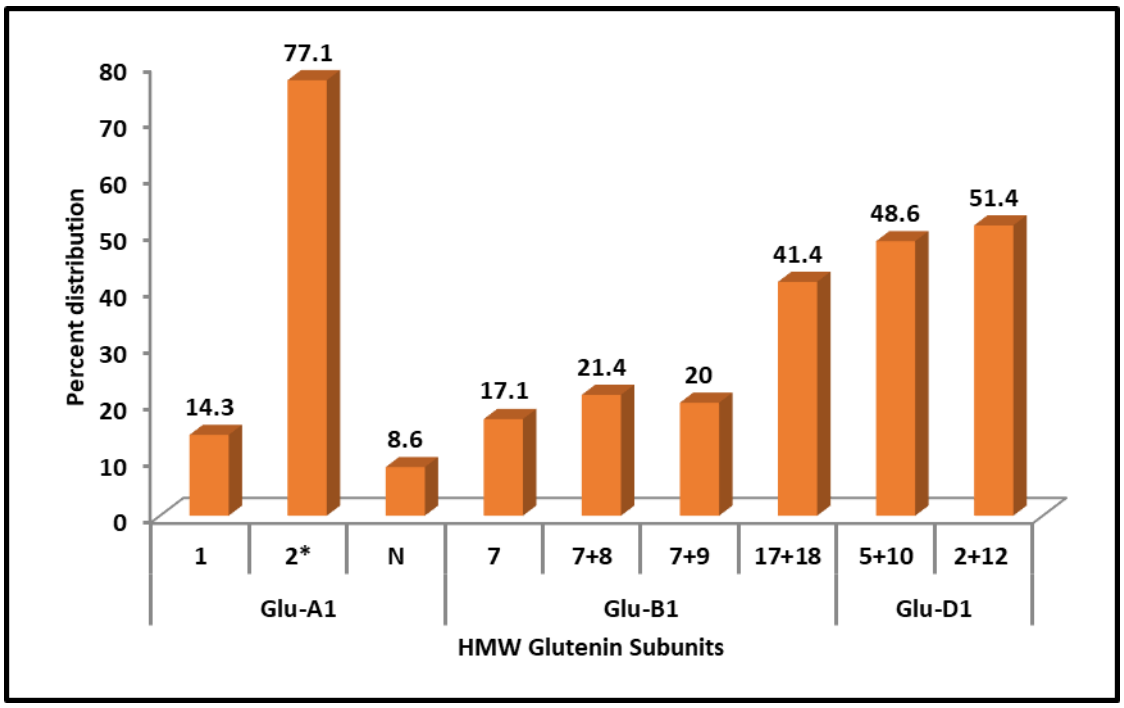

Fig. 1. Percent distribution of High Molecular Weight Glutenin subunits (HMWGS) of *T. aestivum*

Quality Component and Wheat Biofortification Nursery (QCWBN)

In 2023-24, 36 QCWBN entries were evaluated from 13 locations representing 4 different agro-climatic zones for grain appearance score, hectolitre weight, protein content, sedimentation value, iron, and zinc content to identify genotypes containing protein (>13%), iron (>40 ppm) and zinc (>40 ppm) together in accordance with the standards set up as benchmark in 2020 workshop (59th AICRPW&B meet, Aug 24-25, 2020). Following entries are having superiority in all three characters put together.

CZ: RWP2196, GW1028, K2001, GW1367, UP3102, K2101, MACS6893

PZ: GW1367, GW1029

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किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद
Agrisearch with a human touch

बेटी बचाओ बेटी पढ़ाओ

स्वच्छ भारत
एक कदम स्वच्छता की ओर

भाकृअनुप
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63वीं अखिल भारतीय गेहूँ एवं जौ अनुसंधान कार्यकर्ता गोष्ठी-2024

आचार्य नरेन्द्र देव कृषि एवं प्रौद्योगिकी विश्वविद्यालय, अयोध्या (उत्तर प्रदेश)

63rd All India Wheat and Barley Workers Meet-2024

Acharya Narendra Deva University of Agriculture & Technology, Ayodhya (Uttar Pradesh)

सितम्बर 11-13, 2024 | September 11-13, 2024