

THREE YEARS QUALITY DATA (2013- 14 to 2015 - 16)

QUALITY CHARACTERS OF *T. aestivum* ENTRIES

Sr. No	Variety	Grain Appearance (Max Score 10)				Test Weight (Kg/hl)				Protein Content (%)				Sedimentation Value (ml)				High Molecular Weight Glutenin Subunits			
		13-14	14-15	15-16	Mean	13-14	14-15	15-16	Mean	13-14	14-15	15-16	Mean	13-14	14-15	15-16	Mean	Glu-D1	Glu-A1	Glu-B1	Glu-1 Score
																		2015-16			
NEPZ (RTS)																					
1	HD 3171	6.1	6.4	6.3	6.3	79.6	78.6	79.2	79.1	10.3	12.0	10.7	11.0	51	56	66	58	5+10	2*	7	8
2	K 1317	6.1	6.4	6.0	6.2	78.9	78.4	78.2	78.5	11.4	12.2	12.6	12.1	46	57	54	52	2+12	2*	17+18	8
3	HD 2888 (C)	5.7	6.5	6.4	6.2	75.4	77.5	80.5	77.8	11.2	12.0	12.1	11.8	45	45	45	45	2+12	N	20	4
4	C 306 (C)	-	6.4	6.4	6.4	-	78.2	80.0	79.1	-	11.7	11.9	11.8	-	40	45	43	2+12	N	20	4
5	K 8027 (C)	-	6.6	6.1	6.4	-	76.4	77.5	77.0	-	12.0	12.2	12.1	-	40	48	44	2+12	2*	17+18	8
PZ (RITS)																					
1	HI 1605	6.1	6.7	6.7	6.5	80.8	74.9	80.0	78.6	13.3	11.9	14.2	13.1	49	55	60	55	5+10	2*	7	8
2	NI 5439 (C)	5.8	6.9	6.3	6.3	77.6	78.0	77.2	77.6	12.3	12.5	13.7	12.8	45	50	51	49	2+12	N	17+18	6
3	NIAW 1415 (C)	-	6.9	6.5	6.7	-	78.6	78.2	78.4	-	13.7	13.5	13.6	-	53	53	53	2+12	1	7+9	7
4	DBW 93 (C)	-	5.9	6.5	6.2	-	76.4	79.6	78.0	-	13.9	13.8	13.8	-	47	49	48	5+10	2*	17+18	10

ONE YEAR QUALITY DATA (2015-16)

QUALITY CHARACTERS OF *T. Aestivum* ENTRIES

Sr. No	Variety	Extraction Rate (%)	Grain Hardness Index	Wet Gluten (%)	Dry Gluten (%)	Gluten index	Bread Loaf Volume (cc)	Bread Quality (Max Score:10)	Chapati Quality (Max. Score: 10)	Biscuit Quality (Spread factor)	Yellow Pigment (ppm)	Iron (ppm)	Zinc (ppm)	Phenol Test (Max. Score: 10)
		2015-16												
NEPZ (RTS)														
1	HD 3171	69.9	61	24.5	8.5	85	495	5.01	7.76	7.84	3.82	47.1	33.4	5.5
2	K 1317	71.2	71	30.1	10.2	74	508	5.27	8.05	7.34	3.96	43.8	38.3	1.7
3	HD 2888 (C)	71.7	78	31.1	9.6	58	500	5.18	8.12	7.37	3.86	43.9	44.2	1.8
4	C 306 (C)	72.7	83	30.0	10.1	58	498	5.05	8.13	7.48	3.82	38.7	40.3	1.7
5	K 8027 (C)	69.3	67	30.6	10.3	72	515	5.52	8.05	7.28	3.71	37.7	41.8	1.8
PZ (RITS)														
1	HI 1605	71.5	79	35.7	11.5	77	587	7.33	8.04	7.51	3.49	43.0	35.0	1.8
2	NI 5439 (C)	70.2	72	36.9	11.6	74	593	7.49	7.81	7.22	3.79	43.1	35.4	6.0
3	NIAW 1415 (C)	72.0	82	36.2	11.1	60	592	7.44	8.12	7.67	3.85	42.2	36.9	1.8
4	DBW 93 (C)	70.7	76	37.7	11.9	51	597	7.55	7.83	7.57	3.99	43.1	38.3	5.7

TWO YEARS QUALITY DATA (2014-15 & 2015-16)

QUALITY CHARACTERS OF *T. aestivum* ENTRIES from Bio-fortification Trial

Sr. No	Variety	Grain Appearance (Max Score 10)			Test Weight (Kg/hl)			Protein Content (%)			Sedimentation Value (ml)			Grain Hardness Index	Iron (ppm)	Zinc (ppm)
		14-15	15-16	Mean	14-15	15-16	Mean	14-15	15-16	Mean	14-15	15-16	Mean			
ITS (NWPZ)																
1	HPBW 01	6.2	6.8	6.5	77.9	79.9	78.9	12.8	12.4	12.6	57	58	57.5	70	40.6	33.4
2	HPBW 02	6.3	6.8	6.6	78.8	79.5	79.2	11.1	12.5	11.8	61	57	59.0	64	39.4	29.7
3	WB 2	6.3	6.6	6.5	78.7	80.0	79.4	11.8	12.8	12.3	58	59	58.5	68	40.3	34.1
4	DPW 621-50 (C)	6.3	6.6	6.5	77.2	79.4	78.3	12.7	12.7	12.7	55	58	56.5	78	35.1	37.3
5	K 0307 (C)	6.4	6.8	6.6	78.0	81.0	79.5	12.2	12.3	12.2	37	41	39.0	74	39.9	31.9
6	GW 322(C)	6.2	6.6	6.4	76.5	77.7	77.1	11.3	11.5	11.4	38	39	38.5	71	33.5	35.0
7	MACS 6222(C)	6.4	6.4	6.4	78.3	79.7	79.0	12.3	12.9	12.6	38	40	39.0	72	39.1	32.5
ITS (NEPZ)																
1	HPBW 01	6.4	5.5	6.0	77.0	75.3	76.2	12.1	11.4	11.7	56	59	58	65	36.3	34.5
2	HPBW 02	6.7	5.6	6.2	78.7	75.0	76.9	10.3	11.6	10.9	59	61	60	58	36.2	27.5
3	WB 2	6.7	5.3	6.0	75.6	74.9	75.3	10.7	11.9	11.3	57	56	57	63	37.3	33.0
4	DPW 621-50 (C)	6.8	5.3	6.1	78.1	75.9	77.0	11.4	11.7	11.6	60	60	60	75	36.8	35.1
5	K 0307 (C)	6.8	5.7	6.3	77.7	77.9	77.8	11.3	11.2	11.3	44	38	41	67	38.9	32.8
6	GW 322(C)	6.7	5.7	6.2	72.5	74.5	73.5	10.1	10.4	10.2	42	44	43	60	34.9	32.2
7	MACS 6222(C)	7.2	5.8	6.5	77.8	76.4	77.1	11.1	11.3	11.2	41	39	40	71	36.6	34.0
ITS (CZ)																
1	HPBW 01	6.7	6.5	6.6	78.4	80.3	79.4	11.7	12.3	12.0	55	59	57	69	40.3	39.5
2	HPBW 02	6.8	6.4	6.6	78.9	79.5	79.2	11.0	12.7	11.8	57	63	60	65	42.2	39.5
3	WB 2	6.6	6.4	6.5	77.9	79.6	78.8	11.4	12.8	12.1	53	61	57	74	41.9	38.8
4	DPW 621-50 (C)	6.6	6.4	6.5	78.2	76.8	77.5	11.7	12.6	12.2	54	60	57	82	37.9	43.1
5	K 0307 (C)	6.7	6.6	6.7	78.5	79.2	78.9	10.8	11.3	11.1	40	39	40	82	39.2	40.4
6	GW 322(C)	6.4	6.3	6.4	76.8	79.0	77.9	10.4	10.6	10.5	40	38	39	78	36.4	38.4
7	MACS 6222 (C)	6.8	6.5	6.7	78.9	81.6	80.3	11.1	12.4	11.7	37	39	38	71	40.2	39.2
ITS (PZ)																
1	HPBW 01	6.9	6.3	6.6	80.0	77.6	78.8	12.3	14.2	13.2	52	58	55	72	41.7	45.3
2	HPBW 02	6.6	6.4	6.5	79.1	77.3	78.2	11.9	14.0	13.0	54	59	57	67	40.6	43.9
3	WB 2	6.5	6.1	6.3	80.2	78.0	79.1	10.4	14.5	12.4	54	61	58	70	42.9	46.4
4	DPW 621-50 (C)	6.6	6.2	6.4	81.3	77.1	79.2	10.9	14.0	12.5	51	61	56	80	38.4	46.5
5	K 0307 (C)	7.0	6.4	6.7	80.2	79.0	79.6	11.3	14.1	12.7	39	40	40	73	43.1	45.6
6	GW 322(C)	6.9	5.9	6.4	79.8	76.6	78.2	11.9	13.2	12.5	41	39	40	82	35.6	46.4
7	MACS 6222 (C)	7.0	6.1	6.6	80.3	78.5	79.4	11.0	13.8	12.4	40	39	40	76	38.0	43.5

THREE YEARS QUALITY DATA (2013-14 to 2015-16)

QUALITY CHARACTERS OF *T.Durum* ENTRIES

Sr. No.	Variety	Grain Appearance (Max Score 10)				Test Weight (Kg/hl)				Protein Content (%)				Sedimentation Value (ml)			
		13-14	14-15	15-16	Mean	13-14	14-15	15-16	Mean	13-14	14-15	15-16	Mean	13-14	14-15	15-16	Mean
CZ (ITS)																	
1	HI 8759	6.4	7.3	7.5	7.1	84.3	81.9	83.0	83.1	11.4	11.7	12.5	11.9	36	31	38	35
2	HI 8498 (C)	6.0	7.4	7.3	6.9	83.1	81.4	82.7	82.4	12.2	12.4	13.3	12.6	37	33	37	36
3	MPO 1215 (C)	-	7.2	7.4	7.3	-	80.6	83.3	82.0	-	12.0	12.2	12.1	-	34	39	37
4	HI 8737 (C)	-	7.1	7.4	7.3	-	81.4	83.2	82.3	-	12.0	12.6	12.3	-	36	37	37
5	HD 4728 (C)	-	7.6	7.4	7.5	-	81.4	83.3	82.4	-	11.8	12.6	12.2	-	32	36	34
PZ (ITS)																	
1	MACS 3949	5.7	7.5	7.0	6.7	81.9	81.9	80.5	81.4	12.8	12.1	13.7	12.9	41	38	40	40
2	NIDW 295 (C)	5.9	-	6.6	6.3	82.3	-	78.4	80.4	12.1	-	13.8	12.9	39	-	37	38
3	UAS 428 (C)	-	6.7	6.9	6.8	-	81.3	80.6	81.0	-	12.2	14.0	13.1	-	34	39	37

THREE YEARS QUALITY DATA (2013-14 to 2015-16)											
QUALITY CHARACTERS OF <i>T.Durum</i> ENTRIES											
Sr. No.	Variety	Yellow Berry Incidence (%)				Yellow Pigment (ppm)				γ-gliadin	Hardness Index
		13-14	14-15	15-16	Mean	13-14	14-15	15-16	Mean	2015-16	
CZ (ITS)											
1	HI 8759	4.2	7.7	0.9	4.3	5.0	6.2	6.1	5.7	45	69
2	HI 8498 (C)	3.6	6.8	0.8	3.7	5.3	4.7	4.8	5.0	45	80
3	MPO 1215 (C)	-	4.0	3.0	3.5	-	5.9	6.0	6.0	45	69
4	HI 8737 (C)	-	10.5	0.8	5.7	-	5.9	5.8	5.9	45	73
5	HD 4728 (C)	-	10.0	1.7	5.9	-	4.6	5.0	4.8	45	77
PZ (ITS)											
1	MACS 3949	10.0	5.5	3.8	6.4	5.6	6.4	6.4	6.1	45	70
2	NIDW 295 (C)	8.4	-	3.1	5.8	5.9	-	6.1	6.0	45	77
3	UAS 428 (C)	-	5.6	3.2	4.4	-	6.0	6.0	6.0	45	77

		ONE YEAR QUALITY DATA (2015-16) QUALITY CHARACTERS OF <i>T.Durum</i> ENTRIES							
		NUTRITIONAL QUALITY OF <i>T.durum</i> ENTRIES		COOKING QUALITY OF PASTA PRODUCT FROM <i>T. durum</i> ENTRIES					
Sr. No.	Variety	Iron (ppm)	Zinc (ppm)	Cooking Time (min./sec.)	Water Absorption (%)	Water uptake Ratio	Gruel Solid Loss (%)	Stickiness	Overall Acceptability (Out of 9.0)
		2015-16							
CZ (ITS)									
1	HI 8759	42.1	42.8	11:50	127	1.27	1.47	PS	7.50
2	HI 8498 (C)	40.8	40.5	11:25	118	1.18	1.76	NS	6.75
3	MPO 1215 (C)	40.6	42.6	10:35	123	1.23	1.63	PS	7.25
4	HI 8737 (C)	41.5	40.6	10:25	117	1.17	1.81	PS	6.75
5	HD 4728 (C)	42.3	46.0	10:30	112	1.12	2.39	S	5.50
PZ (ITS)									
1	MACS 3949	38.6	40.6	10:40	121	1.21	1.67	PS	7.25
2	NIDW 295 (C)	37.5	42.3	10:40	116	1.16	1.96	S	6.25
3	UAS 428 (C)	38.4	45.4	12:00	117	1.17	2.01	NS	6.25

THREE YEARS QUALITY DATA (2013-14 & 2015-16)																		
QUALITY CHARACTERS OF <i>T. aestivum</i> ENTRIES from MABB Trial																		
Sr. No	Variety	Grain Appearance (Max Score 10)				Test Weight (Kg/hl)				Protein Content (%)				Sedimentation Value (ml)				Extraction Rate (%)
		13-14	14-15	15-16	Mean	13-14	14-15	15-16	Mean	13-14	14-15	15-16	Mean	13-14	14-15	15-16	Mean	2015-16
ITS (NWPZ)																		
1	PBW 723	5.9	5.8	6.3	6.0	78.1	75.5	78.9	77.5	13.0	12.0	11.8	12.3	40	41	43	41	69.6
2	PBW 760	-	-	6.2	6.2	-	-	77.1	77.1	-	-	11.5	11.5	-	-	42	42	69.4
3	PBW 343 (C)	5.1	5.4	6.3	5.6	72.9	71.8	78.6	74.4	12.0	12.3	11.9	12.1	40	37	41	39	68.3
4	HD 2967 (C)	5.5	5.5	6.4	5.8	76.3	75.0	79.2	76.8	12.0	12.1	12.0	12.0	55	56	59	57	68.5
5	DPW 621-50 (C)	5.9	5.9	6.4	6.1	78.5	75.6	79.9	78.0	12.4	12.5	12.2	12.4	51	56	59	55	68.6
6	WH 1105 (C)	5.6	5.8	6.4	5.9	77.0	75.6	79.9	77.5	12.3	12.1	11.8	12.1	58	59	57	58	68.7
ILS (CZ)																		
1	HD 3209	-	6.4	6.4	6.4	-	76.4	79.7	78.1	-	12.4	13.8	13.1	-	45	48	47	69.8
2	HD 2932 (C)	7.0	6.0	6.6	6.3	81.8	75.4	79.9	79.0	12.2	12.8	13.1	12.7	46	45	49	47	69.1
3	Raj 4083 (C)	7.2	6.3	6.7	6.5	81.8	77.1	80.3	79.7	10.8	12.5	13.2	12.2	48	46	49	48	69.4
4	HD 2864 (C)	7.0	6.3	6.7	6.5	83.3	78.8	82.2	81.4	12.1	12.3	12.5	12.3	48	42	43	44	69.1
5	MP 3336 (C)	-	6.5	6.7	6.6	-	78.1	81.7	79.9	-	12.8	12.9	12.9	-	38	41	40	69.2
ILS (PZ)																		
1	HD 3209	-	6.3	6.1	6.2	-	78.0	78.1	78.1	-	13.7	15.0	14.3	-	46	48	47	70.5
2	HD 2932 (C)	6.5	6.3	6.0	6.2	80.1	79.1	77.4	78.9	13.8	13.9	14.3	14.0	58	50	51	53	69.5
3	Raj 4083 (C)	6.6	6.4	6.2	6.4	79.8	80.7	77.2	79.2	13.4	12.6	13.4	13.1	59	47	49	52	69.7
4	HD 2864 (C)	6.6	6.5	6.3	6.5	82.5	80.3	81.2	81.3	13.3	12.6	12.9	12.9	55	44	42	47	69.5
5	MP 3336 (C)	-	6.5	6.1	6.3	-	79.1	78.6	78.9	-	13.5	13.7	13.6	-	41	42	42	69.7

		ONE YEAR QUALITY DATA (2015-16)								
		QUALITY CHARACTERS OF <i>T. Aestivum</i> ENTRIES from MABB Trial								
Sr. No	Variety	Grain Hardness Index	Wet Gluten (%)	Dry Gluten (%)	Gluten Index	Bread Loaf Volume (cc)	Bread Quality (Max Score:10)	Chapati Quality (Max. Score: 10)	Yellow Pigment (ppm)	Phenol Test (Max. Score: 10)
		2015-16								
ITS (NWPZ)										
1	PBW 723	68	28.9	9.7	72	559	6.68	7.64	4.00	5.9
2	PBW 760	61	29.1	9.7	60	589	7.24	7.60	3.00	5.8
3	PBW 343 (C)	67	30.2	9.9	65	563	6.72	7.65	3.46	6.1
4	HD 2967 (C)	66	28.7	9.9	77	566	6.81	7.69	3.62	6.1
5	DPW 621-50 (C)	72	29.9	10.3	77	563	6.77	7.61	3.30	6.6
6	WH 1105 (C)	63	28.3	9.6	74	564	6.80	7.64	3.30	6.7
ILS (CZ)										
1	HD 3209	75	35.5	11.5	61	571	6.90	8.11	3.28	1.6
2	HD 2932 (C)	69	33.8	11.1	57	570	6.88	8.12	3.00	1.6
3	Raj 4083 (C)	76	33.4	11.0	72	571	6.86	7.74	3.02	5.5
4	HD 2864 (C)	72	32.5	10.6	77	568	6.80	8.14	3.02	1.6
5	MP 3336 (C)	74	33.8	10.6	46	568	6.82	8.14	3.01	1.8
ILS (PZ)										
1	HD 3209	74	38.4	12.1	67	600	7.55	8.09	3.05	1.7
2	HD 2932 (C)	63	37.2	12.2	62	578	7.10	8.10	3.01	1.8
3	Raj 4083 (C)	78	35.0	11.4	77	585	7.28	7.75	2.98	5.7
4	HD 2864 (C)	76	34.0	11.0	80	575	7.06	8.15	3.04	1.8
5	MP 3336 (C)	72	35.7	11.3	48	577	7.09	8.12	2.84	1.8