

## 1821-AVT-IR-TS-TAS-NWPZ, 2018-19

## LOCATIONWISE MEAN YIELD (q/ha)

S.N	Variety	Code	Delhi			Haryana						J&K			Punjab																	
			Yield	Rk	G	Hisar	Rohtak	IIWBR-Karnal	Shikohpur	Jammu	Ludhiana	Bathinda	Gurdaspur	Kapurthala																		
1	DBW 221*	NW-TS-105	71.5	2	1	64.3	5	1	64.3	8	0	76.1	5	0	52.0	10	0	50.6	7	0	66.8	6	0	60.6	7	1	53.8	5	1	67.3	2	1
2	DBW 222*	NW-TS-106	73.0	1	1	68.4	1	1	71.1	1	1	82.1	1	1	54.1	8	0	52.4	4	0	63.6	8	0	62.6	2	1	51.8	7	0	65.5	3	1
3	NW 7049	NW-TS-110	56.7	10	0	64.8	4	1	62.1	11	0	77.0	3	0	65.0	1	1	59.4	1	1	66.2	7	0	64.3	1	1	52.8	6	0	59.7	9	0
4	PBW 820 <sup>M</sup>	NW-TS-104	55.7	12	0	62.8	7	0	65.8	5	0	73.3	7	0	48.4	11	0	52.9	3	0	72.8	2	1	54.2	11	0	56.2	3	1	63.9	4	1
5	PBW 821 <sup>M</sup>	NW-TS-108	56.4	11	0	59.6	10	0	63.7	9	0	66.2	12	0	53.7	9	0	51.9	5	0	72.5	4	1	62.0	3	1	57.4	1	1	62.3	6	0
6	DPW 621-50 (C)	NW-TS-111	58.5	8	0	64.8	3	1	65.0	7	0	71.8	9	0	64.8	2	1	41.1	10	0	53.9	9	0	61.4	5	1	41.6	11	0	68.6	1	1
7	DBW 88 (C)	NW-TS-112	63.3	5	0	65.0	2	1	65.3	6	0	77.3	2	1	63.3	3	1	38.3	12	0	52.9	10	0	60.8	6	1	49.3	10	0	62.8	5	0
8	HD 2967 (C)	NW-TS-109	58.2	9	0	55.3	12	0	67.0	2	1	66.8	11	0	61.6	4	1	48.2	8	0	44.9	11	0	61.4	4	1	38.7	12	0	58.2	10	0
9	HD 3086 (C)	NW-TS-103	59.3	7	0	63.0	6	0	63.0	10	0	70.7	10	0	46.4	12	0	51.7	6	0	73.2	1	1	57.6	9	0	56.3	2	1	61.1	7	0
10	PBW 550 (C)	NW-TS-107	59.3	6	0	59.6	9	0	66.8	4	1	72.5	8	0	61.1	5	1	40.1	11	0	43.2	12	0	52.8	12	0	50.6	8	0	55.9	11	0
11	WH 1105 (C)	NW-TS-101	69.2	3	0	60.6	8	0	66.9	3	1	75.9	6	0	57.7	7	0	46.5	9	0	71.2	5	1	58.8	8	0	56.1	4	1	60.0	8	0
12	HD 3226(I) (C)	NW-TS-102	64.0	4	0	57.6	11	0	59.8	12	0	76.9	4	0	60.8	6	1	54.1	2	0	72.6	3	1	54.7	10	0	50.4	9	0	55.3	12	0
G.M.			62.1			62.2			65.1			73.9			57.4			48.9			62.8			59.3			51.3			61.7		
S.E.(M)			1.464			1.703			2.198			2.117			2.092			1.675			1.854			1.856			1.675			2.116		
C.D. (10%)			3.5			4.1			5.3			5.1			5.0			4.0			4.4			4.4			4.0			5.1		
C.V.			4.7			5.5			6.8			5.7			7.3			6.8			5.9			6.3			6.5			6.9		
D.O.S.(dd.mm.yy)			15.11.18			05.11.18			14.11.18			01.11.18			13.11.18			03.11.18			10.11.18			14.11.18			13.11.18			10.11.18		

No. of Trials : Proposed = 24

Conducted = 23

Trial not conducted (01) = Dhakrani

Trials not reported (04) = Alwar (RMT), Bareilly (RMT), Bawal (LSM), KVK-Rampur (HCV)

**1821-AVT-IR-TS-TAS-NWPZ, 2018-19**  
**LOCATIONWISE MEAN YIELD (q/ha)**

S.N	Variety	Code	Punjab			Rajasthan						U.P.			UTK														
			Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G									
1	DBW 221*	NW-TS-105	68.4	3	1	75.2	1	1	74.4	2	0	39.8	12	0	67.0	8	0	66.7	2	0	66.2	2	1	67.5	5	0	61.7	9	0
2	DBW 222*	NW-TS-106	66.8	7	0	63.5	10	0	80.6	1	1	49.9	6	0	73.8	2	1	55.1	11	0	53.1	11	0	69.4	4	0	67.0	3	0
3	NW 7049	NW-TS-110	65.1	8	0	63.7	9	0	69.4	7	0	40.5	11	0	75.6	1	1	64.5	3	0	58.2	8	0	66.0	7	0	67.9	2	0
4	PBW 820 <sup>M</sup>	NW-TS-104	59.6	12	0	73.1	3	1	70.0	6	0	42.4	10	0	61.3	11	0	61.5	7	0	59.7	7	0	58.9	11	0	61.9	8	0
5	PBW 821 <sup>M</sup>	NW-TS-108	74.0	1	1	73.9	2	1	67.9	9	0	54.4	1	1	69.0	6	0	54.7	12	0	59.9	5	0	67.2	6	0	56.8	12	0
6	DPW 621-50 (C)	NW-TS-111	62.8	10	0	61.4	11	0	63.5	10	0	50.9	3	0	63.3	9	0	72.2	1	1	65.3	4	0	64.7	10	0	64.8	6	0
7	DBW 88 (C)	NW-TS-112	67.9	4	0	60.1	12	0	68.8	8	0	47.1	8	0	57.4	12	0	62.2	6	0	65.9	3	0	65.9	8	0	65.5	5	0
8	HD 2967 (C)	NW-TS-109	64.9	9	0	68.8	4	0	63.5	11	0	50.0	5	0	61.9	10	0	63.0	4	0	59.8	6	0	57.4	12	0	57.3	11	0
9	HD 3086 (C)	NW-TS-103	67.9	5	0	64.9	7	0	72.7	4	0	52.2	2	0	71.7	4	1	61.0	8	0	66.7	1	1	69.8	3	0	64.2	7	0
10	PBW 550 (C)	NW-TS-107	69.6	2	1	67.2	5	0	72.9	3	0	47.4	7	0	69.5	5	1	56.9	10	0	57.2	9	0	72.4	1	1	66.0	4	0
11	WH 1105 (C)	NW-TS-101	67.0	6	0	64.9	6	0	71.9	5	0	50.5	4	0	73.7	3	1	62.4	5	0	53.4	10	0	64.9	9	0	59.0	10	0
12	HD 3226(I) (C)	NW-TS-102	61.9	11	0	64.6	8	0	62.5	12	0	43.9	9	0	67.1	7	0	60.1	9	0	51.2	12	0	70.9	2	1	69.3	1	1
G.M.			66.3			66.8			69.8			47.4			67.6			61.7			59.7			66.2			63.4		
S.E.(M)			2.336			2.452			1.005			0.499			2.752			0.439			0.255			0.727			0.534		
C.D. (10%)			5.6			5.9			2.4			1.2			6.6			1.1			0.6			1.7			1.3		
C.V.			7.0			7.3			2.9			2.1			8.1			1.4			0.9			2.2			1.7		
D.O.S.(dd.mm.yy)			13.11.18			10.11.18			14.11.18			14.11.18			15.11.18			15.11.19			14.11.18			08.11.18			14.11.18		

1821-AVT-IR-TS-TAS-NWPZ, 2018-19  
STATE AND ZONAL MEANS (q/ha)

S.N	Variety	Code	Delhi			Haryana			J&K			Punjab			Rajasthan			U.P.			UTK			ZONAL		
			Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G
1	DBW 221*	NW-TS-105	71.5	2	1	64.2	7	0	50.6	7	0	65.3	2	1	60.4	7	0	66.4	2	0	64.6	8	0	63.9	2	1
2	DBW 222*	NW-TS-106	73.0	1	1	68.9	1	1	52.4	4	0	62.3	6	0	68.1	1	1	54.1	12	0	68.2	3	0	64.4	1	1
3	NW 7049	NW-TS-110	56.7	10	0	67.2	3	1	59.4	1	1	62.0	7	0	61.8	6	0	61.3	6	0	66.9	5	0	63.1	3	0
4	PBW 820 <sup>M</sup>	NW-TS-104	55.7	12	0	62.6	10	0	52.9	3	0	63.3	4	0	57.9	10	0	60.6	7	0	60.4	11	0	60.8	10	0
5	PBW 821 <sup>M</sup>	NW-TS-108	56.4	11	0	60.8	11	0	51.9	5	0	67.0	1	1	63.8	4	0	57.3	9	0	62.0	9	0	62.3	6	0
6	DPW 621-50 (C)	NW-TS-111	58.5	8	0	66.6	4	1	41.1	10	0	58.3	10	0	59.2	8	0	68.8	1	1	64.7	7	0	61.1	7	0
7	DBW 88 (C)	NW-TS-112	63.3	5	0	67.7	2	1	38.3	12	0	59.0	9	0	57.7	12	0	64.1	3	0	65.7	6	0	61.0	8	0
8	HD 2967 (C)	NW-TS-109	58.2	9	0	62.7	9	0	48.2	8	0	56.1	12	0	58.5	9	0	61.4	5	0	57.3	12	0	58.3	12	0
9	HD 3086 (C)	NW-TS-103	59.3	7	0	60.8	12	0	51.7	6	0	63.5	3	0	65.5	2	0	63.9	4	0	67.0	4	0	62.8	4	0
10	PBW 550 (C)	NW-TS-107	59.3	6	0	65.0	6	0	40.1	11	0	56.6	11	0	63.3	5	0	57.0	10	0	69.2	2	1	60.0	11	0
11	WH 1105 (C)	NW-TS-101	69.2	3	0	65.3	5	0	46.5	9	0	63.0	5	0	65.4	3	0	57.9	8	0	62.0	10	0	62.7	5	0
12	HD 3226(I) (C)	NW-TS-102	64.0	4	0	63.8	8	0	54.1	2	0	59.9	8	0	57.8	11	0	55.6	11	0	70.1	1	1	60.9	9	0
G.M.			62.1			64.6			48.9			61.4			61.6			60.7			64.8			61.8		
S.E.(M)			1.464			1.018			1.675			0.844			0.991			0.254			0.451			0.398		
C.D. (10%)			3.5			2.4			4.0			2.0			2.3			0.6			1.1			0.9		

## North Western Plains Zone

### Summary of Disease Data and Agronomic Characteristics

Trial: AVT-IR-TS-TAS-NWPZ, 2018-19

SN	Variety	Code	Disease Reaction				Agronomic Characteristics								Grain Characteristics				
			Br	ACI	YI	ACI	Hd.R	Hd.M	Mat.R	Mat.M	Ht.R	Ht.M	Thr.	Lod.M	Col.	Tex.	TGW.R	TGW.M	BP
1	DBW 221*	NW-TS-105	40S	20.0	40S	11.3	83-123	100	139-168	149	90-115	103	Ey	25	A	SH-H	34-42	38	0.2
2	DBW 222*	NW-TS-106	tMS	0.2	20S	5.0	77-123	103	139-165	150	86-120	108	Ey-M	10	A	SH-H	36-46	42	0.4
3	NW 7049	NW-TS-110	10MS	3.3	15MS	4.4	82-120	102	140-165	151	87-126	110	Ey	40	A	SH-H	40-53	47	0.2
4	PBW820 <sup>M</sup>	NW-TS-104	tMS	0.2	5MS	0.9	87-123	105	139-168	150	89-110	101	Ey	20	A	SH-H	32-45	38	0.1
5	PBW821 <sup>M</sup>	NW-TS-108	20S	5.0	5S	1.3	77-115	94	134-162	145	81-105	91	Ey-M	5	A	SH-H	37-47	41	0.0
6	DPW621-50 (C)	NW-TS-111	10MS	2.0	60S	17.9	81-123	105	139-168	151	93-118	104	Ey	30	A	SH-H	34-44	39	0.0
7	DBW88 (C)	NW-TS-112	20S	5.0	60S	21.3	83-123	103	140-170	151	88-115	105	Ey	20	A	SH-H	37-45	40	0.1
8	HD2967 (C)	NW-TS-109	tMS	0.2	60S	27.5	78-116	106	141-165	152	90-119	105	Ey	20	A	SH-H	33-48	41	0.2
9	HD3086 (C)	NW-TS-103	20S	7.5	60S	9.6	83-115	99	137-165	149	93-119	104	Ey	0	A	SH-H	36-46	41	0.2
10	PBW550 (C)	NW-TS-107	5MS	1.0	60S	23.8	78-115	96	138-162	147	79-115	90	Ey-M	10	A	SH-H	35-47	41	0.0
11	WH1105 (C)	NW-TS-101	5S	1.5	40S	11.2	82-123	101	137-168	150	89-110	102	Ey	15	A	SH-H	35-43	39	0.1
12	HD3226(I) (C)	NW-TS-102	10MS	2.0	20MS	2.8	85-118	105	141-165	151	91-125	110	Ey-M	20	A	SH-H	37-46	41	0.1

1. Ancillary data from Delhi, Pantnagar, Faridkot, Bhatinda, Gurdaspur, Ludhiana, Hisar, Bawal, Rohtak, Shikopur, Karnal, Durgapura, Sriganaganagar, Nagina, Jammu, Tabiji, Kashipur and Bulandshahar.
2. Yellow rust data from Delhi, Hisar, Rohtak, Karnal, Ludhiana, Gurdaspur, Jammu and Pantnagar.
3. Brown rust data from Karnal, Ludhiana, Gurdaspur and Pantnagar.
4. Black point data reported from Hisar and Gurdaspur.

**AVT-IR-TS-TAS-NWPZ, 2018-19**  
**Individual Station Rust Data**

SN	Variety	Code	Gurdaspur		Ludhiana		Karnal		Pantnagar		Delhi	Hisar	Rohtak	Jammu
			Br	YI	Br	YI	Br	YI	Br	YI	YI	YI	YI	YI
1	DBW 221*	NW-TS-105	20S	40S	0	10S	40S	0	20S	0	0	0	0	40S
2	DBW 222*	NW-TS-106	0	10S	0	20S	tMS	0	0	0	0	0	0	10S
3	NW 7049	NW-TS-110	5S	10MS	0	0S	10MS	15MS	0	0	5S	0	0	10S
4	PBW820 <sup>M</sup>	NW-TS-104	0	tMS	0	5MR	tMS	0	0	0	0	0	0	5MS
5	PBW821 <sup>M</sup>	NW-TS-108	0	tMS	0	5S	20S	5MS	0	0	0	0	0	tMS
6	DPW621-50 (C)	NW-TS-111	0	20MS	0	60S	10MS	tr	0	0	5S	tMS	tMS	60S
7	DBW88 (C)	NW-TS-112	0	40S	0	40S	20S	tMR	0	20S	0	5S	5S	60S
8	HD2967 (C)	NW-TS-109	0	60S	0	60S	tMS	10S	0	40S	10S	10S	10S	20S
9	HD3086 (C)	NW-TS-103	0	10MS	10S	5MS	0	5S	20S	0	0	0	0	60S
10	PBW550 (C)	NW-TS-107	0	40S	0	60S	5MS	tr	0	30S	0	10S	10S	40S
11	WH1105 (C)	NW-TS-101	5S	10MS	0	40S	tMS	tMS	0	0	0	tMR	tMR	40S
12	HD3226(l) (C)	NW-TS-102	0	5S	0	tMR	10MS	tMS	0	0	0	0	0	20MS

**1822-AVT-IR-LS-TAS-NWPZ, 2018-19**  
**LOCATIONWISE MEAN YIELD (q/ha)**

S.N	Variety	Code	Delhi			Haryana						J&K			Punjab														
			Delhi			Bawal		Hisar		IIWBR-Karnal		Rohtak		Shikohpur		Jammu			Ludhiana		Kapurthala								
			Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G						
1	PBW 771*	NW-LS-206	52.9	1	1	48.6	2	1	57.2	1	1	53.4	3	0	54.9	4	0	51.7	4	1	34.5	6	0	62.3	1	1	50.5	2	0
2	DBW 173 (C)	NW-LS-202	44.0	3	0	42.3	5	0	50.2	4	0	56.3	2	0	56.8	3	1	52.1	2	1	40.2	2	1	57.9	3	0	45.4	5	0
3	HD 3059 (C)	NW-LS-204	42.5	5	0	41.9	6	0	43.8	5	0	45.6	5	0	54.4	5	0	49.6	5	0	39.2	3	1	46.1	5	0	38.2	6	0
4	WH 1021 (C)	NW-LS-203	36.8	6	0	43.7	4	0	43.6	6	0	32.0	6	0	45.5	6	0	36.9	6	0	39.1	4	1	40.7	6	0	47.9	4	0
5	WH 1124 (C)	NW-LS-205	49.1	2	1	53.8	1	1	54.4	2	1	49.9	4	0	59.0	1	1	55.2	1	1	38.1	5	0	59.1	2	1	48.9	3	0
6	PBW 752(I) (C)	NW-LS-201	42.9	4	0	46.1	3	0	53.9	3	0	60.8	1	1	57.9	2	1	51.8	3	1	42.2	1	1	54.6	4	0	58.9	1	1
G.M.			44.7			46.1			50.5			49.7			54.7			49.6			38.9			53.4			48.3		
S.E.(M)			2.432			2.186			1.305			1.447			1.478			2.058			1.294			1.686			2.183		
C.D. (10%)			6.0			5.4			3.2			3.6			3.7			5.1			3.2			4.2			5.4		
C.V.			10.9			9.5			5.2			5.8			5.4			8.3			6.7			6.3			9.0		
D.O.S.(dd.mm.yy)			18.12.18			10.12.18			11.12.18			17.12.18			15.12.18			18.12.18			19.12.18			15.12.18			14.12.18		

No. of Trials:            Proposed = 25                      Conducted = 24  
 Trial not conducted (01) = Shahajahanpur  
 Trials not reported (03) = Bareilly (RMT), KVK-Rampur (HCV), Pilibhit (HCV)

1822-AVT-IR-LS-TAS-NWPZ, 2018-19

LOCATIONWISE MEAN YIELD (q/ha)

S.N	Variety	Code	Punjab						Rajasthan						U.P.														
			Gurdaspur			Bathinda			Faridkot			Durgapura			Tabiji			Sriganganagar			Alwar		Nagina		Bulandshahr				
			Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G			
1	PBW 771*	NW-LS-206	52.2	2	1	50.3	2	1	51.2	3	1	60.6	2	1	37.3	4	0	41.3	3	1	51.4	2	1	52.2	3	0	52.4	1	1
2	DBW 173 (C)	NW-LS-202	53.5	1	1	39.2	6	0	44.3	5	0	62.0	1	1	32.6	6	0	39.6	4	1	52.8	1	1	50.5	4	0	46.9	2	0
3	HD 3059 (C)	NW-LS-204	51.8	4	1	48.6	3	1	43.9	6	0	57.4	4	0	35.2	5	0	36.9	5	0	48.1	4	0	53.5	2	0	39.2	5	0
4	WH 1021 (C)	NW-LS-203	38.3	6	0	46.7	4	1	52.5	2	1	39.4	6	0	39.0	3	0	36.9	6	0	30.1	6	0	48.1	6	0	29.9	6	0
5	WH 1124 (C)	NW-LS-205	51.3	5	1	45.8	5	0	54.4	1	1	60.0	3	1	40.0	2	0	42.3	2	1	50.7	3	1	48.3	5	0	39.5	4	0
6	PBW 752(I) (C)	NW-LS-201	51.9	3	1	50.4	1	1	44.6	4	0	52.5	5	0	44.4	1	1	43.1	1	1	43.3	5	0	59.9	1	1	46.0	3	0
G.M.			49.8			46.8			48.5			55.3			38.1			40.0			46.1			52.1			42.3		
S.E.(M)			1.067			1.531			2.654			1.491			0.562			1.503			1.491			0.487			0.530		
C.D. (10%)			2.6			3.8			6.6			3.7			1.4			3.7			3.7			1.2			1.3		
C.V.			4.3			6.5			10.9			5.4			2.9			7.5			6.5			1.9			2.5		
D.O.S.(dd.mm.yy)			19.12.18			18.12.18			17.12.18			12.12.18			15.12.18			21.12.18			04.12.18			10.12.18			24.12.18		

1822-AVT-IR-LS-TAS-NWPZ, 2018-19

LOCATIONWISE MEAN YIELD (q/ha)

S.N	Variety	Code	U.P.			UTK								
			Ujhani			Pantnagar			Kashipur					
			Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G
1	PBW 771*	NW-LS-206	41.6	1	1	56.6	1	1	60.0	3	0			
2	DBW 173 (C)	NW-LS-202	34.5	5	0	48.9	3	0	54.6	5	0			
3	HD 3059 (C)	NW-LS-204	37.7	4	1	50.4	2	0	54.6	6	0			
4	WH 1021 (C)	NW-LS-203	31.8	6	0	40.4	6	0	60.8	2	0			
5	WH 1124 (C)	NW-LS-205	38.2	3	1	44.0	5	0	64.3	1	1			
6	PBW 752(I) (C)	NW-LS-201	40.5	2	1	44.5	4	0	55.8	4	0			
G.M.			37.4			47.5			58.4					
S.E.(M)			1.862			0.657			0.512					
C.D. (10%)			4.6			1.6			1.3					
C.V.			10.0			2.8			1.8					
D.O.S.(dd.mm.yy)			15.12.18			20.12.18			14.12.18					

## 1822-AVT-IR-LS-TAS-NWPZ, 2018-19 S

## TATE AND ZONAL MEANS (q/ha)

S.N	Variety	Code	Delhi			Haryana			J&K			Punjab			Rajasthan			U.P.			UTK			ZONAL		
			Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G
1	PBW 771*	NW-LS-206	52.9	1	1	53.2	3	1	34.5	6	0	53.3	1	1	47.7	2	1	48.7	2	1	58.3	1	1	51.1	1	1
2	DBW 173 (C)	NW-LS-202	44.0	3	0	51.6	4	0	40.2	2	1	48.1	4	0	46.8	3	1	44.0	3	0	51.8	4	0	47.9	4	0
3	HD 3059 (C)	NW-LS-204	42.5	5	0	47.0	5	0	39.2	3	1	45.7	5	0	44.4	5	0	43.4	4	0	52.5	3	0	45.7	5	0
4	WH 1021 (C)	NW-LS-203	36.8	6	0	40.4	6	0	39.1	4	1	45.2	6	0	36.3	6	0	36.6	6	0	50.6	5	0	41.0	6	0
5	WH 1124 (C)	NW-LS-205	49.1	2	1	54.5	1	1	38.1	5	0	51.9	3	1	48.3	1	1	42.0	5	0	54.1	2	0	49.8	2	0
6	PBW 752(I) (C)	NW-LS-201	42.9	4	0	54.1	2	1	42.2	1	1	52.1	2	1	45.8	4	0	48.8	1	1	50.2	6	0	49.8	3	0
G.M.			44.7			50.1			38.9			49.4			44.9			43.9			52.9			47.5		
S.E.(M)			2.432			0.774			1.294			0.852			0.663			0.665			0.417			0.345		
C.D. (10%)			6.0			1.8			3.2			2.0			1.6			1.6			1.0			0.8		



## Summary of Disease Data and Agronomic Characteristics

North Western Plains Zone

Trial: AVT-IR-LS-TAS, 2018-19

SN	Variety	Code	Disease Reaction			Agronomic Characteristics								Grain Characteristics			
			Br	YI	ACI	Hd.R	Hd.M	Mat.R	Mat.M	Ht.R	Ht.M	Thr.	Lod. Max.	Col.	Tex.	TGW.R	TGW.M
1	PBW 771*	NW-LS-206	0	20S	4.6	75-93	84	108-133	121	72-104	87	Ey-M	0	A	SH-H	32-43	38
2	DBW173 (C)	NW-LS-202	0	15MS	4.7	75-96	85	108-135	123	85-108	98	Ey-M	0	A	SH-H	29-42	36
3	HD3059 (C)	NW-LS-204	0	60S	26.1	76-94	85	111-135	123	78-107	94	Ey-M	0	A	SH-H	29-40	34
4	WH1021 (C)	NW-LS-203	5S	60S	36.2	75-96	85	110-133	122	80-110	96	Ey-M	30	A	SH-H	25-39	33
5	WH1124 (C)	NW-LS-205	5S	40S	7.0	75-94	83	112-132	121	85-106	95	Ey	0	A	SH-H	26-42	35
6	PBW752(I) (C)	NW-LS-201	10S	5MS	0.6	74-93	84	108-132	122	80-108	93	Ey-M	70	A	SH-H	30-46	37

1. Ancillary data from Delhi, Bawal, Hisar, Rohtak, Shikohpur, Ludhiana, Gurdaspur, Bhatinda, Faridkot, Durgapura, Sriganganagar, Kashipur, Karnal, Bulandshahar Pantnagar, Nagina, Jammu, Tabiji and Alwar.
2. Yellow rust data from Delhi, Hisar Rohtak, Karnal, Pantnagar, Shikohpur, Ludhiana, Gurdaspur and Jammu.
3. Brown rust data from Pantnagar.
4. Lodging data from Gurdaspur and Hisar.

### Individual Station Rust Data

SN	Variety	Code	Pantnagar		Gurdaspur	Ludhiana	Delhi	Shikohpur	Rohtak	Hisar	Jammu	Karnal
			Br	YI	YI	YI	YI	YI	YI	YI	YI	YI
1	PBW 771*	NW-LS-206	0	0	5S	10MS	0	0	0	0	20S	10MS
2	DBW173 (C)	NW-LS-202	0	0	5S	5MS	5S	5S	TS	TS	10S	15MS
3	HD3059 (C)	NW-LS-204	0	20S	10S	20S	5S	0	40S	40S	40S	60S
4	WH1021 (C)	NW-LS-203	5S	40S	40S	40S	5S	ts	40S	40S	60S	60S
5	WH1124 (C)	NW-LS-205	5S	0	5S	10MS	0	0	TS	TS	40S	10MS
6	PBW752(I) (C)	NW-LS-201	10S	0	tR	TMS	0	0	0	0	5MS	0

**1823-AVT-RI-TS-TAS-NWPZ, 2018-19**  
**LOCATIONWISE MEAN YIELD (q/ha)**

S.N	Variety	Code	Delhi			Haryana						J&K			Punjab														
			Delhi			Hisar		Bawal		IIWBR-Karnal		Jammu			Ludhiana		Gurdaspur		Kapurthala		Balachaur								
			Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G						
1	BRW 3806*#	NW-RI-308	56.9	6	0	53.5	3	0	41.4	4	1	64.1	9	0	42.3	4	0	49.3	4	0	43.6	8	0	41.1	9	0	52.9	6	0
2	HI 1628*	NW-RI-303	51.2	8	0	52.6	4	0	40.7	6	0	65.0	7	0	41.3	5	0	50.4	3	0	51.9	3	0	53.3	3	1	52.9	5	1
3	NIAW 3170*	NW-RI-309	63.2	1	1	50.4	7	0	44.3	2	1	71.7	1	1	38.9	8	0	49.1	5	0	47.9	5	0	52.0	4	1	47.5	10	0
4	PBW 796	NW-RI-302	61.5	2	1	49.5	8	0	42.7	3	1	71.7	2	1	42.5	3	0	48.2	6	0	51.6	4	0	55.3	1	1	53.1	4	1
5	HD 3043 (C)	NW-RI-305	51.1	9	0	46.2	9	0	36.0	10	0	56.8	10	0	46.9	1	1	45.9	9	0	47.6	6	0	47.0	5	0	49.1	8	0
6	WH 1080 (C)	NW-RI-310	53.3	7	0	52.4	5	0	36.6	9	0	64.3	8	0	37.6	10	0	47.8	7	0	41.5	10	0	44.4	7	0	49.0	9	0
7	WH 1142 (C)	NW-RI-304	59.7	3	1	43.0	10	0	37.4	8	0	70.3	4	1	40.4	6	0	52.4	2	0	45.2	7	0	36.1	10	0	53.2	3	1
8	PBW 644 (C)	NW-RI-306	50.5	10	0	56.1	1	1	40.9	5	0	67.0	6	0	38.2	9	0	37.4	10	0	43.3	9	0	42.6	8	0	54.0	2	1
9	HD 3237(I) (C)	NW-RI-307	59.2	4	1	54.3	2	1	40.0	7	0	69.7	5	1	40.1	7	0	46.1	8	0	54.5	1	1	44.8	6	0	56.8	1	1
10	HI 1620(I) (C)	NW-RI-301	59.1	5	1	51.4	6	0	44.9	1	1	71.2	3	1	44.5	2	1	59.8	1	1	52.4	2	1	55.2	2	1	51.8	7	0
G.M.			56.6			50.9			40.5			67.2			41.3			48.6			47.9			47.2			52.0		
S.E.(M)			1.999			0.938			1.592			1.841			1.543			1.826			0.997			1.774			1.624		
C.D. (10%)			4.8			2.3			3.8			4.4			3.7			4.4			2.4			4.3			3.9		
C.V.			7.1			3.7			7.9			5.5			7.5			7.5			4.2			7.5			6.2		
D.O.S.(dd.mm.yy)			03.11.18			03.11.18			04.11.18			25.10.18			02.11.18			01.11.18			31.10.18			05.11.18			05.11.18		

No. of Trials : Proposed = 14

Conducted = 14

Trials not Conducted (00) = Nil

Trial not reported (00) = Nil

## 1823-AVT-RI-TS-TAS-NWPZ, 2018-19

## LOCATIONWISE MEAN YIELD (q/ha)

S.N	Variety	Code	U.P.			UTK			Rajasthan								
			Bulandshahr			Pantnagar			Diggi			Sriganganagar			Bharatpur		
			Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G
1	BRW 3806 <sup>#</sup>	NW-RI-308	47.6	9	0	54.3	3	0	44.4	3	1	54.1	1	1	51.7	1	1
2	HI 1628*	NW-RI-303	58.4	3	0	52.1	5	0	47.7	1	1	43.8	5	0	45.0	3	0
3	NIAW 3170*	NW-RI-309	62.1	1	1	44.7	10	0	34.8	7	0	52.6	2	1	41.9	4	0
4	PBW 796	NW-RI-302	44.7	10	0	49.9	7	0	31.7	8	0	46.5	4	0	39.9	6	0
5	HD 3043 (C)	NW-RI-305	48.9	8	0	50.2	6	0	30.0	10	0	37.7	10	0	37.2	9	0
6	WH 1080 (C)	NW-RI-310	49.0	7	0	56.5	2	0	30.6	9	0	38.8	9	0	37.3	8	0
7	WH 1142 (C)	NW-RI-304	58.7	2	0	58.2	1	1	36.9	5	0	42.1	7	0	37.2	9	0
8	PBW 644 (C)	NW-RI-306	51.3	5	0	46.5	9	0	36.0	6	0	41.2	8	0	37.6	7	0
9	HD 3237(I) (C)	NW-RI-307	56.8	4	0	52.6	4	0	39.8	4	0	43.7	6	0	41.6	5	0
10	HI 1620(I) (C)	NW-RI-301	51.1	6	0	49.8	8	0	46.0	2	1	49.2	3	0	45.6	2	0
G.M.			52.9			51.5			37.8			45.0			41.5		
S.E.(M)			0.219			0.608			1.768			1.860			1.036		
C.D. (10%)			0.5			1.5			4.3			4.5			2.5		
C.V.			0.8			2.4			9.4			8.3			5.0		
D.O.S.(dd.mm.yy)			04.11.18			27.10.18			05.11.18			05.11.18			05.11.18		

## 1823-AVT-RI-TS-TAS-NWPZ, 2018-19

## STATE AND ZONAL MEANS (q/ha)

S.N	Variety	Code	Delhi			Haryana			J&K			Punjab			U.P.			UTK			Rajasthan			ZONAL		
			Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G	Yield	Rk	G
1	BRW 3806 <sup>#</sup>	NW-RI-308	56.9	6	0	53.0	6	0	42.3	4	0	46.7	8	0	47.6	9	0	54.3	3	0	50.0	1	1	49.8	5	0
2	HI 1628*	NW-RI-303	51.2	8	0	52.8	7	0	41.3	5	0	52.1	2	0	58.4	3	0	52.1	5	0	45.5	3	0	50.5	2	0
3	NIAW 3170*	NW-RI-309	63.2	1	1	55.4	2	1	38.9	8	0	49.1	5	0	62.1	1	1	44.7	10	0	43.1	4	0	50.1	3	0
4	PBW 796	NW-RI-302	61.5	2	1	54.6	5	1	42.5	3	0	52.0	3	0	44.7	10	0	49.9	7	0	39.4	6	0	49.2	6	0
5	HD 3043 (C)	NW-RI-305	51.1	9	0	46.3	10	0	46.9	1	1	47.4	6	0	48.9	8	0	50.2	6	0	35.0	10	0	45.0	10	0
6	WH 1080 (C)	NW-RI-310	53.3	7	0	51.1	8	0	37.6	10	0	45.7	9	0	49.0	7	0	56.5	2	0	35.6	9	0	45.7	9	0
7	WH 1142 (C)	NW-RI-304	59.7	3	1	50.2	9	0	40.4	6	0	46.7	7	0	58.7	2	0	58.2	1	1	38.7	7	0	47.9	7	0
8	PBW 644 (C)	NW-RI-306	50.5	10	0	54.7	4	1	38.2	9	0	44.3	10	0	51.3	5	0	46.5	9	0	38.3	8	0	45.9	8	0
9	HD 3237(I) (C)	NW-RI-307	59.2	4	1	54.7	3	1	40.1	7	0	50.6	4	0	56.8	4	0	52.6	4	0	41.7	5	0	50.0	4	0
10	HI 1620(I) (C)	NW-RI-301	59.1	5	1	55.8	1	1	44.5	2	1	54.8	1	1	51.1	6	0	49.8	8	0	47.0	2	0	52.3	1	1
G.M.			56.6			52.9			41.3			48.9			52.9			51.5			41.4			48.6		
S.E.(M)			1.999			0.869			1.543			0.795			0.219			0.608			0.922			0.400		
C.D. (10%)			4.8			2.0			3.7			1.9			0.5			1.5			2.2			0.9		

## North Western Plains Zone

### Summary of Disease Data and Agronomic Characteristics

Trial: AVT-RI-TS-TAS, 2018-19

SN	Variety	Code	Disease Reaction				Agronomic Characteristics								Grain Characteristics				
			Br	ACI	YI	ACI	Hd.R	Hd.M	Mat.R	Mat.M	Ht.R	Ht.M	Lod.M	Thr.	Col.	Tex.	TGW.R	TGW.M	BP
1	BRW 3806*#	NW-RI-308	0	0.0	40S	18.4	93-121	105	135-174	151	95-126	110	30	Ey	A	SH-H	36-52	43	0.0
2	HI 1628*	NW-RI-303	10MS	1.6	20S	11.7	86-124	102	131-175	150	98-126	111	30	Ey	A	SH-H	34-51	44	0.1
3	NIAW 3170*	NW-RI-309	5MS	0.8	40S	14.1	83-121	101	132-171	149	88-118	107	0	Ey	A	SH-H	31-51	43	0.0
4	PBW 796	NW-RI-302	20S	7.2	60S	18.3	85-124	104	133-175	150	90-120	103	0	Ey	A	SH-H	32-52	44	0.1
5	HD3043 (C)	NW-RI-305	30S	11.0	40S	14.7	93-127	109	137-177	153	96-125	109	0	Ey	A	SH-H	31-44	37	0.2
6	WH1080 (C)	NW-RI-310	20S	5.2	40S	8.9	90-127	105	133-175	152	86-110	97	0	Ey	A	SH-H	35-49	41	0.1
7	WH1142 (C)	NW-RI-304	20S	8.2	60S	14.2	88-127	106	132-178	152	92-115	104	0	Ey	A	SH-H	29-45	39	0.1
8	PBW644 (C)	NW-RI-306	10S	3.0	60S	23.5	91-129	107	135-178	152	97-128	111	30	Ey	A	SH-H	34-48	41	0.2
9	HD3237(l) (C)	NW-RI-307	20S	7.2	20S	5.0	80-127	100	134-175	150	99-130	110	0	Ey	A	SH-H	31-51	42	0.1
10	HI1620(l) (C)	NW-RI-301	20S	6.0	5S	2.2	83-127	101	135-177	151	93-119	104	0	Ey	A	SH-H	32-53	44	0.1

1. Ancillary data from Balachaur, Bawal, Bharatpur, Delhi, Diggi, Gurdaspur, Hisar, Jammu, Karnal, Ludhiana, Pantnagar and Sriganaganagar.
2. Yellow rust data from Balachaur, Gurdaspur Hisar Jammu, Ludhiana and Karnal.
3. Brown rust data from Balachaur, Gurdaspur, Pantnagar, Ludhiana and Karnal.
4. Lodging data reported from Ludhiana.
5. Black point data reported from Gurdaspur and Hisar

### Individual Station Rust Data AVT-RI-TS-TAS, 2018-19

SN	Variety	Code	Gurdaspur		Ludhiana		Balachaur		Karnal		Hisar	Jammu	Pantnagar
			Br	YI	Br	YI	Br	YI	Br	YI	YI	Br	
1	BRW 3806*#	NW-RI-308	0	40S	0	20S	0	10S	0	tMR	0	40S	0
2	HI 1628*	NW-RI-303	0	10S	0	20S	10MS	20S	0	tMR	0	20S	0
3	NIAW 3170*	NW-RI-309	0	20S	0	40S	5MS	5MS	0	tMR	0	20S	0
4	PBW 796	NW-RI-302	5S	5S	10S	5S	0	40S	tMS	0	0	60S	20S
5	HD3043 (C)	NW-RI-305	0	10MS	5S	20S	10S	40S	10S	tMR	0	20S	30S
6	WH1080 (C)	NW-RI-310	0	5MS	0	5MS	20S	5S	tMS	tMR	0	40S	5S
7	WH1142 (C)	NW-RI-304	tMS	5MS	10S	ts	20S	20S	0	tMR	0	60S	10S
8	PBW644 (C)	NW-RI-306	0	20S	0	60S	5MS	20S	tMS	tMS	tMR	40S	10S
9	HD3237(l) (C)	NW-RI-307	5S	5S	10S	5S	tr	tr	tMS	0	0	20S	20S
10	HI1620(l) (C)	NW-RI-301	0	5MS	0	5S	20S	0	10S	tMR	0	5MS	0