

Table 4.7. Central Zone		SPL-IR-ES-HYPT	Centrewise		Yield, q/ha		2021-22
Nutrient management (NM)	Genotypes	BISA Jabalpur	Jabalpur	Udaipur	Vijapur	Zonal Mean	
NM1	GW322	75.25	74.01	54.57	54.21	64.51	
	DBW187	75.01	69.50	53.21	52.31	62.51	
	DBW303	69.49	73.40	52.02	52.71	61.90	
	DBW372	73.75	62.66	48.28	55.71	60.10	
	Mean	73.38	69.89	52.02	53.73	62.26	
NM2	GW322	80.00	80.14	65.28	60.83	71.56	
	DBW187	82.40	77.11	63.72	59.08	70.58	
	DBW303	83.46	82.43	59.84	60.13	71.46	
	DBW372	72.15	69.19	58.82	65.79	66.49	
	Mean	79.50	77.22	61.91	61.46	70.02	
Mean	GW322	77.63	77.07	59.93	57.52	68.04	
	DBW187	78.71	73.31	58.46	55.70	66.54	
	DBW303	76.47	77.92	55.93	56.42	66.68	
	DBW372	72.95	65.92	53.55	60.75	63.29	
	Mean	76.44	73.55	56.97	57.60	66.14	
CD (0.05)	NM (A)	10.26	6.49	3.93	4.93	2.18	
	Genotypes (B)	6.32	3.14	2.53	5.75	2.22	
	B within A	8.94	4.44	3.58	8.14	NS	
	A within B	9.95	5.52	3.92	7.66	NS	
Date of Sowing		10.11.2021	05.11.2021	11.11.2021	04.11.2021		
Date of Harvesting		04.04.2022	12.04.2022	18.03.2022	03.03.2022		

Table 4.8. Central Zone		SPL-IR-ES-HYPT		Pooled		2021-22	
Genotype	Nutrient Management				Mean	Rk	
	NM1	Rk	NM2	Rk			
Yield, q/ha							
GW322	64.51	1	71.56	1	68.04	1	
DBW187	62.51	2	70.58	3	66.54	3	
DBW303	61.90	3	71.46	2	66.68	2	
DBW372	60.10	4	66.49	4	63.29	4	
Mean	62.26		70.02		66.14		
CD (0.05)	NM (A)		Genotype (B)		B within A		A within B
	2.18		2.22		NS		NS
Earhead/sq.m.							
GW322	400	1	437	2	418	1	
DBW187	389	3	445	1	417	2	
DBW303	366	4	433	3	399	4	
DBW372	399	2	431	4	415	3	
Mean	388		437		412		
CD (0.05)	NM (A)		Genotype (B)		B within A		A within B
	7.69		12.53		NS		NS
Grains /earhead							
GW322	35.5	2	34.7	2	35.1	2	
DBW187	32.8	4	32.6	4	32.7	4	
DBW303	39.3	1	38.2	1	38.8	1	
DBW372	33.3	3	34.3	3	33.8	3	
Mean	35.2		34.9		35.1		
CD (0.05)	NM (A)		Genotype (B)		B within A		A within B
	1.79		NS		NS		NS
1000 grain wt, g							
GW322	46.67	2	47.54	2	47.10	2	
DBW187	49.87	1	49.76	1	49.82	1	
DBW303	43.41	4	43.55	4	43.48	4	
DBW372	45.55	3	45.33	3	45.44	3	
Mean	46.38		46.54		46.46		
CD (0.05)	NM (A)		Genotype (B)		B within A		A within B
	1.0		NS		NS		NS
Plant Height, cm							
GW322	92.51	4	91.12	4	91.82	4	
DBW187	96.98	1	91.19	3	94.09	1	
DBW303	94.97	3	91.77	2	93.37	3	
DBW372	95.46	2	92.20	1	93.83	2	
Mean	94.98		91.57		93.27		
CD (0.05)	NM (A)		Genotype (B)		B within A		A within B
	0.81		1.23		1.74		1.69
Biomass, q/ha							
GW322	143.68	3	158.28	3	150.98	2	
DBW187	144.57	1	158.59	2	151.58	1	
DBW303	139.46	4	159.98	1	149.72	3	
DBW372	143.98	2	152.02	4	148.00	4	
Mean	142.93		157.22		150.07		
CD (0.05)	NM (A)		Genotype (B)		B within A		A within B
	4.48		NS		NS		NS
Physiological Maturity, Days							
GW322	119	4	121	4	120	4	
DBW187	120	3	122	2	121	3	
DBW303	121	2	121	3	121	2	
DBW372	125	1	126	1	126	1	
Mean	121		122		122		
CD (0.05)	NM (A)		Genotype (B)		B within A		A within B
	0.76		0.68		NS		NS

Centres: BISA Jabalpur, Jabalpur, Udaipur, Vijapur

Table 4.8.1 Central Zone		SPL-IR-ES-HYPT			Powarkheda 2021-22	
Genotype	Nutrient Management			Mean	Rk	
	NM1	Rk	NM2			
Yield, q/ha						
GW322	46.67	2	49.66	4	48.17	3
DBW187	47.25	1	52.89	1	50.07	1
DBW303	45.89	3	52.79	2	49.34	2
DBW372	45.62	4	50.03	3	47.83	4
Mean	46.36		51.34		48.85	
	F. Test	SEm	CD (0.05)	CV (%)		
Nutrient Mgt (A)	**	0.06	0.26	0.45		
Genotype (B)	**	0.07	0.18	0.36		
B within A	**	0.10	0.25			
A within B			0.27			
Earhead/sq.m.						
GW322	391	2	423	2	410	2
DBW187	450	1	482	1	466	1
DBW303	287	4	382	4	334	4
DBW372	375	3	412	3	393	3
Mean	377		425		401	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	*	5.33	22.00	4.60		
Genotype (B)	**	2.37	5.97	1.45		
B within A	**	3.35	8.44			
A within B		6.07	15.29			
Grains /earhead						
GW322	28.8	3	25.5	3	27.2	3
DBW187	24.7	4	21.7	4	23.2	4
DBW303	42.2	1	34.2	1	38.2	1
DBW372	30.8	2	29.0	2	29.9	2
Mean	31.6		27.6		29.6	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	*	0.33	1.36	3.85		
Genotype (B)	**	0.31	0.78	2.55		
B within A	**	0.44	1.10			
A within B		0.50	1.26			
1000 grain wt, g						
GW322	40.87	2	45.97	2	43.42	2
DBW187	42.50	1	50.67	1	46.58	1
DBW303	37.98	4	40.55	4	39.27	4
DBW372	39.50	3	41.95	3	40.73	3
Mean	40.21		44.78		42.50	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	**	0.05	0.23	0.44		
Genotype (B)	**	0.08	0.19	0.44		
B within A	**	0.11	0.27			
A within B		0.11	0.27			
Plant Height, cm						
GW322	91.7	4	76.0	3	83.8	4
DBW187	98.0	2	80.7	1	89.3	1
DBW303	100.3	1	75.0	4	87.7	2
DBW372	96.0	3	78.0	2	87.0	3
Mean	96.5		77.4		87.0	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	**	0.51	2.12	2.05		
Genotype (B)	**	0.89	2.25	2.51		
B within A	**	1.26	3.18			
A within B		1.21	3.04			

Biomass, q/ha						
GW322	161.39	3	174.64	3	168.02	4
DBW187	177.77	1	190.85	1	184.31	1
DBW303	156.56	4	182.82	2	169.69	3
DBW372	177.49	2	171.32	4	174.40	2
Mean	168.30		179.91		174.10	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	5.80	23.95	11.54		
Genotype (B)	N.S.	4.65	11.72	6.54		
B within A	N.S.	6.58	16.58			
A within B		8.13	20.49			
Physiological Maturity, Days						
GW322	116	3	118	3	117	4
DBW187	115	4	120	1	118	3
DBW303	119	1	118	4	118	2
DBW372	117	2	120	1	119	1
Mean	116.75		119.17		117.96	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	0.93	3.82	2.72		
Genotype (B)	N.S.	0.72	1.81	1.50		
B within A	*	1.02	2.57			
A within B		1.28	3.22			
Date of Sowing:		07.11.2021		25.03.2022		
Date of Harvesting:		25.03.2022				

Table 4.8.2. Central Zone	SPL-IR-ES-HYPT				BISA Jabalpur 2021-22	
Genotype	Nutrient Management				Mean	Rk
	NM1	Rk	NM2	Rk		
	Yield, q/ha					
GW322	75.25	1	80.00	3	77.63	2
DBW187	75.01	2	82.40	2	78.71	1
DBW303	69.49	4	83.46	1	76.47	3
DBW372	73.75	3	72.15	4	72.95	4
Mean	73.38		79.50		76.44	
	F. Test	SEm	CD (0.05)	CV (%)		
Nutrient Mgt (A)	N.S.	2.48	10.26	11.26		
Genotype (B)	N.S.	2.51	6.32	8.04		
B within A	N.S.	3.55	8.94			
A within B		3.95	9.95			
	Earhead/sq.m.					
GW322	400	2	451	1	426	2
DBW187	364	4	436	3	400	3
DBW303	370	3	426	4	398	4
DBW372	423	1	443	2	433	1
Mean	389		439		414	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	*	4.90	20.23	4.10		
Genotype (B)	N.S.	14.66	36.94	8.67		
B within A	N.S.	20.73	52.25			
A within B		18.61	46.90			
	Grains /earhead					
GW322	48.5	1	40.5	3	44.5	2
DBW187	44.1	3	44.1	2	44.1	3
DBW303	45.7	2	49.9	1	47.8	1
DBW372	39.6	4	38.5	4	39.1	4
Mean	44.5		43.3		43.9	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	2.02	8.35	15.98		
Genotype (B)	N.S.	2.03	5.11	11.33		
B within A	N.S.	2.87	7.23			
A within B		3.20	8.08			

1000 grain wt, g						
GW322	39.13	4	43.77	1	41.45	3
DBW187	47.17	1	43.10	2	45.13	1
DBW303	41.73	3	39.23	4	40.48	4
DBW372	44.47	2	42.70	3	43.58	2
Mean	43.13		42.20		42.66	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	0.43	1.76	3.47		
Genotype (B)	**	0.41	1.04	2.37		
B within A	**	0.58	1.47			
A within B		0.66	1.67			
Plant Height, cm						
GW322	100.4	4	92.4	3	96.4	4
DBW187	102.6	3	91.0	4	96.8	3
DBW303	104.0	1	93.1	2	98.6	2
DBW372	102.9	2	96.1	1	99.5	1
Mean	102.5		93.2		97.8	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	**	0.37	1.52	1.30		
Genotype (B)	N.S.	1.07	2.69	2.67		
B within A	N.S.	1.51	3.80			
A within B		1.36	3.42			
Biomass, q/ha						
GW322	143.42	3	157.67	2	150.55	2
DBW187	146.18	2	150.51	3	148.35	3
DBW303	157.63	1	167.13	1	162.38	1
DBW372	137.53	4	143.09	4	140.31	4
Mean	146.19		154.60		150.40	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	**	0.33	1.35	0.76		
Genotype (B)	**	1.76	4.44	2.87		
B within A	N.S.	2.49	6.28			
A within B		2.18	5.50			
Physiological Maturity						
GW322	128	4	129	4	129	4
DBW187	129	3	131	2	130	3
DBW303	129	2	130	3	130	2
DBW372	135	1	136	1	135	1
Mean	130.17		131.42		130.79	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	0.81	3.35	2.15		
Genotype (B)	**	0.50	1.25	0.93		
B within A	N.S.	0.70	1.77			
A within B		1.01	2.55			
Date of Sowing:	10.11.2021					
Date of Harvesting:	04.04.2022					

Table 4.8.3. Central Zone						
SPL-IR-ES-HYPT						
Jabalpur 2021-22						
Genotype	Nutrient Managment				Mean	Rk
	NM1	Rk	NM2	Rk		
Yield, q/ha						
GW322	74.01	1	80.14	2	77.07	2
DBW187	69.50	3	77.11	3	73.31	3
DBW303	73.40	2	82.43	1	77.92	1
DBW372	62.66	4	69.19	4	65.92	4
Mean	69.89		77.22		73.55	
	F. Test	SEm	CD (0.05)	CV (%)		
Nutrient Mgt (A)	N.S.	1.57	6.49	7.40		
Genotype (B)	**	1.25	3.14	4.15		
B within A	N.S.	1.76	4.44			
A within B		2.19	5.52			

Earhead/sq.m.						
GW322	421	2	427	3	424	3
DBW187	449	1	451	2	450	1
DBW303	369	4	486	1	427	2
DBW372	379	3	406	4	392	4
Mean	405		442		424	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	**	2.05	8.45	1.67		
Genotype (B)	**	2.43	6.12	1.40		
B within A	**	3.43	8.65			
A within B		3.61	9.09			
Grains /earhead						
GW322	35.2	2	36.3	2	35.8	2
DBW187	28.6	4	31.5	4	30.0	4
DBW303	44.7	1	37.3	1	41.0	1
DBW372	34.9	3	36.1	3	35.5	3
Mean	35.9		35.3		35.6	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	0.61	2.52	5.94		
Genotype (B)	**	1.28	3.24	8.85		
B within A	*	1.82	4.58			
A within B		1.69	4.25			
1000 grain wt, g						
GW322	50.20	2	51.90	2	51.05	2
DBW187	54.06	1	54.43	1	54.24	1
DBW303	44.57	4	45.53	4	45.05	4
DBW372	47.68	3	47.20	3	47.44	3
Mean	49.13		49.77		49.45	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	0.20	0.83	1.41		
Genotype (B)	**	1.15	2.90	5.70		
B within A	N.S.	1.63	4.10			
A within B		1.42	3.58			
Plant Height, cm						
GW322	98.2	4	94.6	3	96.4	4
DBW187	105.9	1	93.0	4	99.4	2
DBW303	104.6	2	96.6	1	100.6	1
DBW372	102.4	3	95.5	2	98.9	3
Mean	102.7		94.9		98.8	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	**	0.43	1.79	1.52		
Genotype (B)	*	0.83	2.10	2.06		
B within A	*	1.18	2.96			
A within B		1.11	2.79			
Biomass, q/ha						
GW322	143.42	3	157.67	2	150.55	2
DBW187	146.18	2	150.51	3	148.35	3
DBW303	157.63	1	167.13	1	162.38	1
DBW372	137.53	4	143.09	4	140.31	4
Mean	146.19		154.60		150.40	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	**	0.33	1.35	0.76		
Genotype (B)	**	1.76	4.44	2.87		
B within A	N.S.	2.49	6.28			
A within B		2.18	5.50			

Physiological Maturity						
GW322	125	4	125	4	125	4
DBW187	128	2	128	2	128	2
DBW303	128	2	128	2	128	2
DBW372	134	1	134	1	134	1
Mean	128.75		128.83		128.79	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	0.16	0.64	0.42		
Genotype (B)	**	0.26	0.66	0.50		
B within A	N.S.	0.37	0.94			
A within B		0.36	0.90			
Date of Sowing:	05.11.2021					
Date of Harvesting:	12.04.2022					

Table 4.8.4. Central Zone	SPL-IR-ES-HYPT				Udaipur	2021-22
Genotype	Nutrient Management				Mean	Rk
	NM1	Rk	NM2	Rk		
Yield, q/ha						
GW322	54.57	1	65.28	1	59.93	1
DBW187	53.21	2	63.72	2	58.46	2
DBW303	52.02	3	59.84	3	55.93	3
DBW372	48.28	4	58.82	4	53.55	4
Mean	52.02		61.91		56.97	
	F. Test	SEm	CD (0.05)	CV (%)		
Nutrient Mgt (A)	*	0.95	3.93	5.78		
Genotype (B)	**	1.00	2.53	4.32		
B within A	N.S.	1.42	3.58			
A within B		1.55	3.92			
Earhead/sq.m.						
GW322	402	2	407	4	404	2
DBW187	357	4	448	1	403	3
DBW303	380	3	413	3	397	4
DBW372	413	1	415	2	414	1
Mean	388		421		404	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	7.15	29.51	6.12		
Genotype (B)	N.S.	9.70	24.45	5.88		
B within A	*	13.72	34.58			
A within B		13.87	34.95			
Grains /earhead						
GW322	28.6	3	33.8	1	31.2	1
DBW187	32.2	1	30.0	4	31.1	3
DBW303	30.5	2	31.7	2	31.1	2
DBW372	26.6	4	31.6	3	29.1	4
Mean	29.5		31.8		30.6	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	0.61	2.53	6.94		
Genotype (B)	N.S.	0.68	1.72	5.47		
B within A	**	0.97	2.44			
A within B		1.04	2.61			
1000 grain wt, g						
GW322	47.49	1	47.59	1	47.54	1
DBW187	46.53	2	47.43	2	46.98	2
DBW303	45.11	3	45.73	3	45.42	3
DBW372	44.18	4	44.95	4	44.57	4
Mean	45.83		46.43		46.13	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	0.66	2.72	4.95		
Genotype (B)	N.S.	0.84	2.12	4.47		
B within A	N.S.	1.19	3.00			
A within B		1.22	3.08			

Plant Height, cm						
GW322	87.3	1	94.8	1	91.1	1
DBW187	85.7	2	93.8	2	89.8	2
DBW303	84.8	3	91.3	4	88.1	3
DBW372	83.2	4	92.8	3	88.0	4
Mean	85.3		93.2		89.2	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	*	1.00	4.13	3.88		
Genotype (B)	N.S.	1.36	3.44	3.74		
B within A	N.S.	1.93	4.86			
A within B		1.95	4.91			
Biomass, q/ha						
GW322	154.67	1	164.90	1	159.78	1
DBW187	137.33	2	154.67	2	146.00	2
DBW303	128.17	3	153.00	3	140.58	3
DBW372	127.50	4	144.52	4	136.01	4
Mean	136.92		154.27		145.59	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	*	2.80	11.56	6.66		
Genotype (B)	**	2.74	6.92	4.62		
B within A	N.S.	3.88	9.78			
A within B		4.37	11.02			
Physiological Maturity						
GW322	121	4	126	1	124	3
DBW187	122	2	125	2	124	2
DBW303	122	3	124	4	123	4
DBW372	124	1	125	2	125	1
Mean	122.33		125.00		123.67	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	0.79	3.27	2.22		
Genotype (B)	N.S.	0.98	2.46	1.93		
B within A	N.S.	1.38	3.48			
A within B		1.43	3.61			
Date of Sowing:	11.11.2021					
Date of Harvesting:	18.03.2022					

Table 4.8.5. Central Zone	SPL-IR-ES-HYPT				Vijapur	2021-22
Genotype	Nutrient Management				Mean	Rk
	NM1	Rk	NM2	Rk		
Yield, q/ha						
GW322	54.21	2	60.83	2	57.52	2
DBW187	52.31	4	59.08	4	55.70	4
DBW303	52.71	3	60.13	3	56.42	3
DBW372	55.71	1	65.79	1	60.75	1
Mean	53.73		61.46		57.60	
	F. Test	SEm	CD (0.05)	CV (%)		
Nutrient Mgt (A)	*	1.19	4.93	7.18		
Genotype (B)	N.S.	2.28	5.75	9.71		
B within A	N.S.	3.23	8.14			
A within B		3.04	7.66			
Earhead/sq.m.						
GW322	376	3	463	1	420	2
DBW187	388	1	445	3	416	3
DBW303	342	4	406	4	374	4
DBW372	380	2	462	2	421	1
Mean	372		444		408	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	*	7.59	31.34	6.45		
Genotype (B)	*	11.50	28.97	6.91		
B within A	N.S.	16.26	40.97			
A within B		16.00	40.31			

Grains /earhead						
GW322	29.6	3	28.0	3	28.8	3
DBW187	26.3	4	24.7	4	25.5	4
DBW303	36.5	1	33.9	1	35.2	1
DBW372	31.9	2	30.9	2	31.4	2
Mean	31.1		29.4		30.2	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	1.63	6.75	18.71		
Genotype (B)	**	1.69	4.25	13.67		
B within A	N.S.	2.39	6.02			
A within B		2.63	6.64			
1000 grain wt, g						
GW322	49.87	2	46.88	2	48.38	2
DBW187	51.74	1	54.09	1	52.92	1
DBW303	42.24	4	43.70	4	42.97	4
DBW372	45.86	3	46.47	3	46.16	3
Mean	47.43		47.79		47.61	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	0.85	3.52	6.20		
Genotype (B)	**	0.82	2.06	4.21		
B within A	N.S.	1.16	2.92			
A within B		1.32	3.32			
Plant Height, cm						
GW322	84.1	4	82.7	4	83.4	4
DBW187	93.8	1	86.9	1	90.4	1
DBW303	86.4	3	86.0	2	86.2	3
DBW372	93.4	2	84.3	3	88.9	2
Mean	89.4		85.0		87.2	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	*	0.45	1.86	1.79		
Genotype (B)	**	0.78	1.96	2.19		
B within A	**	1.10	2.78			
A within B		1.06	2.66			
Biomass, q/ha						
GW322	115.25	4	135.92	4	125.58	4
DBW187	117.00	2	138.33	2	127.67	2
DBW303	115.50	3	136.96	3	126.23	3
DBW372	133.42	1	149.17	1	141.29	1
Mean	120.29		140.09		130.19	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	*	2.19	9.04	5.82		
Genotype (B)	N.S.	4.95	12.47	9.31		
B within A	N.S.	7.00	17.63			
A within B		6.44	16.24			
Physiological Maturity						
GW322	102	3	104	2	103	3
DBW187	102	3	102	4	102	4
DBW303	103	2	104	2	104	2
DBW372	108	1	109	1	109	1
Mean	104.08		104.67		104.38	
	F. Test	SEm	CD (0.05)	CV (%)		
Date of sowing (A)	N.S.	0.12	0.49	0.39		
Genotype (B)	**	0.22	0.54	0.50		
B within A	N.S.	0.30	0.77			
A within B		0.29	0.73			
Date of Sowing:	04.11.2021					
Date of Harvesting:	03.03.2022					