

Table 4.5. Central Zone		RIR-TS-TAD			Centrewise		Yield, q/ha		2023-24
Number of Irr	Genotype	Bilaspur	Gwalior	Indore	Jabalpur	Powarkheda	Udaipur	Zonal mean	
No	RIRTSCZ301	35.19	32.20	33.03	37.62	20.28	26.47	30.80	
	RIRTSCZ302	36.32	27.78	28.33	27.75	22.62	31.86	29.11	
	RIRTSCZ303	37.08	30.67	31.37	34.33	25.00	22.66	30.19	
	RIRTSCZ304	33.80	34.37	37.63	40.68	27.90	29.37	33.96	
	RIRTSCZ305	38.40	39.01	30.57	41.04	19.33	27.94	32.71	
	Mean	36.16	32.81	32.19	36.29	23.02	27.66	31.35	
One	RIRTSCZ301	36.88	36.51	32.60	45.89	34.52	33.06	36.58	
	RIRTSCZ302	38.02	30.04	31.33	38.99	30.36	42.66	35.23	
	RIRTSCZ303	38.77	34.63	33.87	35.87	31.55	30.59	34.21	
	RIRTSCZ304	35.49	38.79	36.17	43.59	33.21	37.50	37.46	
	RIRTSCZ305	40.09	43.78	31.83	42.31	29.17	33.73	36.82	
	Mean	37.85	36.75	33.16	41.33	31.76	35.51	36.06	
Two	RIRTSCZ301	38.24	41.00	37.73	46.88	37.47	38.57	39.98	
	RIRTSCZ302	39.37	32.62	37.90	39.67	33.66	49.60	38.80	
	RIRTSCZ303	40.13	38.48	38.03	48.71	38.86	35.68	39.98	
	RIRTSCZ304	36.85	41.95	38.63	47.03	34.69	46.75	40.98	
	RIRTSCZ305	41.45	44.65	32.40	49.83	32.31	39.76	40.07	
	Mean	39.208	39.74	36.94	46.42	35.40	42.07	39.96	
Mean	RIRTSCZ301	36.77	36.57	34.46	43.46	30.76	32.70	35.79	
	RIRTSCZ302	37.90	30.15	32.52	35.47	28.88	41.37	34.38	
	RIRTSCZ303	38.66	34.59	34.42	39.64	31.80	29.64	34.79	
	RIRTSCZ304	35.38	38.37	37.48	43.77	31.93	37.87	37.47	
	RIRTSCZ305	39.98	42.48	31.60	44.40	26.93	33.81	36.53	
	Mean	37.74	36.43	34.10	41.35	30.06	35.08	35.79	
CD (0.05)	Irrigation (A)	0.96	0.70	1.58	1.30	0.96	2.95	0.52	
	Genotype (B)	0.95	1.15	1.61	1.41	0.53	3.59	0.72	
	B within A	1.64	1.99	2.80	2.44	0.91	6.21	1.25	
	A within B	1.66	1.87	2.80	2.42	1.12	6.04	1.26	
Date of Sowing:	02.11.2023	11.11.2023	04.11.2023	05.11.2023	05.11.2023	05.11.2023	05.11.2023		
Date of Harvesting:	27.02.2024	10.04.2024	13.03.2024	13.03.2024	31.03.2024	08.03.2024			

Table 4.6. Central Zone **RIR-TS-TAD** **Pooled 2023-24**

Genotype	Number of Irrigation						Mean	Rk
	No	Rk	One	Rk	Two	Rk		
Yield, q/ha								
RIRTSCZ301	30.80	3	36.58	3	39.98	3	35.79	3
RIRTSCZ302	29.11	5	35.23	4	38.80	5	34.38	5
RIRTSCZ303	30.19	4	34.21	5	39.98	4	34.79	4
RIRTSCZ304	33.96	1	37.46	1	40.98	1	37.47	1
RIRTSCZ305	32.71	2	36.82	2	40.07	2	36.53	2
Mean	31.35		36.06		39.96		35.79	
	Irrigation(A)	Genotype (B)		B within A		A within B		
CD (0.05)	0.52	0.72		1.25		1.26		
Earhead/sqm								
RIRTSCZ301	282	5	308	4	325	5	305	5
RIRTSCZ302	287	4	308	5	329	4	308	4
RIRTSCZ303	325	2	336	3	357	2	339	2
RIRTSCZ304	332	1	347	1	362	1	347	1
RIRTSCZ305	323	3	339	2	354	3	339	3
Mean	310		328		345		328	
	Irrigation(A)	Genotype (B)		B within A		A within B		
CD (0.05)	3.89	5.37		NS		9.38		
Grains/Earhead								
RIRTSCZ301	30.50	1	31.81	1	31	1	31.26	1
RIRTSCZ302	30.35	2	31.28	2	31	2	30.80	2
RIRTSCZ303	27.08	4	27.18	4	28	4	27.42	4
RIRTSCZ304	29.61	3	28.95	3	28	3	28.91	3
RIRTSCZ305	26.90	5	27.11	5	27	5	27.06	5
Mean	28.89		29.26		29.1		29.09	
	Irrigation(A)	Genotype (B)		B within A		A within B		
CD (0.05)	N.S.	N.S.		0.85		1.47		
1000 Grains Weight, g								
RIRTSCZ301	36.58	3	38.36	4	40	4	38.39	4
RIRTSCZ302	34.80	5	37.51	5	39	5	37.11	5
RIRTSCZ303	36.47	4	39.75	2	42	2	39.34	2
RIRTSCZ304	36.69	2	39.12	3	42	3	39.19	3
RIRTSCZ305	38.52	1	41.09	1	42	1	40.62	1
Mean	36.61		39.17		41.0		38.93	
	Irrigation(A)	Genotype (B)		B within A		A within B		
CD (0.05)	0.27	0.38		0.65		0.66		
Centres:	Bilaspur, Gwalior, Indore, Jabalpur, Powarkheda, Udaipur							

Table 4.6.1. Central Zone		RIR-TS-TAD				Bilaspur	2023-24	
Genotype	Number of Irrigation						Mean	Rk
	No	Rk	One	Rk	Two	Rk		
Yield, q/ha								
RIRTSCZ301	35.19	4	36.88	4	38.24	4	36.77	4
RIRTSCZ302	36.32	3	38.02	3	39.37	3	37.90	3
RIRTSCZ303	37.08	2	38.77	2	40.13	2	38.66	2
RIRTSCZ304	33.80	5	35.49	5	36.85	5	35.38	5
RIRTSCZ305	38.40	1	40.09	1	41.45	1	39.98	1
Mean	36.16		37.85		39.208		37.74	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.32	0.96	3.27			
Genotype (B)		**	0.39	0.95	3.11			
B within A		N.S.	0.68	1.64				
A within B			0.68	1.66				
Earhead/sqm								
RIRTSCZ301	362	4	384	5	406	4	384	4
RIRTSCZ302	371	3	388	3	418	3	392	3
RIRTSCZ303	375	2	400	2	422	2	399	2
RIRTSCZ304	354	5	385	4	393	5	377	5
RIRTSCZ305	386	1	412	1	430	1	409	1
Mean	370		394		414		392	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	1.67	5.03	1.65			
Genotype (B)		**	2.29	5.55	1.75			
B within A		N.S.	3.97	9.61				
A within B			3.92	9.50				
Grains/Earhead								
RIRTSCZ301	35.12	1	33.58	1	29.30	1	32.7	1
RIRTSCZ302	34.21	3	33.29	2	28.96	3	32.1	2
RIRTSCZ303	32.68	4	29.68	4	26.47	4	29.6	4
RIRTSCZ304	34.72	2	31.68	3	29.27	2	31.9	3
RIRTSCZ305	32.66	5	28.57	5	25.69	5	29.0	5
Mean	33.88		31.36		27.94		31.1	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.19	0.58	2.38			
Genotype (B)		**	0.55	1.33	5.31			
B within A		N.S.	0.95	2.31				
A within B			0.87	2.11				
1000 Grains Weight, g								
RIRTSCZ301	27.67	4	28.63	5	32.12	4	29.5	5
RIRTSCZ302	28.62	3	29.50	3	32.52	3	30.2	3
RIRTSCZ303	30.27	2	32.67	2	35.98	2	33.0	2
RIRTSCZ304	27.55	5	29.17	4	32.01	5	29.6	4
RIRTSCZ305	30.54	1	34.12	1	37.55	1	34.1	1
Mean	28.93		30.82		34.04		31.3	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.18	0.54	2.24			
Genotype (B)		**	0.32	0.78	3.09			
B within A		N.S.	0.56	1.35				
A within B			0.53	1.28				
Date of Sowing	02.11.2023							
Date of Harvesting	27.02.2024							

Table 4.6.2. Central Zone		RIR-TS-TAD				Gwalior		2023-24	
Genotype	Number of Irrigation						Mean	Rk	
	No	Rk	One	Rk	Two	Rk			
Yield, q/ha									
RIRTSCZ301	32.20	3	36.51	3	41.00	3	36.57	3	
RIRTSCZ302	27.78	5	30.04	5	32.62	5	30.15	5	
RIRTSCZ303	30.67	4	34.63	4	38.48	4	34.59	4	
RIRTSCZ304	34.37	2	38.79	2	41.95	2	38.37	2	
RIRTSCZ305	39.01	1	43.78	1	44.65	1	42.48	1	
Mean	32.81		36.75		39.74		36.43		
		F. Test	SEm	CD (0.05)	CV (%)				
Irrigation (A)		**	0.23	0.70	2.46				
Genotype (B)		**	0.47	1.15	3.91				
B within A		N.S.	0.82	1.99					
A within B			0.77	1.87					
Earhead/sqm									
RIRTSCZ301	304	3	328	3	347	3	326	3	
RIRTSCZ302	263	5	307	5	327	5	299	5	
RIRTSCZ303	300	4	323	4	337	4	320	4	
RIRTSCZ304	319	2	341	2	352	2	337	2	
RIRTSCZ305	322	1	348	1	363	1	344	1	
Mean	301		329		345		325		
		F. Test	SEm	CD (0.05)	CV (%)				
Irrigation (A)		**	3.90	11.77	4.65				
Genotype (B)		**	4.07	9.85	3.75				
B within A		N.S.	7.05	17.06					
A within B			7.42	17.94					
Grains/Earhead									
RIRTSCZ301	31.98	4	31.27	3	30.28	2	31.18	4	
RIRTSCZ302	35.70	1	31.04	4	29.78	3	32.17	1	
RIRTSCZ303	32.84	3	31.30	2	30.56	1	31.56	3	
RIRTSCZ304	30.81	5	30.04	5	29.64	4	30.16	5	
RIRTSCZ305	33.40	2	32.21	1	29.31	5	31.64	2	
Mean	32.95		31.17		29.91		31.34		
		F. Test	SEm	CD (0.05)	CV (%)				
Irrigation (A)		*	0.58	1.74	7.11				
Genotype (B)		N.S.	0.54	1.31	5.20				
B within A		N.S.	0.94	2.28					
A within B			1.02	2.47					
1000 Grains Weight, g									
RIRTSCZ301	33.20	3	35.60	3	39.07	3	35.96	3	
RIRTSCZ302	29.60	5	31.60	5	33.53	5	31.58	5	
RIRTSCZ303	31.27	4	34.27	4	37.33	4	34.29	4	
RIRTSCZ304	35.13	2	37.97	2	40.20	2	37.77	2	
RIRTSCZ305	36.40	1	39.07	1	41.93	1	39.13	1	
Mean	33.12		35.70		38.41		35.74		
		F. Test	SEm	CD (0.05)	CV (%)				
Irrigation (A)		**	0.17	0.52	1.87				
Genotype (B)		**	0.34	0.82	2.84				
B within A		N.S.	0.59	1.42					
A within B			0.55	1.34					
Date of Sowing	11.11.2023								
Date of Harvesting	10.04.2024								

Table 4.6.3. Central Zone		RIR-TS-TAD					Indore	2023-24
Genotype	Number of Irrigation						Mean	Rk
	No	Rk	One	Rk	Two	Rk		
Yield, q/ha								
RIRTSCZ301	33.03	2	32.60	3	37.73	4	34.46	2
RIRTSCZ302	28.33	5	31.33	5	37.90	3	32.52	4
RIRTSCZ303	31.37	3	33.87	2	38.03	2	34.42	3
RIRTSCZ304	37.63	1	36.17	1	38.63	1	37.48	1
RIRTSCZ305	30.57	4	31.83	4	32.40	5	31.60	5
Mean	32.19		33.16		36.94		34.10	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.52	1.58	5.94			
Genotype (B)		**	0.67	1.61	5.87			
B within A		*	1.16	2.80				
A within B			1.16	2.80				
Earhead/sqm								
RIRTSCZ301	236	3	260	2	289	2	261	2
RIRTSCZ302	213	5	238	5	278	4	243	5
RIRTSCZ303	241	2	245	4	287	3	258	3
RIRTSCZ304	255	1	261	1	296	1	271	1
RIRTSCZ305	232	4	252	3	263	5	249	4
Mean	235		251		283		256	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	1.12	3.37	1.69			
Genotype (B)		N.S.	9.25	22.39	10.83			
B within A		N.S.	16.03	38.78				
A within B			14.38	34.79				
Grains/Earhead								
RIRTSCZ301	29.88	3	26.49	4	27.46	2	27.95	3
RIRTSCZ302	32.74	2	29.88	2	29.05	1	30.56	1
RIRTSCZ303	29.15	4	28.62	3	26.04	4	27.94	4
RIRTSCZ304	33.30	1	31.29	1	26.50	3	30.36	2
RIRTSCZ305	28.55	5	26.12	5	24.91	5	26.52	5
Mean	30.73		28.48		26.79		28.67	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		*	0.66	1.99	8.90			
Genotype (B)		N.S.	1.20	2.91	12.60			
B within A		N.S.	2.09	5.05				
A within B			1.98	4.79				
1000 Grains Weight, g								
RIRTSCZ301	47.10	1	47.43	3	47.83	4	47.46	3
RIRTSCZ302	41.57	5	44.27	5	47.10	5	44.31	5
RIRTSCZ303	45.27	3	48.37	2	50.87	1	48.17	2
RIRTSCZ304	45.10	4	44.50	4	49.57	3	46.39	4
RIRTSCZ305	46.77	2	48.67	1	49.73	2	48.39	1
Mean	45.16		46.65		49.02		46.94	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.18	0.54	1.47			
Genotype (B)		**	0.33	0.79	2.08			
B within A		**	0.56	1.37				
A within B			0.54	1.30				
Date of Sowing	04.11.2023							
Date of Harvesting	13.03.2024							

Table 4.6.4. Central Zone		RIR-TS-TAD		Jabalpur		2023-24		
Genotype	Number of Irrigation						Mean	Rk
	No	Rk	One	Rk	Two	Rk		
Yield, q/ha								
RIRTSCZ301	37.62	3	45.89	1	46.88	4	43.46	3
RIRTSCZ302	27.75	5	38.99	4	39.67	5	35.47	5
RIRTSCZ303	34.33	4	35.87	5	48.71	2	39.64	4
RIRTSCZ304	40.68	2	43.59	2	47.03	3	43.77	2
RIRTSCZ305	41.04	1	42.31	3.00	49.83	1.00	44.40	1
Mean	36.29		41.33		46.42		41.35	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.43	1.30	4.05			
Genotype (B)		**	0.58	1.41	4.22			
B within A		**	1.01	2.44				
A within B			1.00	2.42				
Earhead/sqm								
RIRTSCZ301	310	4	300	4	330	4	313	4
RIRTSCZ302	298	5	288	5	318	5	301	5
RIRTSCZ303	496	1	486	2	516	2	499	2
RIRTSCZ304	494	2	504	1	524	1	508	1
RIRTSCZ305	418	3	408	3	438	3	421	3
Mean	403		397		425		409	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		#DIV/0!	0.00	0.00	0.00			
Genotype (B)		**	2.01	4.87	1.48			
B within A		N.S.	3.48	8.43				
A within B			3.11	7.54				
Grains/Earhead								
RIRTSCZ301	27.62	1	37.24	1	34.52	2	33.13	1
RIRTSCZ302	23.54	2	34.42	2	35.41	1	31.12	2
RIRTSCZ303	16.53	5	16.76	5	22.33	4	18.54	5
RIRTSCZ304	19.68	4	21.00	4	21.10	5	20.59	4
RIRTSCZ305	21.61	3	22.25	3	26.91	3	23.59	3
Mean	21.80		26.33		28.06		25.39	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.34	1.01	5.11			
Genotype (B)		**	0.47	1.13	5.51			
B within A		**	0.81	1.96				
A within B			0.80	1.93				
1000 Grains Weight, g								
RIRTSCZ301	43.91	2	41.08	4	41.17	4	42.05	3
RIRTSCZ302	39.68	5	39.42	5	35.30	5	38.14	5
RIRTSCZ303	41.88	3	44.05	2	42.41	2	42.78	2
RIRTSCZ304	41.80	4	41.17	3	42.51	1	41.83	4
RIRTSCZ305	45.47	1	46.69	1	42.31	3	44.82	1
Mean	42.55		42.48		40.74		41.92	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.22	0.65	1.99			
Genotype (B)		**	0.38	0.92	2.72			
B within A		**	0.66	1.59				
A within B			0.63	1.52				
Date of Sowing	05.11.2023							
Date of Harvesting	13.03.2024							

Table 4.6.5. Central Zone		RIR-TS-TAD		Powarkheda		2023-24		
Genotype	Number of Irrigation						Mean	Rk
	No	Rk	One	Rk	Two	Rk		
Yield, q/ha								
RIRTSCZ301	20.28	4	34.52	1	37.47	2	30.76	3
RIRTSCZ302	22.62	3	30.36	4	33.66	4	28.88	4
RIRTSCZ303	25.00	2	31.55	3	38.86	1	31.80	2
RIRTSCZ304	27.90	1	33.21	2	34.69	3	31.93	1
RIRTSCZ305	19.33	5	29.17	5.00	32.31	5.00	26.93	5
Mean	23.02		31.76		35.40		30.06	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.32	0.96	4.09			
Genotype (B)		**	0.22	0.53	2.17			
B within A		**	0.38	0.91				
A within B			0.46	1.12				
Earhead/sqm								
RIRTSCZ301	222	5	282	2	269	5	258	5
RIRTSCZ302	255	4	279	3	288	2	274	3
RIRTSCZ303	288	1	270	4	282	3	280	2
RIRTSCZ304	265	3	264	5	274	4	268	4
RIRTSCZ305	281	2	300	1	307	1	296	1
Mean	262		279		284		275	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		N.S.	5.15	15.51	7.25			
Genotype (B)		**	2.44	5.91	2.67			
B within A		**	4.23	10.24				
A within B			6.39	15.46				
Grains/Earhead								
RIRTSCZ301	31.14	3	36.31	1	39.62	1	35.69	1
RIRTSCZ302	32.20	2	32.80	3	32.76	3	32.59	3
RIRTSCZ303	27.27	4	31.77	4	36.87	2	31.97	4
RIRTSCZ304	34.96	1	34.72	2	32.64	4	34.11	2
RIRTSCZ305	21.37	5	27.79	5	28.83	5	26.00	5
Mean	29.39		32.68		34.15		32.07	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.56	1.69	6.76			
Genotype (B)		**	0.39	0.96	3.69			
B within A		**	0.68	1.65				
A within B			0.83	2.01				
1000 Grains Weight, g								
RIRTSCZ301	29.47	4	33.75	4	35.17	5	32.79	4
RIRTSCZ302	27.67	5	33.25	5	35.75	4	32.22	5
RIRTSCZ303	31.80	2	36.77	1	37.42	2	35.33	1
RIRTSCZ304	30.17	3	36.30	2	38.83	1	35.10	2
RIRTSCZ305	32.23	1	35.00	3	36.52	3	34.58	3
Mean	30.27		35.01		36.74		34.01	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.19	0.56	2.12			
Genotype (B)		**	0.13	0.33	1.19			
B within A		**	0.23	0.56				
A within B			0.28	0.68				
Date of Sowing	05.11.2023							
Date of Harvesting	31.03.2024							

Table 4.6.6. Central Zone		RIR-TS-TAD					Udaipur	2023-24
Genotype	Number of Irrigation						Mean	Rk
	No	Rk	One	Rk	Two	Rk		
Yield, q/ha								
RIRTSCZ301	26.47	4	33.06	4	38.57	4	32.70	4
RIRTSCZ302	31.86	1	42.66	1	49.60	1	41.37	1
RIRTSCZ303	22.66	5	30.59	5	35.68	5	29.64	5
RIRTSCZ304	29.37	2	37.50	2	46.75	2	37.87	2
RIRTSCZ305	27.94	3	33.73	3.00	39.76	3.00	33.81	3
Mean	27.66		35.51		42.07		35.08	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.98	2.95	10.81			
Genotype (B)		**	1.48	3.59	12.68			
B within A		N.S.	2.57	6.21				
A within B			2.50	6.04				
Earhead/sqm								
RIRTSCZ301	257	4	293	4	309	4	286	4
RIRTSCZ302	324	1	348	1	347	1	340	1
RIRTSCZ303	249	5	291	5	298	5	279	5
RIRTSCZ304	303	2	329	2	332	2	321	2
RIRTSCZ305	298	3	314	3	323	3	312	3
Mean	286		315		322		308	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		*	6.89	20.76	8.67			
Genotype (B)		**	8.43	20.39	8.22			
B within A		N.S.	14.60	35.32				
A within B			14.76	35.72				
Grains/Earhead								
RIRTSCZ301	27.26	1	25.97	2	27.57	3	26.93	1
RIRTSCZ302	23.73	5	26.27	1	28.65	2	26.22	3
RIRTSCZ303	24.01	3	24.93	5	25.71	5	24.88	5
RIRTSCZ304	24.17	2	24.96	4	29.81	1	26.32	2
RIRTSCZ305	23.84	4	25.69	3	27.30	4	25.61	4
Mean	24.60		25.57		27.81		25.99	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		N.S.	1.26	3.79	18.75			
Genotype (B)		N.S.	1.51	3.66	17.47			
B within A		N.S.	2.62	6.34				
A within B			2.66	6.44				
1000 Grains Weight, g								
RIRTSCZ301	38.15	5	43.68	3	45.93	4	42.59	4
RIRTSCZ302	41.64	1	47.03	1	49.87	1	46.18	1
RIRTSCZ303	38.33	4	42.38	5	46.79	3	42.50	5
RIRTSCZ304	40.39	2	45.61	2	47.46	2	44.49	2
RIRTSCZ305	39.72	3	42.97	4	45.39	5	42.69	3
Mean	39.65		44.34		47.09		43.69	
		F. Test	SEm	CD (0.05)	CV (%)			
Irrigation (A)		**	0.53	1.59	4.67			
Genotype (B)		**	0.66	1.60	4.55			
B within A		N.S.	1.15	2.77				
A within B			1.15	2.79				
Date of Sowing	05.11.2023							
Date of Harvesting	08.03.2024							