All India Coordinated Research Project on Rice (AICRPR)

VARIETAL IMPROVEMENT TRIALS (IRRIGATED)



TECHNICAL PROGRAMME 2023





भारतीय चावल अनुसंधान संस्थान राजेंद्रनगर, हैदराबाद-५०० ०३० ICAR-Indian Institute of Rice Research

(formerly Directorate of Rice Research)

(Indian Council of Agricultural Research)



CONTENT

Trial	Trial Name	Page
No.		No.
-	Star Sheet 2023	1-8
21	Advance Variety Trial & Initial Variety Trial – Boro (AVT & IVT – BORO 2022-23)	9-10
22	Initial Variety Trial – Early Transplanted Rabi (IVT – E TP 2022-23)	11-12
23	Initial Variety Trial – Early Hills (IVT – E (H))	13-14
24	Advance Variety Trial 1 – Medium Hills (AVT 1 – M (H))	15-16
25	Initial Variety Trial – Medium Hills (IVT – M (H))	17-18
26	Initial Variety Trial – Upland Hills (IVT – U (H))	19-20
27	Initial Variety Trial – Japonica	21-22
33	Advance Variety Trial 2 – Early Transplanted (AVT 2 – E TP)	23-24
34	Advance Variety Trial 1 – Early Transplanted (AVT 1 – E TP)	25-36
35	Initial Variety Trial – Early Transplanted (IVT – ETP)	37-38
36	Advance Variety Trial 2 – Irrigated Mid Early (AVT 2 – IME)	39-44
38	Advance Variety Trial 1 – Irrigated Mid Early (AVT 1 – IME) Initial Variety Trial – Irrigated Mid Early (IVT - IME)	45-56 57-58
39	Advance Variety Trial 2 – Irrigated Medium (AVT 2 – IM)	59-62
40	Advance Variety Trial 1 – Irrigated Medium (AVT 1 – IM) Advance Variety Trial 1 – Irrigated Medium (AVT 1 – IM)	63-74
41	Initial Variety Trial – Irrigated Medium (IVT - IM)	75-76
42	Advance Variety Trial 2 & 1 – Late (AVT 2 & 1 – Late)	77-88
43	Initial Variety Trial – Late (IVT - Late)	89-90
44	Advance Variety Trial 2 – Aerobic (AVT 2 – AEROB)	91-92
45	Advance Variety Trial 1 – Aerobic (AVT 1 – AEROB)	93-104
46	Initial Variety Trial – Aerobic (IVT - AEROB)	105-106
47	Advance Variety Trial 2 – Medium Slender (AVT 2 – MS)	107-108
48	Advance Variety Trial 1 – Medium Slender (AVT 1 – MS)	109-118
49	Initial Variety Trial – Medium Slender (IVT - MS)	119-120
50	Advance Variety Trial 1 & Initial Variety Trial – Rice Biofortification (AVT 1 & IVT – BIOFORT)	121-122
51	Advance Variety Trial 2 – Alkaline and Inland Saline Tolerant Variety Trial (AVT 2 – AL&ISTVT)	123-126
52	Advance Variety Trial 1 – Alkaline and Inland Saline Tolerant Variety Trial (AVT 1 – AL&ISTVT)	127-128
53	Initial Variety Trial – Alkaline and Inland Saline Tolerant Variety Trial (IVT – AL&ISTVT)	129-130
54	Advance Variety Trial 1 & Initial Variety Trial – Coastal Saline Tolerant Variety Trial (AVT 1 & IVT - CSTVT)	131-132
55	Initial Variety Trial – Aromatic Grain Type (IVT - AGT)	133-134
56	Advance Variety Trial 2 – Low Phosphorus Tolerance (AVT 2 – LPT)	135-136
57	Advance Variety Trial 1 – Low Phosphorus Tolerance (AVT 1 – LPT)	137-138
58	Initial Variety Trial – Low Phosphorus Tolerance (IVT - LPT)	139-140
59	Advance Variety Trial 2 – Low Nitrogen Tolerance (AVT 2 – LNT)	141-142
60	Advance Variety Trial 1 – Low Nitrogen Tolerance (AVT 1 – LNT)	143-144
61	Initial Variety Trial – Low Nitrogen Tolerance (IVT - LNT)	145-146
62	Initial Variety Trial - Coloured Rice (IVT – CR)	147-148
65	Special Trial under CRP-Biofortification	149-150

ICAR – IIRR VARIETAL IMPROVEMENT TRIALS 2023

Trial No	21	22	23	24	25	26	27	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56				60	61	62	63	
Eco-System	BORO	Early Rabi			Hills							lı	rigat	ed						Aero	ob	M	IS Gr	ain	Biofort	Sa	aline/	Alkal	ine	AGT			P & I	N					
Location/ Trial Name	AVT-IVTBORO 2022-23	AVT- IVT-Early 2022-23	IVT – E (H)	AVT 1-M (H)	IVT – M (H)	IVT – U (H)	(H) (H)	AVT 2- E TP	AVT 1 – E TP	IVT - ETP	AVT 2 - IME	AVT 1 - IME	IVT - IME	AVT 2 - IM	AVT 1 - IM	MI - IVI	AVT 2 & 1 - LATE	IVT - LATE	AVT 2 - Aerob	AVT 1 - Aerob	IVT - Aerob	AVT 2 - MS	AVT 1 - MS	SM - TVI	AVT & IVT - Biofort	AVT 2 - AL&ISTVT	AVT 1 - AL&ISTVT	IVT - AL&ISTVT	AVT & IVT - CSTVT	IVT – AGT	AVT 2 - LPT	AVT 1 - LPT	IVT - LPT	AVT 2 - LNT	AVT 1 - LNT	IVT- LNT	IVT-Coloured Rice	Spl. CRP Biofort	Total
ZONE I – HILI	LY RE	GION								ı		J								1					ı														
MANIPUR																																							
Lamphelpat-ICAR				X	X	X																															X		4
IMPHAL CAU				X	X	X																																	3
WANGBAL				X	X	X																																	3
MEGHALAYA								•	•	•	•														•				•	•									
UPPER SHILLONG			X	X	X	X																																	4
Barapani (Umiam) ICAR				X	X	X																																	3
CAU, Barapani				X	X	X																															X		4
SIKKIM																																							
Gangtok				X	X																																		2
UTTARAKHANI)																																						
Almora- ICAR			X	X	X	X	X																														X		6
Bageswar (Almora)						X																																	1
JAMMU & KASHMII	R																												•										
KHUDWANI			X	X	X		X																																4
Pombay (Khudwani)			X	X	X																																		3
Wadura (Khudwani)			X	X	X																																		3
Rajouri			X	X	X																																		3
Bandipore			X																																				1
Larnoo			X																																				1
Badarwa			X	X	X																																		3

Trial No	21	22	23	24	25	26	27	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57			60	61 E	62	63
Eco-System	BORO	Early Rabi			Hills							Ir	rigat	ed					1	Aero	ob	М	IS Gr	ain	Biofort	S	aline	/Alka	line	AGT			P & I	N				
Location/ Trial Name	AVT-IVTBORO 2022-23	AVT-IVT-Early 2022-23	IVT – E (H)	AVT 1-M (H)	(H) M - TVI	IVT – U (H)	IVT J (H)	AVT 2- E TP	AVT 1 – E TP	IVT - ETP	AVT 2 - IME	AVT 1 - IME	IVT - IME	AVT 2 - IM	AVT 1 - IM	MI - TVI	AVT 2 & 1 - LATE	IVT - LATE	AVT 2 - Aerob	AVT 1 - Aerob	IVT - Aerob	AVT 2 - MS	AVT 1 - MS	SM - TVI	AVT & IVT - Biofort	AVT 2 - AL&ISTVT	AVT 1 - AL&ISTVT	IVT - AL&ISTVT	AVT & IVT - CSTVT	IVT – AGT	AVT 2 - LPT	AVT 1 - LPT	IVT - LPT	AVT 2 - LNT	AVT 1 - LNT	IVT- LNT	IVT-Coloured Rice	Spl. CRP Biofort
HIMACHAL PRADE	SH											-																										·
MALAN			X	X	X	X	X																														X	6
Palampur			X																																			1
Sundernagar (Malan)			X	X	X	X																																4
Bajura (Malan)			X	X	X																																	3
Dhaulakaun			X	X	X	X																																4
Bhertin						X																																1
NAGALAND													u		u															'								•
Mediziphema - ICAR			X																																			1
Nagaland (University)																			X	X	X																	3
SOUTHERN HILLS																																						
Gudaluru			X	X	X																																	3
Sirsi				X	X												X	X				X	X	X	X					X								X 10
Ponnampet			X														X	X																				3
ZONE II-NORTHERN	N																																					
New Delhi																																						
IARI New Delhi																																				7	X	X 2
UTTARAKHAND																																						
PANTNAGAR								X	X	X	X	X	X	X	X	X	X	X																				11
PUNJAB																																						
LUDHIANA								X	X	X	X	X	X						X	X	X				X						X	X	X	X	X	X		X 17
HARYANA																																						
KAUL								X	X	X	X	X	X	X	X	X	X	X	X	X	X																	14
Karnal (ICAR-CSSRI)																			X	X	X				X	X^2	X^2	X^{2}										10

Trial No	21	22	23	24	25	26	27	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57			60	61	62	63
Eco-System	BORO	Early Rabi			Hills							li	rriga	ted					1	Aero	b	М	IS Gr	ain	Biofort	Sa	aline	/Alka	line	AGT			P & I	N				
Location/ Trial Name	AVT-IVTBORO 2022-23	AVT- IVT-Early 2022-23	IVT – E (H)	AVT 1-M (H)	IVT – M (H)	IVT – U (H)	IVT J (H)	AVT 2- E TP	AVT 1 – E TP	IVT - ETP	AVT 2 - IME	AVT 1 - IME	IVT - IME	AVT 2 - IM	AVT 1 - IM	MI - TVI	AVT 2 & 1 - LATE	IVT - LATE	AVT 2 - Aerob	AVT 1 - Aerob	IVT - Aerob	AVT 2 - MS	AVT 1 - MS	IVT - MS	AVT & IVT - Biofort	AVT 2 - AL&ISTVT			AVT & IVT - CSTVT	IVT – AGT	AVT 2 - LPT	AVT 1 - LPT	IVT - LPT	AVT 2 - LNT	AVT 1 - LNT	IVT- LNT	IVT-Coloured Rice	Spl. CRP Biofort
Rohtak (Karnal)																											X									\sqcup		3
Jind (Karnal)																										X												3
Panipat (Karnal)																										X	X	X										3
Kurukshetra (Karnal)																										X	X	X								1		3
Anjanitel(Karnal)																										X	X	X										3
JAMMU KASHMIR																																						·
CHATHA											X	X	X	X	X	X																					X	7
RAJASTHAN												u																						•				•
КОТА								X	X	X															X													X 5
UTTAR PRADESH													•			•															•							
NAGINA								X	X		X	X	X	X	X	X	X	X												X								12
KANPUR											X	X	X													X	X	X		X						Ш		7
ZONE III-EASTER	RN																																					
ODISHA																																						
Bhubaneswar														X	X	X	X	X	X	X	X	X	X	X														11
ICAR-NRRI (Cuttack)	X	X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X 30
JEYPORE	X	X						X	X	X	X	X	X	X	X	X	X	X				X	X	X	X					X							X	19
CHIPLIMA	X	X						X	X	X	X	X	X	X	X	X						X	X	X	X													15
Ranital																	X	X																		i		2
BIHAR						•								•			•	•			•					•								•			1	
BIKRAMGANJ (Dhangain)								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					X								19
PUSA	X																		X	X	X	X	X	X							X	X	X	X	X	X	X	14
Sabour								X	X	X	X	X	X	X	X	X	X	X							X					X						i	X	14
Patna-ICAR								X	X	X									X	X	X																	6

Trial No	21	22	23	24	25	26	27	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56				60	61	62	63	
Eco-System	BORO	Early Rabi			Hills							ı	rriga	ted					,	Aero	b	N	IS Gr	ain	Biofort	S	aline	'Alka	line	AGT			P & I	N					
Location/ Trial Name	AVT-IVTBORO 2022-23	AVT- IVT-Early 2022-23	IVT – E (H)	AVT 1-M (H)	IVT – M (H)	IVT – U (H)	(H) C TVI	AVT 2- E TP	AVT 1 – E TP	IVT - ETP	AVT 2 - IME	AVT 1 - IME	IVT - IME	AVT 2 - IM	AVT 1 - IM	MI - TVI	AVT 2 & 1 - LATE	IVT - LATE	AVT 2 - Aerob	AVT 1 - Aerob	IVT - Aerob	AVT 2 - MS	AVT 1 - MS	SM - TVI	AVT & IVT - Biofort	AVT 2 - AL&ISTVT	AVT 1 - AL&ISTVT	IVT - AL&ISTVT	AVT & IVT - CSTVT	IVT – AGT	AVT 2 - LPT	AVT 1 - LPT	IVT - LPT	AVT 2 - LNT	AVT 1 - LNT	IVT- LNT	IVT-Coloured Rice	Spl. CRP Biofort	Total
JHARKHAND				<u> </u>		1	1	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	1		<u> </u>		1	1				1	<u> </u>		<u> </u>			11		<u> </u>				11	
RANCHI								X		X	X	X	X	X	X	X			X	X	X	X	X	X						X	X	X	X	X	X	X			22
Hazaribagh								X	X	X									X	X	X																		6
WEST BENGAL																																							
CHINSURAH	X							X	X	X	X	X	X	X	X	X	X	X				X	X	X	X				X	X							X		19
Canning-ICAR																													X										1
Pundibhari	X						X										X	X												X							X		6
Hathwara								X	X	X	X	X	X												X					X									8
Malda	X						X	X	X	X	X	X	X	X	X	X	X	X																					13
BANKURA	X										X	X	X	X	X	X														X									8
Gosaba																													X										1
UTTAR PRADESH	•			•	•																																		
MASODHA								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X								X	23
Lucknow-ICAR																										X	X	X											3
VARANASI	X							X	X	X	X	X	X									X	X	X	X					X							X	X	14
														X	X	X														X									4
Gorakhpur Gautam Budha Nagar(Karnal)														2.	11	7.										X	X	X											3
ZONE IV- NORTH	EASTE	RN										1	1			1																							
ASSAM																																							
TITABAR	X						X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X					X							X	X	20
Gerua-ICAR	X						X				X	X	X	X	X	X	X	X				X	X	X						X									14
TRIPURA	1			<u> </u>	I .	1	1	<u> </u>	1	l		L	L	l		L	1	I	<u> </u>	<u> </u>	1	1	1		1	<u> </u>						1		<u> </u>					

Trial No	21	22	23	24	25	26	27	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57		59	60	61	62	63	
Eco-System	BORO	Early Rabi			Hills							li	rriga	ted						Aero	b	М	IS Gr	ain	Biofort	Sa	line/	Alka	line	AGT			P & I	N			ı		
Location/ Trial Name	AVT-IVTBORO 2022-23	AVT- IVT-Early 2022-23	IVT – E (H)	AVT 1-M (H)	(H) M – TVI	IVT – U (H)	IVT J (H)	AVT 2- E TP	AVT 1 – E TP	IVT - E TP	AVT 2 - IME	AVT 1 - IME	IVT - IME	AVT 2 - IM	AVT 1 - IM	MI - TVI	AVT 2 & 1 - LATE	IVT - LATE	AVT 2 - Aerob	AVT 1 - Aerob	IVT - Aerob	AVT 2 - MS	AVT 1 - MS	IVT - MS	AVT & IVT - Biofort	AVT 2 - AL&ISTVT	AVT 1 - AL&ISTVT	IVT - AL&ISTVT	AVT & IVT - CSTVT	IVT – AGT	AVT 2 - LPT	AVT 1 - LPT	IVT - LPT	AVT 2 - LNT	AVT 1 - LNT	IVT- LNT	IVT-Coloured Rice	Spl. CRP Biofort	Total
ARUNDHU TINAGAR	X							X	X	X				X	X	X			X	X	X	X	X	X						X									14
Lembucherra	X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X															19
ZONE-V - CENTR	AL																				1																		-
MADHYA PRADES	Н																																						
Waraseoni														X	X	X	X	X							X					X									7
REWA								X	X	X	X	X	X						X	X	X																		9
Jabalpur											X	X	X						X	X	X	X	X	X	X					X									11
CHHATTISGAR	Н																	•											•										
RAIPUR								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					X							X	X	21
Ambikhapur											X	X	X	X	X	X														X									7
JAGADALPUR								X	X	X	X	X	X	X	X	X	X	X	X	X	X				X					X									16
Bilaspur								X	X	X	X	X	X	X	X	X														X							i		10
MAHARASHTR	A									l									1		1							ı											
SAKOLI	\							X	X	X	X	X	X	X	X	X									X														10
Sindewahi								X	X	X	X	X	X	X	X	X						X	X	X	X													X	14
ZONE VI - WEST	ERN				•															•	•							•	•										
MAHARASHTR	Α																																						
KARJAT								X	X	X	X	X	X	X	X	X	X	X				X	X	X	X					X	X	X	X	X	X	X	X		23
Panvel																													X							Ш			1
Shirgaon														X	X	X						X	X	X														X	7
Vadagaon											X	X	X				X	X													X	X	X	X	X	X			11

Trial No	21	22	23	24	25	26	27	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57			60	61	62	63	
Eco-System	BORO	Early Rabi			Hills							lı	rriga	ted					1	Aero	b	М	IS Gra	ain	Biofort	Sa	aline/	Alka	line	AGT			Р&	N					
Location/ Trial Name	AVT-IVTBORO 2022-23	AVT- IVT-Early 2022-23	IVT – E (H)	AVT 1-M (H)	IVT – M (H)	IVT – U (H)	IVT J (H)	AVT 2- E TP	AVT 1 – E TP	IVT - E TP	AVT 2 - IME	AVT 1 - IME	IVT - IME	AVT 2 - IM	AVT 1 - IM	MI - TVI	AVT 2 & 1 - LATE	IVT - LATE	AVT 2 - Aerob	AVT 1 - Aerob	IVT - Aerob	AVT 2 - MS	AVT 1 - MS	IVT - MS	AVT & IVT - Biofort	AVT 2 – AL&ISTVT	AVT 1 - AL&ISTVT	IVT - AL&ISTVT	AVT & IVT - CSTVT	IVT – AGT	AVT 2 - LPT	AVT 1 - LPT	IVT - LPT	AVT 2 - LNT	AVT 1 - LNT	IVT- LNT	IVT-Coloured Rice	Spl. CRP Biofort	Total
Pondaghat																	X	X																					2
Parbhani																			X	X	X																		3
Radhanagari								X	X	X	X	X	X									X	X	X															9
GUJARAT																																							
NAVSARI											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							X	X	22
NAWAGAM								X	X	X	X	X	X	X	X	X						X	X	X	X					X							X		15
Derol								X	X	X									X	X	X																		6
Dabhoi								X	X	X												X	X	X															6
Vyara								X	X	X	X	X	X						X	X	X	X	X	X															12
Baruch (Karnal)																													X										1
GOA				1											ı	ı	ı		1		1				r								1	1					
Goa																													X										1
ZONE VII – SOUTI																																							
ANDHRA PRADESH	ł		1	1	ı				1		ı				1	1	1		1	1	1				Ι		1 1		-				1	ı	1			1	
Machilipatnam																													X										1
MARUTERU		X						X	X	X	X	X	X	X	X	X	X	X				X	X	X	X						X	X	X	X	X	X			22
Ragolu											X	X	X	X	X	X	X	X																					8
Bapatla																						X	X	X	X												X		5
Nellore		X															X	X							X														4
TELANGANA							,				,																	,											
Rudrur								X	X	X															X														4
ICAR-IIRR, Hyderabad																															X	X	X	X	X	X	X	X	8

Trial No	21	22	23	24	25	26	27	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57		59	60	61	62	63	
Eco-System	BORO	Early Rabi			Hills							li	rriga	ted					4	Aero	b	М	S Gr	ain	Biofort	Sa	aline/	'Alka	line	AGT			P&1	N			ļ		
Location/ Trial Name	AVT-IVTBORO 2022-23	AVT- IVT-Early 2022-23	IVT – E (H)	AVT 1-M (H)	IVT – M (H)	IVT – U (H)	IVT J (H)	AVT 2- E TP	AVT 1 – E TP	IVT - ETP	AVT 2 - IME	AVT 1 - IME	IVT - IME	AVT 2 - IM	AVT 1 - IM	IVT - IM	AVT 2 & 1 - LATE	IVT - LATE	AVT 2 - Aerob	AVT 1 - Aerob	IVT - Aerob	AVT 2 - MS	AVT 1 - MS	IVT - MS	AVT & IVT - Biofort	AVT 2 - AL&ISTVT	AVT 1 - AL&ISTVT	IVT - AL&ISTVT	AVT & IVT - CSTVT	IVT – AGT	AVT 2 - LPT	AVT 1 - LPT	IVT - LPT	AVT 2 - LNT	AVT 1 - LNT	IVT- LNT	IVT-Coloured Rice	Spl. CRP Biofort	Total
RAJENDRANAGAR		X									X	X	X	X	X	X						X	X	X	X					X									12
Kampasagar		X						X	X	X									X	X	X	X	X	X		X	X	X		X									14
Kunaram								X	X	X	X	X	X																										6
WARANGAL		X						X	X	X	X	X	X	X	X	X						X	X	X															13
Jagtial		X						X	X	X				X	X	X																							7
TAMIL NADU				1	1										ı	ı	1				ı					ı					1								
ADUTHURAI		X						X	X	X	X	X	X	X	X	X	X	X				X	X	X	X					X			<u></u>			Ш	X	X	19
COIMBATORE		X						X	X	X	X	X	X	X	X	X						X	X	X	X								<u> </u>			Ш			14
Tirur								X	X	X				X	X	X						X	X	X									<u></u>						9
Trichy																										X	X	X					<u> </u>						3
Annamalainagar																										X	X	X					<u> </u>						3
KERALA	· ·			ı	1									1	ı	Ι	1	ı	1		1						1 1	-			ı							l l	
MONCOMPU		X						X	-+		X	X	X												X								 					X	9
PATTAMBI		X						X	X	X	X	X	X	X	X	X						X	X	X	X					X			 				X	X	17
Vytilla																										X	X	X	X							Ш			4
KARNATAKA				1	I	1						1		1	I	I	1	1	ı		1					1	1 1	1	1		1							l I	
MANDYA		X						X	-		X	X	X	X	X	X			X	X	1	_	X	X	X						X	X	X	X	X	X			23
MUGAD								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X				 		$\vdash \vdash$			20
Kumta									_	4																			X					Щ		Щ			1
BRAHMAVAR		X						X	X	X	X	X	X	X	X	X									X				X				 				X	X	14
GANGAVATI		X									X	X	X	X	X	X									X	X	X	X			X	X	X	X	X	X			17

Trial No	21	22	23	24	25	26	27	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	
Eco-System	BORO	Early Rabi			Hills							li	riga	ted					,	Aero	b	N	IS Gr	ain	Biofort	Sa	line/	Alka	line	AGT			P&1	N					
Location/ Trial Name	AVT-IVTBORO 2022-23	AVT-IVT-Early 2022-23	IVT – E (H)	AVT 1-M (H)	IVT – M (H)	IVT – U (H)	IVT J (H)	AVT 2- E TP	AVT 1 – E TP	IVT - ETP	AVT 2 - IME	AVT 1 - IME	IVT - IME	AVT 2 - IM	AVT 1 - IM	MI - TVI	AVT 2 & 1 - LATE	IVT - LATE	AVT 2 - Aerob	AVT 1 - Aerob	IVT - Aerob	AVT 2 - MS	AVT 1 - MS	Ŀ	AVT & IVT - Biofort	AVT 2 - AL&ISTVT	AVT 1 - AL&ISTVT	IVT - AL&ISTVT	AVT & IVT - CSTVT	IVT – AGT	AVT 2 - LPT	AVT 1 - LPT	IVT - LPT		AVT 1 - LNT	IVT- LNT	IVT-Coloured Rice	Spl. CRP Biofort	Total
Malagi																						X	X	X	X					X									5
Kathalgere											X	X	X	X	X	X																							6
PUDUCHERRY					l .				-																ı														
KURUMBAPET								X	X	X	X	X	X	X	X	X	X	X				X	X	X															14
Puducherry								X	X	X	X	X	X	X	X	X						X	X	X	X	X	X	X		X									17
Karaikal											X	X	X	X	X	X									X	X	X	X	X	X									12
Total Locations	13	16	17	19	19	12	8	49	49	49	52	52	52	48	48	48	31	31	25	25	25	39	39	39	39	19	19	19	14	35	10	10	10	10	10	10	23	17	1050
Total Enries	42	40	22	12	22	14	7	19	37	64	21	43	64	17	31	64	54	64	18	33	64	9	27	64	52	13	19	21	50	40	11	30	28	10	20	30	35	52	1263

ICAR- INDIAN INSTITUTE OF RICE RESEARCH

Rajendranagar, Hyderabad-500 030 Boro 2022-23

21. Advance Variety Trial & Initial Variety Trial -Name of the trial:

Boro (AVT & IVT - BORO)

Objective: To study the comparative performance of cultures suitable for boro

season

Locations: 13

Randomized Block Design (RBD) Layout:

Replications:

Fertilizers: As per the recommendation of the centre

Plant protection: Need-based

Plot size: 15 sq m

Spacing: Transplanting: 15 cm between rows

10 cm between plants

No. of entries: 42

Check varieties Varietal checks: Gautam, IR 64; Hybrid Check: Rajalakshmi,; Local

check

1. Sow the seedbed as thin as possible General instructions:

2. Transplant seedling as per the situation

3. Transplant seedlings very shallow

4. Gap fill within a week of planting

Incorporate fertilizer evenly

Data to be collected:

Cold Tolerance score 0-9 scale at 25-30 days old seedling stage. 1.

Spikelet Fertility observation-- 1-3 scale* 2.

3. Temperature records (min.& max. at nursery, vegetative and flowering stages) (Table enclosed)

4. Grain yield (kg/plot)

5. Panicles per sq m (No.)

6. Plant Height (cm)

7. Days to 50% flowering (No.)

Notes on grain shattering 1-3 scale# 8.

Notes on lodging[@] 1-3 scale

Yield: When the mean yield of the experiment is below 4 t/ha, kindly offer an

explanation for the low yield

^{*: 1 -}indicate fertile, 2- partially fertile (>50% fertility), 3- Sterile (<50% fertility visual observation).

^{#: 1-} No shattering, 2- moderate shattering, 3- shattering.

^{@: 1-} No lodging, 2- partial lodging. 3- lodging.

Layout plan of entries in Advance Variety Trial & Initial Variety Trial-Boro, (AVT & IVT -Boro) 2022-23

Replication 1	Replication 2
Plot No. / Entry No.	Plot No. / Entry No
101 /2124	201 /2136
102 /2132	202 /2128
103 /2112	203 /2107
104 /2114	204 /2117
105 /2103	205 /2109
106 /2101	206 /2120
107 /2118	207 /2135
108 /2104	208 /2142 (LC)
109 /2125	209 /2103
110 /2123	210 /2138
111 /2113	211 /2118
112 /2102	212 /2126
113 /2121	213 /2104
114 /2134	214 /2137
115 /2139	215 /2123
116 /2115	216 /2129
117 /2106	217 /2116
118 /2131	218 /2124
119 /2138	219 /2131
120 /2122	220 /2105
121 /2135	221 /2102
122 /2141	222 /2114
123 /2116	223 /2111
124 /2129	224 /2106
125 /2128	225 /2108
126 /2130	226 /2101
127 /2105	227 /2132
128 /2136	228 /2122
129 /2120	229 /2134
130 /2127	230 /2133
131 /2126	231 /2112
132 /2109	232 /2141
133 /2137	233 /2121
134 /2111	234 /2115
135 /2110	235 /2113
136 /2119	236 /2130
137 /2140	237 /2125
138 /2108	238 /2127
139 /2142 (LC)	239 /2139
140 /2107	240 /2140
141 /2117	241 /2119
142 /2133	242 /2110

Rabi 2022-23

		Nation 2022-25
1.	Trial No.	22
2	Name of the trial:	Initial Variety Trial – Early –Transplanted (IVT- E-TP)
3	Objective:	To study the comparative performance of early elite cultures in Rabi transplanted irrigated conditions
4	Locations:	16
5	Layout:	Randomized Block Design (RBD)
6	Replications:	2
7	Fertilizers:	On the basis of soil type and recommended agronomic practices at the location. Entire P, K and 25% N as basal, 50% N after 25 days planting and 25% at reproductive stage.
8	Plant protection:	Need-based
9	Plot size:	10 sqm (This should be strictly followed)
10	Spacing:	20 cm between rows 15 cm between plants
11	No. of entries:	40
12	Check varieties:	National : CO-51; Zonal : Narendra 97 (Eastern), MTU 1153 (Southern); and Local Check.
13	General instructions:	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No.22: Layout plan of entries in Initial Variety Trial - Early Transplanted (IVT-E TP), Rabi 2022-23

Replication 1	Replication 2
Plot No. / Entry No.	Plot No. / Entry No.
101/2228	201 /2209
102 /2239	202 /2212
103 /2240 (LC)	203 /2228
104 /2217	204 /2208
105 /2231	205 /2227
106 /2236	206 /2222
107 /2230	207 /2211
108 /2229	208 /2234
109 /2207	209 /2210
110 /2234	210 /2226
111 /2225	211 /2220
112 /2226	212 /2239
113 /2212	213 /2238
114 /2220	214 /2231
115 /2233	215 /2203
116 /2224	216 /2207
117 /2213	217 /2232
118 /2216	218 /2224
119 /2219	219 /2204
120 /2208	220 /2202
121 /2204	221 /2229
122 /2237	222 /2206
123 /2232	223 /2223
124 /2210	224 /2217
125 /2215	225 /2221
126 /2218	226 /2214
127 /2206	227 /2236
128 /2214	228 /2237
129 /2205	229 /2230
130 /2222	230 /2235
131 /2209	231 /2205
132 /2235	232 /2240 (LC)
133 /2201	233 /2218
134 /2227	234 /2215
135 /2238	235 /2201
136 /2223	236/2216
137 /2202	237 /2213
138 /2221	238 /2219
139 /2211	239 /2233
140 /2203	240 /2225

1	Experiment No.:	23
2	Name of the trial:	Initial Variety Trial- Irrigated Early (Hills) –IVT-E (H)
3	Objective:	To study the comparative performance of elite early duration cold tolerant cultures under irrigated condition in hills
4	Locations:	17
5	Layout:	Randomized Block Design (RBD)
6	Replications:	2
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	10 sq m (This should be strictly followed)
10	Spacing:	20 x 15 cm
11	No. of entries:	22
12	Check varieties:	National: Vivekdhan 86, Zonal: Shalimar Rice 3 and Local Check
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (Days) Days to maturity (Days) Notes on pests, diseases and lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 23: Layout plan of entries in Initial Variety Trial -Early (Hills) – IVT-E (H), Kharif 2023

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.
101 /2308	201 /2313
102 /2322 (LC)	202 /2316
103 /2317	203 /2306
104 /2309	204 /2320
105 /2305	205 /2319
106 /2302	206 /2307
107 /2316	207 /2318
108 /2301	208 /2308
109 /2310	209 /2315
110 /2314	210 /2301
111 /2311	211 /2321
112 /2318	212 /2310
113 /2313	213 /2302
114 /2307	214 /2317
115 /2321	215 /2303
116 /2304	216/2312
117 /2320	217 /2305
118 /2319	218 /2314
119 /2312	219 /2322 (LC)
120 /2303	220 /2311
121 /2306	221 /2309
122 /2315	222 /2304

1	Experiment No.:	24
2	Name of the trial:	Advance Variety Trial 1 -Medium (Hills) – AVT 1- M (H)-Irrigated
3	Objective:	To study the comparative performance of elite medium duration cold tolerant cultures under irrigated condition in hills
4	Locations:	19
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	15 sq m (This should be strictly followed)
10	Spacing:	20 x 15 cm
11	No. of entries:	12
12	Check varieties:	National: Vivekdhan 62, Zonal: VL Dhan 68 (North & South), RC Maniphou 11 (North East) and Local Check
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (Days) Days to maturity (Days) Notes on pests, diseases and lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No.24: Layout plan of entries in Advance Variety Trial 1-Medium (Hills) – AVT 1--M (H), Kharif 2023

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /2410	201 /2412 (LC)	301 /2403
102 /2407	202 /2409	302 /2402
103 /2406	203 /2402	303 /2404
104 /2403	204 /2407	304 /2410
105 /2402	205 /2408	305 /2405
106 /2401	206 /2410	306 /2408
107 /2405	207 /2406	307 /2407
108 /2408	208 /2404	308 /2411
109 /2411	209 /2401	309 /2409
110 /2404	210 /2405	310 /2412 (LC)
111 /2409	211 /2403	311 /2401
112 /2412 (LC)	212 /2411	312 /2406

1	Experiment No.	25
2	Name of the trial:	Initial Variety Trial-Medium (Hills) – IVT-M (H)- Irrigated
3	Objective:	To study the comparative performance of elite medium duration cold tolerant cultures under irrigated condition in hills
4	Locations:	19
5	Layout:	Randomized Block Design (RBD)
6	Replications:	2
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	10 Sq m (This should be strictly followed)
10	Spacing:	20 X 15 cm
11	No. of entries:	22
12	Check varieties:	National : Vivekdhan 62, Zonal : VL Dhan 68 (North & South), RC Maniphou 11 (North East) and Local Check
13	General instructions: Data to be collected:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.)
		Days to 50% flowering (Days) Days to maturity (Days) Notes on pests, diseases and lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 25: Layout plan of entries in Initial Variety Trial – Medium Hills (IVT-M (H), Kharif 2023

Replication 1	Replication 2
Plot No. / Entry No.	Plot No. / Entry No.
101 /2509	201 /2517
102 /2510	202 /2519
103 /2517	203 /2522
104 /2501	204 /2508
105 /2521 (LC)	205 /2512
106 /2518	206 /2510
107 /2508	207 /2516
108 /2514	208 /2520
109 /2502	209 /2511
110 /2519	210 /2506
111 /2512	211 /2501
112 /2504	212 /2502
113 /2511	213 /2515
114 /2507	214 /2509
115 /2516	215 /2513
116 /2520	216 /2504
117 /2515	217 /2505
118 /2506	218 /2503
119 /2513	219 /2518
120 /2505	220 /2514
121/2522	221/2507
122/2503	222/2521 (LC)

1	Experiment No.	26
2	Name of the trial:	Initial Variety Trial-Upland (Hills) – IVT-U (H)
3	Objective:	To study the comparative performance of elite medium duration cold tolerant cultures under rainfed upland condition in hills
4	Locations:	12
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	10 Sq m (This should be strictly followed)
10	Spacing:	20 X 15 cm
11	No. of entries:	14
12	Check varieties:	National: Sukaradhan 1, Zonal: VL Dhan 158 (North & South), Bhalum-1 (North East) and Local Check
13 14	General instructions: Data to be collected:	 Sow the seedbed as thin as possible Gap fill within a week of sowing Incorporate fertilizer evenly Gap fill within a week of planting Incorporate fertilizer evenly Grain yield (kg/plot) based on net plot size to be reported
14	Data to be confected:	 Grain yield (kg/piot) based on het plot size to be reported Panicles per sq m (No.) Days to 50% flowering (Days) Days to maturity (Days) Notes on pests, diseases and lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 26: Layout plan of entries in Initial Variety Trial –Upland Hills (IVT-U (H), Kharif 2023

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /2607	201 /2614 (LC)	301 /2613
102 /2606	202 /2605	302 /2609
103 /2602	203 /2608	303 /2606
104 /2601	204 /2607	304 /2610
105 /2613	205 /2611	305 /2604
106 /2608	206 /2613	306 /2603
107 /2603	207 /2604	307 /2608
108 /2612	208 /2601	308 /2602
109 /2611	209 /2610	309 /2614 (LC)
110 /2605	210 /2606	310 /2601
111 /2614 (LC)	211 /2603	311 /2607
112 /2609	212 /2612	312 /2611
113 /2610	213 /2602	313 /2605
114 /2604	214 /2609	314 /2612

Experiment No. 27

Name of the trial: **Initial Variety Trial - Japonica (IVT-J)**

Objective: To evaluate comparative performance of japonicas for yield and quality

characteristics.

8 Locations:

Randomized Block Design (RBD) Layout:

Replications:

Fertilizer: As per the recommendation of the centre

Plant protection: Need-based

Plot size: 10 sqm (This should be strictly followed) Spacing: 20 cm between rows 15 cm between plants

7 No. of entries:

Check Varieties: Shalimar Rice-5, Varundhan, Bhrigudhan and Local check.

General instructions: 1. Sow the seedbed as thin as possible.

2. Transplant 25 days old seedlings.

3. Transplant seedlings very shallow.

4. Gap fill within a week of transplanting.

5. Incorporate fertilizers evenly

Data to be collected: 1. Plant height (cm)

2. Days to 50% flowering (No.)

3. Days to maturity (No.)

4. Panicles/sq m (No.)

5. Panicle length (cm)

6. Panicle weight (g)

7. Sterility percentage

8. Test weight (g)

9. Grain yield (kg/plot)

10. Score on incidence of pest/disease in field and also conditions, if

available

Trial No. 27: Layout plan of entries in Initial Variety Trial -Japonica (IVT-J), Kharif 2023

Replication 1	Replication 2	Replication 3	Replication 4
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No	Plot No. / Entry No
101 /2705	201 /2706	301 /2702	401 /2701
102 /2703	202 /2701	302 /2707 (LC)	402 /2705
103 /2704	203 /2705	303 /2706	403 /2703
104 /2701	204 /2707 (LC)	304 /2703	404 /2702
105 /2706	205 /2704	305 /2701	405 /2704
106 /2702	206 /2703	306 /2705	406 /2707 (LC)
107 /2707 (LC)	207 /2702	307 /2704	407 /2706

	_		
1.	Trial No.	33	
2	Name of the trial:	Advance Variety Trial 2 – Early – Transplanted (AVT 2- E-TP)	
3	Objective:	To study the comparative performance of early elite cultures in transplanted irrigated conditions	
4	Locations:	49	
5	Layout:	Randomized Block Design (RBD)	
6	Replications:	3	
7	Fertilizers:	On the basis of soil type and recommended agronomic practices at the location. Entire P, K and 25% N as basal, 50% N after 25 days planting and 25% at reproductive stage.	
8	Plant protection:	Need-based	
9	Plot size:	15 sqm (This should be strictly followed)	
10	Spacing:	20 cm between rows 15 cm between plants	
11	No. of entries:	19	
12	Check varieties:	National: CO-51; Zonal: PR 124 (Northern): Narendra 97 (Eastern): Luit (North Eastern); Sahbhagidhan (Central & Western): MTU 1153 (Southern); Hybrid: US 314 and Local Check.	
13	General instructions:	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. 	

Trial No.33: Layout plan of entries in Advance Variety Trial 2 - Early Transplanted (AVT 2-E TP), Kharif 2023

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /3312	201 /3316	301 /3307
102 /3309	202 /3317	302 /3302
103 /3314	203 /3304	303 /3313
104 /3317	204 /3307	304 /3311
105 /3302	205 /3312	305 /3310
106 /3303	206 /3305	306 /3318
107 /3301	207 /3319 (LC)	307 /3314
108 /3318	208 /3311	308 /3306
109 /3304	209 /3314	309 /3319 (LC)
110 /3308	210 /3302	310 /3301
111 /3310	211 /3303	311 /3308
112 /3313	212 /3310	312 /3316
113 /3305	213 /3306	313 /3309
114/3319 (LC)	214 /3309	314 /3315
115 /3316	215 /3315	315 /3312
116/3306	216/3308	316 /3305
117 /3315	217 /3301	317 /3304
118 /3307	218 /3318	318 /3303
119 /3311	219 /3313	319 /3317

	India 2020				
1.	Trial No.	34			
2	Name of the trial:	Advance Variety Trial 1 – Early –Transplanted (AVT 1- E-TP)			
3	Objective:	To study the comparative performance of early elite cultures in transplanted irrigated conditions			
4	Total Locations:	49 (05 For Zone – II)			
5	Layout:	Randomized Block Design (RBD)			
6	Replications:	3			
7	Fertilizers:	On the basis of soil type and recommended agronomic practices at the location. Entire P, K and 25% N as basal, 50% N after 25 days planting and 25% at reproductive stage.			
8	Plant protection:	Need-based			
9	Plot size:	15 sqm (This should be strictly followed)			
10	Spacing:	20 cm between rows 15 cm between plants			
11	Total No. of entries:	57 (For Zone-II only 22 entries)			
12	Check varieties:	National: CO-51; Zonal: PR 124 (Northern); Hybrid: US 314 and Local Check.			
13	General instructions:	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly 			
14	Data to be collected:	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. 			

Trial No.34: Layout plan of entries in Advance Variety Trial 1 - Early Transplanted (AVT 1-E TP), Kharif 2023 (Zone – II)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /3439	201 /3442	301 /3417
102 /3444	202 /3401	302 /3439
103 /3421	203 /3418	303 /3413
104 /3417	204 /3439	304 /3445
105 /3407	205 /3434	305 /3444
106 /3446	206 / 3449	306 /3421
107 /3430	207 /3407	307 /3401
108 /3416	208 /3421	308 /3441 (LC)
109 /3443	209 /3438	309 /3449
110 /3401	210 /3430	310 /3442
111 /3438	211 /3447	311 /3428
112 /3413	212 /3443	312 /3430
113 /3442	213 /3416	313 /3434
114 /3447	214 /3417	314 /3418
115 /3434	215 /3441 (LC)	315 /3447
116 /3449	216 /3444	316 /3446
117 /3445	217 /3428	317 /3438
118 /3440	218 /3402	318 /3416
119 /3402	219 /3440	319 /3443
120 /3441 (LC)	220 /3445	320 /3407
121 /3428	221 /3413	321 /3440
122 /3418	222 /3446	322 /3402

<u>Note</u>: Total No. of entries in the trial are 57; For Zone-II only 22 entries are included. Wherever missing numbers are found, those entries are not included for Zone-II

1.	Trial No.	34	
2	Name of the trial:	Advance Variety Trial 1 – Early –Transplanted (AVT 1- E-TP)	
3	Objective:	To study the comparative performance of early elite cultures in transplanted irrigated conditions	
4	Total Locations:	49 (13 For Zone – III)	
5	Layout:	Randomized Block Design (RBD)	
6	Replications:	3	
7	Fertilizers:	On the basis of soil type and recommended agronomic practices at the location. Entire P, K and 25% N as basal, 50% N after 25 days planting and 25% at reproductive stage.	
8	Plant protection:	Need-based	
9	Plot size:	15 sqm (This should be strictly followed)	
10	Spacing:	20 cm between rows 15 cm between plants	
11	Total No. of entries:	57 (For Zone-III only 27 entries)	
12	Check varieties:	National: CO-51; Zonal: Narendra 97 (Eastern); Hybrid: US 314 and Local Check.	
13	General instructions:	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. 	

Trial No.34: Layout plan of entries in Advance Variety Trial 1 - Early Transplanted (AVT 1-E TP), Kharif 2023 (Zone –III)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /3443	201 /3406	301 /3434
102 /3418	202 /3441 (LC)	302 /3431
103 /3442	203 /3407	303 /3406
104 /3402	204 /3426	304 /3407
105 /3431	205 /3401	305 /3409
106 /3446	206 /3440	306 /3413
107 /3407	207 /3442	307 /3418
108 /3417	208 /3428	308 /3449
109 /3438	209 /3443	309 /3441 (LC)
110 /3434	210/3410	310 /3426
111 /3413	211 /3416	311 /3421
112 /3428	212 /3418	312 /3410
113 /3426	213 /3438	313 /3444
114 /3430	214 /3447	314 /3401
115 /3447	215 /3409	315 /3417
116/3416	216 /3430	316 /3445
117 /3406	217 /3414	317 /3402
118 /3449	218 /3413	318 /3430
119 /3401	219 /3421	319 /3428
120 /3444	220 /3434	320 /3440
121 /3421	221 /3445	321 /3442
122 /3440	222 /3431	322 /3416
123 /3410	223 /3402	323 /3438
124 /3414	224 /3446	324 /3447
125 /3445	225 /3417	325 /3443
126 /3409	226 /3444	326 /3414
127 /3441 (LC)	227 /3449	327 /3446

Note: Total No. of entries in the trial are 57; For Zone-III only 27 entries are included. Wherever missing numbers are found, those entries are not included for Zone-III

1.	Trial No.	34	
2	Name of the trial:	Advance Variety Trial 1 – Early –Transplanted (AVT 1- E-TP)	
3	Objective:	To study the comparative performance of early elite cultures in transplanted irrigated conditions	
4	Total Locations:	49 (3 For Zone – IV)	
5	Layout:	Randomized Block Design (RBD)	
6	Replications:	3	
7	Fertilizers:	On the basis of soil type and recommended agronomic practices at the location. Entire P, K and 25% N as basal, 50% N after 25 days planting and 25% at reproductive stage.	
8	Plant protection:	Need-based	
9	Plot size:	15 sqm (This should be strictly followed)	
10	Spacing:	20 cm between rows 15 cm between plants	
11	Total No. of entries:	57 (For Zone-IV only 49 entries)	
12	Check varieties:	National: CO-51; Zonal: Luit (North Eastern); Hybrid: US 314 and Local Check.	
13	General instructions:	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. 	

Trial No.34: Layout plan of entries in Advance Variety Trial 1 - Early Transplanted (AVT 1-E TP), Kharif 2023 (Zone –IV)

Replication 1 Plot	Replication 2 Plot	Replication 3 Plot
No. / Entry No.	No. / Entry No.	No. / Entry No.
101/3430	201/3418	301 /3428
102 /3414	202 /3453	302 /3447
103 /3436	203 /3412	303 /3418
104 /3441 (LC)	204 /3437	304 /3413
105/3416	205 /3414	305 /3404
106 /3412	206 /3434	306/3405
107 /3453	207 /3427	307/3408
108 /3402	208/3411	308/3427
109/3409	209/3419	309/3414
110 /3407	210 /3403	310 /3433
111 /3411	210/3403	311/3423
112 /3404	211/3438	312/3445
113 /3421	212/3440	312/3445 313/3441 (LC)
114 /3447		314/3417
115 /3420	214 /3431 215 /3404	315 /3430
116 /3418	216 /3450	316/3446
117 /3449	217 /3423	317 /3449
118 /3424	218 /3413	318 /3425
119 /3425	219 /3436	319 /3435
120 /3443	220 /3441 (LC)	320 /3429
121 /3437	221 /3445	321 /3420
122 /3415	222 /3449	322 /3442
123 /3428	223 /3422	323 /3421
124 /3442	224 /3417	324 /3448
125 /3413	225 /3408	325 /3416
126 /3444	226 /3432	326 / 3436
127 /3403	227 /3401	327 /3419
128 /3450	228 /3425	328 /3402
129 /3423	229 /3435	329 /3437
130 /3427	230 /3443	330 / 3438
131 /3431	231 /3421	331 /3407
132 /3405	232 /3442	332 /3452
133 /3452	233 /3448	333 /3444
134 /3445	234 /3447	334 /3409
135 /3446	235 /3407	335 /3453
136 /3401	236 /3433	336/3401
137 /3440	237 /3451	337 /3411
138 /3435	238 /3420	338 /3451
139 /3433	239 /3416	339 /3412
140 /3417	240 /3429	340 /3415
141 /3451	241 /3409	341 /3443
142 /3438	242 /3428	342 /3424
143 /3419	243 /3402	343 /3403
144 /3422	244 /3405	344 /3440
145 /3429	245 /3430	345 /3422
146 /3448	246 /3444	346 /3432
147 /3434	247 /3424	347 /3434
148 /3432	248 /3415	348 /3450
149 /3408	249 /3452	349 /3431

Note: Total No. of entries in the trial are 57; For Zone-IV only 49 entries are included. Wherever missing numbers are found, those entries are not included for Zone-IV

1.	Trial No.	34	
2	Name of the trial:	Advance Variety Trial 1 – Early –Transplanted (AVT 1- E-TP)	
3	Objective:	To study the comparative performance of early elite cultures in transplanted irrigated conditions	
4	Total Locations:	49 (6 For Zone – V)	
5	Layout:	Randomized Block Design (RBD)	
6	Replications:	3	
7	Fertilizers:	On the basis of soil type and recommended agronomic practices at the location. Entire P, K and 25% N as basal, 50% N after 25 days planting and 25% at reproductive stage.	
8	Plant protection:	Need-based	
9	Plot size:	15 sqm (This should be strictly followed)	
10	Spacing:	20 cm between rows 15 cm between plants	
11	Total No. of entries:	57 (For Zone-V only 21entries)	
12	Check varieties:	National: CO-51; Zonal: Sahbhagidhan (Central); Hybrid: US 314 and Local Check.	
13	General instructions:	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. 	

Trial No.34: Layout plan of entries in Advance Variety Trial 1 - Early Transplanted (AVT 1-E TP), Kharif 2023 (Zone – V)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /3430	201 /3421	301 /3446
102 /3416	202 /3407	302 /3440
103 /3402	203 /3418	303 /3444
104 /3438	204 /3440	304 /3418
105 /3440	205 /3417	305 /3428
106 /3434	206 /3413	306 /3402
107 /3443	207 /3430	307 /3421
108 /3401	208 /3444	308 /3443
109 /3428	209 /3445	309 /3417
110 /3446	210 /3443	310 /3445
111 /3417	211 /3428	311 /3442
112 /3441 (LC)	212 /3447	312 /3438
113 /3418	213 /3442	313 /3434
114 /3421	214 /3402	314 /3401
115 /3449	215 /3441 (LC)	315 /3416
116 /3413	216 /3449	316 /3407
117 /3407	217 /3416	317 /3413
118 /3447	218 /3446	318 /3430
119 /3445	219 /3401	319 /3447
120 /3442	220 /3438	320 /3441 (LC)
121 /3444	221 /3434	321 /3449

Note: Total No. of entries in the trial are 57; For Zone-V only 21 entries are included. Wherever missing numbers are found, those entries are not included for Zone-V

Milit 1 2020		
1.	Trial No.	34
2	Name of the trial:	Advance Variety Trial 1 – Early –Transplanted (AVT 1- E-TP)
3	Objective:	To study the comparative performance of early elite cultures in transplanted irrigated conditions
4	Total Locations:	49 (6 For Zone – VI)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	On the basis of soil type and recommended agronomic practices at the location. Entire P, K and 25% N as basal, 50% N after 25 days planting and 25% at reproductive stage.
8	Plant protection:	Need-based
9	Plot size:	15 sqm (This should be strictly followed)
10	Spacing:	20 cm between rows 15 cm between plants
11	Total No. of entries:	57 (For Zone-VI only 21 entries)
12	Check varieties:	National: CO-51; Zonal: Sahbhagidhan (Western); Hybrid: US 314 and Local Check.
13	General instructions:	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No.34: Layout plan of entries in Advance Variety Trial 1 - Early Transplanted (AVT 1-E TP), Kharif 2023 (Zone – VI)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /3421	201 /3407	301 /3445
102 /3447	202 /3401	302 /3430
103 /3434	203 /3445	303 /3402
104 /3413	204 /3444	304 /3449
105 /3407	205 /3416	305 /3418
106 /3428	206 /3443	306 /3416
107 /3449	207 /3434	307 /3438
108 /3416	208 /3421	308 /3441 (LC)
109 /3445	209 /3430	309 /3440
110 /3441 (LC)	210 /3447	310 /3444
111 /3438	211 /3446	311 /3447
112 /3418	212 /3428	312 /3417
113 /3402	213 /3413	313 /3407
114 /3442	214 /3418	314 /3428
115 /3443	215 /3442	315 /3434
116 /3444	216 /3438	316 /3401
117 /3446	217 /3402	317 /3421
118 /3440	218/3441 (LC)	318 /3413
119 /3430	219 /3417	319 /3443
120 /3417	220 /3440	320 /3446
121 /3401	221 /3449	321 /3442

Note: Total No. of entries in the trial are 57; For Zone-VI only 21 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VI

1.	Trial No.	34
2	Name of the trial:	Advance Variety Trial 1 – Early –Transplanted (AVT 1- E-TP)
3	Objective:	To study the comparative performance of early elite cultures in transplanted irrigated conditions
4	Total Locations:	49 (16 For Zone – VII)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	On the basis of soil type and recommended agronomic practices at the location. Entire P, K and 25% N as basal, 50% N after 25 days planting and 25% at reproductive stage.
8	Plant protection:	Need-based
9	Plot size:	15 sqm (This should be strictly followed)
10	Spacing:	20 cm between rows 15 cm between plants
11	Total No. of entries:	57 (For Zone-VII only 26 entries)
12	Check varieties:	National: CO-51; Zonal: MTU 1153 (Southern); Hybrid: US 314; Local Check and Recurrent Parent: ADT 45
13	General instructions:	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No.34: Layout plan of entries in Advance Variety Trial 1 – Early ransplanted (AVT 1-E TP), Kharif 2023 (Zone –VII)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /3446	201 /3402	301 /3416
102 /3439	202 /3454	302 /3443
103 /3457	203 /3417	303 /3440
104 /3440	204 /3407	304 /3457
105 /3430	205 /3445	305 /3455
106/3418	206 /3434	306 /3456
107 /3421	207 /3444	307 /3413
108 /3454	208 /3456	308 /3430
109 /3441 (LC)	209 /3447	309 /3439
110 /3443	210 /3430	310 /3447
111 /3407	211 /3443	311 /3421
112 /3413	212 /3438	312 /3418
113 /3447	213 /3421	313 /3454
114 /3455	214 /3449	314 /3434
115 /3401	215 /3442	315 /3407
116/3438	216 /3457	316 /3445
117 /3449	217 /3418	317 /3417
118 /3444	218 /3401	318/3441 (LC)
119 /3428	219 /3455	319 /3444
120 /3402	220 /3428	320 /3442
121 /3442	221 /3416	321 /3446
122 /3434	222 /3413	322 /3438
123 /3417	223 /3440	323 /3401
124 /3456	224 /3441 (LC)	324 /3428
125 /3445	225 /3439	325 /3449
126 /3416	226 /3446	326 /3402

Note: Total No. of entries in the trial are 57; For Zone-VII only 26 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VII

	Kharif 2023		
1.	Trial No.	35	
2	Name of the trial:	Initial Variety Trial – Early –Transplanted (IVT- E-TP)	
3	Objective:	To study the comparative performance of early elite cultures in transplanted irrigated conditions	
4	Locations:	49	
5	Layout:	Simple Lattice Design	
6	Replications:	2	
7	Fertilizers:	On the basis of soil type and recommended agronomic practices at the location. Entire P, K and 25% N as basal, 50% N after 25 days planting and 25% at reproductive stage.	
8	Plant protection:	Need-based	
9	Plot size:	10 sq m (This should be strictly followed)	
10	Spacing:	20 cm between rows; 15 cm between plants	
11	No. of entries:	64	
12	Check varieties:	National : CO-51; Zonal : PR 124 (Northern), Narendra 97 (Eastern), Luit (North Eastern), Sahbhagidhan (Central & Western), MTU 1153 (Southern) and Local Check.	
13	General instructions:	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle (Mean of 5 panicles each entry) Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests 	

When the mean yield of the experiment is below 4 t/ha, kindly offer an explanation for the low yield,

Notes on lodging

Rainfall during the crop growth (Number of rainy days)

Maximum and minimum temperature.

Grain type

Trial No.35: Layout plan of entries in Initial Variety Trial - Early Transplanted (IVT-E TP), Kharif 2023

REPLICATION-I

101/3517	109/3559	117/3534	125/3506	133/3512	141/3555	149/3530	157/3509
102/3522	110/3552	118/3554	126/3547	134/3545	142/3510	150/3505	158/3527
103/3533	111/3513	119/3514	127/3531	135/3525	143/3511	151/3539	159/3551
104/3516	112/3519	120/3537	128/3526	136/3515	144/3549	152/3562	160/3540
105/3507	113/3532	121/3560	129/3548	137/3504	145/3544	153/3528	161/3503
106/3563	114/3543	122/3524	130/3558	138/3546	146/3557	154/3501	162/3535
107/3550	115/3541	123/3520	131/3502	139/3536	147/3521	155/3553	163/3523
108/3542	116/3556	124/3508	132/3564	140/3529	148/3561	156/3518	164/3538
			(LC)				

REPLICATION-II

201/3503	209/3538	217/3523	225/3535	233/3509	241/3551	249/3527	257/3540
202/3560	210/3508	218/3520	226/3524	234/3534	242/3514	250/3554	258/3537
203/3528	211/3518	219/3553	227/3501	235/3530	243/3539	251/3505	259/3562
204/3532	212/3556	220/3541	228/3543	236/3559	244/3513	252/3552	260/3519
205/3544	213/3561	221/3521	229/3557	237/3555	245/3511	253/3510	261/3549
206/3548	242/3564	222/3502	230/3558	238/3506	246/3531	254/3547	262/3526
	(LC)						
207/3507	215/3542	223/3550	231/3563	239/3517	247/3533	255/3522	263/3516
208/3504	216/3529	224/3536	232/3546	240/3512	248/3525	256/3545	264/3515

	E-marina ant Na	26
1 2	Experiment No. Name of the trial:	36 Advance Variety Trial 2 – Irrigated Mid Early (AVT 2-IME)
3	Objective:	To study the comparative performance of mid-early duration elite cultures and hybrids in irrigated areas
4	Total No. of Locations:	52 (For Zone II, V & VI—20 Locations)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8	Plant protection:	Need-based
9	Plot size:	15 sq.m (This should be strictly followed)
10	Spacing:	20 cm between rows, 15 cm between hills
11	Total No. of entries:	21 (For Zone-II, V & VI—15 entries)
12	Check varieties:	National: Gontrabidhan-3; Zonal: PR 113 (Northern), MTU 1010 (Central), Karjat-7 (Western); Hybrid: US 312 and Local check
13	General instructions	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle (Mean of 5 panicles each entry) Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 36: Layout plan of entries in Advance Variety Trial 2- Irrigated Mid Early, AVT 2- IME, Kharif 2023 (Zone-II, V & VI)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /3612	201 /3613	301 /3605
102 /3601	202 /3606	302 /3612
103 /3607	203 /3604	303 /3621
104 /3603	204 /3607	304/3614 (LC)
105 /3606	205 /3612	305 /3604
106 /3605	206 /3609	306/3611
107 /3602	207 /3603	307 /3606
108 /3613	208 /3610	308 /3601
109 /3608	209 /3614 (LC)	309 /3602
110 /3610	210 /3611	310 /3613
111 /3604	211 / 3621	311 /3603
112 /3611	212 /3608	312 /3610
113 /3614 (LC)	213 /3602	313 /3608
114 /3609	214 /3601	314 /3607
115 /3621	215 /3605	315 /3609

<u>Note</u>: Total No. of entries in the trial are 21; For Zone-II, V & VI only 15 entries are included. Wherever missing numbers are found, those entries are not included for Zone-II, V & VI.

1 2	Experiment No. Name of the trial:	36 Advance Variety Trial 2 – Irrigated Mid Early (AVT 2-IME)
3	Objective:	To study the comparative performance of mid-early duration elite cultures and hybrids in irrigated areas
4	Total No. of Locations:	52 (For Zone III & IV—15 Locations)
5	Layout:	Randomized Block Design (RBD)
3	Layout.	Randonnized Block Besign (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need-based
9	Plot size:	15 sq.m (This should be strictly followed)
10	Spacing:	20 cm between rows, 15 cm between hills
11	Total No. of entries:	21 (For Zone-III & IV—18 entries)
12	Check varieties:	National: Gontrabidhan-3; Zonal: Lalat (Eastern and North Eastern); Hybrid: US 312 and Local check Recurrent Parent: Naveen
13	General instructions	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle (Mean of 5 panicles each entry) Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 36: Layout plan of entries in Advance Variety Trial 2- Irrigated Mid Early, AVT 2- IME, Kharif 2023 (Zone-III & IV)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /3618	201 /3613	301 /3605
102 /3620	202 /3606	302 /3612
103 /3619	203 /3609	303 /3621
104 /3603	204 /3607	304/3614 (LC)
105 /3606	205 /3612	305 /3604
106 /3605	206 / 3618	306/3611
107 /3607	207 /3620	307 /3606
108 /3613	208 /3619	308 /3601
109 /3608	209 /3614 (LC)	309 /3602
110 /3610	210 /3611	310 /3613
111 /3604	211 / 3621	311 /3603
112 /3611	212 /3608	312 /3610
113 /3614 (LC)	213 /3602	313 /3608
114 /3609	214 /3601	314 /3607
115 /3621	215 /3605	315 /3609
116/3601	216/3604	316/3620
117/3602	217/3610	317/3618
118/3612	218/3603	318/3619

<u>Note</u>: Total No. of entries in the trial are 21; For Zone-III & IV only 18 entries are included. Wherever missing numbers are found, those entries are not included for Zone-III & IV.

1 2	Experiment No. Name of the trial:	36 Advance Variety Trial 2 – Irrigated Mid Early (AVT 2-IME)
3	Objective:	To study the comparative performance of mid-early duration elite cultures and hybrids in irrigated areas
4	Total No. of Locations:	52 (For Zone VII—17 Locations)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
		•
8	Plant protection:	Need-based
9	Plot size:	15 sq.m (This should be strictly followed)
10	Spacing:	20 cm between rows, 15 cm between hills
11	Total No. of entries:	21 (For Zone-VII—18 entries)
12	Check varieties:	National : Gontrabidhan-3; Zonal : MTU 1010 (Southern); Hybrid: US 312 and Local check Recurrent Parent: ADT 39
13	General instructions	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle (Mean of 5 panicles each entry) Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 36: Layout plan of entries in Advance Variety Trial 2- Irrigated Mid Early, AVT 2- IME, Kharif 2023 (Zone-VII)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /3615	201 /3613	301 /3605
102 /3617	202 /3606	302 /3612
103 /3616	203 /3609	303 /3621
104 /3603	204 /3607	304 /3614 (LC)
105 /3606	205 /3612	305 /3604
106 /3605	206/3616	306 /3611
107 /3607	207 /3617	307 /3606
108/3613	208 /3615	308 /3601
109 /3608	209 /3614 (LC)	309 /3602
110 /3610	210 /3611	310 /3613
111 /3604	211 / 3621	311 /3603
112 /3611	212 /3608	312 /3610
113 /3614 (LC)	213 /3602	313 /3608
114 /3609	214 /3601	314 /3607
115 /3621	215 /3605	315 /3609
116/3601	216/3604	316/3617
117/3602	217/3610	317/3615
118/3612	218/3603	318/3616

Note: Total No. of entries in the trial are 21; For Zone-VII only 18 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VII.

1	Experiment No.	37
1 2	Name of the trial:	Advance Variety Trial 1 – Irrigated Mid Early (AVT 1-IME)
3	Objective:	To study the comparative performance of mid-early duration elite cultures and hybrids in irrigated areas
4	Total Locations:	52 (06 for Zone – II)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8	Plant protection:	Need-based
9	Plot size:	15 sq.m (This should be strictly followed)
10	Spacing:	20 cm between rows, 15 cm between hills
11	Total No. of entries:	43 (For Zone-II only 22 entries)
12	Check varieties:	National : Gontrabidhan-3; Zonal : PR 113 (Northern); Hybrid: US 312; Local check and Recurrent Parent: Pusa 44
13	General instructions	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle (Mean of 5 panicles each entry) Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 37: Layout plan of entries in Advance Variety Trial 1- Irrigated Mid Early, AVT 1- IME, Kharif 2023 (Zone –II)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101/3720	201 /3729	301/3718
102 /3725	202 /3732 (LC)	302/3701
103 /3742	203 /3719	303 /3724
104 /3743	204 /3725	304 /3707
105 /3703	205 /3724	305 /3719
106 /3729	206/3716	306 /3728
107 /3709	207 /3718	307 /3725
108 /3701	208 /3703	308 / 3709
109 /3731	209 /3709	309 /3723
110 /3716	210 /3713	310 /3714
111 /3721	211 /3701	311 /3703
112 /3719	212 /3710	312 /3732 (LC)
113 /3718	213 /3707	313 /3731
114 /3727	214 /3721	314 /3743
115 /3713	215 /3728	315 /3729
116 /3710	216/3727	316 /3742
117 /3728	217 /3714	317 /3720
118 /3707	218 /3720	318 /3716
119 /3732 (LC)	219 /3742	319 /3727
120 /3723	220 /3731	320 /3713
121 /3724	221 /3743	321 /3721
122 /3714	222 /3723	322 /3710

<u>Note</u>: Total No. of entries in the trial are 43; For Zone-II only 22 entries are included. Wherever missing numbers are found, those entries are not included for Zone-II.

1	Experiment No.	37
2	Name of the trial:	Advance Variety Trial 1 – Irrigated Mid Early (AVT 1-IME)
3	Objective:	To study the comparative performance of mid-early duration elite cultures and hybrids in irrigated areas
4	Total Locations:	52 (12 for Zone – III)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8	Plant protection:	Need-based
9	Plot size:	15 sq.m (This should be strictly followed)
10	Spacing:	20 cm between rows, 15 cm between hills
11	Total No. of entries:	43 (For Zone-III only 19 entries)
12	Check varieties:	National: Gontrabidhan-3; Zonal: Lalat (Eastern); Hybrid: US 312; Local check and Recurrent Parents: Pusa 44 & Krishna Hamsa
13	General instructions	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle (Mean of 5 panicles each entry) Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 37: Layout plan of entries in Advance Variety Trial 1- Irrigated Mid Early, AVT 1- IME, Kharif 2023 (Zone –III)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /3730	201 /3740	301 /3731
102 /3718	202 /3724	302 /3729
103 /3724	203 /3743	303 /3728
104 /3719	204 /3726	304 /3720
105 /3740	205 /3725	305 /3719
106/3732 (LC)	206 /3721	306 /3726
107 /3726	207 /3719	307 /3732 (LC)
108 /3741	208 /3714	308 /3727
109 /3721	209 /3742	309 /3714
110 /3728	210 /3723	310 /3742
111 /3742	211 /3728	311 /3725
112 /3729	212 /3718	312 /3724
113 /3714	213 /3720	313 /3721
114 /3720	214 /3729	314 /3741
115 /3731	215 /3727	315 /3730
116 /3723	216 /3741	316/3743
117 /3725	217 /3731	317 /3718
118 /3727	218/3732 (LC)	318 /3740
119 /3743	219 /3730	319 /3723

<u>Note</u>: Total No. of entries in the trial are 43; For Zone-III only 19 entries are included. Wherever missing numbers are found, those entries are not included for Zone-III.

1	Experiment No.	37
1 2	Name of the trial:	Advance Variety Trial 1 – Irrigated Mid Early (AVT 1-IME)
3	Objective:	To study the comparative performance of mid-early duration elite cultures and hybrids in irrigated areas
4	Total Locations:	52 (03 for Zone – IV)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8	Plant protection:	Need-based
9	Plot size:	15 sq.m (This should be strictly followed)
10	Spacing:	20 cm between rows, 15 cm between hills
11	Total No. of entries:	43 (For Zone-IV only 28 entries)
12	Check varieties:	National: Gontrabidhan-3; Zonal: Lalat (North Eastern); Hybrid: US 312; Local check and Recurrent Parent: Krishna Hamsa
13	General instructions	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle (Mean of 5 panicles each entry) Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 37: Layout plan of entries in Advance Variety Trial 1- Irrigated Mid Early, AVT 1- IME, Kharif 2023 (Zone –IV)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /3715	201 /3725	301 /3716
102 /3741	202 /3704	302 /3722
103 /3740	203 /3720	303 /3718
104 /3732 (LC)	204 /3723	304 /3712
105 /3706	205 /3705	305 /3723
106 /3709	206/3711	306 /3719
107 /3725	207 /3732 (LC)	307 /3720
108 /3727	208 /3724	308 /3729
109 /3718	209 /3741	309 /3731
110 /3731	210 /3727	310 /3728
111 /3702	211 /3714	311 /3715
112 /3720	212 /3716	312 /3705
113 /3704	213 /3740	313 /3710
114 /3729	214 /3708	314 /3711
115 /3719	215 /3710	315 /3708
116/3716	216 /3715	316 /3704
117 /3710	217 /3709	317 /3714
118 /3721	218 /3702	318 / 3741
119 /3705	219 /3722	319 /3706
120 /3722	220 /3731	320 /3725
121 /3723	221 /3718	321 /3709
122 /3717	222 /3719	322 /3732 (LC)
123 /3724	223 /3712	323 /3727
124 /3728	224 /3721	324 /3717
125 /3712	225 /3717	325 /3702
126 /3711	226 /3728	326 / 3724
127 /3708	227 /3729	327 /3721
128 /3714	228 /3706	328 /3740

<u>Note</u>: Total No. of entries in the trial are 43; For Zone-IV only 28 entries are included. Wherever missing numbers are found, those entries are not included for Zone-IV.

1	Experiment No.	37
2	Name of the trial:	Advance Variety Trial 1 – Irrigated Mid Early (AVT 1-IME)
3	Objective:	To study the comparative performance of mid-early duration elite cultures and hybrids in irrigated areas
4	Total Locations:	52 (08 for Zone – V)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8	Plant protection:	Need-based
9	Plot size:	15 sq.m (This should be strictly followed)
10	Spacing:	20 cm between rows, 15 cm between hills
11	Total No. of entries:	43 (For Zone-V only 20 entries)
12	Check varieties:	National: Gontrabidhan-3; Zonal: MTU 1010 (Central); Hybrid: US 312; Local check and Recurrent Parent: MTU 1010
13	General instructions	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle (Mean of 5 panicles each entry) Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 37: Layout plan of entries in Advance Variety Trial 1- Irrigated Mid Early, AVT 1- IME, Kharif 2023 (Zone –V)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /3737	201 /3725	301 /3736
102 /3729	202 /3727	302 /3723
103 /3734	203 /3735	303 /3720
104 /3728	204 /3732 (LC)	304 /3721
105 /3735	205 /3714	305 /3718
106 /3738	206 /3728	306/3714
107 /3718	207 /3720	307 /3728
108 /3723	208 /3736	308 /3738
109 /3714	209 /3738	309 /3719
110 /3731	210 /3737	310/3732 (LC)
111 /3727	211 /3731	311 /3739
112 /3724	212 /3733	312 /3731
113 /3721	213 /3734	313 /3724
114 /3725	214 /3729	314 /3733
115 /3733	215 /3739	315 /3737
116 /3736	216 /3721	316/3735
117 /3732 (LC)	217 /3724	317 /3725
118 /3719	218 /3718	318 /3734
119 /3720	219 /3723	319 /3727
120 /3739	220 /3719	320 /3729

<u>Note</u>: Total No. of entries in the trial are 43; For Zone-V only 20 entries are included. Wherever missing numbers are found, those entries are not included for Zone-V.

1	Experiment No.	37
1 2	Name of the trial:	Advance Variety Trial 1 – Irrigated Mid Early (AVT 1-IME)
3	Objective:	To study the comparative performance of mid-early duration elite cultures and hybrids in irrigated areas
4	Total Locations:	52 (06 for Zone – VI)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need-based
9	Plot size:	15 sq.m (This should be strictly followed)
10	Spacing:	20 cm between rows, 15 cm between hills
11	Total No. of entries:	43 (For Zone-VI only 13 entries)
12	Check varieties:	National : Gontrabidhan-3; Zonal : Karjat-7 (Western); Hybrid: US 312 and Local check
13	General instructions	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle (Mean of 5 panicles each entry) Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 37: Layout plan of entries in Advance Variety Trial 1- Irrigated Mid Early, AVT 1- IME, Kharif 2023 (Zone –VI)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /3729	201 /3714	301 /3719
102 /3718	202 /3725	302 /3727
103 /3724	203 /3732 (LC)	303 /3725
104 /3731	204 /3727	304 /3729
105 /3725	205 /3724	305 /3732 (LC)
106 /3728	206 /3731	306/3714
107 /3719	207 /3720	307 /3724
108 /3727	208 /3729	308 /3718
109 /3721	209 /3728	309 /3720
110 /3714	210 /3718	310 /3721
111 /3720	211 /3721	311 /3723
112 /3732 (LC)	212 /3723	312 /3728
113 /3723	213 /3719	313 /3731

<u>Note</u>: Total No. of entries in the trial are 43; For Zone-VI only 13 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VI.

	Empariment No.	37
1	Experiment No.	
2	Name of the trial:	Advance Variety Trial 1 – Irrigated Mid Early (AVT 1-IME)
3	Objective:	To study the comparative performance of mid-early duration elite cultures and hybrids in irrigated areas
4	Total Locations:	52 (17 for Zone – VII)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8	Plant protection:	Need-based
9	Plot size:	15 sq.m (This should be strictly followed)
10	Spacing:	20 cm between rows, 15 cm between hills
11	Total No. of entries:	43 (For Zone-VII only 24 entries)
12	Check varieties:	National: Gontrabidhan-3; Zonal: MTU 1010 (Southern); Hybrid: US 312; Local check and Recurrent Parents: MTU 1010, Pusa 44 & Krishna Hamsa
13	General instructions	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle (Mean of 5 panicles each entry) Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 37: Layout plan of entries in Advance Variety Trial 1- Irrigated Mid Early, AVT 1- IME, Kharif 2023 (Zone –VII)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /3742	201 /3734	301 /3719
102 /3718	202 /3737	302 /3728
103 /3741	203 /3735	303 /3714
104 /3732 (LC)	204 /3738	304 /3739
105 /3725	205 /3743	305 /3741
106 /3743	206 /3733	306 / 3736
107 /3719	207 /3720	307 /3735
108 /3740	208 /3723	308 /3734
109 /3729	209 /3728	309 /3737
110 /3736	210 /3741	310 /3738
111 /3737	211 /3714	311 /3725
112 /3739	212 /3718	312 /3724
113 /3734	213 /3721	313 /3732 (LC)
114 /3714	214 /3742	314 /3720
115 /3738	215 /3725	315 /3743
116 /3728	216/3739	316/3723
117 /3724	217 /3719	317 /3733
118 /3731	218 /3736	318 /3729
119 /3720	219 /3732 (LC)	319 /3721
120 /3721	220 /3729	320 /3718
121 /3727	221 /3724	321 /3731
122 /3735	222 /3731	322 /3740
123 /3733	223 /3727	323 /3727
124 /3723	224 /3740	324 /3742

<u>Note</u>: Total No. of entries in the trial are 43; For Zone-VII only 24 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VII.

ICAR-INDIAN INSTITUTE OF RICE RESEARCH

Rajendranagar, Hyderabad – 500 030, Telangana Kharif 2023

		Kharii 2023	
1	Experiment No.	38	
2	Name of the trial:	Initial Variety Trial – Irrigated Mid Early (IVT-IME)	
3	Objective:	To study the comparative performance of mid-early duration elite cultures in irrigated areas	
4	Locations:	52	
5	Layout:	Simple Lattice design	
6	Replications:	2	
7	Fertilizers:	As per the recommendation of the centre	
8	Plant protection:	Need-based	
9	Plot size:	10 sq.m (This should be strictly followed)	
10	Spacing:	20 cm between rows, 15 cm between hills	
11	Total No. of entries:	64	
12	Check varieties:	National : Gontra Bidhan-3; Zonal : PR 113 (Northern), Lalat (Eastern and North Eastern), MTU 1010 (Central and Southern); Karjat-7 (Western) and Local check	
13	General instructions	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow (1-2 seedlings / hill). Gap fill within a week of planting Incorporate fertilizer evenly 	
42	Data to be collected	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) Number of fertile & sterile spikelets / Panicle (Mean of 5 panicles each entry) Purity score: (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. 	

REPLICATION-I

101/3817	109/3859	117/3834	125/3806	133/3812	141/3855	149/3830	157/3809
102/3822	110/3852	118/3854	126/3847	134/3845	142/3810	150/3805	158/3827
103/3833	111/3813	119/3814	127/3831	135/3825	143/3811	151/3839	159/3851
104/3816	112/3819	120/3837	128/3826	136/3815	144/3849	152/3862	160/3840
105/3807	113/3832	121/3860	129/3848	137/3804	145/3844	153/3828	161/3803
106/3863	114/3843	122/3824	130/3858	138/3846	146/3857	154/3801	162/3835
107/3850	115/3841	123/3820	131/3802	139/3836	147/3821	155/3853	163/3823
108/3842	116/3856	124/3808	132/3864	140/3829	148/3861	156/3818	164/3838
			(LC)				

REPLICATION-II

201/3803	209/3838	217/3823	225/3835	233/3809	241/3851	249/3827	257/3840
202/3860	210/3808	218/3820	226/3824	234/3834	242/3814	250/3854	258/3837
203/3828	211/3818	219/3853	227/3801	235/3830	243/3839	251/3805	259/3862
204/3832	212/3856	220/3841	228/3843	236/3859	244/3813	252/3852	260/3819
205/3844	213/3861	221/3821	229/3857	237/3855	245/3811	253/3810	261/3849
206/3848	242/3864	222/3802	230/3858	238/3806	246/3831	254/3847	262/3826
	(LC)						
207/3807	215/3842	223/3850	231/3863	239/3817	247/3833	255/3822	263/3816
208/3804	216/3829	224/3836	232/3846	240/3812	248/3825	256/3845	264/3815

ICAR-INDIAN INSTITUTE OF RICE RESEARCH RAJENDRANAGAR, HYDERABAD – 500 030, TELANGANA KHARIF 2023

1	Experiment No.	39
2	Name of the trial:	Advance Variety Trial 2 – Irrigated Medium (AVT 2-IM)
3	Objective:	To study the comparative performance of medium duration elite cultures and hybrids in irrigated areas
4	Total Locations:	48 (For Zone-II, III, IV, V & VI—31 Locations)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8 9 10 11	Plant protection: Plot size: Spacing: Total no. of entries:	Need - based 15 sq m (This should be strictly followed) 20 x 15 cm 17 (For Zone-II, III, IV, V & VI—15 entries)
12	Check varieties:	National: NDR 359; Zonal: PR 121 (Northern): CR Dhan 300 (Eastern & North Eastern): Karma Mahsuri (Central): Akshyadhan (Western): Hybrid: HRI 174 and Local Check.
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow (1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Days to 50% flowering Plant height (cm) Panicles per sq m (No.) Number of fertile and sterile spikelets per Panicle (Average of 50 Panicles) Spikelet Fertility (SPF) Purity score (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No.39: Layout plan of entries in Advance Variety Trial 2- Irrigated Medium (AVT 2 - IM), Kharif 2023 (Zone-II, III, IV, V & VI)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /3903	201 /3905	301 /3914
102 /3904	202 /3902	302 /3917 (LC)
103 /3911	203 /3913	303 /3907
104 /3902	204 /3906	304 /3908
105 /3907	205 /3910	305 /3905
106 /3906	206 /3912	306 /3909
107 /3908	207 /3901	307 /3904
108 /3905	208 /3909	308 /3912
109 /3914	209 /3917 (LC)	309 /3901
110 /3909	210 /3914	310 /3913
111 /3912	211 /3903	311 /3902
112 /3901	212 /3904	312 /3910
113 /3913	213 /3911	313 /3903
114 /3910	214 /3908	314 /3906
115 /3917 (LC)	215 /3907	315 /3911

Note: Total No. of entries in the trial are 17; For Zone-II, III, IV, V & VI only 15 entries are included. Wherever missing numbers are found, those entries are not included for Zone-II, III, IV, V & VI.

ICAR-INDIAN INSTITUTE OF RICE RESEARCH RAJENDRANAGAR, HYDERABAD – 500 030, TELANGANA KHARIF 2023

1	Experiment No.	39
2	Name of the trial:	Advance Variety Trial 2 – Irrigated Medium (AVT 2-IM)
3	Objective:	To study the comparative performance of medium duration elite cultures and hybrids in irrigated areas
4	Total Locations:	48 (For Zone-VII—17 Locations)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8 9 10 11	Plant protection: Plot size: Spacing: Total no. of entries:	Need - based 15 sq m (This should be strictly followed) 20 x 15 cm 17 (For VII—17 entries)
12	Check varieties:	National: NDR 359; Zonal: Jaya (Southern); Hybrid: HRI 174 and Local Check. Recurrent Parent: Gangavathi Sona
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow (1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Days to 50% flowering Plant height (cm) Panicles per sq m (No.) Number of fertile and sterile spikelets per Panicle (Average of 50 Panicles) Spikelet Fertility (SPF) Purity score (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No.39: Layout plan of entries in Advance Variety Trial 2- Irrigated Medium (AVT 2 - IM), Kharif 2023 (Zone-VII)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /3903	201 /3915	301 /3914
102 /3904	202 /3916	302 /3917 (LC)
103 /3907	203 /3913	303 /3901
104 /3915	204 /3906	304 /3908
105 /3916	205 /3910	305 /3905
106 /3906	206 /3912	306 /3909
107 /3908	207 /3901	307 /3904
108 /3905	208 /3909	308 /3915
109 /3902	209 /3917 (LC)	309 /3916
110 /3909	210 /3914	310 /3913
111 /3912	211 /3903	311 /3902
112 /3901	212 /3904	312 /3910
113 /3913	213 /3911	313 /3903
114 /3910	214 /3908	314 /3906
115 /3917 (LC)	215 /3907	315 /3911
116/3914	216/3902	316/3912
117/3911	217/3905	317/3907

Note: Total No. of entries in the trial are 17; For Zone-VII all 17 entries are included.

1	Experiment No.	40
2	Name of the trial:	Advance Variety Trial 1 – Irrigated Medium (AVT 1-IM)
3	Objective:	To study the comparative performance of medium duration elite cultures and hybrids in irrigated areas
4	Total Locations:	48 (04 for Zone-II)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8 9 10 11	Plant protection: Plot size: Spacing: Total No. of entries:	Need - based 15 sq m (This should be strictly followed) 20 x 15 cm 31 (For Zone-II only 18 entries)
12	Check varieties:	National: NDR 359; Zonal: PR 121 (Northern): Hybrid: HRI 174; Local Check and Recurrent Parent: Jaya
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Days to 50% flowering Plant height (cm) Panicles per sq m (No.) Number of fertile and sterile spikelets per Panicle (Average of 50 Panicles) Spikelet Fertility (SPF) Purity score (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No.40: Layout plan of entries in Advance Variety Trial 1- Irrigated Medium (AVT 1-IM), Kharif 2023 (Zone-II)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /4016	201 /4011	301 /4020
102 /4018	202 /4010	302 /4023
103 /4011	203 /4024 (LC)	303 /4010
104 /4021	204 /4013	304 /4018
105 /4012	205 /4021	305 /4002
106 /4013	206 /4012	306 /4024 (LC)
107 /4004	207 /4002	307 /4011
108 /4024 (LC)	208 /4028	308 /4005
109 /4002	209 /4031	309 /4016
110 /4010	210 /4029	310 /4012
111 /4023	211 /4030	311 /4031
112 /4005	212 /4016	312 /4030
113 /4020	213 /4018	313 /4028
114 /4009	214 /4023	314 /4029
115 /4030	215 /4004	315 /4009
116 /4031	216 /4005	316 /4021
117 /4029	217 /4020	317 /4013
118 /4028	218 /4009	318 /4004

Note: Total No. of entries in the trial are 31; For Zone-II only 18 entries are included. Wherever missing numbers are found, those entries are not included for Zone-II

1	Experiment No.	40
2	Name of the trial:	Advance Variety Trial 1 – Irrigated Medium (AVT 1-IM)
3	Objective:	To study the comparative performance of medium duration elite cultures and hybrids in irrigated areas
4	Total Locations:	48 (12 for Zone-III)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8 9 10 11	Plant protection: Plot size: Spacing: Total No. of entries:	Need - based 15 sq m (This should be strictly followed) 20 x 15 cm 31 (For Zone-III only 24 entries)
12	Check varieties:	National: NDR 359; Zonal: CR Dhan 300 (Eastern): Hybrid: HRI 174; Local Check and Recurrent Parent: Jaya
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Days to 50% flowering Plant height (cm) Panicles per sq m (No.) Number of fertile and sterile spikelets per Panicle (Average of 50 Panicles) Spikelet Fertility (SPF) Purity score (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No.40: Layout plan of entries in Advance Variety Trial 1- Irrigated Medium (AVT 1 -IM), Kharif 2023 (Zone-III)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /4012	201 /4017	301 /4008
102 /4028	202 /4005	302 /4013
103 /4030	203 /4023	303 /4024 (LC)
104 /4029	204 /4020	304 /4017
105 /4031	205 /4002	305 /4015
106 /4019	206 /4008	306 /4001
107 /4020	207 /4011	307 /4021
108 /4015	208 /4001	308 /4019
109 /4002	209 /4019	309 /4030
110 /4024 (LC)	210 /4013	310 /4029
111 /4008	211 /4021	311 /4028
112 /4023	212 /4014	312 /4031
113 /4021	213 /4004	313 /4020
114 /4001	214 /4003	314 /4009
115 /4017	215 /4024 (LC)	315 /4005
116 /4013	216 /4016	316 /4010
117 /4003	217 /4009	317 /4023
118 /4005	218 /4010	318 /4004
119 /4011	219 /4012	319 /4002
120 /4016	220 /4030	320 /4014
121 /4009	221 /4028	321 /4003
122 /4010	222 /4029	322 /4016
123 /4004	223 /4031	323 /4011
124 /4014	224 /4015	324 /4012

<u>Note</u>: Total No. of entries in the trial are 31; For Zone-III only 24 entries are included. Wherever missing numbers are found, those entries are not included for Zone-III

1	Experiment No.	40
2	Name of the trial:	Advance Variety Trial 1 – Irrigated Medium (AVT 1-IM)
3	Objective:	To study the comparative performance of medium duration elite cultures and hybrids in irrigated areas
4	Total Locations:	48 (04 for Zone-IV)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8 9 10 11	Plant protection: Plot size: Spacing: Total No. of entries:	Need - based 15 sq m (This should be strictly followed) 20 x 15 cm 31 (For Zone-IV only 17 entries)
12	Check varieties:	National: NDR 359; Zonal: CR Dhan 300 (North Eastern): Hybrid: HRI 174; Local Check and Recurrent Parent: Jaya
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Days to 50% flowering Plant height (cm) Panicles per sq m (No.) Number of fertile and sterile spikelets per Panicle (Average of 50 Panicles) Spikelet Fertility (SPF) Purity score (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No.40: Layout plan of entries in Advance Variety Trial 1- Irrigated Medium (AVT 1-IM), Kharif 2023 (Zone-IV)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /4031	201 /4009	301 /4021
102 /4029	202 /4013	302 /4012
103 /4030	203 /4006	303 /4023
104 /4028	204 /4011	304 /4010
105 /4004	205 /4012	305 /4020
106 /4009	206 /4005	306 /4013
107 /4020	207 /4004	307 /4006
108 /4024 (LC)	208 /4010	308 /4004
109 /4021	209 /4023	309 /4031
110 /4007	210 /4021	310 /4030
111 /4005	211 /4024 (LC)	311 /4029
112 /4013	212 /4007	312 /4028
113 /4023	213 /4020	313 /4011
114 /4006	214 /4029	314 /4005
115 /4011	215 /4031	315 /4009
116 /4012	216 /4030	316 /4007
117 /4010	217 /4028	317 /4024 (LC)

Note: Total No. of entries in the trial are 31; For Zone-IV only 17 entries are included. Wherever missing numbers are found, those entries are not included for Zone-IV

1	Experiment No.	40	
2	Name of the trial:	Advance Variety Trial 1 – Irrigated Medium (AVT 1-IM)	
3	Objective:	To study the comparative performance of medium duration elite cultures and hybrids in irrigated areas	
4	Total Locations:	48 (07 for Zone-V)	
5	Layout:	Randomized Block Design (RBD)	
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre	
8 9 10 11	Plant protection: Plot size: Spacing: Total No. of entries:	Need - based 15 sq m (This should be strictly followed) 20 x 15 cm 31 (For Zone-V only 15 entries)	
12	Check varieties:	National: NDR 359; Zonal: Karma Mahsuri (Central): Hybrid: HRI 174; Local Check and Recurrent Parent: Jaya	
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Days to 50% flowering Plant height (cm) Panicles per sq m (No.) Number of fertile and sterile spikelets per Panicle (Average of 50 Panicles) Spikelet Fertility (SPF) Purity score (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. 	

Trial No.40: Layout plan of entries in Advance Variety Trial 1- Irrigated Medium (AVT 1 -IM), Kharif 2023 (Zone-V)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /4013	201 /4031	301 /4024 (LC)
102 /4021	202 /4028	302 /4011
103 /4012	203 /4029	303 /4005
104 /4010	204 /4030	304 /4023
105 /4024 (LC)	205 /4020	305 /4010
106 /4020	206 /4012	306 /4031
107 /4004	207 /4013	307 /4030
108 /4005	208 /4004	308 /4029
109 /4023	209 /4005	309 /4028
110 /4031	210 /4009	310 /4021
111 /4030	211 /4011	311 /4009
112 /4028	212 /4021	312 /4020
113 /4029	213 /4024 (LC)	313 /4004
114 /4009	214 /4010	314 /4012
115 /4011	215 /4023	315 /4013

Note: Total No. of entries in the trial are 31; For Zone-V only 15 entries are included. Wherever missing numbers are found, those entries are not included for Zone-V

1	Experiment No.	40
2	Name of the trial:	Advance Variety Trial 1 – Irrigated Medium (AVT 1-IM)
3	Objective:	To study the comparative performance of medium duration elite cultures and hybrids in irrigated areas
4	Total Locations:	48 (04 for Zone-VI)
5	Layout:	Randomized Block Design (RBD)
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre
8 9 10 11	Plant protection: Plot size: Spacing: Total No. of entries:	Need - based 15 sq m (This should be strictly followed) 20 x 15 cm 31 (For Zone-VI only 16 entries)
12	Check varieties:	National: NDR 359; Zonal: Akshyadhan (Western):
13	General instructions:	 Hybrid: HRI 174; Local Check and Recurrent Parent: Jaya Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Days to 50% flowering Plant height (cm) Panicles per sq m (No.) Number of fertile and sterile spikelets per Panicle (Average of 50 Panicles) Spikelet Fertility (SPF) Purity score (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No.40: Layout plan of entries in Advance Variety Trial 1- Irrigated Medium (AVT 1-IM), Kharif 2023 (Zone-VI)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /4005	201 /4004	301 /4030
102 /4010	202 /4012	302 /4029
103 /4023	203 /4013	303 /4031
104 /4011	204 /4022	304 /4028
105 /4024 (LC)	205 /4011	305 /4005
106 /4009	206 /4030	306 /4022
107 /4021	207 /4029	307 /4013
108 /4022	208 /4031	308 /4020
109 /4020	209 /4028	309 /4009
110 /4004	210 /4009	310 /4024 (LC)
111 /4012	211 /4021	311 /4023
112 /4013	212 /4005	312 /4010
113 /4030	213 /4010	313 /4021
114 /4028	214 /4023	314 /4004
115 /4029	215 /4020	315 /4011
116 /4031	216 /4024 (LC)	316 /4012

Note: Total No. of entries in the trial are 31; For Zone-VI only 16 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VI

1	Experiment No.	40	
2	Name of the trial:	Advance Variety Trial 1 – Irrigated Medium (AVT 1-IM)	
3	Objective:	To study the comparative performance of medium duration elite cultures and hybrids in irrigated areas	
4	Total Locations:	48 (17 for Zone-VII)	
5	Layout:	Randomized Block Design (RBD)	
6 7	Replications: Fertilizers:	3 As per the recommendation of the centre	
8 9 10 11	Plant protection: Plot size: Spacing: Total No. of entries:	Need - based 15 sq m (This should be strictly followed) 20 x 15 cm 31 (For Zone-VII only 18 entries)	
12	Check varieties:	National: NDR 359; Zonal: Jaya (Southern): Hybrid: HRI 174: Local Check and Recurrent Parents: Jaya & WGL 14.	
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Days to 50% flowering Plant height (cm) Panicles per sq m (No.) Number of fertile and sterile spikelets per Panicle (Average of 50 Panicles) Spikelet Fertility (SPF) Purity score (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. 	

Trial No.40: Layout plan of entries in Advance Variety Trial 1- Irrigated Medium (AVT 1 -IM), Kharif 2023 (Zone-VII)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /4029	201 /4009	301 /4020
102 /4028	202 /4012	302 /4004
103 /4030	203 /4023	303 /4011
104 /4031	204 /4021	304 /4023
105 /4026	205 /4004	305 /4009
106 /4027	206 /4013	306 /4030
107 /4025	207 /4005	307 /4029
108 /4024 (LC)	208 /4010	308 /4028
109 /4021	209 /4020	309 /4031
110 /4011	210 /4024 (LC)	310 /4026
111 /4005	211 /4028	311 /4025
112 /4012	212 /4030	312 /4027
113 /4023	213 /4031	313 /4024 (LC)
114 /4004	214 /4029	314 /4021
115 /4009	215 /4011	315 /4013
116 /4020	216 /4027	316 /4010
117 /4013	217 /4025	317 /4012
118 /4010	218 /4026	318 /4005

<u>Note</u>: Total No. of entries in the trial are 31; For Zone-VII only 18 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VII

1	Experiment No.	41
2	Name of the trial:	Initial Variety Trial – Irrigated Medium (IVT-IM)
3	Objective:	To study the comparative performance of medium duration elite cultures
4	Total Locations:	in irrigated areas 48
5 6 7	Layout: Replications: Fertilizers:	Simple Lattice Design 2 As per the recommendation of the centre
8 9 10	Plant protection: Plot size: Spacing:	Need - based 10 sq m (This should be strictly followed) 20 x 15 cm
11	Total no. of entries:	64
12	Check varieties:	National: NDR 359; Zonal: PR 121 (Northern), CR Dhan 300 (Eastern and North Eastern), Karma Mahsuri (Central), Akshyadhan (Western), Jaya (Southern) and Local Check.
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow (1-2 seedlings / hill). Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Days to 50% flowering Plant height (cm) Panicles per sq m (No.) Number of fertile and sterile spikelets per Panicle (Average of 50 Panicles) Spikelet Fertility % (SPF) Purity score (UNI) 1 = >95% pure 2 = 80-95% pure 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type Notes on lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No.41: Layout plan of entries in Initial Variety Trial - Irrigated Medium (IVT - IM), Kharif 2023.

REPLICATION-I

101/4117	109/4159	117/4134	125/4106	133/4112	141/4155	149/4130	157/4109
102/4122	110/4152	118/4154	126/4147	134/4145	142/4110	150/4105	158/4127
103/4133	111/4113	119/4114	127/4131	135/4125	143/4111	151/4139	159/4151
104/4116	112/4119	120/4137	128/4126	136/4115	144/4149	152/4162	160/4140
105/4107	113/4132	121/4160	129/4148	137/4104	145/4144	153/4128	161/4103
106/4163	114/4143	122/4124	130/4158	138/4146	146/4157	154/4101	162/4135
107/4150	115/4141	123/4120	131/4102	139/4136	147/4121	155/4153	163/4123
108/4142	116/4156	124/4108	132/4164	140/4129	148/4161	156/4118	164/4138
			(LC)				

REPLICATION-II

201/4103	209/4138	217/4123	225/4135	233/4109	241/4151	249/4127	257/4140
202/4160	210/4108	218/4120	226/4124	234/4134	242/4114	250/4154	258/4137
203/4128	211/4118	219/4153	227/4101	235/4130	243/4139	251/4105	259/4162
204/4132	212/4156	220/4141	228/4143	236/4159	244/4113	252/4152	260/4119
205/4144	213/4161	221/4121	229/4157	237/4155	245/4111	253/4110	261/4149
206/4148	242/4164	222/4102	230/4158	238/4106	246/4131	254/4147	262/4126
	(LC)						
207/4107	215/4142	223/4150	231/4163	239/4117	247/4133	255/4122	263/4116
208/4104	216/4129	224/4136	232/4146	240/4112	248/4125	256/4145	264/4115

ICAR-INDIAN INSTITUTE OF RICE RESEARCH

Rajendranagar, Hyderabad–500030, Telangana Kharif 2023

1.	Experiment No.	42	
2	Name of the trial:	Advance Variety Trial 2 & 1–Late (AVT2& 1–L)	
3	Objectives:	To evaluate comparative performance of late duration elite cultures In irrigated areas	
4	Total Locations:	31 (03 For Zone-II)	
5	Layout:	Randomized Block Design (RBD)	
6	Replications:	3	
7	Fertilizers:	As per the recommendation of the centre	
8	Plant protection:	Need- based	
9	Plot size:	15 sqm (This should be strictly followed)	
10	Spacing:	20x15cm	
11	Total No. of entries:	54 (For Zone-II only 23 entries)	
12	Check varieties:	National: Swarna; Zonal: Pusa-44 (Northern); Hybrid Check: PA 6444 and Local Check. Recurrent Parent: Pusa 44	
13	General instructions:	 Sow the seed bed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Seedling per hill:2to3 Gapfill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m(No.) Days to50% flowering Notes on pests, diseases and lodging Plant height (cm) Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. 	

Trial No. 42: Layout plan of entries in Advance Variety Trial 2 & 1–Late (AVT 2& 1-L), Kharif 2023 (ZONE-II)

Replication 1 Plot No./Entry No.	Replication 2 Plot No./Entry No.	Replication 3 Plot No./Entry No
101 /4208	201 /4230	301 /4223
102 /4212	202 /4232	301 /4223
103 /4212	203 /4219	302 /4231
104 /4202	204 /4218	304 /4221 (LC)
105 /4228	205 /4233	305 /4229
106 /4223	206 / 4201	306 /4220
107/4231	207 /4212	307 /4226
108 /4215	208 / 4229	308 /4224
109 /4218	209 /4227	309 /4224
110 /4219	210 /4208	310 /4217
111 /4232	211/4228	311 /4225
112 /4221 (LC)	212 /4215	312 /4203
113 /4229	213 /4223	312/4203
114 /4220	214 /4203	314 /4219
115 /4230	215 /4202	315 / 4201
116 /4233	216 / 4225	316 / 4230
117 /4224	217 /4226	317 /4208
118 /4201	218 /4224	318 /4218
119 /4222	219 /4220	319 /4233
120 /4225	220 /4221 (LC)	320 /4232
121 /4227	221 /4217	321 /4202
122 /4217	222 / 4222	322 /4212
123 /4203	223 /4231	323 /4228

<u>Note</u>: Total No. of entries in the trial are 54; For Zone-II, only 23 entries are included. Wherever missing numbers are found, those entries are not included for Zone-II

.....

Experiment No. 42

Name of the trial: Advance Variety Trial 2 & 1–Late (AVT2& 1–L)

Objectives: To evaluate comparative performance of late duration elite cultures

in irrigated areas

Total Locations: 31 (10 For Zone-III)

Layout: Randomized Block Design (RBD)

Replications: 3

Fertilizers: As per the recommendation of the centre

Plant protection: Need-based

Plot size: 15sqm (This should be strictly followed)

Spacing: 20x15cm

Total No. of entries: 54 (For Zone-III only 45 entries)

Check varieties: National: Swarna; Zonal: NDR 8002 (Eastern); Hybrid Check:

PA 6444 and Local Check.

Recurrent Parents: Pusa 44, Swarna, Improved Samba Mahsuri

and Samba Mahsuri.

General instructions:

• Sow the seed bed as thin as possible

Transplant 25-day old seedlings

• Transplant seedlings very shallow

• Seedling per hill: 2to3

• Gap fill within a week of planting

Incorporate fertilizer evenly

Data to be collected:

• Grain yield (kg/plot) based on net plot size to be reported

Panicles/sq m(No.)

Days to 50% flowering

Notes on pests, diseases and lodging

• Plant height (cm)

• Rainfall during the crop growth (Number of rainy days)

• Maximum and minimum temperature.

Trial No. 42: Layout plan of entries in Advance Variety Trial 2 & 1-Late (AVT 2& 1-L), Kharif 2023 (ZONE-III)

Replication 1	Replication 2	Replication 3
Plot No./Entry No.	Plot No./ Entry No.	Plot No./ Entry No.
101/4202	201 /4251	301 /4242
102 /4248	202 /4230	302 /4238
103 /4244	203 /4253	303 /4218
103 /4244	203/4233	304 /4221 (LC)
104 /4243	204 / 4248	305 /4226
105 /4241	206 /4239	306 /4203
106/4201		307 /4220
	207 /4202	
108 /4253	208 /4246	308 /4223 309 /4212
109 /4245	209 /4254	
110 /4218	210 /4234	310 /4228
111 /4249	211 /4201	311 /4207
112 /4222	212 /4221 (LC)	312 /4227
113 /4234	213 /4228	313 /4208
114 /4217	214 /4243	314 /4246
115 /4207	215 /4208	315 /4202
116 /4215	216 /4217	316 /4240
117 /4252	217 /4232	317 /4222
118 /4228	218 /4225	318 /4234
119 /4250	219 /4237	319 /4233
120 /4212	220 /4226	320 /4236
121 /4239	221 /4245	321 /4251
122 /4208	222 /4236	322 /4252
123 /4242	223 /4233	323 /4239
124 /4221 (LC)	224 /4252	324 /4237
125 /4224	225 /4222	325 /4229
126 /4220	226 /4215	326 /4249
127 /4203	227 /4241	327 /4253
128 /4240	228 /4203	328 /4215
129 /4229	229 /4244	329 /4230
130 /4219	230 /4249	330 /4225
131 /4231	231 /4247	331 /4245
132 /4225	232 / 4220	332 /4244
133 /4238	233 /4227	333 /4231
134 /4237	234 /4231	334 /4248
135 /4223	235 /4229	335 /4232
136 / 4254	236 / 4250	336 /4219
137 /4235	237 /4212	337 /4247
138 /4246	238 /4242	338 /4224
139 /4226	239 /4207	339 /4217
140 /4230	240 /4218	340 /4243
140 /4230	241 /4240	341 /4235
141 /4227	241 /4240	341 /4253
143 /4232	243 /4224	343 /4254
144 /4247	244 /4223	344 /4201
145 /4233	245 /4235	345 /4241

Note: Total No. of entries in the trial are 54; For Zone-III, only 45 entries are included. Wherever missing numbers are found, those entries are not included for Zone-III

ICAR-INDIAN INSTITUTE OF RICE RESEARCH

Rajendranagar, Hyderabad–500030, Telangana Kharif 2023

1. 2	Experiment No.	42	
2		42	
_	Name of the trial:	Advance Variety Trial 2 & 1–Late(AVT2& 1–L)	
3	Objectives:	To evaluate comparative performance of late duration elite cultures in irrigated areas	
4	Total Locations:	31 (03 For Zone-IV)	
5	Layout:	Randomized Block Design (RBD)	
6	Replications:	3	
7	Fertilizers:	As per the recommendation of the centre	
8	Plant protection:	Need- based	
9	Plot size:	15sqm (This should be strictly followed)	
10	Spacing:	20x15cm	
11	Total No. of entries:	54 (For Zone-IV Only 18 entries)	
12	Check varieties:	National: Swarna; Zonal: Ranjeet (North Eastern); Hybrid Check: PA 6444 and Local Check.	
13	General instructions: Data to be collected:	 Sow the seed bed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Seedling per hill:2to3 Gap fill within a week of planting Incorporate fertilizer evenly Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m(No.) Days to 50% flowering Notes on pests, diseases and lodging Plant height (cm) Rainfall during the crop growth(Number of rainy days) 	

Trial No. 42: Layout plan of entries in Advance Variety Trial 2 & 1–Late (AVT 2& 1-L), Kharif 2023 (ZONE-IV)

Replication 1 Plot No./Entry No.	Replication 2 Plot No./Entry No.	Replication 3 Plot No./Entry No
101/4214	201 /4205	301 /4213
102 /4217	202 /4219	302 /4204
103 /4206	203 /4201	303 /4212
104 /4209	204 /4217	304 /4221 (LC)
105 /4201	205 /4203	305 /4220
106 /4204	206 /4213	306 /4201
107 /4212	207 /4204	307 /4206
108 /4221 (LC)	208 /4212	308 /4211
109 /4218	209 /4215	309 /4208
110 /4215	210 /4211	310 /4214
111 /4208	211 /4209	311 /4218
112 /4220	212 /4221 (LC)	312 /4219
113 /4211	213 /4208	313 /4202
114 /4203	214 /4202	314 /4205
115 /4213	215 /4218	315 /4215
116 /4219	216 /4206	316 /4209
117 /4202	217 /4220	317 /4203
118 /4205	218 /4214	318 /4217

<u>Note</u>: Total No. of entries in the trial are 54; For Zone-IV, only 18 entries are included. Wherever missing numbers are found, those entries are not included for Zone-IV

ICAR-INDIAN INSTITUTE OF RICE RESEARCH

Rajendranagar, Hyderabad –500030, Telangana Kharif 2023

1.	Experiment No.	42
2	Name of the trial:	Advance Variety Trial 2 & 1–Late(AVT 2& 1–L)
3	Objectives:	To evaluate comparative performance of late duration elite cultures In irrigated areas
4	Total Locations:	31 (3 For Zone-V)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need- based
9	Plot size:	15sqm (This should be strictly followed)
10	Spacing:	20x15cm
11	Total No. of entries:	54 (For Zone-V Only 32 entries)
12	Check varieties:	National: Swarna; Zonal: NDR 8002 (Central); Hybrid Check:PA 6444 and Local Check; Recurrent Parents: Swarna, Improved Samba Mahsuri and Samba Mahsuri.
13	General instructions:	 Sow the seed bed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Seedling per hill:2to3 Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Grain yield(kg/plot) based on net plot size to be reported Panicles/sq m(No.) Days to 50% flowering Notes on pests, diseases and lodging Plant height (cm) Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 42: Layout plan of entries in Advance Variety Trial 2 & 1-Late (AVT 2& 1-L), Kharif 2023 (ZONE-V)

Replication 1	Replication 2	Replication 3
Plot No./Entry No.	Plot No./Entry No.	Plot No./Entry No
101 /4218	201 /4239	301 /4217
102 /4251	202 /4254	302 /4246
103 /4249	203 /4201	303 /4236
104 /4221 (LC)	204 /4217	304 /4243
105 /4238	205 /4250	305 /4237
106 /4217	206 /4220	306 /4253
107 /4247	207 /4208	307 /4218
108 /4241	208 /4219	308 /4212
109 /4253	209 /4203	309 /4247
110 /4242	210 /4234	310 /4220
111 /4220	211 /4238	311 /4249
112 /4236	212 /4247	312 /4251
113 /4235	213 /4241	313 /4234
114 /4246	214 /4218	314 /4215
115 /4240	215 /4253	315 /4202
116 /4239	216 /4244	316 /4208
117 /4243	217 /4252	317 /4238
118 /4202	218 /4249	318 /4221 (LC)
119 /4215	219 /4248	319 /4240
120 /4245	220 /4235	320 /4254
121 /4234	221 /4246	321 /4219
122 /4203	222 /4243	322 /4241
123 /4252	223 /4212	323 /4239
124 /4248	224 /4242	324 /4235
125 /4208	225 /4245	325 /4203
126 /4219	226 /4240	326 /4244
127 /4212	227 /4236	327 /4245
128 /4201	228 /4237	328 /4242
129 /4244	229 /4221(LC)	329 /4250
130 /4250	230 /4215	330 /4201
131 /4237	231 /4251	331 /4248
132 /4254	232 /4202	332 /4252

Note: Total No. of entries in the trial are 54; For Zone-V, only 32 entries are included. Wherever missing numbers are found, those entries are not included for Zone-V

ICAR-INDIAN INSTITUTE OF RICE RESEARCH

Rajendranagar, Hyderabad–500030, Telangana Kharif2023

1.	Experiment No.	42
2	Name of the trial:	Advance Variety Trial 2 & 1-Late (AVT 2 & 1-L)
3	Objectives:	To evaluate comparative performance of late duration elite cultures in irrigated areas
4	Total Locations:	31 (04 For Zone-VI)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need- based
9	Plot size:	15sqm (This should be strictly followed)
10	Spacing:	20x15cm
11	Total No. of entries:	54 (For Zone-VI only 11 entries)
12	Check varieties:	National: Swarna; Zonal: Salivahana (Western); Hybrid Check: PA 6444 and Local Check.
13	General instructions:	 Sow the seed bed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Seedling per hill:2to3 Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m(No.) Days to50% flowering Notes on pests, diseases and lodging Plant height(cm) Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 42: Layout plan of entries in Advance Variety Trial 2 & 1-Late (AVT 2& 1-L), Kharif 2023 (ZONE-VI)

Replication 1 Plot No./Entry No.	Replication 2 Plot No./Entry No.	Replication 3 Plot No./Entry No.
		· · · · · · · · · · · · · · · · · · ·
101 /4215	201 /4219	301 /4208
102 /4220	202 /4203	302 /4218
103 /4202	203 /4217	303 /4212
104 /4218	204 /4201	304 /4221 (LC)
105 /4217	205 /4202	305 /4215
106 /4219	206 /4218	306 /4220
107 /4208	207 /4215	307 /4202
108 /4212	208 /4221 (LC)	308 /4219
109 /4203	209 /4220	309 /4201
110 /4221 (LC)	210 /4208	310 /4217
111 /4201	211 /4212	311 /4203

Note: Total No. of entries in the trial are 54; For Zone-VI, only 11 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VI.

ICAR-INDIAN INSTITUTE OF RICE RESEARCH

Rajendranagar, Hyderabad–500030, Telangana Kharif 2023

1.	Experiment No.	42
2	Name of the trial:	Advance Variety Trial 2 & 1–Late (AVT 2& 1–L)
3	Objectives:	To evaluate comparative performance of late duration elite cultures in irrigated areas
4	Total Locations:	31 (08 For Zone-VII)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need- based
9	Plot size:	15 sqm (This should be strictly followed)
10	Spacing:	20x15cm
11	Total No. of entries:	54 (For Zone-VII only 46 entries)
12	Check varieties:	National: Swarna; Zonal: Pushyami (Southern); Hybrid Check: PA 6444 and Local Check; Recurrent Parents: Pusa 44, Swarna, Improved Samba Mahsuri and Samba Mahsuri.
13	General instructions:	 Sow the seed bed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Seedling per hill:2to3 Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m(No.) Daysto50% flowering Notes on pests, diseases and lodging Plant height (cm) Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 42: Layout plan of entries in Advance Variety Trial 2 & 1–Late (AVT 2& 1-L), Kharif 2023 (ZONE-VII)

Replication 1 Plot No./Entry No.	Replication 2 Plot No./Entry No.	Replication 3 Plot No./Entry No.
101 /4220	201 /4253	301 /4215
102 /4235	202 /4244	302 /4238
103 /4252	203 /4225	303 /4246
104 /4228	204 /4236	304 /4243
105 /4253	205 /4233	305 /4222
106 /4226	206 /4235	306 /4245
107 /4221 (LC)	207 /4252	307 /4218
108 /4208	208 /4241	308 /4254
109 /4210	209 /4224	309 /4250
110 /4225	210 /4229	310 /4210
111 /4230	211 /4245	311 /4228
112 /4212	212 /4247	312 /4237
113 /4222	213 /4232	313 /4216
114 /4248	214 /4230	314 /4234
115 /4203	215 /4237	315 /4220
116 /4232	216 /4202	316 /4208
117 /4238	217 /4201	317 /4217
118 /4245	218 /4254	318 /4235
119 /4219	219 /4249	319 /4226
120 /4254	220 /4216	320 /4240
121 /4240	221 /4246	321 /4248
122 /4250	222 /4242	322 /4241
123 /4247	223 /4219	323 /4251
124 /4202	224 /4250	324 /4227
125 /4242	225 /4231	325 /4247
126 /4218	226 /4248	326 /4223
127 /4239	227 /4227	327 /4233
128 /4246	228 /4240	328 /4201
129 /4249	229 /4234	329 /4212
130 /4216	230 /4239	330 /4202
131 /4224	231 /4203	331 /4236
132 /4251	232 /4243	332 /4252
133 /4231	233 /4228	333 /4221 (LC)
134 /4241	234 /4223	334 /4230
135 /4234	235 /4208	335 /4231
136 /4237	236 /4217	336 /4253
137 /4227	237 /4238	337 /4224
138 /4244	238 /4226	338 /4242
139 /4236	239 /4212	339 /4229
140 /4233	240 /4222	340 /4239
141 /4223	241 /4221 (LC)	341 /4244
142 /4201	242 /4215	342 /4232
143 /4215	243 /4220	343 /4225
144 /4229	244 /4218	344 /4219
145 /4217	245 /4251	345 /4203
146 /4243	246 /4210	346 /4249

<u>Note</u>: Total No. of entries in the trial are 54; For Zone-VII, only 46 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VII.

ICAR-INDIAN INSTITUTE OF RICE RESEARCH

Rajendranagar, Hyderabad – 500 030, Telangana Kharif 2023

1.	Experiment No.	43
2	Name of the trial:	Initial Variety Trial –Late (IVT – L)
3	Objectives:	To evaluate comparative performance of late duration elite cultures in irrigated areas
4	Total Locations:	31
5	Layout:	Simple Lattice Design
6	Replications:	2
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need- based
9	Plot size:	10 sq m (This should be strictly followed)
10	Spacing:	20 x 15 cm
11	Total No. of entries:	64
12	Check varieties:	National: Swarna; Zonal: Pusa 44 (Northern), NDR 8002 (Eastern & Central), Ranjeet (North Eastern), Salivahana (Western), Pushyami (Southern), Hybrid: CRHR 702, Hybrid Observational Check: MRP 5222 and Local Check.
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Seedling per hill: 2 to 3 Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m (No.) Days to 50% flowering Notes on pests, diseases and lodging Plant height (cm) Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 43: Layout plan of entries in Initial Variety Trial –Late (IVT-L), Kharif 2023 <u>REPLICATION-I</u>

101/4317	109/4359	117/4334	125/4306	133/4312	141/4355	149/4330	157/4309
102/4322	110/4352	118/4354	126/4347	134/4345	142/4310	150/4305	158/4327
103/4333	111/4313	119/4314	127/4331	135/4325	143/4311	151/4339	159/4351
104/4316	112/4319	120/4337	128/4326	136/4315	144/4349	152/4362	160/4340
105/4307	113/4332	121/4360	129/4348	137/4304	145/4344	153/4328	161/4303
106/4363	114/4343	122/4324	130/4358	138/4346	146/4357	154/4301	162/4335
107/4350	115/4341	123/4320	131/4302	139/4336	147/4321	155/4353	163/4323
108/4342	116/4356	124/4308	132/4364	140/4329	148/4361	156/4318	164/4338
			(LC)				

REPLICATION-II

201/4303	209/4338	217/4323	225/4335	233/4309	241/4351	249/4327	257/4340
202/4360	210/4308	218/4320	226/4324	234/4334	242/4314	250/4354	258/4337
203/4328	211/4318	219/4353	227/4301	235/4330	243/4339	251/4305	259/4362
204/4332	212/4356	220/4341	228/4343	236/4359	244/4313	252/4352	260/4319
205/4344	213/4361	221/4321	229/4357	237/4355	245/4311	253/4310	261/4349
206/4348	214/4364	222/4302	230/4358	238/4306	246/4331	254/4347	262/4326
	(LC)						
207/4307	215/4342	223/4350	231/4363	239/4317	247/4333	255/4322	263/4316
208/4304	216/4329	224/4336	232/4346	240/4312	248/4325	256/4345	264/4315

1	Trial No.	44
1		44
2	Name of the trial:	Advance Variety Trial 2 – Aerobic (AVT 2-Aerob)
3	Objectives:	To study the comparative performance of elite cultures under aerobic conditions
4	Total Locations:	25
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	15 sq m (Direct seeded) (This should be strictly followed)
10	Spacing:	20 x 15 cm
11	Total No. of entries:	18
12	Check varieties:	National: CR Dhan 201 & DRR Dhan 54 Zonal: CR Dhan 202 (Northern, Eastern, North Eastern & Central), AAUDR-1 (Western), MAS 946-1 (Southern) and Local Check.
13	General instructions:	 Dibble 2 or 3 seeds / hill at shallow depth. Apply Pendamethalene herbicide @ 1 kg/ha a.i per hectare at near saturated condition within 5-6days after sowing. Apply bispyribac sodium @ 250 ml/ha at 2-3 leaf stage of weeds. Maintain aerobic condition and provide need based frequent irrigation when tips of top leaves start rolling so that plants should not experience moisture stress at any stages of crop growth. Crop should not suffer due to drought. There should not be more than one day standing water in field.
14.	Fertilizer application:	 Recommended dose of Nitrogen application in 3 splits (1/3 at 10-12 days after rice emergence, 1/3 at maximum tillering stage & 1/3 at panicle initiation stage). Recommended dose of P & K can be applied basal. Whenever Iron deficiency is seen foliar spray of 1.5% FeSO4 solution 2-3 times at weekly interval.
15	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m Days to 50% flowering Notes on pests, diseases and lodging Plant height (cm) Spikelet fertility Rainfall data and quantity of irrigation water Maximum and minimum temperature Number of irrigations given in relation to crop growth.

Trial No. 44: Layout plan of entries in Advance Variety Trial 2– Aerobic (AVT 2-Aerob), Kharif 2023

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /4414	201 /4401	301 /4407
102 /4413	202 /4418	302 /4403
103 /4410	203 /4412	303 /4408
104 /4402	204 /4403	304 /4409
105 /4404	205 /4406	305 /4412
106 /4409	206 /4407	306 /4414
107 /4411	207 /4405	307 /4404
108 /4417(LC)	208 /4413	308 /4415
109 /4401	209 /4416	309 /4411
110 /4406	210 /4409	310 /4405
111 /4407	211 /4404	311 /4416
112 /4418	212 /4415	312 /4406
113 /4403	213 /4410	313 /4402
114 /4408	214 /4417 (LC)	314 /4401
115 /4415	215 /4402	315 /4418
116 /4405	216 /4411	316 /4413
117 /4416	217 /4408	317 /4417 (LC)
118 /4412	218 /4414	318 /4410

	Kharif 2023				
1	Trial No.	45			
2	Name of the trial:	Advance Variety Trial 1 – Aerobic (AVT 1-Aerob)			
3	Objectives:	To study the comparative performance of elite cultures under aerobic conditions			
4	Total Locations:	25 (03 for Zone - II)			
5	Layout:	Randomized Block Design (RBD)			
6	Replications:	3			
7	Fertilizers:	As per the recommendation of the centre			
8	Plant protection:	Need based			
9	Plot size:	15 sq m (Direct seeded) (This should be strictly followed)			
10	Spacing:	20 x 15 cm			
11	Total No. of entries:	33 (for Zone- II only 19 entries)			
12	Check varieties:	National: DRR Dhan 54, Zonal: CR Dhan 202 (Northern); Hybrid: PA 6129 and Local Check.			
13	General instructions:	 Dibble 2 or 3 seeds / hill at shallow depth. Apply Pendamethalene herbicide @ 1 kg/ha a.i per hectare at near saturated condition within 5-6days after sowing. Apply bispyribacsodium @ 250 ml/ha at 2-3 leaf stage of weeds. Maintain aerobic condition and provide need based frequent irrigation when tips of top leaves start rolling so that plants should not experience moisture stress at any stages of crop growth. Crop should not suffer due to drought. There should not be more than one day standing water in field. 			
14.	Fertilizer application:	 Recommended dose of Nitrogen application in 3 splits (1/3 at 10-12 days after rice emergence, 1/3 at maximum tillering stage & 1/3 at panicle initiation stage). Recommended dose of P & K can be applied basal. Whenever Iron deficiency is seen foliar spray of 1.5% FeSO4 solution 2-3 times at weekly interval. 			
15	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m Days to 50% flowering Notes on pests, diseases and lodging Plant height (cm) Spikelet fertility Rainfall data and quantity of irrigation water Maximum and minimum temperature Number of irrigations given in relation to crop growth. 			

Trial No. 45 : Layout plan of entries in Advance Variety Trial 1– Aerobic (AVT 1-Aerob), Kharif 2023 (Zone – II)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /4529	201 /4520	301 /4524
102 /4517	202 /4514	302 /4522
103 /4516	203 /4501	303 /4502
104 /4533 (LC)	204 /4510	304 /4517
105 /4501	205 /4522	305 /4511
106 /4502	206 /4516	306 /4523
107 /4524	207 /4505	307 /4512
108 /4522	208 /4517	308 /4533 (LC)
109 /4513	209 /4511	309 /4515
110 /4505	210 /4513	310 /4514
111 /4512	211 /4523	311 /4530
112 /4511	212 /4502	312 /4520
113 /4514	213 /4530	313 /4505
114 /4515	214 /4512	314 /4513
115 /4520	215 /4515	315 /4510
116 /4521	216 /4524	316 /4501
117 /4510	217 /4533 (LC)	317 /4521
118 /4530	218 /4521	318 /4529
119 /4523	219 /4529	319 /4516

<u>Note</u>: Total No. of entries in the trial are 33; For Zone-II only 19 entries are included. Wherever missing numbers are found, those entries are not included for Zone-II.

Kharif 2023		
1	Trial No.	45
2	Name of the trial:	Advance Variety Trial 1 – Aerobic (AVT 1-Aerob)
3	Objectives:	To study the comparative performance of elite cultures under aerobic conditions
4	Total Locations:	25 (08 for Zone - III)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	15 sq m (Direct seeded) (This should be strictly followed)
10	Spacing:	20 x 15 cm
11	Total No. of entries:	33 (for Zone- III only 28 entries)
12	Check varieties:	National: DRR Dhan 54, Zonal: CR Dhan 202 (Eastern); Hybrid: PA 6129 and Local Check.
13	General instructions:	 Dibble 2 or 3 seeds / hill at shallow depth. Apply Pendamethalene herbicide @ 1 kg/ha a.i per hectare at near saturated condition within 5-6days after sowing. Apply bispyribacsodium @ 250 ml/ha at 2-3 leaf stage of weeds. Maintain aerobic condition and provide need based frequent irrigation when tips of top leaves start rolling so that plants should not experience moisture stress at any stages of crop growth. Crop should not suffer due to drought. There should not be more than one day standing water in field.
14.	Fertilizer application:	 Recommended dose of Nitrogen application in 3 splits (1/3 at 10-12 days after rice emergence, 1/3 at maximum tillering stage & 1/3 at panicle initiation stage). Recommended dose of P & K can be applied basal. Whenever Iron deficiency is seen foliar spray of 1.5% FeSO4 solution 2-3 times at weekly interval.
15	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m Days to 50% flowering Notes on pests, diseases and lodging Plant height (cm) Spikelet fertility Rainfall data and quantity of irrigation water Maximum and minimum temperature Number of irrigations given in relation to crop growth.

Trial No. 45: Layout plan of entries in Advance Variety Trial 1– Aerobic (AVT 1-Aerob), Kharif 2023 (Zone – III)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /4526	201 /4523	301 /4531
102 /4527	202 /4511	302 /4529
103 /4509	203 /4531	303 /4501
104 /4507	204 /4530	304 /4517
105 /4524	205 /4514	305 /4508
106 /4501	206 /4527	306 /4533 (LC)
107 /4519	207 /4510	307 /4520
108 /4512	208 /4513	308 /4522
109 /4533 (LC)	209 /4509	309 /4507
110 /4514	210 /4506	310 /4505
111 /4517	211 /4501	311 /4514
112 /4522	212 /4526	312 /4511
113 /4513	213 /4529	313 /4504
114 /4510	214 /4518	314 /4515
115 /4505	215 /4521	315 /4519
116 /4518	216 /4508	316 /4513
117 /4531	217 /4515	317 /4503
118 /4530	218 /4517	318 /4521
119 /4521	219 /4522	319 /4530
120 /4511	220 /4507	320 /4523
121 /4520	221 /4505	321 /4510
122 /4503	222 /4533 (LC)	322 /4518
123 /4506	223 /4512	323 /4506
124 /4529	224 /4524	324 /4512
125 /4523	225 /4504	325 /4527
126 /4515	226 /4519	326 /4526
127 /4508	227 /4520	327 /4524
128 /4504	228 /4503	328 /4509

<u>Note</u>: Total No. of entries in the trial are 33; For Zone-III only 28 entries are included. Wherever missing numbers are found, those entries are not included for Zone-III.

Kitat ii 2025		
1	Trial No.	45
2	Name of the trial:	Advance Variety Trial 1 – Aerobic (AVT 1-Aerob)
3	Objectives:	To study the comparative performance of elite cultures under aerobic conditions
4	Total Locations:	25 (03 for Zone - IV)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	15 sq m (Direct seeded) (This should be strictly followed)
10	Spacing:	20 x 15 cm
11	Total No. of entries:	33 (for Zone- IV only 17 entries)
12	Check varieties:	National: DRR Dhan 54, Zonal: CR Dhan 202 (North Eastern); Hybrid: PA 6129 and Local Check.
13	General instructions:	 Dibble 2 or 3 seeds / hill at shallow depth. Apply Pendamethalene herbicide @ 1 kg/ha a.i per hectare at near saturated condition within 5-6days after sowing. Apply bispyribacsodium @ 250 ml/ha at 2-3 leaf stage of weeds. Maintain aerobic condition and provide need based frequent irrigation when tips of top leaves start rolling so that plants should not experience moisture stress at any stages of crop growth. Crop should not suffer due to drought. There should not be more than one day standing water in field.
14.	Fertilizer application:	 Recommended dose of Nitrogen application in 3 splits (1/3 at 10-12 days after rice emergence, 1/3 at maximum tillering stage & 1/3 at panicle initiation stage). Recommended dose of P & K can be applied basal. Whenever Iron deficiency is seen foliar spray of 1.5% FeSO4 solution 2-3 times at weekly interval.
15	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m Days to 50% flowering Notes on pests, diseases and lodging Plant height (cm) Spikelet fertility Rainfall data and quantity of irrigation water Maximum and minimum temperature Number of irrigations given in relation to crop growth.

Trial No. 45: Layout plan of entries in Advance Variety Trial 1– Aerobic (AVT 1-Aerob), Kharif 2023 (Zone – IV)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /4523	201 /4514	301 /4530
102 /4510	202 /4522	302 /4533 (LC)
103 /4511	203 /4524	303 /4513
104 /4501	204 /4521	304 /4515
105 /4524	205 /4520	305 /4523
106 /4530	206 /4515	306 /4529
107 /4522	207 /4501	307 /4514
108 /4517	208 /4533 (LC)	308 /4510
109 /4521	209 /4513	309 /4511
110 /4520	210 /4512	310 /4517
111 /4512	211 /4510	311 /4522
112 /4533 (LC)	212 /4523	312 /4521
113 /4514	213 /4530	313 /4520
114 /4505	214 /4511	314 /4501
115 /4529	215 /4517	315 /4505
116 /4515	216 /4505	316 /4512
117 /4513	217 /4529	317 /4524

<u>Note</u>: Total No. of entries in the trial are 33; For Zone-IV only 17 entries are included. Wherever missing numbers are found, those entries are not included for Zone-IV.

Knarii 2023		
1	Trial No.	45
2	Name of the trial:	Advance Variety Trial 1 – Aerobic (AVT 1-Aerob)
3	Objectives:	To study the comparative performance of elite cultures under aerobic conditions
4	Total Locations:	25 (04 for Zone - V)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	15 sq m (Direct seeded) (This should be strictly followed)
10	Spacing:	20 x 15 cm
11	Total No. of entries:	33 (for Zone- V only 22 entries)
12	Check varieties:	National: DRR Dhan 54, Zonal: CR Dhan 202 (Central); Hybrid: PA 6129 and Local Check.
13	General instructions:	 Dibble 2 or 3 seeds / hill at shallow depth. Apply Pendamethalene herbicide @ 1 kg/ha a.i per hectare at near saturated condition within 5-6days after sowing. Apply bispyribacsodium @ 250 ml/ha at 2-3 leaf stage of weeds. Maintain aerobic condition and provide need based frequent irrigation when tips of top leaves start rolling so that plants should not experience moisture stress at any stages of crop growth. Crop should not suffer due to drought. There should not be more than one day standing water in field.
14.	Fertilizer application:	 Recommended dose of Nitrogen application in 3 splits (1/3 at 10-12 days after rice emergence, 1/3 at maximum tillering stage & 1/3 at panicle initiation stage). Recommended dose of P & K can be applied basal. Whenever Iron deficiency is seen foliar spray of 1.5% FeSO4 solution 2-3 times at weekly interval.
15	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m Days to 50% flowering Notes on pests, diseases and lodging Plant height (cm) Spikelet fertility Rainfall data and quantity of irrigation water Maximum and minimum temperature Number of irrigations given in relation to crop growth.

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /4517	201 /4532	301 /4524
102 /4505	202 /4528	302 /4527
103 /4510	203 /4533 (LC)	303 /4502
104 /4528	204 /4527	304 /4517
105 /4501	205 /4521	305 /4528
106 /4513	206 /4514	306 /4511
107 /4523	207 /4517	307 /4515
108 /4530	208 /4511	308 /4522
109 /4532	209 /4505	309 /4523
110 /4525	210 /4524	310 /4530
111 /4522	211 /4513	311 /4514
112 /4520	212 /4502	312 /4513
113 /4524	213 /4515	313 /4533 (LC)
114 /4515	214 /4523	314 /4521
115 /4514	215 /4510	315 /4501
116 /4511	216 /4530	316 /4520
117 /4521	217 /4525	317 /4512
118 /4527	218 /4501	318 /4529
119 /4533 (LC)	219 /4520	319 /4525
120 /4529	220 /4522	320 /4505
121 /4512	221 /4529	321 /4510
122 /4502	222 /4512	322 /4532

<u>Note</u>: Total No. of entries in the trial are 33; For Zone-V only 22 entries are included. Wherever missing numbers are found, those entries are not included for Zone-V.

Kharif 2023		
1	Trial No.	45
2	Name of the trial:	Advance Variety Trial 1 – Aerobic (AVT 1-Aerob)
3	Objectives:	To study the comparative performance of elite cultures under aerobic conditions
4	Total Locations:	25 (04 for Zone - VI)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	15 sq m (Direct seeded) (This should be strictly followed)
10	Spacing:	20 x 15 cm
11	Total No. of entries:	33 (for Zone- VI only 17 entries)
12	Check varieties:	National: DRR Dhan 54, Zonal: AAUDR-1 (Western); Hybrid: PA 6129 and Local Check.
13	General instructions:	 Dibble 2 or 3 seeds / hill at shallow depth. Apply Pendamethalene herbicide @ 1 kg/ha a.i per hectare at near saturated condition within 5-6days after sowing. Apply bispyribacsodium @ 250 ml/ha at 2-3 leaf stage of weeds. Maintain aerobic condition and provide need based frequent irrigation when tips of top leaves start rolling so that plants should not experience moisture stress at any stages of crop growth. Crop should not suffer due to drought. There should not be more than one day standing water in field.
14.	Fertilizer application:	 Recommended dose of Nitrogen application in 3 splits (1/3 at 10-12 days after rice emergence, 1/3 at maximum tillering stage & 1/3 at panicle initiation stage). Recommended dose of P & K can be applied basal. Whenever Iron deficiency is seen foliar spray of 1.5% FeSO4 solution 2-3 times at weekly interval.
15	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m Days to 50% flowering Notes on pests, diseases and lodging Plant height (cm) Spikelet fertility Rainfall data and quantity of irrigation water Maximum and minimum temperature Number of irrigations given in relation to crop growth.

Trial No. 45: Layout plan of entries in Advance Variety Trial 1– Aerobic (AVT 1-Aerob), Kharif 2023 (Zone – VI)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /4523	201 /4514	301 /4530
102 /4510	202 /4522	302 /4514
103 /4511	203 /4524	303 /4513
104 /4501	204 /4521	304 /4515
105 /4524	205 /4520	305 /4523
106 /4530	206 /4515	306 /4529
107 /4522	207 /4501	307 /4520
108 /4517	208 /4533 (LC)	308 /4510
109 /4521	209 /4513	309 /4511
110 /4520	210 /4512	310 /4517
111 /4512	211 /4510	311 /4522
112 /4533 (LC)	212 /4523	312 /4521
113 /4514	213 /4530	313 /4533 (LC)
114 /4505	214 /4511	314 /4501
115 /4529	215 /4517	315 /4505
116 /4515	216 /4505	316 /4512
117 /4513	217 /4529	317 /4524

Note: Total No. of entries in the trial are 33; For Zone-VI only 17 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VI.

Knarii 2023		
1	Trial No.	45
2	Name of the trial:	Advance Variety Trial 1 – Aerobic (AVT 1-Aerob)
3	Objectives:	To study the comparative performance of elite cultures under aerobic conditions
4	Total Locations:	25 (03 for Zone - VII)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	15 sq m (Direct seeded) (This should be strictly followed)
10	Spacing:	20 x 15 cm
11	Total No. of entries:	33 (for Zone- VII only 17 entries)
12	Check varieties:	National: DRR Dhan 54, Zonal: MAS 946-1 (Southern); Hybrid: PA 6129 and Local Check.
13	General instructions:	 Dibble 2 or 3 seeds / hill at shallow depth. Apply Pendamethalene herbicide @ 1 kg/ha a.i per hectare at near saturated condition within 5-6days after sowing. Apply bispyribacsodium @ 250 ml/ha at 2-3 leaf stage of weeds. Maintain aerobic condition and provide need based frequent irrigation when tips of top leaves start rolling so that plants should not experience moisture stress at any stages of crop growth. Crop should not suffer due to drought. There should not be more than one day standing water in field.
14.	Fertilizer application:	 Recommended dose of Nitrogen application in 3 splits (1/3 at 10-12 days after rice emergence, 1/3 at maximum tillering stage & 1/3 at panicle initiation stage). Recommended dose of P & K can be applied basal. Whenever Iron deficiency is seen foliar spray of 1.5% FeSO4 solution 2-3 times at weekly interval.
15	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m Days to 50% flowering Notes on pests, diseases and lodging Plant height (cm) Spikelet fertility Rainfall data and quantity of irrigation water Maximum and minimum temperature Number of irrigations given in relation to crop growth.

Trial No. 45: Layout plan of entries in Advance Variety Trial 1– Aerobic (AVT 1-Aerob), Kharif 2023 (Zone – VII)

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /4523	201 /4514	301 /4530
102 /4510	202 /4522	302 /4514
103 /4511	203 /4524	303 /4513
104 /4501	204 /4521	304 /4515
105 /4524	205 /4520	305 /4523
106 /4530	206 /4515	306 /4529
107 /4522	207 /4501	307 /4520
108 /4517	208 /4533 (LC)	308 /4510
109 /4521	209 /4513	309 /4511
110 /4520	210 /4512	310 /4517
111 /4512	211 /4510	311 /4522
112 /4533 (LC)	212 /4523	312 /4521
113 /4514	213 /4530	313 /4533 (LC)
114 /4505	214 /4511	314 /4501
115 /4529	215 /4517	315 /4505
116 /4515	216 /4505	316 /4512
117 /4513	217 /4529	317 /4524

Note: Total No. of entries in the trial are 33; For Zone-VII only 17 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VII.

1	Trial No.	46
2	Name of the trial:	Initial Variety Trial – Aerobic (IVT-AEROB)
3	Objectives:	To study the comparative performance of elite cultures under aerobic conditions
4	Total Locations:	25
5	Layout:	Simple Lattice Design
6	Replications:	2
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	10 sq m (Direct seeded) (This should be strictly followed)
10	Spacing:	20 x 15 cm or 30 x 10 cm
11	Total no. of entries:	64
12	Check varieties:	National: DRR Dhan 54, Zonal: CR Dhan 202 (Northern, Eastern, North Eastern and Central), AAUDR -1 (Western), MAS 946-1 (Southern), Hybrid: PA 6129, Hybrid Observational Check: DRR H-4 and Local Check.
13	General instructions:	 Dibble 2 or 3 seeds / hill at shallow depth. Apply Pendamethalene herbicide @ 1 kg/ha a.i per hectare at near saturated condition within 5-6days after sowing. Apply bispyribac sodium @ 250 ml/ha at 2-3 leaf stage of weeds. Maintain aerobic condition and provide need based frequent irrigation when tips of top leaves start rolling so that plants should not experience moisture stress at any stages of crop growth. Crop should not suffer due to drought. There should not be more than one day standing water in field.
14.	Fertilizer application:	 Recommended dose of Nitrogen application in 3 splits (1/3 at 10-12 days after rice emergence, 1/3 at maximum tillering stage & 1/3 at panicle initiation stage). Recommended dose of P & K can be applied basal. Whenever Iron deficiency is seen foliar spray of 1.5% FeSO4 solution 2-3 times at weekly interval.
15	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles/sq m Days to 50% flowering Notes on pests, diseases and lodging Plant height (cm) Spikelet fertility Maximum and minimum temperature Number of irrigations given in relation to crop growth. Rainfall data and quantity of irrigation water

- When the mean yield of the experiment is below 3 t/ha, kindly offer an explanation for the low yield.
- Kindly provide weather data especially rainfall data.

Trial No. 46: Layout plan of entries in Initial Variety Trial – Aerobic (IVT-AEROB), Kharif 2023

REPLICATION-I

101/4617	109/4659	117/4634	125/4606	133/4612	141/4655	149/4630	157/4609
102/4622	110/4652	118/4654	126/4647	134/4645	142/4610	150/4605	158/4627
103/4633	111/4613	119/4614	127/4631	135/4625	143/4611	151/4639	159/4651
104/4616	112/4619	120/4637	128/4626	136/4615	144/4649	152/4662	160/4640
105/4607	113/4632	121/4660	129/4648	137/4604	145/4644	153/4628	161/4603
106/4663	114/4643	122/4624	130/4658	138/4646	146/4657	154/4601	162/4635
107/4650	115/4641	123/4620	131/4602	139/4636	147/4621	155/4653	163/4623
108/4642	116/4656	124/4608	132/4664	140/4629	148/4661	156/4618	164/4638
			(LC)				

REPLICATION-II

201/4603	209/4638	217/4623	225/4635	233/4609	241/4651	249/4627	257/4640
202/4660	210/4608	218/4620	226/4624	234/4634	242/4614	250/4654	258/4637
203/4628	211/4618	219/4653	227/4601	235/4630	243/4639	251/4605	259/4662
204/4632	212/4656	220/4641	228/4643	236/4659	246/4613	252/4652	260/4619
205/4644	213/4661	221/4621	229/4657	237/4655	245/4611	253/4610	261/4649
206/4648	214/4664 (LC)	222/4602	230/4658	238/4606	246/4631	254/4647	262/4626
207/4607	215/4642	223/4650	231/4663	239/4617	247/4633	255/4622	263/4616
208/4604	216/4629	224/4636	232/4646	240/4612	248/4625	256/4645	264/4615

Kharii 2023			
1	Trial No.	47	
2	Name of the trial:	Advance Variety Trial 2- Medium Slender Grain (AVT 2-MS)	
3	Objective:	To study the comparative performance of Medium Slender grain cultivars and elite lines for yield and quality	
4	Locations:	39	
5	Layout:	Randomized Block Design (RBD)	
6	Replications:	3	
7	Fertilizers:	As per the recommendation of the centre	
8	Plant protection:	Need based	
9	Plot size:	15 sq m (This should be strictly followed)	
10	Spacing:	Transplanting: 20 cm between rows 15 cm between plants	
11	Total No. of entries:	9	
12	Check varieties	National: WGL 14 (Medium duration) & BPT 5204 (Late duration); Zonal: Improved Samba Mahsuri (Eastern & Central), Ketekejoha (North Eastern), Karjat-6 (Western), ADT 49 (Southernand Local Check	
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (No.) Plant height (cm) Spikelets/Panicle (No.) Grains/Panicle (No.) Sterility percentage Test Weight (g) Notes on pests, diseases and lodging Grain quality characteristics to be provided wherever facilities exist. Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. Data will be considered only if MS grain type is used as Local Check. 	

Data will not be considered if mean yield of the experiment is below 4 t/ha. Kindly offer an explanation for the low yield.

Trial No. 47: Layout plan of entries in Advance Variety Trial 2 – Medium Slender Grain (AVT 2-MS), Kharif 2023

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /4706	201 /4705	301 /4703
102 /4701	202 /4707	302 /4704
103 /4703	203 /4708	303 /4709 (LC)
104 /4705	204 /4704	304 /4707
105 /4704	205 /4702	305 /4701
106 /4709 (LC)	206 /4706	306 /4702
107 /4707	207 /4701	307 /4708
108 /4702	208 /4709 (LC)	308 /4705
109 /4708	209 /4703	309 /4706

		Kilatii 2025
1	Trial No.	48
2	Name of the trial:	Advance Variety Trial 1– Medium Slender Grain (AVT 1-MS)
3	Objective:	To study the comparative performance of Medium Slender grain cultivars and elite lines for yield and quality
4	Total Locations:	39 (10 for Zone – III)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	15 sq m (This should be strictly followed)
10	Spacing:	Transplanting: 20 cm between rows 15 cm between plants
11	Total No. of entries:	27 (For Zone –III only 14 entries)
12	Check varieties	National : Telangana Sona (Early Duration), WGL 14 (Medium duration) & BPT 5204 (Late duration & Recurrent Parent); Zonal : Improved Samba Mahsuri (Eastern) : Hybrids : 27 P 63 and LocalCheck
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (No.) Plant height (cm) Spikelets/Panicle (No.) Grains/Panicle (No.) Sterility percentage Test Weight (g) Notes on pests, diseases and lodging Grain quality characteristics to be provided wherever facilities exist. Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. Data will be considered only if MS grain type is used as Local Check.

Data will not be considered if mean yield of the experiment is below 4 t/ha. Kindly offer an explanation for the low yield.

Trial No. 48: Layout plan of entries in Advance Variety Trial 1 – Medium Slender Grain (AVT 1-MS), Kharif 2023 (Zone – III)

Replication 1	Replication 2	Replication 3
Plot No. /	Plot No. /	Plot No. /
Entry No.	Entry No.	Entry No.
101 /4811	201 /4818	301 /4817
102 /4817	202 /4812	302 /4819
103 /4816	203 /4819	303 /4815
104 /4812	204 /4817	304 /4805
105 /4818	205 /4809	305 /4812
106 /4819	206 /4827 (LC)	306 /4811
107 /4809	207 /4805	307 /4818
108 /4815	208 /4822	308 /4814
109 /4805	209 /4808	309 /4822
110 /4827 (LC)	210 /4814	310 /4823
111 /4823	211 /4811	311 /4808
112 /4814	212 /4815	312 /4816
113 /4822	213 /4816	313 /4827 (LC)
114 /4808	214 /4823	314 /4809

Note: Total No. of entries in the trial are 27; For Zone-III only 14 entries are included. Wherever missing numbers are found, those entries are not included for Zone-III.

Knarii 2023			
1	Trial No.	48	
2	Name of the trial:	Advance Variety Trial 1- Medium Slender Grain (AVT 1-MS)	
3	Objective:	To study the comparative performance of Medium Slender grain cultivars and elite lines for yield and quality	
4	Total Locations:	39 (04 for Zone – IV)	
5	Layout:	Randomized Block Design (RBD)	
6	Replications:	3	
7	Fertilizers:	As per the recommendation of the centre	
8	Plant protection:	Need based	
9	Plot size:	15 sq m (This should be strictly followed)	
10	Spacing:	Transplanting: 20 cm between rows 15 cm between plants	
11	Total No. of entries:	27 (For Zone –IV only 16 entries)	
12	Check varieties	National : Telangana Sona (Early Duration), WGL 14 (Medium duration) & BPT 5204 (Late duration); Zonal : Ketakijoha (North Eastern): Hybrids : 27 P 63 and Local Check	
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (No.) Plant height (cm) Spikelets/Panicle (No.) Grains/Panicle (No.) Sterility percentage Test Weight (g) Notes on pests, diseases and lodging Grain quality characteristics to be provided wherever facilities exist. Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. Data will be considered only if MS grain type is used as Local Check. 	

Data will not be considered if mean yield of the experiment is below 4 t/ha. Kindly offer an explanation for the low yield.

Trial No. 48: Layout plan of entries in Advance Variety Trial 1 – Medium Slender Grain (AVT 1-MS), Kharif 2023 (Zone – IV)

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /4816	201 /4811	301 /4807
102 /4808	202 /4803	302 /4821
103 /4811	203 /4805	303 /4827 (LC)
104 /4812	204 /4814	304 /4811
105 /4807	205 /4821	305 /4803
106 /4803	206 /4827 (LC)	306 /4815
107 /4815	207 /4823	307 /4809
108 /4820	208 /4819	308 /4817
109 /4819	209 /4812	309 /4820
110 /4805	210 /4815	310 /4812
111 /4827 (LC)	211 /4807	311 /4814
112 /4823	212 /4817	312 /4819
113 /4817	213 /4820	313 /4816
114 /4809	214 /4808	314 /4805
115 /4814	215 /4809	315 /4808
116 /4821	216 /4816	316 /4823

Note: Total No. of entries in the trial are 27; For Zone-IV only 16 entries are included. Wherever missing numbers are found, those entries are not included for Zone-IV.

Kharif 2023			
1	Trial No.	48	
2	Name of the trial:	Advance Variety Trial 1- Medium Slender Grain (AVT 1-MS)	
3	Objective:	To study the comparative performance of Medium Slender grain cultivars and elite lines for yield and quality	
4	Total Locations:	39 (03 for Zone – V)	
5	Layout:	Randomized Block Design (RBD)	
6	Replications:	3	
7	Fertilizers:	As per the recommendation of the centre	
8	Plant protection:	Need based	
9	Plot size:	15 sq m (This should be strictly followed)	
10	Spacing:	Transplanting: 20 cm between rows 15 cm between plants	
11	Total No. of entries:	27 (For Zone –V only 14 entries)	
12	Check varieties	National : Telangana Sona (Early Duration), WGL 14 (Medium duration) & BPT 5204 (Late duration & Recurrent Parent); Zonal : Improved Samba Mahsuri (Central): Hybrids : 27 P 63 and Local Check	
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (No.) Plant height (cm) Spikelets/Panicle (No.) Grains/Panicle (No.) Sterility percentage Test Weight (g) Notes on pests, diseases and lodging Grain quality characteristics to be provided wherever facilities exist. Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. Data will be considered only if MS grain type is used as Local Check. 	

Data will not be considered if mean yield of the experiment is below 4 t/ha. Kindly offer an explanation for the low yield.

Trial No. 48: Layout plan of entries in Advance Variety Trial 1- Medium Slender Grain (AVT 1-MS), Kharif 2023 (Zone - V)

Replication 1 Plot No. /	Replication 2 Plot No. /	Replication 3 Plot No. /
Entry No.	Entry No.	Entry No.
101 /4812	201 /4805	301 /4804
102 /4815	202 /4811	302 /4827 (LC)
103 /4805	203 /4817	303 /4819
104 /4827 (LC)	204 /4822	304 /4811
105 /4809	205 /4804	305 /4816
106 /4814	206 /4812	306 /4808
107 /4804	207 /4808	307 /4815
108 /4808	208 /4827 (LC)	308 /4805
109 /4819	209 /4823	309 /4814
110 /4822	210 /4809	310 /4812
111 /4811	211 /4816	311 /4822
112 /4823	212 /4815	312 /4817
113 /4817	213 /4814	313 /4809
114 /4816	214 /4819	314 /4823

Note: Total No. of entries in the trial are 27; For Zone-V only 14 entries are included. Wherever missing numbers are found, those entries are not included for Zone-V.

Knarii 2023			
1	Trial No.	48	
2	Name of the trial:	Advance Variety Trial 1- Medium Slender Grain (AVT 1-MS)	
3	Objective:	To study the comparative performance of Medium Slender grain cultivars and elite lines for yield and quality	
4	Total Locations:	39 (07 for Zone – VI)	
5	Layout:	Randomized Block Design (RBD)	
6	Replications:	3	
7	Fertilizers:	As per the recommendation of the centre	
8	Plant protection:	Need based	
9	Plot size:	15 sq m (This should be strictly followed)	
10	Spacing:	Transplanting: 20 cm between rows 15 cm between plants	
11	Total No. of entries:	27 (For Zone –VI only 18 entries)	
12	Check varieties	National: Telangana Sona (Early Duration), WGL 14 (Medium duration) & BPT 5204 (Late duration); Zonal: Karjat-6 (Western): Hybrids: 27 P 63 and Local Check	
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly 	
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (No.) Plant height (cm) Spikelets/Panicle (No.) Grains/Panicle (No.) Sterility percentage Test Weight (g) Notes on pests, diseases and lodging Grain quality characteristics to be provided wherever facilities exist. Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. Data will be considered only if MS grain type is used as Local Check. 	

Data will not be considered if mean yield of the experiment is below 4 t/ha. Kindly offer an explanation for the low yield.

Trial No. 48: Layout plan of entries in Advance Variety Trial 1 – Medium Slender Grain (AVT 1-MS), Kharif 2023 (Zone – VI)

Replication 1	Replication 2	Replication 3
Plot No. /	Plot No. /	Plot No. /
Entry No.	Entry No.	Entry No.
101 /4817	201 /4811	301 /4808
102 /4802	202 /4815	302 /4827 (LC)
103 /4806	203 /4801	303 /4816
104 /4808	204 /4827 (LC)	304 /4810
105 /4811	205 /4823	305 /4805
106 /4823	206 /4813	306 /4806
107 /4809	207 /4812	307 /4817
108 /4816	208 /4814	308 /4811
109 /4815	209 /4808	309 /4813
110 /4812	210 /4819	310 /4802
111 /4810	211 /4804	311 /4823
112 /4814	212 /4802	312 /4801
113 /4819	213 /4817	313 /4804
114 /4827 (LC)	214 /4810	314 /4812
115 /4804	215 /4809	315 /4814
116 /4813	216 /4805	316 /4819
117 /4801	217 /4806	317 /4815
118 /4805	218 /4816	318 /4809

<u>Note</u>: Total No. of entries in the trial are 27; For Zone-VI only 18 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VI.

1	T : 1 \ Y	Kharif 2023
1	Trial No.	48
2	Name of the trial:	Advance Variety Trial 1– Medium Slender Grain (AVT 1-MS)
3	Objective:	To study the comparative performance of Medium Slender grain cultivars and elite lines for yield and quality
4	Total Locations:	39 (15 for Zone – VII)
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	15 sq m (This should be strictly followed)
10	Spacing:	Transplanting: 20 cm between rows 15 cm between plants
11	Total No. of entries:	27 (For Zone –VII only 16 entries)
12	Check varieties	National : Telangana Sona (Early Duration), WGL 14 (Medium duration) & BPT 5204 (Late duration & Recurrent Parent); Zonal : ADT 49 (Southern): Hybrids : 27 P 63 and Local Check
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (No.) Plant height (cm) Spikelets/Panicle (No.) Grains/Panicle (No.) Sterility percentage Test Weight (g) Notes on pests, diseases and lodging Grain quality characteristics to be provided wherever facilities exist. Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. Data will be considered only if MS grain type is used as Local Check.

Data will not be considered if mean yield of the experiment is below 4 t/ha. Kindly offer an explanation for the low yield.

Trial No. 48: Layout plan of entries in Advance Variety Trial 1 – Medium Slender Grain (AVT 1-MS), Kharif 2023 (Zone – VII)

Replication 1	Replication 2	Replication 3
Plot No. /	Plot No. /	Plot No. /
Entry No.	Entry No.	Entry No.
101 /4808	201 /4816	301 /4824
102 /4811	202 /4815	302 /4823
103 /4816	203 /4805	303 /4822
104 /4824	204 /4809	304 /4805
105 /4827 (LC)	205 /4812	305 /4817
106 /4823	206 /4814	306 /4808
107 /4825	207 /4824	307 /4819
108 /4817	208 /4826	308 /4812
109 /4826	209 /4827 (LC)	309 /4811
110 /4805	210 /4823	310 /4814
111 /4812	211 /4825	311 /4815
112 /4814	212 /4822	312 /4816
113 /4822	213 /4819	313 /4827 (LC)
114 /4819	214 /4808	314 /4809
115 /4809	215 /4811	315 /4825
116 /4815	216 /4817	316 /4826

<u>Note</u>: Total No. of entries in the trial are 27; For Zone-VII only 16 entries are included. Wherever missing numbers are found, those entries are not included for Zone-VII.

1	Trial No.	49
2	Name of the trial:	Initial Variety Trial – Medium Slender Grain (IVT-MS)
3	Objective:	To study the comparative performance of Medium Slender grain cultivars and elite lines for yield and quality
4	Locations:	39
5	Layout:	Simple Lattice Design
6	Replications:	2
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9	Plot size:	10 sq m (This should be strictly followed)
10	Spacing:	Transplanting: 20 cm between rows 15 cm between plants
11	No. of entries:	64
12	Check varieties	National: Telangana Sona (Early duration), WGL 14 (Medium duration) & BPT 5204 (Late duration); Zonal: Improved Samba Mahsuri (Eastern & Central), Ketekijoha (North Eastern), Karjat-6 (Western), ADT 49 (Southern) and Local Check.
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (No.) Plant height (cm) Sterility percentage Test Weight (g) Notes on pests, diseases and lodging Grain quality characteristics to be provided wherever facilities exist. Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Data will not be considered if mean yield of the experiment is below 4 t/ha. Kindly offer an explanation for the low yield.

Trial No. 49: Layout plan of entries in Initial Variety Trial—Medium Slender Grain (IVT-MS), Kharif 2023

REPLICATION-I

101/4917	109/4959	117/4934	125/4906	133/4912	141/4955	149/4930	157/4909
102/4922	110/4952	118/4954	126/4947	134/4945	142/4910	150/4905	158/4927
103/4933	111/4913	119/4914	127/4931	135/4925	143/4911	151/4939	159/4951
104/4916	112/4919	120/4937	128/4926	136/4915	144/4949	152/4962	160/4940
105/4907	113/4932	121/4960	129/4948	137/4904	145/4944	153/4928	161/4903
106/4963	114/4943	122/4924	130/4958	138/4946	146/4957	154/4901	162/4935
107/4950	115/4941	123/4920	131/4902	139/4936	147/4921	155/4953	163/4923
108/4942	116/4956	124/4908	132/4964	140/4929	148/4961	156/4918	164/4938
			(LC)				

REPLICATION-II

201/4903	209/4938	217/4923	225/4935	233/4909	241/4951	249/4927	257/4940
202/4960	210/4908	218/4920	226/4924	234/4934	242/4914	250/4954	258/4937
203/4928	211/4918	219/4953	227/4901	235/4930	243/4939	251/4905	259/4962
204/4932	212/4956	220/4941	228/4943	236/4959	244/4913	252/4952	260/4919
205/4944	213/4961	221/4921	229/4957	237/4955	245/4911	253/4910	261/4949
206/4948	214/4964	222/4902	230/4958	238/4906	246/4931	254/4947	262/4926
	(LC)						
207/4907	215/4942	223/4950	231/4963	239/4917	247/4933	255/4922	263/4916
208/4904	216/4929	224/4936	232/4946	240/4912	248/4925	256/4945	264/4915

	Kharif	2023

1	Trial No.	50
2	Name of the trial:	Advance Variety Trial -1& Initial Variety Trial - Rice Biofortification (AVT 1& IVT-BIOFORT)
3	Objective:	To study the comparative performance of elite lines for yield and nutritional quality
4	Locations:	39
5 6	Layout: Replications:	Rectangular Lattice Design 2
7	Fertilizers:	As per the recommendation of the centre (if zinc is not included in the POPs, apply zinc sulphate @ 25-50 kg/ha once in every 3 crop seasons, preferably in rabi). If the centre is not applied the zinc sulphate in the last two years, apply in current season without fail.
8	Plant protection:	Need based
9	Plot size:	10 sq m (This should be strictly followed)
10	Spacing:	20 x 15 cm
11	No. of entries:	52
12	Check varieties	Yield Checks : BPT 5204 & IR 64; Yield &Micro Nutrient Checks : DRR Dhan 45; Micro Nutrient Check : Chittimutyalu and DRR Dhan 48
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow (4 cms) Gap fill within a week of planting Incorporate fertilizer evenly Soil samples up to 20 cm depth before planting to be collected and should be sent to IIRR before transplanting. Soil samples also should be collected after harvesting to be sent to IIRR for analysis for estimating Fe & Zn content.
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (No.) Plant height (cm) Sterility percentage Test Weight/ 1000 grain weight (g) Notes on pests, diseases and lodging Grain quality characteristics to be provided wherever facilities exist. 50 gms of grains per entry in 2 replications after harvesting to be sent to IIRR for Fe and Zn analysis Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.
W/la a sa	44	

When the mean yield of the experiment is below 4 t/ha, kindly offer an explanation for the low yield.

Trial No. 50: Layout plan of entries in Advance Variety Trial & Initial Variety Trial – Rice Biofortification (AVT-1& IVT- BIOFORT), Kharif 2023

REPLICATION-I

101 /5030	114 /5014	127 /5017	140 /5020
102 /5034	115 /5005	128 /5049	141 /5001
103 /5048	116 /5036	129 /5007	142 /5021
104 /5027	117 /5050	130 /5006	143 /5008
105 /5010	118 /5042	131 /5039	144 /5024
106 /5016	119 /5019	132 /5032	145 /5026
107 /5045	120 /5011	133 /5004	146 /5025
108 /5037	121 /5040	134 /5002	147 /5013
109 /5035	122 /5029	135 /5022	148 /5015
110 /5009	123 /5033	136 /5051	149 /5003
111 /5023	124 /5018	137 /5043	150 /5052
112 /5038	125 /5012	138 /5046	151 /5041
113 /5044	126 /5047	139 /5031	152 /5028

REPLICATION-II

		T T	
201 /5017	214 /5039	227 /5042	240 /5020
202 /5018	215 /5050	228 /5021	241 /5040
203 /5052	216 /5044	229 /5049	242 /5041
204 /5029	217 /5007	230 /5034	243 /5004
205 /5031	218 /5035	231 /5010	244 /5013
206 /5006	219 /5019	232 /5026	245 /5008
207 /5012	220 /5048	233 /5037	246 /5009
208 /5023	221 /5024	234 /5025	247 /5047
209 /5002	222 /5003	235 /5028	248 /5045
210 /5030	223 /5001	236 /5046	249 /5016
211 /5036	224 /5038	237 /5043	250 /5015
212 /5032	225 /5011	238 /5033	251 /5027
213 /5022	226 /5014	239 /5051	252 /5005

1 Trial No.: 51

2 Name of the trial: Advance Variety Trial 2 - Alkaline and Inland Saline Tolerant Variety Trial

(AVT 2- AL& ISTVT)

3 Objectives: To evaluate comparative performance of promising elite cultures for Alkalinity and

Inland salinity.

4 Locations: 19 (18 For Zone- II, III & VII)

5 Layout: Randomized Block Design (RBD)

6 Fertilizers: As per the recommendation of the centre

7 Replications: 3

8 Entries: 13

9 Plot size: 15 sq m (This should be strictly followed)

10 Spacing 15 x 15 cm

11 Check varieties: Alkaline - CSR 36; Inland saline - CSR 23; Early Duration Saline Check -- CSR

10; Sensitive Check & Recurrent Parent - Pusa 44; Saline Tolerant Check -

FL 478 and Local check

12 Special instructions:

• Before land preparation, collect surface (0-30 cm depth) soil samples randomly from 10-15 spots from the experimental sites, air dry, mix and pass through 2 mm sieve, analyze the pH and EC at your centre and half of the sample send to IIRR.

13 General instructions:

- The trial for sodic soils (alkaline) may be conducted in soil with pH >8.5, EC <4 dSm $^{-1}$ and ESP more than 15% whereas inland salinity trial may be conducted in soil with pH \leq 8.0, EC >4 dSm $^{-1}$
- Select a homogeneously Alkaline/ Inland saline area for main field
- Raise the nursery in normal soil and sow the nursery as thin as possible
- Transplant seedlings shallow
- Seedlings per hill: 2-3
- Gap fill within a week of planting after recording the mortality of the seedlings
- Transplant 30 days old seedlings & incorporate fertilizer evenly
- No soil amendment or high doses of fertilizer to be added
- 14 Data to be collected:
- <u>Soil characteristics</u>: For sodic/alkaline and inland saline soils, pH and EC to be determined at 3 stages of crop growth i.e., 1) Before puddling/transplanting, 2) Maximum tillering and 3) Flowering in 0-15 & 15-30 cm soil depth. Soil characteristics may be determined from 2 replications only.
- Soil Samples need to be sent to CSSRI Karnal.
- EC and pH data of irrigation water/inundation water.
- Water depth and duration of water during crop growth
- Seedling survival percentage
- Grain yield (kg/plot) based on net plot size to be reported
- Days to 50% flowering & Plant height (cm)
- Phenotypic acceptability
- Reaction to pests and diseases
- Rainfall during crop growth (Number of rainy days)
- Maximum & minimum temperature

When the mean yield of the experiment is below 2 t/ha, kindly offer an explanation for the low yield.

- NB: i) Without the data on pH & EC at three stages of crop growth data will not be considered.
- ii) Since very frequently trials of AL&ISTVT are getting inundated, which is typical of this ecology, data on the survived entries will be useful. Therefore please record data.
- iii) It is requested that trial be conducted as per the technical program and record data properly. Many a time, data from several centres is not considered in the past due to poor conduct of trials. Therefore you are requested to conduct the trial to generate meaningfull data.

Trial 51: Layout plan of entries in Advance Variety Trial 2 - Alkaline and Inland Saline Tolerant Variety Trial (AVT 2- AL & ISTVT), Kharif 2023 (Zone- II, III & VII)

Replication 1 Plot No. /	Replication 2 Plot No. /	Replication 3 Plot No. /
Entry No.	Entry No.	Entry No.
101 /5108	201 /5113	301 /5109
102 /5102	202 /5105	302 /5106 (LC)
103 /5111	203 /5110	303 /5105
104 /5113	204 /5107	304 /5101
105 /5103	205 /5101	305 /5107
106 /5104	206/5106 (LC)	306 /5110
107 /5109	207 /5111	307 /5103
108 /5110	208 /5102	308 /5104
109 /5106 (LC)	209 /5109	309 /5113
110 /5107	210 /5103	310 /5111
111 /5112	211 /5104	311 /5108
112 /5101	212 /5112	312 /5102
113 /5105	213 /5108	313 /5112

15 Trial No.: 51

16 Name of the trial: Advance Variety Trial 2 - Alkaline and Inland Saline Tolerant Variety Trial

(AVT 2- AL& ISTVT)

17 Objectives: To evaluate comparative performance of promising elite cultures for Alkalinity and

Inland salinity.

18 Locations: 19 (**01 For Zone- VI**)

19 Layout: Randomized Block Design (RBD)

20 Fertilizers: As per the recommendation of the centre

21 Replications: 3

22 Entries: 13 (For Zone-VI only 11 entries)

23 Plot size: 15 sq m (This should be strictly followed)

24 Spacing 15 x 15 cm

25 Check varieties: Alkaline - CSR 36; Inland saline - CSR 23; Early Duration Saline Check -- CSR

10; Sensitive Check-Pusa 44; Saline Tolerant Check -FL 478- and Local check

26 Special instructions:

• Before land preparation, collect surface (0-30 cm depth) soil samples

randomly from 10-15 spots from the experimental sites, air dry, mix and pass through 2 mm sieve, analyze the pH and EC at your centre and half of the

sample send to IIRR.

27 General instructions: • The trial for sodic soils (alkaline) may be conducted in soil with pH >8.5, EC

<4 dSm $^{-1}$ and ESP more than 15% whereas inland salinity trial may be conducted in soil with pH \leq 8.0, EC >4 dSm $^{-1}$

• Select a homogeneously Alkaline/ Inland saline area for main field

- Raise the nursery in normal soil and sow the nursery as thin as possible
- Transplant seedlings shallow
- Seedlings per hill: 2-3
- Gap fill within a week of planting after recording the mortality of the seedlings
- Transplant 30 days old seedlings & incorporate fertilizer evenly
- No soil amendment or high doses of fertilizer to be added
- 28 Data to be collected:
- <u>Soil characteristics</u>: For sodic/alkaline and inland saline soils, pH and EC to be determined at 3 stages of crop growth i.e., 1) Before puddling/transplanting, 2) Maximum tillering and 3) Flowering in 0-15 & 15-30 cm soil depth. Soil characteristics may be determined from 2 replications only.
- Soil Samples need to be sent to CSSRI Karnal.
- EC and pH data of irrigation water/inundation water.
- Water depth and duration of water during crop growth
- Seedling survival percentage
- Grain yield (kg/plot) based on net plot size to be reported
- Days to 50% flowering & Plant height (cm)
- Phenotypic acceptability
- Reaction to pests and diseases
- Rainfall during crop growth (Number of rainy days)
- Maximum & minimum temperature

When the mean yield of the experiment is below 2 t/ha, kindly offer an explanation for the low yield.

NB: i) Without the data on pH & EC at three stages of crop growth data will not be considered.

- ii) Since very frequently trials of AL&ISTVT are getting inundated, which is typical of this ecology, data on the survived entries will be useful. Therefore please record data.
- iii) It is requested that trial be conducted as per the technical program and record data properly. Many a time, data from several centres is not considered in the past due to poor conduct of trials. Therefore you are requested to conduct the trial to generate meaningfull data.

Trial 51: Layout plan of entries in Advance Variety Trial 2 - Alkaline and Inland Saline Tolerant Variety Trial (AVT 2- AL & ISTVT), Kharif 2023 (Zone- VI)

Replication 1 Plot No. /	Replication 2 Plot No. /	Replication 3 Plot No. /
Entry No.	Entry No.	Entry No.
101 /5109	201 /5102	301 /5105
102 /5103	202 /5112	302 /5104
103 /5107	203 /5113	303 /5102
104 /5104	204 /5101	304 /5112
105 /5113	205 /5108	305 /5109
106/5106 (LC)	206 /5103	306 /5107
107 /5102	207 /5109	307 /5108
108 /5108	208 /5105	308 /5106 (LC)
109 /5101	209 /5104	309 /5113
110 /5105	210 /5107	310 /5103
111 /5112	211 /5106 (LC)	311 /5101

<u>Note</u>: Total No. of entries in the trial are 13; For Zone- VI only 11 entries are included. Wherever missing numbers are found, those entries are not included for Zone- VI.

Rajendranagar, Hyderabad – 500 030, Telangana Kharif 2023

	Kharif 2023				
1	Trial No.:	52			
2	Name of the trial:	Advance Variety Trial 1- Alkaline and Inland Saline Tolerant Variety Trial (AVT 1- AL& ISTVT)			
3	Objectives:	To evaluate comparative performance of promising elite cultures for Alkalinity and Inland salinity.			
4	Locations:	19			
5	Layout:	Randomized Block Design (RBD)			
6	Fertilizers:	As per the recommendation of the centre			
7	Replications:	3			
8	Entries:	19			
9	Plot size:	15 sq m (This should be strictly followed)			
10	Spacing	15 x 15 cm			
11	Check varieties:	Alkaline - CSR 36, Early Duration Saline Check -CSR 10, Sensitive Check And Recurrent Parent - Pusa 44, Local check and Improved samba mahsuri (Recurrent Parent)			
12	Special instructions:	• Before land preparation, collect surface (0-30 cm depth) soil samples randomly from 10-15 spots from the experimental sites, air dry, mix and pass through 2 mm sieve, analyze the pH and EC at your centre and half of the sample send to IIRR.			
13	General instructions:	 The trial for sodic soils (alkaline) may be conducted in soil with pH >8.5, EC <4 dSm ⁻¹ and ESP more than 15% whereas inland salinity trial may be conducted in soil with pH ≤ 8.0, EC >4 dSm ⁻¹ Select a homogeneously Alkaline/ Inland saline area for main field Raise the nursery in normal soil and sow the nursery as thin as possible Transplant seedlings shallow Seedlings per hill: 2-3 Gap fill within a week of planting after recording the mortality of the seedlings Transplant 30 days old seedlings & incorporate fertilizer evenly No soil amendment or high doses of fertilizer to be added 			
14	Data to be collected:	 Soil characteristics: For sodic/alkaline and inland saline soils, pH and EC to be determined at 3 stages of crop growth i.e., 1) Before puddling/ transplanting, 2) Maximum tillering and 3) Flowering in 0-15 & 15-30 cm soil depth. Soil characteristics may be determined from 2 replications only. Soil Samples need to be sent to CSSRI Karnal. EC and pH data of irrigation water/inundation water. Water depth and duration of water during crop growth Seedling survival percentage Grain yield (kg/plot) based on net plot size to be reported Days to 50% flowering & Plant height (cm) Phenotypic acceptability Reaction to pests and diseases Rainfall during crop growth (Number of rainy days) Maximum & minimum temperature experiment is below 2 t/ha, kindly offer an explanation for the low yield. 			
- 11	on the mean yield of the c	Aperiment is solow 2 with, kinding offer an explanation for the fow yield.			

- NB: Without the data on pH & EC at three stages of crop growth data will not be considered.
 - i) Since very frequently trials of AL&ISTVT are getting inundated, which is typical of this ecology, data on the survived entries will be useful. Therefore please record data.
 - ii) It is requested that trial be conducted as per the technical program and record data properly.

 Many a time, data from several centres is not considered in the past due to poor conduct of trials.

 Therefore you are requested to conduct the trial to generate meaningfull data.

Trial 52: Layout plan of entries in Advance Variety Trial 1- Alkaline and Inland Saline Tolerant Variety Trial (AVT 1-AL & ISTVT), Kharif 2023

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /5205	201 /5201	301 /5204
102 /5214	202 /5208	302 /5216
103 /5217	203 /5214	303 /5209
104 /5215	204 /5206	304 /5202
105 /5204	205 /5216	305 /5210 (LC)
106 /5209	206 /5218	306 /5205
107 /5210 (LC)	207 /5205	307 /5208
108 /5201	208 /5212	308 /5217
109 /5219	209 /5202	309 /5206
110 /5207	210 /5204	310 /5212
111 /5218	211 /5203	311 /5214
112 /5206	212 /5209	312 /5213
113 /5202	213 /5211	313 /5203
114 /5208	214 /5210 (LC)	314 /5215
115 /5216	215 /5213	315 /5218
116 /5211	216 /5219	316 /5201
117 /5213	217 /5207	317 /5219
118 /5212	218 /5215	318 /5207
119 /5203	219 /5217	319 /5211

Rajendranagar, Hyderabad – 500 030, Telangana Kharif 2023

		Kharii 2025		
1	Trial No.:	53		
2	Name of the trial:	Initial Variety Trial - Alkaline and Inland Saline Tolerant Variety Trial (IVT- AL & ISTVT)		
3	Objectives:	To evaluate comparative performance of promising elite cultures for Alkalinity and Inland salinity.		
4	Locations:	19		
5	Layout:	Randomized Block Design (RBD)		
6	Fertilizers:	As per the recommendation of the centre		
7	Replications:	3		
8	Entries:	21		
9	Plot size:	10 sq m (This should be strictly followed)		
10	Spacing	15 x 15 cm		
11	Check varieties:	Alkaline - CSR 36, Inland saline - CSR 23, Early Duration Saline Check CSR 10, Sensitive Check - Pusa 44 and DRR Dhan 58 and Local check		
12	Special instructions:	 Before land preparation, collect surface (0-30 cm depth) soil samples randomly from 10-15 spots from the experimental sites, air dry, mix and pass through 2 mm sieve, analyze the pH and EC at your centre and half of the sample send to IIRR. 		
13	General instructions:	 The trial for sodic soils (alkaline) may be conducted in soil with pH >8.5, EC <4 dSm ⁻¹ and ESP more than 15% whereas inland salinity trial may be conducted in soil with pH ≤ 8.0, EC >4 dSm ⁻¹ Select a homogeneously Alkaline/ Inland saline area for main field Raise the nursery in normal soil and sow the nursery as thin as possible Transplant seedlings shallow Seedlings per hill: 2-3 Gap fill within a week of planting after recording the mortality of the seedlings Transplant 30 days old seedlings & incorporate fertilizer evenly No soil amendment or high doses of fertilizer to be added 		
14	Data to be collected:	 Soil characteristics: For sodic/alkaline and inland saline soils, pH and EC to be determined at 3 stages of crop growth i.e., 1) Before puddling/ transplanting, 2) Maximum tillering and 3) Flowering in 0-15 & 15-30 cm soil depth. Soil characteristics may be determined from 2 replications only. Soil Samples need to be sent to CSSRI Karnal. EC and pH data of irrigation water/inundation water. Water depth and duration of water during crop growth Seedling survival percentage Grain yield (kg/plot) based on net plot size to be reported Days to 50% flowering & Plant height (cm) Phenotypic acceptability Reaction to pests and diseases Rainfall during crop growth (Number of rainy days) Maximum & minimum temperature 		
Whe	When the mean yield of the experiment is below 2 t/ha, kindly offer an explanation for the low yield.			

- NB: Without the data on pH & EC at three stages of crop growth data will not be considered.
 - i) Since very frequently trials of AL&ISTVT are getting inundated, which is typical of this ecology, data on the survived entries will be useful. Therefore please record data.
 - ii) It is requested that trial be conducted as per the technical program and record data properly. Many a time, data from several centres is not considered in the past due to poor conduct of trials.

 Therefore you are requested to conduct the trial to generate meaningfull data.

Trial 53: Layout plan of entries in Initial Variety Trial - Alkaline and Inland Saline Tolerant Variety Trial (IVT- AL & ISTVT), Kharif 2023

Dankastian 1 Dankastian 2 Dankastian 2				
Replication 1	Replication 2	Replication 3		
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.		
101 /5321	201 /5310	301 /5309		
102 /5308	202 /5318	302 /5307		
103 /5313	203 /5320 (LC)	303 /5317		
104 /5301	204 /5307	304 /5312		
105 /5303	205 /5304	305 /5301		
106 /5320 (LC)	206 /5303	306 /5302		
107 /5312	207 /5306	307 /5310		
108 /5314	208 /5317	308 /5316		
109 /5307	209 /5302	309 /5305		
110 /5319	210 /5321	310 /5314		
111 /5316	211 /5314	311 /5304		
112 /5302	212 /5316	312 /5306		
113 /5318	213 /5308	313 /5321		
114 /5311	214 /5309	314 /5308		
115 /5306	215 /5311	315 /5320 (LC)		
116 /5315	216 /5313	316/5318		
117 /5305	217 /5315	317 /5311		
118 /5310	218 /5301	318 /5319		
119 /5304	219 /5305	319 /5303		
120 /5309	220 /5312	320 /5315		
121 /5317	221 /5319	321 /5313		

Rajendranagar, Hyderabad – 500 030, Telangana Kharif 2023

1	Trial No.:	54
2	Name of the trial:	Advance Variety Trial -2 & Initial Variety Trial - Coastal Saline Tolerant Variety Trial (AVT-2 & IVT - CSTVT)
3	Objectives:	To evaluate comparative performance of promising elite cultures for CoastalSaline soils
4	Locations:	14
5	Layout:	Rectangular Lattice Design (RLD)
6	Fertilizers:	As per the recommendation of the centre
7	Replications:	3
8	Entries:	50
9	Plot size:	15 sq m (This should be strictly followed)
10	Spacing	15 x 15 cm
11	Check varieties:	Coastal saline – Bhuthnath, Early duration saline Check CSR 10, Saline Tolerant Check- FL 478, Sensitive Check- Pusa 44, Local check and Recurrent Parent: ADT 45
12	Special instructions:	• Before land preparation, collect surface (0-30 cm depth) soil samples randomly from 10-15 spots from the experimental sites, air dry, mix and pass through 2 mm sieve, analyze the pH and EC at your centre and half of the sample send to IIRR.
13	General instructions:	 In coastal saline soils, the trial may be conducted in soils with electrical conductivity above 4 dSm⁻¹ and pH < 7. Select a homogeneously coastal saline area for main field Raise the nursery in normal soil and sow the nursery as thin as possible Transplant seedlings shallow Seedlings per hill: 2-3 Gap fill within a week of planting after recording the mortality of the seedlings Transplant 30 days old seedlings & incorporate fertilizer evenly No soil amendment or high doses of fertilizer to be added
14	Data to be collected:	 Soil characteristics: For coastal saline soils, pH and EC to be determined at 3 stages of crop growth i.e., 1) Before puddling/ transplanting, 2)Maximum tillering and 3) Flowering in 0-15 & 15-30 cm soil depth. Soil characteristics may be determined from 2 replications only. EC and pH data of irrigation water/inundation water. Water depth and duration of water during crop growth Seedling survival percentage Grain yield (kg/plot) based on net plot size to be reported Days to 50% flowering & Plant height (cm) Phenotypic acceptability Reaction to pests and diseases Rainfall during crop growth (Number of rainy days) Maximum & minimum temperature

When the mean yield of the experiment is below 2 t/ha, kindly offer an explanation for the low yield.

NB: i) Without the data on pH & EC at three stages of crop growth, data will not be considered.

ii)Since very frequently trials of CSTVT are getting inundated, which is typical of this ecology, dataon the survived entries will be useful. Therefore please record data.

iii) It is requested that trial be conducted as per the technical program and record data properly. Many a time,data from several centres is not considered in the past due to poor conduct of trials. Therefore you are requested to conduct the trial to generate meaningfull data.

Trial 54: Layout plan of entries in Advance Variety Trial -2 & Initial Variety Trial - Coastal Saline Tolerant Variety Trial (AVT-2 & IVT - CSTVT), Kharif 2023.

Replication - I

101 /5404	111 /5405	121 /5441	131 /5415	141 /5406
102 /5407	112 /5432	122 /5409	132 /5401	142 /5411
103 /5418	113 /5408	123 /5437	133 /5430	143 /5403
104 /5423	114 /5442	124 /5422	134 /5431	144 /5419
105 /5429	115 /5444	125 /5446	135 /5439	145 /5420
106 /5448	116 /5417	126 /5449	136 /5443	146 /5416
107 /5433	117 /5434	127 /5414	137 /5427	147 /5424
108 /5440	118 /5425	128 /5426	138 /5421	148 /5410
109 /5450 (LC)	119 /5402	129 /5447	139 /5436	149 /5413
110 /5438	120 /5445	130 /5428	140 /5412	150 /5435

Replication - II

201 /5403	211 /5444	221 /5435	231 /5415	241 /5419
202 /5433	212 /5443	222 /5431	232 /5426	242 /5410
203 /5428	213 /5409	223 /5404	233 /5421	243 /5440
204 /5418	214 /5407	224 /5434	234 /5408	244 /5441
205 /5437	215 /5406	225 /5436	235 /5422	245 /5429
206 /5401	216 /5424	226 /5448	236 /5416	246 /5442
207 /5423	217 /5412	227 /5413	237 /5445	247 /5446
208 /5405	218 /5430	228 /5447	238 /5438	248 /5420
209 /5414	219 /5411	229 /5427	239 /5402	249 /5432
210 /5425	220 /5439	230 /5449	240 /5417	250 /5450 (LC)

Replication - III

301 /5408	311 /5433	321 /5443	331 /5427	341 /5426
302 /5448	312 /5450 (LC)	322 /5428	332 /5407	342 /5445
303 /5418	313 /5430	323 /5412	333 /5449	343 /5414
304 /5438	314 /5431	324 /5446	334 /5402	344 /5425
305 /5406	315 /5417	325 /5403	335 /5439	345 /5437
306 /5432	316 /5401	326 /5435	336 /5444	346 /5419
307 /5440	317 /5409	327 /5420	337 /5429	347 /5447
308 /5415	318 /5422	328 /5423	338 /5416	348 /5441
309 /5411	319 /5404	329 /5424	339 /5410	349 /5413
310 /5434	320 /5436	330 /5421	340 /5442	350 /5405

1	Trial No.	55
2	Name of the trial:	Initial Variety Trial – Aromatic Grain Type (IVT – AGT) (Non-Basmati)
3	Objective:	To study the comparative performance of aromatic grain cultivars and elite lines for yield and quality.
4	Total Locations:	35
5	Layout:	Rectangular Lattice Design
6	Replications:	2
7	Fertilizers:	As per the recommendation of the centre
8	Plant protection:	Need based
9 10	Plot size: Spacing:	10 sq m (This should be strictly followed) 20 x 15 cm
11	Total entries:	40
12	Check varieties	National: Shobini, Zonal: Badshabhog Sel-1 (Northern & Central), CR Sugandh Dhan 907 (Eastern & North Eastern), GAR-14 (Western) Sugandh Samba (Southern), Quality: Dubraj Sel-1, Ketekijoha; Long Grain Check: Rajendranagar Vari-2 and Local check.
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting Incorporate fertilizer evenly
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (No.) Plant height (cm) Spikelets/Panicle (No.) Sterility percentage Test Weight (g) Notes on pests, diseases and lodging Grain quality characteristics to be provided wherever facilities exist. Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

When the mean yield of the experiment is below 4 t/ha, kindly offer an explanation for the low yield.

Trial No. 55: Layout plan of entries in Initial Variety Trial - Aromatic Grain Type (IVT-AGT), (Non-Basmati), Kharif 2023

REPLICATION-I

101/5513	109/5531	117/5511	125/5527	133/5522
102/5516	110/5520	118/5539	126/5540	134/5512
103/5530	111/5509	119/5526	127/5505	135/5508
104/5536 (LC)	112/5515	120/5503	128/5510	136/5507
105/5514	113/5517	121/5518	129/5525	137/5519
106/5523	114/5533	122/5524	130/5528	138/5502
107/5534	115/5532	123/5537	131/5529	139/5501
108/5521	116/5506	124/5538	132/5504	140/5535

REPLICATION-II

201/5536 (LC)	209/5516	217/5502	225/5515	233/5513
202/5538	210/5530	218/5539	226/5517	234/5514
203/5522	211/5532	219/5528	227/5504	235/5506
204/5507	212/5521	220/5535	228/5526	236/5527
205/5533	213/5509	221/5523	229/5512	237/5510
206/5525	214/5537	222/5520	230/5529	238/5518
207/5534	215/5524	223/5531	231/5511	239/5540
208/5519	216/5505	224/5503	232/5508	240/5501

Rajendranagar, Hyderabad – 500 030, Telangana Kharif 2023

1	Trial No.	56
2	Name of the trial:	Advance Variety Trial 2-Low Phosphorus tolerance trial (AVT 2 –LPT)
3	Objective:	To study the comparative performance of elite lines for low phosphorus tolerance
4	Locations:	10
5	Layout:	Randomized Block Design (RBD)
6	Replications:	3
7	Fertilizers:	Nitrogen and Potash = Recommended Dose Phosphorus = Two levels (i) P_0 (No Application of Phosphorous) (ii) P_{50} (50% of Phosphorous) i.e. 30 Kg/ha
8	Plant protection:	Need based
9	Plot size:	Three square meters
10	Spacing:	Transplanting: 20 cm between rows 15 cm between plants
11 12 13	No. of entries: Check varieties General instructions: Data to be collected:	Positive checks: Swarna, Rasi & Vandana Negative checks: Improved Samba Mahsuri Genotypes should be evaluated at Zero Phosphorus (No application of P), and 50 % Phosphorus (30kg P ₂ O ₅ /ha) Sow the seed in bed as thin as possible like regular trial Transplant 25-day old seedlings, one seedling / hill. Gap fill within a week of planting Incorporate fertilizer evenly of recommended dose 50% of nitrogen at transplanting as basal dose and remaining 50% in two top dressings Soil phosphorus content should be estimated before transplanting, 45 DAT and at harvesting stage Days to 50% flowering Plant height (cm) Productive tiller Number per plant (No.)
		 Panicle length (cm) No. of filled grains per panicle Spikelet fertility percentage Grain yield per plot (kg) Grain yield Kg/ha Phosphorus content in grain in each plot after harvest Notes on pests, diseases and lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature.

Trial No. 56: Lay out plan of entries in AVT 2- Low Phosphorus tolerance trial, Kharif 2023

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /5605	201 /5609	301 /5606
102 /5607	202 /5603	302 /5610
103 /5603	203 /5605	303 /5611
104 /5611	204 /5608	304 /5603
105 /5610	205 /5606	305 /5601
106 /5606	206 / 5602	306 /5605
107 /5608	207 /5610	307 /5604
108 /5602	208 /5604	308 /5608
109 /5601	209 /5611	309 /5607
110 /5609	210 /5601	310 /5602
111 /5604	211 /5607	311 /5609

NOTE: Same layout for two levels of Phosphorous

- (i) P₀ (No Application of Phosphorous)
- (ii) P_{50} (50% of Phosphorous i.e. 50 kg P_2O_5/ha)

Rajendranagar, Hyderabad – 500 030, Telangana Kharif 2023

1	Trial No.	57	
2	Name of the trial:	Advance Variety Trial 1-Low Phosphorus tolerance trial (AVT 1 –LPT)	
3	Objective:	To study the comparative performance of elite lines for low phosphorus tolerance	
4	Locations:	10	
5	Layout:	Randomized Block Design (RBD)	
6	Replications:	3	
7	Fertilizers:	Nitrogen and Potash = Recommended Dose Phosphorus = Two levels (i) P_0 (No Application of Phosphorous) (ii) P_{50} (50% of Phosphorous) i.e. 30 Kg/ha	
8 9	Plant protection: Plot size:	Need based Three square meters	
10	Spacing:	Transplanting: 20 cm between rows 15 cm between plants	
11 12	No. of entries: Check varieties	30 Positive checks : Swarna, Rasi & Vandana Negative check : Improved Samba Mahsuri Recurrent Parents : Pusa 44 & Improved Samba Mahsuri	
13.	General instructions: Data to be collected:	 Genotypes should be evaluated at Zero Phosphorus (No application of P), and 50 % Phosphorus (30kg P₂O₅/ha) Sow the seed in bed as thin as possible like regular trial Transplant 25-day old seedlings, one seedling / hill. Gap fill within a week of planting Incorporate fertilizer evenly of recommended dose 50% of nitrogen at transplanting as basal dose and remaining 50% in two top dressings Soil phosphorus content should be estimated before transplanting, 45 DAT and at harvesting stage Days to 50% flowering Plant height (cm) Productive tiller Number per plant (No.) Panicle length (cm) No. of filled grains per panicle Spikelet fertility percentage Grain yield per plot (kg) 	

Grain yield Kg/ha

Phosphorus content in grain in each plot after harvest

Rainfall during the crop growth (Number of rainy days)

Notes on pests, diseases and lodging

Maximum and minimum temperature.

Trial No. 57: Lay out plan of entries in AVT 1- Low Phosphorus tolerance trial, Kharif 2023

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /5707	201 /5709	301 /5728
102 /5717	202 /5714	302 /5711
103 /5702	203 /5707	303 /5703
104 /5712	204 /5722	304 /5718
105 /5727	205 /5702	305 /5709
106 /5715	206 /5712	306 /5714
107 /5705	207 /5728	307 /5702
108 /5714	208 /5711	308 /5713
109 /5723	209 /5721	309 /5724
110 /5709	210 /5726	310 /5701
111 /5724	211 /5725	311 /5716
112 /5708	212 /5720	312 /5730
113 /5726	213 /5724	313 /5727
114 /5716	214 /5703	314 /5729
115 /5704	215 /5719	315 /5708
116 /5719	216 /5708	316 /5720
117 /5701	217 /5713	317 /5719
118 /5711	218 /5716	318 /5723
119 /5729	219 /5705	319 /5721
120 /5713	220 /5729	320 /5704
121 /5725	221 /5730	321 /5717
122 /5720	222 /5710	322 /5726
123 /5728	223 /5715	323 /5722
124 /5721	224 /5727	324 /5725
125 /5718	225 /5717	325 /5710
126 /5706	226 /5723	326 /5715
127 /5703	227 /5701	327 /5707
128 /5710	228 /5706	328 /5712
129/5730	229/5704	329/5705
130/5722	230/5718	330/5706

NOTE: Same layout for two levels of Phosphorous

- (i) P₀ (No Application of Phosphorous)
- (ii) P_{50} (50% of Phosphorous i.e. 50 kg P_2O_5/ha)

Rajendranagar, Hyderabad - 500 030, Telangana Kharif 2023

1 Trial No. 58 2 Name of the trial: Initial Variety Trial-Low Phosphorus tolerance trial (IVT -LPT) 3 Objective: To study the comparative performance of elite lines for low phosphorus tolerance 4 Locations: 10 5 Layout: Randomized Block Design (RBD) 6 Replications: 7 Fertilizers: Nitrogen and Potash = Recommended Dose Phosphorus = Two levels (i) P_0 (No Application of Phosphorous) (ii) P₅₀ (50% of Phosphorous) i.e. 30 Kg/ha Plant protection: 8 Need based 9 Plot size: Three square meters Transplanting: 20 cm between rows 10 Spacing: 15 cm between plants 11 No. of entries: 28 12 Check varieties Positive checks : Swarna, Rasi & Vandana **Negative check** : Improved Samba Mahsuri General instructions: Genotypes should be evaluated at Zero Phosphorus (No application of P), and 50 % Phosphorus (30kg P₂O₅/ha) Sow the seed in bed as thin as possible like regular trial Transplant 25-day old seedlings, one seedling / hill. Gap fill within a week of planting Incorporate fertilizer evenly of recommended dose

14. Data to be collected:

- 50% of nitrogen at transplanting as basal dose and remaining
- 50% in two top dressings
- Soil phosphorus content should be estimated before transplanting, 45 DAT and at harvesting stage Days to 50% flowering
 - Plant height (cm)
 - Productive tiller Number per plant (No.)
 - Panicle length (cm)
 - No. of filled grains per panicle
 - Spikelet fertility percentage
 - Grain yield per plot (kg)
 - Grain yield Kg/ha
 - Phosphorus content in grain in each plot after harvest
 - Notes on pests, diseases and lodging
 - Rainfall during the crop growth (Number of rainy days)
 - Maximum and minimum temperature.

Trial No. 58: Lay out plan of entries in IVT- Low Phosphorus tolerance trial, Kharif 2023

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /5807	201 /5809	301 /5828
102 /5817	202 /5814	302 /5811
103 /5802	203 /5807	303 /5803
104 /5812	204 /5822	304 /5818
105 /5827	205 /5802	305 /5809
106 /5815	206 /5812	306 /5814
107 /5805	207 /5828	307 /5802
108 /5814	208 /5811	308 /5813
109 /5823	209 /5821	309 /5824
110 /5809	210 /5826	310 /5801
111 /5824	211 /5825	311 /5816
112 /5808	212 /5820	312 /5806
113 /5826	213 /5824	313 /5827
114 /5816	214 /5803	314 /5805
115 /5804	215 /5819	315 /5808
116 /5819	216 /5806	316 /5820
117 /5801	217 /5813	317 /5819
118 /5811	218 /5816	318 /5823
119 /5822	219 /5805	319 /5821
120 /5813	220 /5804	320 /5812
121 /5825	221 /5818	321 /5817
122 /5820	222 /5810	322 /5826
123 /5828	223 /5815	323 /5822
124 /5821	224 /5827	324 /5825
125 /5818	225 /5817	325 /5810
126 /5806	226 /5823	326 /5815
127 /5803	227 /5801	327 /5807
128 /5810	228 /5808	328 /5804

NOTE: Same layout for two levels of Phosphorous

- (i) P₀ (No Application of Phosphorous)
- (ii) P_{50} (50% of Phosphorous i.e. 50 kg P_2O_5/ha)

Rajendranagar, Hyderabad – 500 030, Telangana Kharif 2023

1	Trial No.	59			
1					
2	Name of the trial:	Advance Varietal Trial 2 – Low Nitrogen Tolerance Trial (AVT 2-LNT)			
3	Objective:	To study the comparative performance of elite lines and cultivars for different levels of nitrogen			
4	Locations:	10			
5	Layout:	Randomized Block Design (RBD)			
6	Replications:	3			
7	Fertilizers:	Phosphorus and Potash = Recommended Dose Nitrogen = Two levels (i) N $_0$ (No Application of Nitrogen) (ii) N $_{50}$ (50% of Nitrogen) i.e. 50 Kg/ha			
8 9	Plant protection: Plot size:	Need based Minimum: 5 sq m			
10	Spacing:	Transplanting: 20 cm between rows 15 cm between plants			
11	No. of entries:	10			
12	Check varieties	Positive Check: Varadhan, Rasi & Swarna			
13	General instructions: Data to be collected:	 Genotypes should be evaluated at Two levels of nitrogen N₀ (Zero kg N/ha i.e. no application of N) and N ₅₀ (50 kg N /ha) Sow the seed in bed as thin as possible Transplant 25-day old seedlings, one seedling / hill. Gap fill within a week of planting Incorporate fertilizer evenly as per the trial 50% of nitrogen at transplanting as basal dose and remaining 50% in two top dressings Soil Nitrogen content should be estimated before transplanting, 45 DAT and at harvesting stage Days to 50% flowering Plant height (cm) Total Tiller Number per plant Productive tiller per plant (No.) Panicle length (cm) No. of filled grains per panicle Spikelet fertility percentage Grain yield kg per ha % nitrogen Use Efficiency Notes on pests, diseases and lodging 			

Rainfall during the crop growth (Number of rainy days)

Maximum and minimum temperature.

Any other information

Trial No. 59: Lay out plan of entries in AVT 2- Low Nitrogen tolerance trial, Kharif 2023

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 /5909	201 /5901	301 /5904
102 /5906	202 /5908	302 /5910
103 /5905	203 /5902	303 /5901
104 /5904	204 /5909	304 /5908
105 /5910	205 /5906	305 /5907
106 /5908	206/5904	306 /5902
107 /5901	207 /5905	307 /5903
108 /5902	208 /5907	308 /5905
109 /5907	209 /5903	309 /5909
110 /5903	210 /5910	310 /5906

NOTE: Same layout for two levels of Nitrogen

- (i) N₀ (No Application of Nitrogen)
- (ii) N 50 (50% of Nitrogen i.e. 50 kg N/ha)

Rajendranagar, Hyderabad – 500 030, Telangana Kharif 2023

15	Trial No.	60 Advance Varietal Trial 1 – Low Nitrogen Tolerance Trial (AVT 1-LNT)		
16	Name of the trial:			
17	Objective:	To study the comparative performance of elite lines and cultivars for different levels of nitrogen		
18	Locations:	10		
19	Layout:	Randomized Block Design (RBD)		
20	Replications:	3		
21	Fertilizers:	Phosphorus and Potash = Recommended Dose Nitrogen = Two levels (i) N ₀ (No Application of Nitrogen) (ii) N ₅₀ (50% of Nitrogen) i.e. 50 Kg/ha		
22 23	Plant protection: Plot size:	Need based Minimum: 5 sq m		
24	Spacing:	Transplanting: 20 cm between rows		
25	No. of entries:	15 cm between plants 20		
26	Check varieties	Positive Check : Varadhan, Rasi & Swarna Susceptible Check : Improved Samba Mahsuri		
27	General instructions: Data to be collected:	 Genotypes should be evaluated at Two levels of nitrogen N₀ (Zero kg N/ha i.e. no application of N) and N ₅₀ (50 kg N /ha) Sow the seed in bed as thin as possible Transplant 25-day old seedlings, one seedling / hill. Gap fill within a week of planting Incorporate fertilizer evenly as per the trial 50% of nitrogen at transplanting as basal dose and remaining 50% in two top dressings Soil Nitrogen content should be estimated before transplanting, 45 DAT and at harvesting stage Days to 50% flowering Plant height (cm) Total Tiller Number per plant Productive tiller per plant (No.) Panicle length (cm) No. of filled grains per panicle Spikelet fertility percentage Grain yield Kg per ha % nitrogen in grain Nitrogen Use Efficiency Notes on pests, diseases and lodging Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. 		

Any other information

Trial No. 60: Lay out plan of entries in AVT 1- Low Nitrogen tolerance trial, Kharif 2023

Replication 1 Plot No. / Entry No.	Replication 2 Plot No. / Entry No.	Replication 3 Plot No. / Entry No.
101 / 6012	201 /6003	301 /6006
102 / 6011	202 /6005	302 /6010
103 / 6006	203 /6008	303 /6014
104 / 6005	204 /6017	304 /6003
105 / 6016	205 /6012	305 /6013
106 / 6014	206 /6013	306 /6018
107 / 6017	207 /6004	307 /6005
108 / 6004	208 /6015	308 /6009
109 / 6007	209 /6010	309 /6020
110 / 6003	210 /6014	310 /6002
111 / 6020	211 /6002	311 /6015
112 / 6013	212 /6019	312 /6008
113 / 6018	213 /6016	313 /6012
114 / 6010	214 /6007	314 /6004
115 / 6009	215 /6001	315 /6019
116 / 6015	216 /6006	316 /6001
117 / 6002	217 /6011	317 /6016
118 / 6019	218 / 6018	318 / 6017
119 / 6001	219 / 6009	319 / 6011
120 / 6008	220 / 6020	320 / 6007

NOTE: Same layout for two levels of Nitrogen

- (i) N₀ (No Application of Nitrogen)
- (ii) N ₅₀ (50% of Nitrogen i.e. 50 kg N/ha)

Rajendranagar, Hyderabad – 500 030, Telangana Kharif 2023

-	AMILIA ZVZC			
29	Trial No.	61		
30	Name of the trial:	Initial Varietal Trial – Low Nitrogen Tolerance Trial (IVT-LNT)		
31	Objective:	To study the comparative performance of elite lines and cultivars for different levels of nitrogen		
32	Locations:	10		
33	Layout:	Randomized Block Design (RBD)		
34	Replications:	3		
35	Fertilizers:	Phosphorus and Potash = Recommended Dose Nitrogen = Two levels (i) N ₀ (No Application of Nitrogen) (ii) N ₅₀ (50% of Nitrogen) i.e. 50 Kg/ha		
36 37	Plant protection: Plot size:	Need based Minimum: 5 sq m		
38	Spacing:	Transplanting: 20 cm between rows 15 cm between plants		
39	No. of entries:	30		
40	Check varieties	Positive Check : Varadhan, Rasi & Swarna Susceptible Check: Improved Samba Mahsuri & DRR Dhan 64		
42	General instructions: Data to be collected:	 Genotypes should be evaluated at Two levels of nitrogen N₀ (Zero kg N/ha i.e. no application of N) and N₅₀ (50 kg N /ha) Sow the seed in bed as thin as possible Transplant 25-day old seedlings, one seedling / hill. Gap fill within a week of planting Incorporate fertilizer evenly as per the trial 50% of nitrogen at transplanting as basal dose and remaining 50% in two top dressings Soil Nitrogen content should be estimated before transplanting, 45 DAT and at harvesting stage Days to 50% flowering Plant height (cm) Total Tiller Number per plant Productive tiller per plant (No.) Panicle length (cm) No. of filled grains per panicle Spikelet fertility percentage Grain yield kg per ha % nitrogen in grain Nitrogen Use Efficiency Notes on pests, diseases and lodging 		
		 Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. Any other information 		

Trial No. 61: Lay out plan of entries in IVT- Low Nitrogen tolerance trial, Kharif 2023

Replication 1	Replication 2	Replication 3
Plot No. / Entry No.	Plot No. / Entry No.	Plot No. / Entry No.
101 /6103	201 /6111	301 /6130
102 /6101	202 /6120	302 /6112
103 /6127	203 /6117	303 /6115
104 /6114	204 /6119	304 /6126
105 /6108	205 /6113	305 /6124
106 /6105	206 /6115	306 /6101
107 /6119	207 /6102	307 /6117
108 /6128	208 /6127	308 /6129
109 /6102	209 /6106	309 /6116
110 /6122	210 /6110	310 /6108
111 /6121	211 /6109	311 /6123
112 /6112	212 /6123	312 /6103
113 /6124	213 /6128	313 /6122
114 /6109	214 /6104	314 /6128
115 /6106	215 /6125	315 /6109
116 /6130	216 /6107	316 /6118
117 /6111	217 /6121	317 /6119
118 /6123	218 /6124	318 /6110
119 /6129	219 /6118	319 /6111
120 /6110	220 /6101	320 /6114
121 /6126	221 /6114	321 /6107
122 /6120	222 /6116	322 /6113
123 /6118	223 /6129	323 /6120
124 /6125	224 /6105	324 /6102
125 /6113	225 /6108	325 /6121
126 /6116	226 /6130	326 /6127
127 /6117	227 /6112	327 /6105
128 /6107	228 /6122	328 /6104
129 /6115	229 /6126	329 /6125
130 /6104	230 /6103	330 /6106

NOTE: Same layout for two levels of Nitrogen

- (i) N₀ (No Application of Nitrogen)
- (ii) N ₅₀ (50% of Nitrogen i.e. 50 kg N/ha)

Rajendranagar, Hyderabad – 500 030, Telangana Kharif 2023

	Kilarii 2025			
1.	Trial No.	62		
2	Name of the trial:	Initial Varietal Trial - Coloured Rice (IVT - CR)		
3	Objective:	To study the comparative performance of early coloured rice cultures in transplanted irrigated conditions		
4	Locations:	23		
5	Layout:	Rectangular Lattice Design		
6	Replications:	2		
7	Fertilizers:	As per the recommendation of the centre		
8	Plant protection:	Need-based		
9	Plot size:	10 sqm (This should be strictly followed)		
10	Spacing:	20 cm between rows 15 cm between plants		
11 12	No. of entries: Check varieties:	35 Checks: Chakho Poireiton, Kauni, Uma, Jyothi, Choharto and Local Check		
13	General instructions:	 Sow the seed in seedbed as thin as possible Planting of 25 days old 2-3 seedling/hill Transplant seedlings very shallow 1-2 seedlings / hill. Gap fill within a week of planting Incorporate fertilizer evenly 		
14	Data to be collected:	 Days to 50% flowering (DFF) Plant height (cm) Panicles per sq m (No.) 100 gms of seed should be supplied to ICAR-IIRR for estimation of Zinc and Iron. Photographs during crop growth may also be submitted. Number of fertile & sterile spikelets / Panicle Spikelet Fertility % (SPF) Purity score: (UNI) 1 = >95% pure; 2 = 80-95% pure; 3 = < 80% pure Number of completely sterile plants, if any Grain yield (kg/plot) based on net plot size to be reported Observations on incidence of diseases/pests Grain type 		

When the mean yield of the experiment is below 4 t/ha, kindly offer an comments for the low yield,

Rainfall during the crop growth (Number of rainy days)

Maximum and minimum temperature.

Notes on lodging

Trial No.62: Layout Plan of entries in Initial Varietal Trial- Coloured Rice (IVT - CR), Kharif 2023

REPLICATION-I

101 /6234	108 /6228	115 /6206	122 /6212	129 /6218
102 /6227	109 /6204	116 /6213	123 /6225	130 /6230
103 /6229	110 /6232	117 /6203	124 /6226	131 /6207
104 /6202	111 /6215	118 /6224	125 /6216	132 /6214
105 /6221	112 /6231	119 /6222	126 /6210	133 /6223
106 /6205	113 /6219	120 /6220	127 /6217	134 /6209
107 /6235 (LC)	114 /6201	121 /6233	128 /6211	135 /6208

REPLICATION-II

201 /6211	208 /6225	215 /6233	222 /6203	229 /6218
202 /6230	209 /6227	216 /6223	223 /6213	230 /6222
203 /6204	210 /6216	217 /6205	224 /6224	231 /6231
204 /6235 (LC)	211 /6219	218 /6228	225 /6202	232 /6234
205 /6232	212 /6208	219 /6209	226 /6206	233 /6217
206 /6201	213 /6221	220 /6214	227 /6212	234 /6220
207 /6229	214 /6215	221 /6207	228 /6210	235 /6226

		Kilai ii 2025		
1 2	Trial No. Name of the trial:	63 Special trial under CRP-Biofortification (Bench Mark Studies)		
3	Objective:	Evolution of popular rice varieties for Zinc, Protein, and Iron content		
4	Locations:	17		
5	Layout:	Rectangular Lattice Design		
6	Replications:	2		
7	Fertilizers:	As per the recommendation of the centre (if zinc is not included in the POPs, apply zinc sulphate @ 25-50 kg/ha once in every 3 crop seasons, preferably in rabi). If the center has not applied the zinc sulphate in the last two years, apply in current season without fail.		
8	Plant protection:	Need based		
9	Plot size:	7 sq m (This should be strictly followed)		
10	Spacing:	20 x 15 cm		
11	No. of entries:	52		
12	Check varieties	BPT 5204, DRR Dhan 45, DRR Dhan 48 and Kalanamak Kiran		
13	General instructions:	 Sow the seedbed as thin as possible Transplant 25-day old seedlings Transplant seedlings very shallow Gap fill within a week of planting. Incorporate fertilizer evenly. Soil samples up to 20 cm depth before planting to be collected and should be sent to IIRR before transplanting. Soil samples also should be collected after harvesting to be sent to IIRR for analysis for estimating Fe & Zn content. 		
14	Data to be collected:	 Grain yield (kg/plot) based on net plot size to be reported Panicles per sq m (No.) Days to 50% flowering (No.) Plant height (cm) Sterility percentage Test Weight/ 1000 grain weight (g) Notes on pests, diseases and lodging Grain quality characteristics to be provided wherever facilities exist. 50 gms of grains per entry in 2 replications after harvestingto be sent to IIRR for Fe and Zn analysis Rainfall during the crop growth (Number of rainy days) Maximum and minimum temperature. 		

When the mean yield of the experiment is below 4 t/ha, kindly offer an explanation for the low yield.

Trial No. 63: Layout plan of entries in Special trial under CRP-Biofortification (Bench Mark Studies) Kharif 2023

REPLICATION-I

101 /6330	114 /6314	127 /6317	140 /6320
102 /6334	115 /6305	128 /6349	141 /6301
103 /6348	116 /6336	129 /6307	142 /6321
104 /6327	117 /6350	130 /6306	143 /6308
105 /6310	118 /6342	131 /6339	144 /6324
106/6316	119 /6319	132 /6332	145 /6326
107 /6345	120 /6311	133 /6304	146 /6325
108 /6337	121 /6340	134 /6302	147 /6313
109 /6335	122 /6329	135 /6322	148 /6315
110 /6309	123 /6333	136 /6351	149 /6303
111 /6323	124 /6318	137 /6343	150 /6352
112 /6338	125 /6312	138 /6346	151 /6341
113 /6344	126 /6347	139 /6331	152 /6328

REPLICATION-II

201 /6317	214 /6339	227 /6342	240 /6320
202 /6318	215 /6350	228 /6321	241 /6340
203 /6352	216 /6344	229 /6349	242 /6341
204 /6329	217 /6307	230 /6334	243 /6304
205 /6331	218 /6335	231 /6310	244 /6313
206 /6306	219 /6319	232 /6326	245 /6308
207 /6312	220 /6348	233 /6337	246 /6309
208 /6323	221 /6324	234 /6325	247 /6347
209 /6302	222 /6303	235 /6328	248 /6345
210 /6330	223 /6301	236 /6346	249 /6316
211 /6336	224 /6338	237 /6343	250 /6315
212 /6332	225 /6311	238 /6333	251 /6327
213 /6322	226 /6314	239 /6351	252 /6305







भारतीय चावल अनुसंधान संस्थान राजेंद्रनगर, हैदराबाद-५०० ०३० ICAR-Indian Institute of Rice Research (formerly Directorate of Rice Research) (Indian Council of Agricultural Research)

