Dear Shri Shivraj Singh Chouhan ji,

Namaste. We write to you again from the Coalition of a GM-Free India. This Coalition is an informal, pan-India collective platform of citizens across many states of India (including agricultural scientists, biotechnologists, ecologists and environmentalists, medical fraternity members, farmers' leaders, consumer rights activists etc.) who are concerned about gene technologies in our food and farming systems, and are doing their best to set up/support alternatives to unsafe and unneeded technologies in our agriculture. We know that Genome Editing is Genetic Engineering as per India's statutory definition (Rule 3(iv) of Rules 1989 of EPA 1986) of GE; we are aware of, and have shared with you in the past a large body of scientific literature that documents that this technology is imprecise and unsafe, and needs to be brought under stringent regulation.

This is in continuation of our letter to you dated 30th October 2025, wherein, we presented data culled out from ICAR's AICRPR (All India Coordinated Research Project on Rice) annual reports (Vol.I Varietal Improvement) for 2023 and 2024 to show that India's much-hyped genome edited rice lines of Pusa DST-1 and DRR Dhan 100 'Kamala' do not have scientific evidence corroborating the bombastic claims made about these two genome edited lines. By the evening of 30/10/2025, ICAR put out a 2-page rebuttal to our press conference in Delhi that day. The response was shallow; it sought to circumvent a serious controversy about the scientific integrity of our public sector NARS by labeling us as "anti-development" and by just reiterating that long-established norms were followed, without any specific references given. While today your honorable self also advocates caution with regard to transgenic crops, at one point of time, even this caution was labelled as anti-development by the biotech lobby including ICAR which issued gag orders on its own scientists for speaking out against GM crops. We are still waiting for a detailed and scientific defence by ICAR of itself in the case of genome-edited rice varieties, to prove that it does serious, pro-farmer, biosafe science in fulfillment of its mandate.

With additional data compiled and presented in the annexures to this letter, we reiterate our key points against the misconduct witnessed here, which is part of a pattern seen earlier with GM cotton, Bt brinjal and GM mustard also. While ICAR is being challenged directly by our evidence from its own reports, this letter is also to highlight how the Ministry of Agriculture & Farmers' Welfare and the Government of India are enabling manipulation of science by effectively de-regulating genome-editing of two kinds of applications (SDN-1 and SDN-2) on specious grounds.

- Effective de-regulation of SDN-1 and SDN-2 applications from EPA 1986's 1989 Rules happened in May 2022. Around July 2022, granting of patent on CRISPR technology in India took place. This means that field level testing would have commenced only in Kharif 2023. What is surprising is that while the AICRPR 2022 annual report makes no mention of any IVT (Initial Varietal Trial) done, Kamala was put into an AVT (Advanced Varietal Trial) in 2023. Similar is the case with Pusa DST-1, which went straight into AVT trials in Kharif 2023, and this was done without actual testing for the claimed traits! This is not in line with ICAR's guidelines (Guidelines for testing crop varieties under the All-India Coordinated Crop Improvement Projects, 2015).

- Number of test sites in each zone does not align with laid-down norms in the ICAR Guidelines, in the testing of these genome edited rice lines. ICAR basked in some temporary glory around announcing these genome edited rice varieties as a global breakthrough. However, the claims are not backed by adequate testing, or data from the limited testing done. This was the crux of our presentation on October 30, 2025 in any case.

- What is alarming is that one of the varieties (DRR Dhan 100 'Kamala') was "recommended for release" in multiple states of three zones, without any data presented to substantiate how this recommendation has emerged, when a minimum period of three years of testing is laid down in the ICAR guidelines (IVT, AVT-1 and AVT-2). Why did the annual report of 2024 conveniently keep out the results of Kamala trials in Kharif 2024 as part of AVT-2.

- How did these two Genome Edited Lines (GELs) even reach AVT-2 in the first instance? The norms specified for promotion of entries at every stage to the next stage have been clearly laid down (Pages 5 and 6 of the Guidelines). These have not been adhered to in the case of GELs.

It is clear that data has not been generated, or been ignored, or manipulated conveniently, to push these entries into a "recommendation for release"!

The data that we are presenting in the attached Annexures for both Pusa DST-1 and DRR Dhan 100 'Kamala' clearly show that **Checks have consistently outperformed the genome edited rice varieties** except for a few rare instances. The Check could be the parent, or the local or zonal or national checks. When this is the case, why are unneeded, unsafe, untested and under-performing Genome Edited GM varieties being pushed onto farmers of India, that too using patented technologies which will involve huge costs to the public exchequer if not individual farmers? This promotion of GEL varieties which fared badly vis-a-vis other checks in itself is a violation of established ICAR guidelines.

It is absolutely clear that the ICAR is compromising on the science of crop improvement as has been evolved within the public sector agricultural research establishment in India as well as biosafety in falsely hyping up genome editing, and this needs to be stopped immediately. ICAR should respond as a scientific body to what we are presenting, and not as a political entity. Standards of performance of ICAR need to be reviewed too. We demand that all genome editing be brought under stringent regulation, and for an independent investigation to be set up immediately to look into scientific misconduct. We urge you to ensure that unneeded, untested and unsafe proprietary technologies are not thrust on Indian farmers.

Sincerely,

Kavitha Kuruganti
Co-Convenor, Coalition for a GM-Free India

Copy to: Dr ML Jat, Director-General, Indian Council of Agricultural Research (ICAR)

ANNEXURE 1 : Pusa DST-1 Trials

KHARIF 2023, AVT-1 IRRIGATED MID EARLY TRIALS IN ZONE V AND VII								
Site/Zone	**State**	**IET-32043 (Pusa DST-1)**	**MTU 1010**	**Local Check**	**%age difference_ Parent**	**% difference -Local Check**	**Local Check Variety**	**Data taken from:**
Jabalpur, Zone V Central	MP	5793	4213	4537	27.3	21.7		Table No. 4b.2, Page 1.109
Raipur, Zone V Central	CH	**3173**	3653	4566	**-15.1**	**-43.9**		Table No. 4b.2, Page 1.109
Ambikapur, Zone V Central	CH	4321	4136	4537	4.3	**-5**		Table No. 4b.2, Page 1.109
Jagdalpur, Zone V Central	CH	**7573**	8231	8731	**-8.7**	**-15.3**		Table No. 4b.2, Page 1.109
Bilaspur, Zone V Central	CH	**6207**	6917	5383	**-11.4**	13.3		Table No. 4b.2, Page 1.109
Sakoli, Zone V Central	MH	**4167**	4867	4844	**-16.8**	**-16.2**	PKV-Ganesh	Table No. 4b.2, Page 1.109
Sindewahi, Zone V Central	MH	**3024**	5181	4161	**-71.3**	**-37.6**	PDKV-Ganesh	Table No. 4b.2, Page 1.109
ZONE V CENTRAL - MEAN	***(7)***	***4894***	***5314***	***5251***	**-8.6**	**-7.3**		***Table No. 4b.2, Page 1.109***
Maruteru, Zone VII Southern	AP	**2828**	4299	4936	**-52**	**-74.5**	MTU 1121	Table No. 4b.2, Page 1.112
Ragolu, Zone VII Southern	AP	5758	5429	6746	5.7	**-17.2**	MTU 1239	Table No. 4b.2, Page 1.112
Rajendranagara, Zone VII Southern	TE	**4783**	5049	5028	**-5.6**	**-5.1**	RNR 29325	Table No. 4b.2, Page 1.112
Kumaram, Zone VII Southern	TE	5465	4814	5781	11.9	**-5.8**	KNM 1638	Table No. 4b.2, Page 1.112
Warangal, Zone VII Southern	TE	**5838**	6118	6459	**-4.8**	**-10.6**	RNR 15048	Table No. 4b.2, Page 1.112
Coimbatore, Zone VII Southern	TN	**5194**	6889	6189	**-32.6**	**-19.2**	TKM 13	Table No. 4b.2, Page 1.112
Monocompu, Zone VII Southern	KE	6684	3385	4774	49.4	28.6	MO 16 Uma	Table No. 4b.2, Page 1.113
Pattambi, Zone VII Southern	KE	6942	6449	5642	7.1	18.7	JYOTHI	Table No. 4b.2, Page 1.113
Mandya, Zone VII Southern	KA	**3060**	3686	5573	**-20.5**	**-82.1**	Thanu	Table No. 4b.2, Page 1.113
Mugad, Zone VII Southern	KA	**4990**	5575	6321	**-11.7**	**-26.7**	PSB-68	Table No. 4b.2, Page 1.113
Gangavathi Zone VII Southern	KA	**8750**	9458	8029	**-8.1**	8.2	GNV 1109	Table No. 4b.2, Page 1.113
Karaikal Zone VII Southern	PY	5360	4838	4524	9.7	15.6	ADT 39	Table No. 4b.2, Page 1.113
ZONE VII SOUTHERN MEAN	***12)***	***5471***	***5499***	***5695***	**-0.5**	**-4.1**		***Table No. 4b.2, Page 1.113***
OVERALL		**5018**	**5260**	**5381**	**-4.8**	**-7.2**		**Table on Page 1.684**

Trials not considered:								
Rewa*, Zone V Central	MP	1983	2882	2126	-45.3	-7.2	JR 206	Table No. 4b.2, Page 1.110
Brahmawar*, Zone VII Southern	KA	3296	2766	4108	16.1	-24.6		Table No. 4b.2, Page 1.114
In 12 of the 19 sites where trials were laid out in Kharif 2023, Pusa DST-1 under-performed vis-a-vis the non-GM parent in terms of absolute yield figures. In any case, **no testing for traits took place in this AVT-1** because of seed supply being in shortage.								
Except for 4 sites, **Pusa DST-1 under-performed compared to Checks. Then, where is the need for this GEL and why was it pushed to next stage?**								

PUSA DST-1 SECOND YEAR OF TRIALS

INLAND SALINITY TOLERANCE in AVT 2 & 1, Kharif 2024, Yield in Kg/ha									
Location	**State**	**IET-32043 Pusa DST-1**	**MTU-1010**	**CSR 10 Early Duration Saline Check**	**Local Check**	**% Diff_parent**	**% Diff_Local Check**	**Check Variety**	**Page Number**
Gangavati, Zone VII	KA	3508	3199	1410	3360	8.8	4.2	GNV 1109	Table No. 25.2, Page 6.26, 2024
Rohtak, Zone II	HR	3135	2360	3040	3345	24.7	**-6.7**	CSR 27	Table No. 25.2, Page 6.25, 2024
Panipat, Zone II	HR	3015	3015	3055	3385	0	**-12.3**	CSR 27	Table No. 25.2, Page 6.25, 2024
3 sites, 2 zones, 2 states	**Mean**	***3219***	***2858***	***2502***	***3363***	***11***	***-5***		
ALKALINITY TOLERANCE in AVT 2 & 1, KHARIF 2024, YIELD IN KG/HA									
Location	**State**	**IET-32043 / Pusa DST-1**	**MTU-1010 (Non-GM parent)**	**CSR 36 Alkaline Tolerant Check**	**Local Check**	**% Diff_parent**	**% Diff_Local Check**	**Check Variety**	**Page Number**
Kurukshetra, Zone II	HR	**2953**	3000	3160	3533	**-1.6**	**-19.6**	CSR 36	Table No. 25.2, Page 6.20, 2024
Anjanite, Zone II	HR	**2645**	3415	3255	3235	**-29.1**	**-22.3**	CSR 36	Table No. 25.2, Page 6.20, 2024
Kanpur, Zone II	UP	**1822**	1931	1738	1889	**-6**	**-3.7**	CSR 36	Table No. 25.2, Page 6.20, 2024
Zone II Northern 3 sites, 2 states	***Mean***	***2473***	***2782***	**2718**	***2886***	**-12.5**	**-16.7**		**Table No. 25.2, Page 6.20, 2024**

GB Nagar, Zone III	UP	2905	3385	3440	3555	-16.5	-22.4	CSR 36	Table No. 25.2, Page 6.20, 2024
Zone III (Eastern) 1 site/state	***Mean***	***2905***	***3385***	**3440**	***3555***	**-16.5**	**-22.4**		**Table No. 25.2, Page 6.20, 2024**
Kampasagar, Zone VII	TE	5431	**NA**	3855	5206		4.1		Table No. 25.2, Page 6.21, 2024
Trichy, Zone VII	TN	3200	4157	3646	5112	-29.9	-59.8		Table No. 25.2, Page 6.21, 2024
Annamalai Nagar, Zone VII	TN	3495	3202	2508	3225	8.4	7.7		Table No. 25.2, Page 6.21, 2024
Puducherry, Zone VII	PY	3256	2911	2411	3373	10.6	-3.6		Table No. 25.2, Page 6.21, 2024
Karaikal, Zone VII	PY	3272	2744	2604	3373	16.1	-3.1		Table No. 25.2, Page 6.21, 2024
Zone VII Southern 5 sites, 3 states: AS REPORTED BY ICAR	***Mean***	***3731***	***3254***	***3005***	***4058***	**12.8**	**-8.8**		**Table No. 25.2, Page 6.21, 2024**
OVERALL MEAN, 8 sites, 3 zones		**2944**	**3093**	**2845**	**3412**	**-6**	**-15.85**		**Compiled by the Coalition**
COASTAL SALINITY TOLERANCE in AVT-1, KHARIF 2024, YIELD IN KG/HA									
Location	**State**	**IET-32043 / Pusa DST-1**	**MTU-1010 (Non-GM parent)**	**Buthnath (Coastal Saline Tolerant Check)**	**Local Check**	**% Diff_parent**	**% Diff_Local Check**	**Check Variety**	**Page Number**
Gosaba, Zone III Eastern	WB	3451	3931	4521	4878	-13.9	-41.4	Chinsurah Nona 1	Table 27.2, Page 6.60, 2024
ZONE III EASTERN-1 site	***MEAN***	***3451***	***3931***	***4521***	***3581***	**-13.9**	**-3.8**		Table 27.2, Page 6.61, 2024
Panvel, Zone VI Western	MH	1626	2120	3827	2299	-30.4	-41.4	Panvel 1	Table 27.2, Page 6.61, 2024
Navsari, Zone VI Western	GJ	4408	5049	4400	5522	-14.5	-25.3	GR-19	Table 27.2, Page 6.61, 2024
ZONE VI WESTERN - 2 sites	***MEAN***	***3017***	***3585***	***4114***	***3911***	**-18.8**	**-29.6**		Table 27.2, Page 6.61, 2024
Vytilla, Zone VII Southern	KL	3877	2929	2846	4789	24.5	-23.5	Karikagga	Table 27.2, Page 6.61, 2024
Puducherry, Zone VII South	PY	3531	3968	2422	3453	-12.4	2.2	KKL(R) 3	Table 27.2, Page 6.61, 2024
Karaikal, Zone VII Southern	PY	2919	3967	2689	3589	-35.9	-23	KKL(R) 3	Table 27.2, Page 6.61, 2024
ZONE VII SOUTHERN	***MEAN***	***3442***	***3621***	***2652***	***3944***	***-5.2***	***-14.6***		Table 27.2, Page 6.61, 2024
OVERALL MEAN, 6 SITES, 3 ZONES		**3302**	**3661**	**3451**	**4088**	**-14**	**-25.4**		**Compiled by the Coalition**

*** NOT CONSIDERED**									
Canning*, Zone III Eastern	WB	**1389**	1754		2957	**-26.3**	**-112.9**	Canning 7	Table 27.2, Page 6.60, 2024
Brahmavar*, Zone VII Southern	KA	1108	895		2006	19.2	-81	MCM 100	Table 27.2, Page 6.62, 2024
Under Alkalinity Tolerance, in **5 out of 8 sites** that the Genome Edited Line was tested for, it **under-performed** vis-a-vis the non-GM parent line. In **only one site did Pusa DST-1 exhibit yield superiority over the checks**. As per the overall mean calculated for this one season of testing for traits, **Pusa DST-1 under-performed by 6% against its parent and by 15.8% against the local check in terms of absolute yield figures**.									
Under Inland Salinity Stress, **in 2 out of 3 sites, Pusa DST-1 showed yield superiority vis-a-vis the parental line**. However, the **Local Check outperformed in terms of yield superiority in 2 out of 3 sites**.									
Under Coastal Salinity Stress, in **Five out of Six sites** where trials were undertaken and considered, **Pusa DST-1 under-performed**. It is important to note that **in all sites, it under-performed vis-a-vis the Checks, including the Local Check**. Overall, the Genome Edited Line of Pusa DST-1 under-performed by 14% against its parent and by 25.4% against Local Check in terms of absolute yield figures.									
The conclusion that this GEL is "promising" has no basis in the data presented in the annual report. Further, testing violated the guidelines of ICAR for crop improvement.									

PUSA DST-1 OVERALL SUMMARY OF YIELD IN ABSOLUTE FIGURES, OVER TWO YEARS OF TESTING

	Kharif 2023 AVT-1 (Irrigated Mid Early, no trait testing)	**Kharif 2024 - Inland Salinity AVT 1**	**Kharif 2024 - Alkalinity AVT 2**	**Kharif 2024 - Coastal Salinity AVT 1**
Variety	**Overall (19 sites, 2 zones)**	**Overall (3 sites, 2 zones)**	**Overall (8 sites, 3 zones)**	**Overall (6 sites, 3 zones)**
Pusa DST-1	**5018**	3219	**2943**	**3302**
MTU-1010	5260	2858	3093	3661
CSR 36/ 10 / Buthnath		2502	2845	3451
Local Check	**5381**	**3363**	**3412**	**4088**
Summary in Page 1.9 says, "IET 32043 (was found) promising in Zone VII under Alkalinity, and in Zone II and Zone VII under Inland Saline conditions". The entry was promoted to 3rd year of testing in AVT-2 AL and ISTVT in Zone II and III				
Page 1.12: "IET 32043 is found promising for the states of MTU 1010 Gazette-notified and adopted areas". ICAR testing guidelines were violated in terms of number of sites in which trials were laid out, for Inland Salinity Stress. **Despite under-performance, it was promoted to next stage.**				

ANNEXURE 2 : DRR DHAN 100 ‘KAMALA’

KHARIF 2023 Yield -Kg/ha : Advanced Varietal Trial-1 : AVT-1-MS (Medium Sown): http://aicrip-intranet.in/Documents/AicripSite/ProgressReports2023/Volume%20I%20Varietal%20Improvement%202023.pdf											
Location	**STATE**	**IET 32072 (DRR Dhan 100 'Kamala'**	**Samba Mahsuri BPT 5204-Parent - National Late Duration**	**Telangana Sona-National Check Early Duration**	**WGL 14-National Check Medium Duration**	**Zonal Check**	**Local Check**	**%age difference Vs. Parent**	**%age difference Vs. Local Check**	**Local Check Variety Name**	**Reference**
Bhubaneswar, Zone III Eastern	OD	5866	5433	5351	5180	4681	**6377**	7.4	**-8.7**	Pratikshya	Table 10b.2, Page 1.422
Jeypore, Zone III, Eastern	OD	**2557**	4433	2469	4861	5049	**5092**	**-73.4**	**-99.1**	Kalinga Dhan 1203	Table 10b.2, Page 1.422
Bikramganj, Zone III Eastern	BR	**5298**	**6470**	5599	5411	6253	4946	**-22.1**	6.6	R Sweta	Table 10b.2, Page 1.422
Ranchi, Zone III Eastern	JH	**4620**	5380	3656	3434	3730	**5621**	**-16.5**	**-21.7**		Table 10b.2, Page 1.422,
Chinsurah, Zone III Eastern	WB	3815	3296	3796	**4148**	3426	4037	13.6	**-5.8**	Swarna Shreya	Table 10b.2, Page 1.422
Varanasi, Zone III Eastern	UP	**4013**	**5099**	4368	4920	4232	4353	**-27.1**	**-8.5**	HUR-917	Table 10b.2, Page 1.422
ZONE III EASTERN (6)	***MEAN***	***4362***	***5019***	***4207***	***4659***	***4562***	***5071***	***-15.1***	***-16.3***		***0b.2, Page 1.422, 2023 Annual***
Raipur, Zone V Central	CH	5056	5042	4121	4651	**5247**	4848	0.3	4.1	Chhattisgarh Devbhog	Table 10b.2, Page 1.424
Sindhewhi, Zone V Central	MH	**1967**	**5584**	3606	3950	4171	4081	**-183.9**	**-107.5**	PDKV-Kisan	Table 10b.2, Page 1.424
ZONE V CENTRAL (2)	***MEAN***	***3512***	***5313***	***3864***	***4301***	***4709***	***4465***	***-51.3***	***-27.1***		***0b.2, Page 1.424, 2023 Annual***
Maruteru, Zone VII Southern	AP	**6756**	6470	4198	6117	3925	5511	4.2	18.4	MTU-1224	*Table 10b.2, Page 1.426*
Bapatla, Zone VII Southern	AP	4113	4050	3410	4319	2729	**4567**	1.5	**-11.0**	BPT-2782	*Table 10b.2, Page 1.426*
Rajendranagar, Zone VII Southern	TE	**4068**	4697	4276	4989	3509	**7073**	**-15.5**	**-73.9**	RNR-11718	*Table 10b.2, Page 1.426*
Warangal, Zone VII Southern	TE	**5638**	5329	5612	4154	4787	5626	5.5	0.2	WGL 32100	*Table 10b.2, Page 1.426*
Aduturai, Zone VII Southern	TN	**5246**	5042	4188	4244	4790	5064	3.9	3.5	CO 52	*Table 10b.2, Page 1.427*
Coimbatore, Zone VII Southern	TN	4745	4666	3780	5405	5575	**6751**	1.7	**-42.3**	CO 52	*Table 10b.2, Page 1.427*
Mandya, Zone VII Southern	KA	4787	4205	3615	4003	4846	**5276**	12.2	**-10.2**	Thanu	*Table 10b.2, Page 1.427*

Sirsi, Zone VII Southern	KA	3644	3100	3644	3511	3667	**4000**	14.9	**-9.8**		*Table 10b.2, Page 1.427*
Mugad, Zone VII Southern	KA	**6141**	**6229**	5196	5315	4229	6214	**-1.4**	**-1.2**	Siri-1253	*Table 10b.2, Page 1.427*
Malag, Zone VII Southern	KA	**6927**	7089	6310	**7476**	6977	4275	**-2.3**	38.3	Siri-1253	*Table 10b.2, Page 1.427*
Kurumbapet, Zone VII Southern	PY	5304	4044	6458	6479	**7185**	5309	23.8	**-0.1**	ADT (R) 53	*Table 10b.2, Page 1.427*
ZONE VII SOUTHERN (11)	***MEAN***	***5215***	***4993***	***4608***	***5092***	***4747***	***5424***	***4.3***	***-4.0***		***Table 10b.2, Page 1.427***
OVERALL MEAN, 19 SITES, 3 ZONES		**4772**	**4984**	**4472**	**4865**	**4705**	**5236**	**-12**	**-17**		**Compiled by Coalition for a GM-Free India**
Page 1.683 on "Performance of Genome Edited Line entry (IET 32072) and its recurrent parent (BPT 5204) during Kharif 2023 takes the average of only 10 sites, including two "Not Considered" sites in Madhya Pradesh and Uttar Pradesh, only 1 site out of two in Odisha, only 1 site out of two in Telangana, only 1 site out of two in Karnataka, stating that "locations were selected based on flowering", to arrive at +17.5% yield advantage!											
In 8 out of 19 sites, Kamala under-performed in absolute yield, compared to parent; compared to the non-GM Checks, it under-performed in 16 of the 19 trials in Kharif 2023											
Kamala being moved to AVT-2 after this performance in Kharif 2023 in itself is against the ICAR guidelines for crop improvement trials											
NO IVT DATA AVAILABLE IN 2022 ANNUAL REPORT. UNCLEAR HOW THIS VARIETY REACHED ADVANCED VARIETAL TRIAL STRAIGHTAWAY, IN VIOLATION OF ICAR GUIDELINES											
Index: Zonal averages given in light blue background; Under-performance of Genome Edited Line highlighted in red font; Best-performing Variety highlighted in light green cells											
TRIALS NOT CONSIDERED											
Cuttack*, Zone III Eastern	OD	4869	4015	5788	4732	5086	5692	17.5	-16.9	CR Dhan 327	Table 10b.2, Page 1.423
Pusa*, Zone III Eastern	BR	3039	3039	4575	4052	4020	3889	0.0	-28.0	Rajendra Sweta	Table 10b.2, Page 1.423
Masodha*, Zone III Eastern	UP	**5518**	4479	5158	3895	5237	5472	18.8	0.8	Samba Mahsuri Sub1	Table 10b.2, Page 1.423
Jabalpur*, Zone V Central	MP	**8303**	4180	9337	4013	9023	8463	49.7	-1.9	IR-64	Table 10b.2, Page 1.424

Rabi 2023-24 Yield-kg/ha (Initial Variety Trial - Early Transplanted Rabi):

http://aicrip-intranet.in/Documents/AicripSite/2025/Volume%20I%20Varietal%20Improvement%202024.pdf

Location	State	IET 32072 (DRR Dhan 100 'Kamala'	Samba Mahsuri BPT 5204-Parent - National Late Duration	National Check CO51	Zonal Check Narendra 97 or MTU 1153	Local Check	% Difference Vs. Parent	% Difference Vs. Local Check	Local Check Variety	Reference
Cuttack, Zone III Eastern	OD	1764	3158	4639	2492	5689	-79.0	-222.5	CR Dhan 210	Table 10.2, Page 2.226
Jeypore, Zone III Eastern	OD	4632	6743	5958	3463	7035	-45.6	-51.9	Chandragiri	Table 10.2, Page 2.226
Bankura, Zone III Eastern	WB	7668	8084	8102	7604	5914	-5.4	22.9	Lalat	Table 10.2, Page 2.226
Chinsurah, Zone III Eastern	WB	4976	5604	6138	5099	5685	-12.6	-14.2	Ajit 2233	Table 10.2, Page 2.226
Zone III Eastern (4)	*MEAN*	***4760***	*5897*	6209	4664	6081	-23.9	-27.8		Table 10.2, Page 2.227
Maruteru, Zone VII Southern	AP	5834	4753	4822	6193	5820	18.5	0.2	MTU-1273	Table 10.2, Page 2.227
Nellore, Zone VII Southern	AP	2760	3101	4148	2955	5871	-12.4	-112.7		Table 10.2, Page 2.227
Mandya, Zone VII Southern	KA	3840	4177	5086	5588	4967	-8.8	-29.3	CTH-1	Table 10.2, Page 2.227
Pattambi, Zone VII Southern	KE	5299	5697	6085	6195	5892	-7.5	-11.2		Table 10.2, Page 2.227
Monocombu, Zone VII	KE	2809	2048	3717	6079	4653	27.1	-65.6	MO-21 Prathayasa	Table 10.2, Page 2.228
Jagtial, Zone VII Southern	TE	6616	4822	9402	9369	8004	27.1	-21.0	JGL-18047	Table 10.2, Page 2.228
Rajendranagar, Zone VII	TE	5916	3786	6914	4573	5622	36.0	5.0	RNR-29325	Table 10.2, Page 2.228
Warangal, Zone VII Southern	TE	5436	4377	8302	6521	6437	19.5	-18.4	KNM 118	Table 10.2, Page 2.228
Aduturai, Zone VII Southern	TN	4810	5506	5633	5506	5570	-14.5	-15.8	ADT-56	Table 10.2, Page 2.229
Coimbatore, Zone VII Southern	TN	7273	5809	6533	7408	6784	20.1	6.7	CO 54	Table 10.2, Page 2.229
Zone VII Southern (10)	*MEAN*	***5059***	***4408***	6064	6039	5962	12.9	-17.8		Table 10.2, Page 2.229
OVERALL MEAN		4974	4833	6106	5646	5996	2.8	-20.5		Table 10.2, Page 2.229

(Odisha Chiplima and Karnataka Brahmavar NOT CONSIDERED)

Nowhere did GM Kamala perform better than any of the Checks in the 14 trials that were considered. In 8 of the 14 sites, Kamala under-performed compared to its parent. In 10 of the 14 sites, Kamala underperformed compared to Local Checks. Overall, Kamala under-performed compared to the Local Check upto 20.5% in terms of yield. In the Southern Zone, it under-performed upto 17.8%. Vis-a-vis the yield of the parent, Kamala showed higher yield of upto 12.9% in the Southern Zone and under-performed in all sites vis-a-vis the parent in the Eastern Zone (Zone III).

Page 2.222 Summary: "Whereas, gene edited line IET 32072 (5059 kg/ha) showed significant yield superiority over its parent BPT 5204 (4408 kg/ha) and hence promoted to 3rd year of testing (AVT-2-ETP Rabi Zone VII)". The GEL's under-performance vis-a-vis the Local Check or other checks is not discussed!

Page 9.26 of the Report however discards data of Mandya in Karnataka and Aduturai in TN, to give figures of only 8 sites, with IET 32072 shown with an average of 5243 yield, and BPT 5204 with only 4299. The % yield difference is shown as 21.95%.

Index: Zonal averages given in light blue background; Under-performance of Genome Edited Line highlighted in red font; Best-performing Variety highlighted in light green cells

KHARIF 2024 Yield -Kg/ha : Initial Varietal Trial : IVT-DSR:

http://aicrip-intranet.in/Documents/AicripSite/2025/Volume%20I%20Varietal%20Improvement%202024.pdf

Location		IET 32072 Kamala	BPT 5204-S Mahsuri-Parent	CR Dhan 320 (Early)	Shahbhagi dhan (Early)	Local Check	% Diff_Parent	% Diff_ Local Check	Local Check Variety	Reference
Karnal, Zone II Northern	HR	4383	4250	2927	3780	4267	3.0	2.6		Table 37.2, Page 8.32
Kaul, Zone II Northern	HR	**4653**	4943	4813	4523	4717	**-6.2**	**-1.4**		Table 37.2, Page 8.32
ZONE II NORTHERN- 2 sites	*MEAN*	***4518***	***4597***	***4156***	***3734***	***4553***	**-1.7**	**-0.8**		*Table 37.2, Page 8.32*
Titabar, Zone VI North Eastern	AS	1044		5433	3507	1902		**-82.2**		No data for parent line
ZONE VI NORTH EAST - 1 site		**1044**		**5433**	**3507**	**1902**				
Navasari, Zone VI Western	GJ	1794	1771	3680	3360	884	1.3	50.7	GNR-8	Table 37.2, Page 8.33
Karjat, Zone VI Western	MH	**2179**	2603	4831	3608	2381	**-19.5**	**-9.3**		Table 37.2, Page 8.33
Vadgaonmaval, Zone VI Western	MH	4885	3609	5823	5740	4672	26.1	4.4	Phule Kolam	Table 37.2, Page 8.33
ZONE VI WESTERN- 3 sites	*MEAN*	***2953***	***2661***	***4778***	***4236***	***2646***	**9.9**	**10.4**		*Table 37.2, Page 8.34*
Bapatla, Zone VII Southern	AP	**4311**	4556	4299	3975	5244	**-5.7**	**-21.6**		Table 37.2, Page 8.34
Mandya, Zone VII Southern	KA	4981	3861	5204	4042	4856	22.5	2.5	KMP-175	Table 37.2, Page 8.34
Coimbatore, Zone VII Southern	TN	**4993**	5018	4550	4392	4641	**-0.5**	7.0		Table 37.2, Page 8.34
ZONE VII SOUTHERN- 3 sites	*MEAN*	*4762*	*4478*	*4684*	*4136*	*4914*	*6.0*	**-3.2**		*Table 37.2, Page 8.34*
OVERALL MEAN	**9 sites**	**3692**	**3826**	**4573**	**3960**	**3942**	**-3.6**	**-6.8**		***Table 37.2, Page 8.34***

KHARIF 2024

Performance of Genome Edited Line entry (IET 32072) and its wild parent (BPT 5205) during Kharif 2024

as given in the 2024 annual report, page 9.25 without any data published about how this table was created

States	Locations	IET 32072	BPT 5204	CD	%Yield Advantage over its Wild Parent
TE	1	6859	5940	781	15.47
KA	2	5706	5273	519	8.21
CH	1	4091	3852	553	6.2
JH	1	3800	3267	602	16.31
UP	1	4629	2665	213	73.7
Mean	**6**	**5132**	**4378**	**531**	**17.21**

"Although it was initially promoted from AVT-1 MS to AVT-2 MS, it was not tested under AVT-2 MS. Instead, a separate NIL and GEL trial was constituted under Kharif 2024, and this entry was evaluated under AVT-2 NIL and the GEL trial in second year of testing".

"The IET 32072, along with its wild parent BPT 5204, was evaluated at twenty one locations across three zones (III, V and VII). In this trial, two BPT 5204 check entries were included to compare the genome-edited line and other near-isogenic lines. It was observed that data from few locations differered between the same check entries, and as a result, they were excluded from the analysis of the genome-edited line's performance. Therefore, data from only six locations were used for assessing the performance of genome edited line".

"The mean grain yield of IET 32072 was 5132 kg/ha.. In comparison, its wild parent BPT 5204 had a mean yield of 4378 kg/ha... IET 32072 demonstrated superior yield performance across all tested regions...Overall, IET 32072 achieved a ***+17.70%*** higher yield than the wild parent BPT 5204....Hence, IET 32072 is found promising" (Page 9.25)

SUMMARY OF DATA OVER TWO YEARS, 3 SEASONS FOR KAMALA

	AVT-1 MS Kharif 2023	IVT ETP Rabi 2023-24	IVT DSR Kharif 2024	Kharif 2024 (no site-wise data available)-only summary table given
Variety	**Overall (19 sites, 3 zones)**	**Overall (14 sites, 2 zones)**	**Overall (9 sites, 3 zones)**	**Overall (6 sites, 3 zones)**
Kamala/DRR 100/IET32072	**4772**	4974	**3692**	5132
BPT 5204/Samba Mahsuri	4984	4833	3826	4378
National Check-Early Duration	4472	6106	4573	No data
NC-Medium Duration	4865			No data
Zonal Check	4705	5646	3960	No data
Local Check	5236	5996	3942	No data

OTHER PARAMETERS TESTED FOR, LIKE DFF AND PAN

Kharif 2023-DRR Dhan 100 "Kamala" Vis-a-vis parent non-GM BPT 5204 and Local Check on Parameters like DFF & PAN											
		IET 32072: Kamala (GEL)			BPT-5204			Local Check			
Location	State	DFF	PH	PAN	DFF	PH	PAN	DFF	PH	PAN	
Bhubaneswar	OD	100	97	222	114	85	316	111	100	278	
Jeypore	OD	108	72	316	112	69	319	109	86	330	
Bikramganj	BR	116	109	378	110	97	373	107	129	365	
Ranchi	JH	118	91	137	110	79	251	110	95	238	
Chinsurah	WB	63	98	224	76	84	229	64	108	253	
Varanasi	UP	116	83	114	121	79	191	115	80	187	
Zone III Eastern MEAN	**6 sites**	**104**	**92**	**232**	**107**	**82**	**280**	**103**	**100**	**275**	
Raipur	CH	104	95	175	84	95	222	109	87	844	
Sindewahi	MH	114	108	191	115	88	297	111	125	303	
Zone V Central MEAN	**2 sites**	**109**	**102**	**183**	**100**	**92**	**260**	**110**	**106**	**574**	
Marateru	AP	92	117	352	114	116	341	110	112	352	
Bapatla	AP	86	102	276	105	101	307	109	108	371	
Rajendranagar	TE	112	84	311	114	74	322	112	89	433	
Warangal	TE	111	121	370	117	109	408	109	122	389	
Adutarai	TN	100	62	393	106	74	413	100	99	426	
Coimbatore	TN	95	104	234	112	94	244	113	114	329	
Mandya	KA	102	85	340	115	76	351	104	100	408	
Sirsi	KA	104	85	330	100	73	377	103	82	297	
Mugad	KA	101	71	331	102	61	375	100	68	305	
Malag	KA	113	75	114	107	54	82	113	62	133	
Kurambapet	PY	81	75	347	84	89	400	85	99	380	
Zone VII Southern MEAN	**11 sites**	**100**	**89**	**309**	**107**	**84**	**329**	**105**	**96**	**348**	
Overall, 19 sites, 3 zones		**102**	**91**	**271**	**106**	**84**	**306**	**105**	**98**	**348**	

In the table above, it can be seen that Kamala has DFF that is 7 days earlier than parent in the Southern zone, and 4 days overall in Kharif 2023. Nowhere near the 20 days earlier maturity claimed by this PIB press release. In terms of PAN, it fared lower than Checks in most sites tested.

RABI- 2023:24 KAMALA PERFORMANCE ON OTHER PARAMETERS LIKE DFF & PAN										
		IET 32072: Kamala (GEL)			BPT-5204 (Parent)			Local Check		
Location	**State**	**DFF**	**PH**	**PAN**	**DFF**	**PH**	**PAN**	**DFF**	**PH**	**PAN**
Cuttack	OD	117	76	**272**	117	86	273	110	123	294
Jeypore	OD	102	85	**261**	106	78	378	94	86	437
Bankura	WB	**129**	81	**317**	128	83	417	128	77	383
Chinsurah	WB	124	87	**187**	130	89	231	111	97	242
Zone III Eastern MEAN	**4 Sites**	**118**	**82**	**259**	**120**	**84**	**325**	**111**	**96**	**339**
Marateru	AP	77	109	**323**	87	100	337	78	112	352
Nellore	AP	84	86	453	97	86	413	94	83	435
Mandya	KA	113	80	247	115	77	289	105	90	240
Pattambi	KE	84	74	**262**	87	84	271	94	77	336
Moncompu	KE	85	101	**260**	86	78	291	87	106	556
Jaggital	TE	116	92	**372**	117	82	453	93	96	449
Rajendranagar	TE	107	76	**387**	108	72	520	107	89	498
Warangal	TE	102	81	**418**	105	79	468	93	93	449
Adutarai	TN	97	84	422	114	93	392	75	73	426
Coimbatore	TN	96	87	**320**	101	90	363	91	96	383
Zone VII Southern MEAN	**10 Sites**	**96**	**87**	**346**	**102**	**84**	**380**	**92**	**92**	**412**
OVERALL	**14 sites**	**102**	**86**	**322**	**107**	**84**	**364**	**97**	**93**	**391**

In the table above, it can be seen that overall, Kamala had a DFF mean that is 5 days earlier than its parent. However, the Local Check was 5 days earlier than Kamala, and it was earlier than Kamala in most sites! On a parameter like PAN (Panicles per Square Meter), except in 3 locations, the Checks (local or parent) fared better. Given this, it is unclear how Kamala is supposed to have resulted in higher yields, or matured earlier by 20 days, as per the PIB press release.

Overall Summary, on parameters like DFF and PAN, for Kamala, over Kharif 2023 and Rabi 2023-24										
		IET 32072: Kamala (GEL)			BPT-5204 (Parent)			Local Check		
Location	Sites	DFF	PH	PAN	DFF	PH	PAN	DFF	PH	PAN
Kharif 2023	19 sites, 3 zones	102	91	271	106	84	306	105	98	348
Rabi 2023-24	14 sites, 2 zones	102	86	322	107	84	364	97	93	391

Our earlier analysis shared in a media conference in New Delhi on 30/10/2025 is present here:
https://indiagminfo.org/scientific-fraud-exposed-in-icars-genome-edited-rice-trials-coalition-for-a-gm-free-india-sounds-the-alarm/