PROCEEDINGS OF THE
53rd PLANT GERMPLASM REGISTRATION COMMITTEE MEETING
(Indian Council of Agricultural Research)
ICAR-National Bureau of Plant Genetic Resources, New Delhi

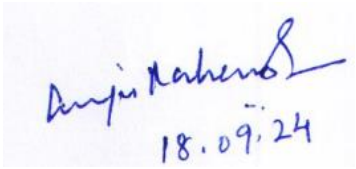
53rd Meeting of Plant Germplasm Registration Committee (PGRC) was held in virtual mode on September 18, 2024 (12:00 PM) at ICAR-NBPGR, New Delhi and was attended by the following members/invitees:

1.	Dr TR Sharma	DDG (Crop Science), Indian Council of Agricultural Research, Krishi Bhavan, New Delhi	Chairman
2.	Dr DK Yadava	ADG (Seeds), ICAR, Krishi Bhavan, New Delhi	Co-Chairman
3.	Dr RK Gautam	Director (Officiating), ICAR-National Bureau of Plant Genetic Resources, Pusa Campus, New Delhi	Member
4.	Dr. Sanjeev Gupta	ADG (Oilseed & Pulses) ICAR, New Delhi	Member
5.	Dr KV Prasad	Director, ICAR-Directorate of Floricultural Research, Pune, Maharashtra	Member
6.	Dr PK Rai	Director, ICAR-Directorate of Rapeseed-Mustard Research, Bharatpur, Rajasthan	Member
7.	Dr. NK Rai	Director, ICAR-Indian Institute of Vegetable Research, Varanasi, Uttar Pradesh	Member
8.	Dr Ratan Tiwari	Director, ICAR-Indian Institute of Wheat and Barley Research, Karnal, Haryana	Member
9.	Dr. J. Dinakara Adiga	Director, ICAR-Directorate of Cashew Research, Puttur, Karnataka	Member
10.	Dr AL Rathna Kumar	Nominee of Director, ICAR-Indian Institute of Oilseeds Research, Hyderabad, Telangana	Member
11.	Dr Jyoti Badri	Nominee of Director, ICAR-Indian Institute of Rice Research, Hyderabad, Telangana	Member
12.	Dr. Rajiv Kumar	Nominee of Director, ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	Member
13.	Dr. Salej Sood	Nominee of Director, ICAR- Central Potato Research Institute, Shimla, Himachal Pradesh	Member
14.	Dr. Jai Sunder	Nominee of Director, ICAR-Central Island Agricultural Research Institute, Port Blair, Andaman & Nicobar Islands	Member
15.	Dr Anju Mahendru Singh	Head, Division of Germplasm Conservation, ICAR-National Bureau of Plant Genetic Resources, Pusa Campus, New Delhi	Member Secretary
16.	Dr Anjali Kak Koul	Principal Scientist, Division of Germplasm Conservation, ICAR-National Bureau of Plant Genetic Resources, Pusa Campus, New Delhi	Member of the PGRC Team

The meeting was organized in virtual mode under the Chairmanship of Dr. TR Sharma, Deputy Director General (Crop Science), ICAR. Dr RK Gautam, welcomed the Chairman, Co-Chairman, ADGs and the PC/PD/nominees of the Directors. Dr Gautam then requested the Chairman for his opening remarks. The Chairman spoke about the importance of the PGRC and its efforts to register promising germplasm with unique and valuable Plant Genetic Resources and appreciated the efforts of NBPGR in registering the potentially valuable trait specific germplasm.

After the Chairman's remarks, the member-secretary presented the minutes of the 52nd meeting which were adopted after the confirmation by the Chairman. Action taken report on the recommendations of the 52nd meeting was presented. Member-secretary apprised the committee members about the status of the registration proposals. 122 proposals had been received. 42 did not respond after reverted for making corrections in the application/attaching documentary proof while 43 were pending for comments for one or two more experts. 37 proposals complete in all respects were presented and discussed in detail. Recommendations of the committee for each proposal have been summarized in the enclosed table. Accordingly, 33 proposals belonging to 15 crops and 17 species are approved for registration.

At the end of the meeting, the member-secretary proposed a vote of thanks to the Chairperson, Co-Chairperson and Director, NBPGR for their guidance and suggestions in PGRC related work. She also thanked the ADGs, Directors, PC/PD/nominees and NBPGR colleague Dr Anjali Kak. The efforts of Sh Arup Das, YP in processing the applications and PGRC related work was also appreciated.



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53rd Plant Germplasm Registration Committee Meeting, September 18, 2024: Summary of New Proposals with Recommendations

S. No	App. No./ National Id.	Crop/ Botanical Name	Other Identity	Pedigree	Potentially valuable features	Applied by (First developer)	Recommendations of PGRC
Cereals							
1.	24159; IC76013 **INGR24054**	Rice/ *Oryza sativa*	IC76013	IET-9854/ Swarnadan/ veluthacheera	Possesses resistance to brown planthopper at reproductive stage (damage score of 2.2)	Dr. Jhansi Lakshmi V, ICAR-IIRR Rajendranagar, Hyderabad	**Recommended**
2.	24161; IC75975 **INGR24055**	Rice/ *Oryza sativa*	IC75975	RP2068-18-2-9 (Swarnadhan/ Vellathachera)	Novel donor for resistance to Brown planthopper (damage score 2.3)	Dr. Jhansi Lakshmi V, ICAR-IIRR Rajendranagar, Hyderabad	**Recommended**
3.	24163; IC653256 **INGR24056**	Rice/ *Oryza sativa*	IR 75870-5-8-5-B-5-B-HWR-15	IR 64 x O. glaberrima // IR 64 in BC1F11 generation	Novel donor for resistance to Brown (damage scoe is 4.2) Present in the backgound of IR64	Dr RM Sundaram, ICAR-IIRR Rajendranagar, Hyderabad	**Recommended**
4.	24164; IC653257 **INGR24057**	Rice/ *Oryza sativa*	IR73382-80-9-3-13-2-2-1-3-B-HWR-16	IR 64 x *O. rufipogon* acc. 106412//IR 64 in BC1F11 generation	Novel donor for resistance to Brown planthopper (damage score <3) Present in the background of IR64	Dr RM Sundaram, ICAR-IIRR Rajendranagar, Hyderabad	**Recommended**

5.	24166; IC653258 **INGR24058**	Rice/ *Oryza sativa*	RP 6837-RMS-ISMA 13	Improved Samba Mahsuri (RP Bio 226)*4 / RP2068-18-3-5 in BC3F8 generation	Novel donor for resistance to Brown planthopper (damage score <3) Present in the background of popular variety Improved Samba Mahsuri.	Dr RM Sundaram, ICAR-IIRR Rajendranagar, Hyderabad	**Recommended**
6.	24066; IC653259 **INGR24059**	Wheat/ *Triticum aestivum*	GW557; J2020-07	HJ 2014-43-1-9-1-1 (RSP 566 x GW 366)	Leaf and Stem rust resistance [Leaf rust score (ACI = 0.3-3.3); Stem rust score (ACI = 0.0-2.3)]	Dr I. B. Kapadiya WRS, JAU Junagadh, Gujarat	**Recommended**
7.	24113; IC653260 **INGR24060**	Wheat/ *Triticum aestivum*	UASD 22-5; UAS BW 13039	LOK-62 X (BOW/VEE/5/ND/VG9144//KAL/BB/3/YACO/4/CHIL/6/CASKOR/3/CROC_1/AE.SQUARROSA (224)/OPATA/7/ PASTOR//MILAN/KAUZ/3/BAV92)	Tolerance to drought (DSI = 0.62) and heat stress (HSI = 0.73)	Dr Suma S Biradar UAS, Dharwad, Karnataka	**Recommended**
8.	24168; IC653261 **INGR24061**	Barley/ *Hordeum vulgare*	BHS 491 (BBM 880)	HBL704/ UPB1008	Resistant to all the pathotypes of leaf rust at seedling and adult (HSI=TS) stage. Resistant to all the	Dr Madhu Patial ICAR-IARI RS Shimla, Himachal Pradesh	**Recommended**

					pathotypes of stripe rust at seedling stage. Adult plant resistance to stripe rust with ACI = 0.3, HIS = 5MR		
9.	24214; IC653262 **INGR24062**	Barley/ *Hordeum vulgare*	BHS 488 (BBM 861)	BHS385 / BHS369	Adult plant resistance to yellow rust with ACI = 0.2 HIS = TMS	Dr Madhu Patial ICAR-IARI RS Shimla, Himachal Pradesh	**Recommended**
10.	24218; IC653263 **INGR24063**	Barley/ *Hordeum vulgare*	BHS 489 (BBM 863)	BHS285 / BHS169	Hull less barley possessing seedling resistance to all the pathotypes of yellow rust. Adult plant resistance to yellow rust with ACI less than 10 (ACI=1.3). Adult plant resistant leaf rust with highest susceptibility score of 0.	Dr Madhu Patial ICAR-IARI RS Shimla, Himachal Pradesh	**Recommended**
Grain legumes							
11.	24112; IC646505 **INGR24064**	Cluster bean/ *Cyamopsis tetragonolobus*	IC646505; SM/MSK/22-1-1/IIHRCB 22-1-1	Germplasm collection from Virudhanagar district of Tamilnadu	Stringless pods in cluster at each node	Dr Smaranika Mishra ICAR-IIHR, Bangalore, Karnataka	**Recommended**
Vegetables							
12.	24074;	Bitter Gourd/	DBGS-54-	DBGS-54-1 (a	First white flowered	Dr Gograj Singh Jat	**Recommended**

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	IC653264 **INGR24065**	*Momordica charantia*	18	germplasm line maintained at ICAR-IARI, New Delhi)	bitter gourd line developed. White flower trait is governed by single recessive gene. Good combine for fruit yield, fruits with discontinuous narrow ridges which is a desirable market trait.	ICAR-IARI, Pusa Campus, New Delhi	
13.	24087; IC653265 **INGR24066**	Bitter Gourd/ *Momordica charantia*	DBGS-21-06	PVGy201 (Gynoecious) X S-43 (Monoecious)	Highly stable predominantly gynoecious line of bitter gourd with high female: male flower (3:1) ratio Fruits are long (16-18cm), green, spiny surface with broken and discontinuous ridges those are highly preferred by the consumers.	Dr Gograj Singh Jat ICAR-IARI, Pusa Campus, New Delhi	**Recommended**
14.	24051; IC632332	Ivy gourd/ *Coccinia indica*	IC0632332; CIAH/CHES/LPY/CHESIG-3/	The accession 'CHESIG-3' is diverse for morphological parameters. It was collected from Baina, Dahod, Gujarat and maintained at the ICAR-Central	Round shape fruit with continuous white stripes.	Dr Lalu Prasad Yadav CHES, ICAR-CIAH, Godhra, Gujarat	**Not Recommended:** Variability in shape is very common in Ivy gourd. The trait is not a unique or uncommon trait

				Horticultural Experiment Station (CIAH RS), Godhra-389340, Gujarat			
Oilseeds							
15.	23221; IC337891 **INGR24067**	Safflower/ *Carthamus tinctorius*	IC337891 (GMU-2347); JLA-350	IC-337891 designated as GMU-2347	Moisture stress tolerance	Dr N. Mukta ICAR-IIOR, Hyderabad, Telengana	**Recommended**
16.	24017; IC631963 **INGR24068**	Safflower/ *Carthamus tinctorius*	IC631963 (GMU-7899)	IC-631963 designated as GMU-7899	Early flowering (77 days) with high seed yield (1763 kg/ha)	Dr N. Mukta ICAR-IIOR, Hyderabad, Telengana	**Recommended**
Spices							
17.	24095; IC646223 **INGR24069**	Pandan/ *Pandanus amaryllifolius*	JAVJ 22; Acc 3 Malacca	Local Germplasm (Collection from Nicobar Islands)	High foliage (430g/plant/year) production in tropical high rainfall condition. Can be cooked with rice to give pleasant aroma Foliage rich in antioxidant content [DPPH activity (80.21% RSA)]	Dr I Jaisankar ICAR-CIARI, Port Blair, A & N Island	**Recommended**
Fruits and Nuts							
18.	24146; IC250164 **INGR24070**	Cashew/ *Anacardium occidentale*	NRC-386; CP 09-11.2 (P-22)/	CP 09-12.9 (P.22)	High bearing with unique apple to nut attachment (reduced fruit cavity depth (2.60 mm) and scar size (3.13 mm)	Dr Siddanna Savadi ICAR-DCR Puttur-Karnataka	**Recommended**
19.	24147; IC653266 **INGR24071**	Cashew/ *Anacardium occidentale*	NRC-577	Not known (Seedling selection)	Very long nuts (42.08 mm) and kernels (32.76 mm) which fall in	Dr Siddanna Savadi ICAR-DCR Puttur-Karnataka	**Recommended**

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					superior kernel grade types (W120)		
20.	24149; IC	Cashew/ *Anacardium occidentale*	NRC-578	Not known (Seedling selection)	Medium nut (7.15 g) and High yielding accession (12.05 kg)	Dr Siddanna Savadi ICAR-DCR Puttur-Karnataka	**Not recommended** due to average value of the trait. Yield is not a criterion for registration
21.	24150; IC653267 **INGR24072**	Cashew/ *Anacardium occidentale*	NRC-579	Not known (Seedling selection)	Wide (broad) nuts and width of the nut is 31.26 mm which is high compared to other genotypes/ accessions	Dr Siddanna Savadi ICAR-DCR Puttur-Karnataka	**Recommended**
22.	24152; IC653268 **INGR24073**	Cashew/ *Anacardium occidentale*	Puttur Col No. 12/ NRC-580	Not known (Seedling selection)	Jumbo nut type accession with lowest cashew apple to nut (AN) ratio (4.12)	Dr Siddanna Savadi ICAR-DCR Puttur-Karnataka	**Recommended**
Ornamental							
23.	24148; IC653269 **INGR24074**	Gladiolus/ *Gladiolus hybridus*	DFR-Glad-1	Seed parent: Ocilla and Male parent: Hunting Song	Taller plant with 107.58 cm plant height, longer spikes (91.23 cm), only 61.00 days for spike initiation days. Early maturing: florets showing colour in about 70.66 days. Florets pale yellow (18C as per R.H.S	Dr. Tarak Nath Saha, ICAR-DFR Pune, Maharashtra	**Recommended**

					colour chart) with reddish spots at the base of inner tepals Good rachis length (48.12 cm) on which flowers arranged in symmetrical manner. It produces more florets per spike (15.38)		
24.	24128; IC653270 **INGR24075**	Orchid/ *Dendrobium nobile*	NRCOP 20-007	NA	High quercetin (phenolic) content (1679.3 mg/kg) in stem Contains bioactive compound Ethylamine (Embramine) and 1,6-Methanonaphthalen-5(1H)-one, octahy-dro-2,4a,8a-trimethyl (1S,2S,4aR,6R, 8aS) These medicinally/ nutraceutically important bioactive compounds were detected for the first time in Dendrobium nobile Lindl.	Dr. Suman Natta ICAR-NRC for Orchids Pakyong, Sikkim	**Recommended**
25.	24129; IC653271 **INGR24076**	Orchid/ *Dendrobium moschatum*	NAOC 1547	NA	High quercetin (phenolic) content (4518.3 mg/kg in leaves. Contains bioactive compound Cycloheptasiloxane and	Dr. Suman Natta ICAR-NRC for Orchids Pakyong, Sikkim	**Recommended**

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					Benzofuran. These medicinally/nutraceutically important bioactive compounds were detected for the first time in Dendrobium moschatum (Banks) Sw.		
26.	24130; IC	Orchid/ *Dendrobium densiflorum*	NAOC 118	NA	High phenolics such as quercetin (742 mg/kg) and catechin (1211.1 mg/kg) content in stem and leaves, respectively. Contains bioactive compound Phenanthrene, 4-methoxy, and 3,6-Dimethyl-5-oxo-1,2,3,5-tetrahydroimi- dazo[1,2-a] pyrimidine. These medicinally/ nutraceutically important bioactive compoundswere detected for the first time in Dendrobium densiflorum Lindl.	Dr. Suman Natta ICAR-NRC for Orchids Pakyong, Sikkim	**Not Recommended** due to lower value of quercetin in this species compared to *Dendrobium nobile* and *Dendrobium moschatum*
27.	24131; IC	Orchid/ *Acampe pappilosa*	NAOC 2141	NA	High caffeic acid (phenolic) content (224 mg/kg) in whole plant. Contains bioactive compound, Cis, trans-	Dr. Suman Natta ICAR-NRC for Orchids Pakyong, Sikkim	**Not Recommended** due to lower value of quercetin in this species

					1,6-Dimethylspiro [4.5] decane and Spiro [3.5] nonan-1-one, 5-methyl-, trans. These medicinally/ nutraceutically important bioactive compoundswere detected for the first time in *Acampe papilosa* (Lindl.) Lindl.		
28.	24137; IC653272 **INGR24077**	Orchid/ *Coelogyne nitida*	NAOC 2628	NA	High quercetin (phenolic) content (2496.6 mg/kg) in whole plant. Contains bioactive compound, 2-Pyrrolidinecarboxylic acid, 1,2-dimethyl-5-oxo-, methyl ester and Quinoline, decahydro-2,5-dipropyl. These medicinally/ nutraceutically important bioactive compoundswere detected for the first time in *Coelogyne nitida* (Wall. ex D. Don) Lindl.	Dr. Suman Natta ICAR-NRC for Orchids Pakyong, Sikkim	**Recommended**
29.	24138; IC653273 **INGR24078**	Orchid/ *Arundina graminifolia*	NRCOP 0028	NA Other (Natural Germplasm)	High quercetin (phenolic) content (211 mg/kg in whole plant. Contains bioactive	Dr. Suman Natta ICAR-NRC for Orchids Pakyong, Sikkim	**Recommended**

					compound, 2DL-Norleucine, N-(2-methoxyethoxycar-bonyl)-, pentyl ester. These medicinally/ nutraceutically important bioactive compoundswere detected for the first time in *Arundina graminifolia* (D.Don) Hochr.		
30.	24204; IC653274 **INGR24079**	Marigold/ *Tagetes erecta*	IIHRMO 2335	GP 208 x GP 18-1	High in carotenoid content (2.28 g/100 g of dry petal meal) Large sized double flowers with flower diameter of 6.05cm Higher in yield (0.500kg/plant)	Dr Tejaswini P ICAR-IIHR, Bengaluru Karnataka	**Recommended**
31.	24206; IC653275 **INGR24080**	Marigold/ *Tagetes erecta*	IIHRMO 2340	CH5-3 x R5-2-12	Rich in carotenoid content (2.07 g/100 g of dry petal meal) Higher number of seeds/ capitulum (145.51) Higher number of flowers/ plant (114.37) and is also genetic male sterile line	Dr Tejaswini P ICAR-IIHR, Bengaluru Karnataka	**Recommended**
Tuber							
32.	22237; IC648624	Potato/ *Solanum*	BS 48-6	DM/M6	Improved 'Sli' gene donor (self-	Dr Salej Sood ICAR-CPRI,	**Recommended**

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	INGR24081	*tuberosum*			compatibility gene) diploid line for self-compatibility introgression Profuse flowering and berry setting upon selfing	Shimla, Himachal pradesh	
33.	22238; IC648623 **INGR24082**	Potato/ *Solanum tuberosum*	BS 49-1	DM/M18	Vigrous self-compatibility gene (Sli) donor diploid line Profuse flowering and berry setting upon selfing	Dr Salej Sood ICAR-CPRI, Shimla, Himachal Pradesh	**Recommended**
Agroforestry							
34.	24037; IC626370 **INGR24083**	Macaranga/ *Macaranga nicobarica*	JPJ/18-032/	Local Germplasm (Collection from Galathea forest, Nicobar Andaman and Nicobar Islands)	Large sized leaves, Abundant leaves in tropical high rainfall conditions Leaf lamina undivided, intact and does not tear with mild pressure besides the size of over 75cm x 90 cm Leaves do not have any taste or offensive smell.	Dr I Jaisankar ICAR-CIARI, Port Blair, A & N Island	**Recommended**

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Summary of Deferred Proposals of previous PGRC Meeting with Recommendations

S. No.	App. No./ National Id.	Crop/ Botanical Name	Proposer Identity	Pedigree	Potentially valuable features	Corresponding author	Recommendations of PGRC
1.	22165; IC346692 **INGR24084**	Indian Mustard/ *Brassica juncea*	DRMR 1188	Germplasm collection from Patiala, Punjab	Drought tolerance (SPAD value= 41.18)	Dr. HK Sharma, ICAR-DRMR, Bharatpur, Rajasthan	**Recommended**
2.	23110; IC653276 **INGR24085**	Potato/ *Solanum tuberosum*	Kanpuria Safed	Local potato collection from Kanpur, Uttar Pradesh	Highly resistant to late blight (AUDPC value = 23)	Dr. Dalamu, ICAR-CPRI, Shimla, Himachal Pradesh	**Recommended**
3.	24079; IC599082 **INGR24086**	Black Pepper/ *Piper nigrum*	Arka Coorg Excel	Selection from open pollinated seedling	Highest berry recovery Percentage **(37.22 %)**	Dr G Karunakaran ICAR-IIHR, Bengaluru, Karnataka	**Recommended**

18.09.24

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