

PLANTGERMPLASM REGISTRATION COMMITTEE
(Indian Council of Agricultural Research)
ICAR-National Bureau of Plant Genetic Resources (NBPGR), New Delhi
Proceedings of the
XXXXIInd Meeting of Plant Germplasm Registration Committee (PGRC)
held at ICAR-NBPGR, New Delhi (December 21, 2020)

The XXXXIInd meeting of PGRC was held on **December 21, 2020** from 03:00 hrs. on wards in virtual mode at ICAR -NBPGR, New Delhi. The following members/invitees were present:

1.	Dr.TR Sharma	DDG (CS), Indian Council of Agricultural Research, New Delhi	Chairman
2.	Dr. DK Yadava	ADG (Seeds), Indian Council of Agricultural Research, New Delhi	Member
3.	Dr. RK Singh	ADG (CC), Indian Council of Agricultural Research, New Delhi	Member
4.	Dr. SK Jha	ADG (O&P), Indian Council of Agricultural Research, New Delhi	Member
5.	Dr. V Pandey	ADG (Hort.-I), Indian Council of Agricultural Research, KAB-II, Pusa Campus, New Delhi	Member
6.	Dr. BK Pandey	ADG (Hort.-II), Indian Council of Agricultural Research, KAB-II, Pusa Campus, New Delhi	Member
7.	Dr. Kuldeep Singh	Director, ICAR-National Bureau of Plant Genetic Resources, Pusa Campus, New Delhi	Member
8.	Dr. GP Singh	Director, Indian Institute of Wheat and Barley Research, Karnal, Haryana	Member
9.	Dr. NP Singh	Director, ICAR-Indian Institute of Pulses Research, Kanpur, Uttar Pradesh	Member
10.	Dr. Bakshi Ram	Director, ICAR-Sugarcane Breeding Institute, Coimbatore, Tamil Nadu	Member
11.	Dr. MR Dinesh	Director, ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	Member
12.	Dr. KV Prasad	Director, ICAR-Directorate of Floricultural Research, Pune, Maharashtra	Member
13.	Dr. Vilas A Tonapi	Director, ICAR-Indian Institute of Millets Research, Rajendranagar, Hyderabad, Telangana	Member
14.	Dr. S Roy	Director, ICAR-Directorate of Medicinal & Aromatic Plants Research, Anand, Gujarat	Member
15.	Dr. PK Rai	Director (Acting), ICAR-Directorate of Rapeseed-Mustard Research, Bharatpur, Rajasthan	Member
16.	Dr. M. Sujatha	Director (Acting), ICAR-Indian Institute of Oilseeds Research Rajendranagar, Hyderabad, Telangana	Member

17.	Dr. Sanjeev Gupta	Project Coordinator, AICRP on MULLaRP, ICAR-IIPR, Kanpur, Uttar Pradesh	Member
18.	Dr. BC Patra	Representative of Director, ICAR-National Rice Research Institute, Cuttack, Odisha	Member
19.	Dr. PE Rajashekar	ICAR-Indian Institute of Horticultural Research, Bengaluru, Karnataka	Invitee
20.	Dr. Gyanendra Singh	Indian Institute of Wheat and Barley Research, Karnal, Haryana	
21.	Dr. M Elangovan	ICAR-Indian Institute of Millets Research, Rajendranagar, Hyderabad, Telangana	
22.	Dr. C Aruna Reddy		
23.	Dr. K Hariprasanna		
24.	Dr. KN Ganapathy		
25.	Dr. Amasiddha B		
26.	Dr. Nagaraja Reddy R	ICAR-Directorate of Medicinal & Aromatic Plants Research, Anand, Gujarat	
27.	Dr. Ashok Kumar	Head (Acting), Division of Germplasm Evaluation, ICAR-National Bureau of Plant Genetic Resources, Pusa Campus, New Delhi	Special invitee
28.	Dr. Anjali Kak Koul	Principal Scientist, Division of Germplasm Conservation, ICAR-National Bureau of Plant Genetic Resources, Pusa Campus, New Delhi	Special invitee
29.	Dr. Veena Gupta	Head (Acting), Division of Germplasm Conservation, ICAR-National Bureau of Plant Genetic Resources, Pusa Campus, New Delhi	Member Secretary

The **XXXXIInd** meeting of Plant Germplasm Registration Committee was held under the Chairmanship of Dr. TR Sharma, DDG (CS) in virtual mode. Dr. Kuldeep Singh, Director, ICAR-NBPGR welcomed the Chairman and all the experts from different Institutes. Dr. TR Sharma emphasized that efforts should be made to promote the registration of trait specific germplasm, not only from ICAR institutes but from other organizations like SAUs, CSIR, DBT and DST.

The minutes of the XXXXIst meeting of PGRC were adopted as such after the confirmation of the Chairman.


Following recommendations emerged during the discussion in PGRC meeting:

- Any line, which is parent of any released variety, can be considered for registration for any trait as per the guidelines, provided that the resultant variety is not a registered for the said trait.
- Data requirement for entries tested in other countries for a given trait will remain same as for other entries (Four location or four seasons) as per the guidelines.
- To promote registration of trait specific germplasm at ICAR-NBPGR, Director will write a letter to all the ICAR/CSIR institutes, SAUs, DBT and DST encouraging them to submit applications for registration.

A total of 124 proposals were received for registration. Out of that, 43 (where comments were received and completed in all respect) were considered for registration along with comments received from the respective PD/PC or experts to ascertain their unique feature(s) and potential values, which formed the basis for registration. Each proposal was discussed in detail and recommendations of PGRC for each proposal has been summarized in the enclosed table. Finally, 39 proposals belonging to 23 species were approved for registration and four were not approved for want of additional data or lack of uniqueness.

Next meeting of PGRC meeting will be held in second week of March 2021.

The meeting ended with vote of thanks by Dr Veena Gupta, Member-Secretary.


(Veena Gupta) 24/12/2020.
Member Secretary, PGRC
ICAR-National Bureau of Plant Genetic Resources
Pusa Campus, New Delhi-110 012

(TR Sharma)
DDG (CS) & Chairman, PGRC
Indian Council of Agricultural Research
Krishi Bhawan, New Delhi-110 001

**XXXXIInd Germplasm Registration Committee Meeting, December 21, 2020:
Summary of New Proposals with Recommendations**

S. No.	App. No./ National Id.	Other Identity	Crop/ Botanical Name	Pedigree	Potentially valuable features	Corresponding author	Recommendations of PGRC
Cereals							
1.	20016; IC0635696 INGR20079	SC-11/ SP-70/ TI-26/ SB-8	Rice/ <i>Oryza sativa</i>	Selection of single EMS induced Samba Mahsuri mutant line in M2 and advanced to M8 through panicle to row method	Higher culm strength in elite genetic background of Samba Mahsuri.	Dr. M Sheshu Madhav, ICAR-IIRR, Hyderabad, Telangana	Recommended
2.	20017; IC0635695 INGR20080	ShB-1/ SB-5	Rice/ <i>Oryza sativa</i>	Selection of single EMS induced Samba Mahsuri mutant line in M2 and advanced to M8 through panicle to row method	Highly tolerant to sheath blight. Medium slender grain type. Possessing genetic background of elite cultivar Samba Mahsuri.	Dr. M Sheshu Madhav, ICAR-IIRR, Hyderabad, Telangana	Recommended
3.	20097; IC0633421 INGR20081	GW2012-475	Wheat/ <i>Triticum aestivum</i>	MACS 2496/ CMH83.2578//GW 496/WH 147//GW 496	Early maturity. High Yielding.	Dr. SI Patel, SDAU, Vijapur, Gujarat	Recommended
4.	20098; IC0633420 INGR20082	GW 2010-321	Wheat/ <i>Triticum aestivum</i>	GW 366/HW 1042//KAUZ*2//TC* 6/RL 6081/3//KAUZ	Early maturity. High Yielding.	Dr. SI Patel, SDAU, Vijapur, Gujarat	Recommended
5.	20083; IC0635425	UP 2942	Wheat/ <i>Triticum aestivum</i>	"CS/TH.SC//3*PVN/ 3/MIRLO/BUC/4/U RES/JUN//KAUZ/5/ HUITES/6/YANAC/ 7/CS/TH.SC//3*PV N/3/MIRLO/ BUC/4/ MILAN/5/TILHI	Chapatti quality- Chapatti score (8.05/10.00). Chapatti quality- Phenol score (2.1/10.0). High zinc content (40.2ppm) and high iron content (38.5ppm).	Dr. JP Jaiswal, GBPUA&T, Pantnagar, Uttarakhand	Not Recommended: The proposed genotype UP 2942 possessing much lower Chapatti quality (8.05/10) than series of released varieties including C 306. Also claims for Zinc (40.2

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							ppm) and Iron (38.5 ppm) contents are in normal range. Hence the proposal lacks superiority.
6.	20104; IC0635427	UP 3029	Wheat/ <i>Triticum aestivum</i>	LIVINGSTON/5/2* W 15.92/4/ PASTOR//HXL7573 /2*BAU/3/WBLL 1	Resistance to wheat blast (Score=0). Resistance to stem, leaf and stripe rust. High yield potential (Grain yield 87.1q/ha).	Dr. JP Jaiswal, GBPUA&T, Pantnagar, Uttarakhand	Not Recommended: In the present case, data for wheat blast is obtained from one environment only and the genotype does not fulfil the criteria for the registration of germplasm (minimum four environment data are required). It should be tested for three more seasons and then resubmitted.
7.	20105; IC0635428	UP 3036	Wheat/ <i>Triticum aestivum</i>	(MILAN/KAUZ//PR INIA/3/BABAX)/DB W74	Resistance to wheat blast (Score=0). Resistance to brown rust (OS, ACI 0.0).High protein content and sedimentation value in restricted irrigation system.	Dr. JP Jaiswal, GBPUA&T, Pantnagar, Uttarakhand	Not Recommended: In the present case, data for wheat blast is obtained from one environment only and the genotype does not fulfil the criteria for the registration of germplasm (minimum four environment data are required). It should be tested for three more seasons and then resubmitted.
8.	20106; IC0635429 INGR20083	UPB 1065	Barley/ <i>Hordeum vulgare</i>	LIMON/BICHY2000 //NE167/CLE176	Low Beta glucan content (<3.5%) -malt quality trait. High Filtration rate and Kolbach index (Malt Quality Traits).	Dr. JP Jaiswal, GBPUA&T, Pantnagar, Uttarakhand	Recommended

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					High yield potential and resistance to yellow rust.		
Millets							
9.	19117; IC0343586 INGR20084	EP 87 (IC0343586)	Sorghum/ <i>Sorghum bicolor</i>	Selection from EP 87	Drought tolerant.	Dr. M Elangovan ICAR-IIMR, Hyderabad, Telangana	Recommended
10.	19152; IC0485033 INGR20085	CSV 15/SPV 2389 IC0485033	Sorghum/ <i>Sorghum bicolor</i>	NSSV 13 x CSV 15	Low HCN content. High protein yield. High seed yielding single-cut forage genotype (Dual-purpose type).	Dr. Ganapathy KN, ICAR-IIMR, Hyderabad, Telangana	Recommended
11.	20046; IC0635700 INGR20086	SPV 2315	Sorghum/ <i>Sorghum bicolor</i>	(CSV 20 × Pant Chari 5) × (CSV 20 × PVK 809) -4-2-2-2-1-2; Pant Chari 5 = CS 3541 x IS 6935 (IS 6935 = EC0484727); CSV 20 = SPV 946 x Kh 89-246 (SPV 946 = SPV 475 x SPV 462, SPV 475 = IC0546895, SPV462=IC0121564); PVK 809 = PVK 809 x SPV881 (SPV 881=IC0144832)	Resistant to foliar diseases (Anthracnose, Zonate leaf spot, Leaf blight and Grey leaf spot). High per day productivity for green fodder High seed yield.	Dr. Ganapathy KN, ICAR-IIMR, Hyderabad, Telangana	Recommended
12.	19171; IC0635025 INGR20087	SPV-2296 (DSR 1145)	Sorghum / <i>Sorghum bicolor</i>	(RS 29 x NR 486) x NR 486	Tolerance to shoot fly. Tolerance to downy mildew. High protein content (12.2%) and High grain yield with higher nutrient-use efficiency.	Dr. K Hariprasanna, ICAR-IIMR, Hyderabad, Telangana	Recommended
Grain Legumes							

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13.	20183; EC718515; INGR20088	EC718515	Wild Lentil/ <i>Lens orientalis</i>	Not applicable	Resistant against rust (<i>Uromyces fabae</i> (Grev.) Fuckel). Resistant against powdery mildew (<i>Erysiphe trifolii</i>).	Dr. Mohar Singh, ICAR-NBPGR Regional Station, Shimla, Himachal Pradesh	Recommended
14.	20185; EC718266; INGR20089	EC718266	Wild Lentil/ <i>Lens nigricans</i>	Not applicable	Resistant against rust (<i>Uromyces fabae</i> (Grev.) Fuckel)	Dr. Mohar Singh, ICAR-NBPGR Regional Station, Shimla, Himachal Pradesh	Recommended
15.	20180; EC271515 INGR20090	EC271515	French Bean/ <i>Phaseolus vulgaris</i>	Not applicable	Resistant against white mold disease (<i>Sclerotinia sclerotiorum</i>)	Dr. Mohar Singh, ICAR-NBPGR Regional Station, Shimla, Himachal Pradesh	Recommended
16.	20182; IC0278744 INGR20091	IC278744	French Bean/ <i>Phaseolus vulgaris</i>	Not applicable	Resistant against white mold disease (<i>Sclerotinia sclerotiorum</i>)	Dr. Mohar Singh, ICAR-NBPGR Regional Station, Shimla, Himachal Pradesh	Recommended
Vegetables							
17.	20010; IC0637026 IC0637207 INGR20092	NIPB1 & NIPB 1B	Cauliflower/ <i>Brassica oleracea</i> var. botrytis	CMS (<i>Erucastrumcaneriens e</i>) <i>Brassica napus</i> × <i>Brassica oleraceavar botrytis</i> (Pusa Meghna)	Cytoplasmic male sterile line. Compact creamy white curd. Strongly waxy. Bluish green broad leaves.	Dr. Rohit Chamola, ICAR-NIPB, Pusa campus, New Delhi	Recommended
Oilseeds							
18.	20153; IC0609646 INGR20093	DRMR 2300 (NPJ-149)	Indian Mustard/ <i>Brassica juncea</i>	NM 919 x Pusa Agrani	High temperature tolerance at seedling stage.	Dr. VV Singh, ICAR-DRMR, Bharatpur, Rajasthan	Recommended
19.	20156; IC0636678 INGR20094	ICIRG226-29-2-2	Castor/ <i>Ricinus communis</i>	Inbred Line	High ricinoelic acid. Early maturity.	Dr K. Anjani, ICAR-IIOR Hyderabad, Telangana	Recommended

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Medicinal and Aromatic Plants							
20.	20007; IC0635703 INGR20095	CSIR-IHBT- ST-03	Stevia/ <i>Stevia</i> <i>rebaudiana</i>	CSIR-IHBT-ST-01	Large leaf size. Tetraploid stevia.	Dr. Ashok Kumar, CSIR-IHBT, Palmapur, Himachal Pradesh	Recommended
21.	20009; IC0630604 INGR20096	CSIR- IHBT-VJ-05	Tagar (Indian Valeriana)/ <i>Valeriana</i> <i>jatamansi</i>	Progeny of VJ-05	High fresh root biomass yield of 2.71 kg/plot (6 sqm). Essential oil content: 0.31%.	Dr. Sanatsujat Singh, CSIR-IHBT, Palmapur, Himachal Pradesh	Recommended
22.	20133; IC0618244 INGR20097	IIHR-CA- 13	Indian birthwort/ <i>Centella</i> <i>asiatica</i>	Clonal selection of germplasm collected from Shimoga	Higher asiaticoside content (3.73%). Higher Total triterpene content (7.67%). Higher dry biomass content (2276 kg/ha)	Dr. Rohini MR, ICAR-IIHR, Bengaluru, Karnataka	Recommended
23.	20150; IC0618233 INGR20098	IIHR-CA-1	Indian birthwort/ <i>Centella</i> <i>asiatica</i>	Clonal selection of germplasm collected from Pune, Maharashtra	Higher fresh biomass yield of 15t/ha/year. Higher total carotenoid (32.33mg/100g) and iron (149.5ppm) content Broad sized leaves with long petiole.	Dr. Rohini MR, ICAR-IIHR, Bengaluru, Karnataka	Recommended
Ornamentals							
24.	20132; IC0636677	PR - 9	Tuberose/ <i>Polianthes</i> <i>tuberosa</i>	Selection from cv. Phule Rajani	A dwarf tuberose selection (average plant height 48.49 cm) with short and	Dr. Tarak Nath Saha, ICAR-DFR, Pune, Maharashtra	Recommended

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	INGR20099				straight spikes suitable for pot culture, vertical panel and other purposes.		
25.	20062; IC0630601 INGR20100	CSIR-IHBT- Gr-11-6	Gerbera/ <i>Gerbera jasmeonii</i>	Gr-1 x Gr-3	Double flower shape.	Dr. Sanatsujat Singh, CSIR-IHBT, Palmapur, Himachal Pradesh	Recommended_
26.	20064; IC0630600 INGR20101	CSIR- IHBT-Gr- Y-1	Gerbera/ <i>Gerbera jasmeonii</i>	Gr-1 x Gr-3	Double flower shape. Standard size (>10 cm).	Dr. Sanatsujat Singh CSIR-IHBT, Palmapur, Himachal Pradesh	Recommended
27.	20151; IC0632739 INGR20102	IIHRGO-1	Gerbera/ <i>Gerbera jasmeonii</i>	IIHR99-5 x Savana	Flower colour and flower form: Bright red (RHS colour: 40A, Red Group) and double type flowers. Ability to grow under open field conditions.	Dr. C Aswath, ICAR-IIHR, Bengaluru, Karnataka	Recommended_
28.	20008; IC0630603 INGR20103	CSIR-IHBT- TM-09	Marigold/ <i>Tagete sminuta</i>	Half-sib progeny of TM-09	High biomass yield 58.11kg/plot (24sqm). Essential oil content 0.343%.	Dr. Ashok Kumar, CSIR-IHBT, Palmapur, Himachal Pradesh	Recommended
29.	20031; IC0630602 INGR20104	CSIR-IHBT- TM-03	Marigold/ <i>Tagetes minuta</i>	Progeny of TM-03	High essential oil content: 0.375% (3.75g/kg).	Dr. Sanatsujat Singh, CSIR-IHBT, Palmapur, Himachal Pradesh	Recommended_
30.	20061; IC0635435 INGR20105	CSIR-IHBT- RD-04	Damask Rose/ <i>Rosa x damascena</i>	Selection from half sib progeny of Jwala	High flower yield 4.92 kg/plot (12sqm).	Dr. Sanatsujat Singh, CSIR-IHBT, Palmapur, Himachal Pradesh	Recommended

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31.	20065; IC0635436 INGR20106	CSIR-IHBT- CH-14-1	Chrysanthemum/ <i>Dendranthema grandiflora</i>	Yellow puma x white star	Yellow flower colour. Double flower shape (8.36cm diameter) Spray type.	Dr. Ashok Kumar, CSIR-IHBT, Palmapur, Himachal Pradesh	Recommended
32.	20066; IC0635437 INGR20107	CSIR-IHBT- CH-14-2	Chrysanthemum/ <i>Dendranthema grandiflora</i>	Yellow puma x Shyamal	Brick red flower colour with bi coloured florets (yellow colour on floret tips). Spray type.	Dr. Ashok Kumar, CSIR-IHBT, Palmapur, Himachal Pradesh	Recommended
33.	20067; IC0635438; INGR20108	CSIR-IHBT - CH-14-4	Chrysanthemum/ <i>Dendranthema grandiflora</i>	Yellow puma x shyamal	Pink flower colour. Flower diameter 9.94cm. Plant height 100.97cm.	Dr. Ashok Kumar, CSIR-IHBT, Palmapur, Himachal Pradesh	Recommended
34.	20068; IC0635439; INGR20109	CSIR-IHBT -CH-14-8	Chrysanthemum/ <i>Dendranthema grandiflora</i>	Poornima x shyamal	Dark pink flower colour. Spatulate(Fluted) florets. Flower diameter 7.99cm.	Dr. Ashok Kumar, CSIR-IHBT, Palmapur, Himachal Pradesh	Recommended
35.	20069; IC0635440	CSIR-IHBT- CH-14-18	Chrysanthemum/ <i>Dendranthema grandiflora</i>	Yellow puma x Poornima	Creamish white flowers with yellow centre. Double flower shape. Flower diameter 6.91cm (spray type chrysanthemum).	Dr. Ashok Kumar, CSIR-IHBT, Palmapur, Himachal Pradesh	Not Recommended: Lack of uniqueness (Fluted).
Commercial Crop							
36.	20177; IC0636675 INGR20110	AS 04-1687	Sugarcane/ <i>Saccharum officinarum</i>	BO 102 x IND 84- 337	Drought tolerance. Water logging tolerance.	Dr. A Suganya, ICAR-SBI Coimbatore, Tamil Nadu	Recommended
37.	20162; IC0636674 INGR20111	BM 1010- 168	Sugarcane/ <i>Saccharum sp</i>	Co 98010 x (Co 1148 x SES 404)	Drought tolerance. High relative water content under drought.	Dr. P Govindaraj, ICAR-SBI Coimbatore, Tamil Nadu	Recommended

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38.	20154; IC0636673 INGR20112	SBIEC 14006	Wild sugarcane <i>Erianthus</i> <i>arundinaceus</i>	IK 76-75 GC (Open pollination)	High harvestable biomass. High fibre content.	Dr. P. Govindaraj, ICAR-SBI Coimbatore, Tamil Nadu	Recommended
Fruits							
39.	19182; IC0637024 INGR20113	Pune Selection-2	Papaya/ <i>Carica papaya</i>	Selection from local land race Madhubala	Papaya Ringspot Virus Tolerant Line. Yellow Flesh.	Dr. GK Mahapatro, ICAR-IARI Regional Station, Pune, Maharashtra	Recommended
40.	19183; IC0637025 INGR20114	Pune Selection-5	Papaya/ <i>Carica papaya</i>	Selection from local land race Madhubala	Papaya ringspot virus tolerant line. Yellow Flesh..	Dr. GK Mahapatro, ICAR-IARI Regional Station, Pune, Maharashtra	Recommended

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Summary of Deferred Proposals of previous PGRC Meeting with Recommendations

S. No.	App. No./ National Id.	Proposer Identity	Crop/ Botanical Name	Pedigree	Potentially valuable features	Corresponding author	Recommendations of PGRC
Vegetables							
1.	19139; IC0635036 IC0635037 INGR20115	IPC 126A and IPC 126B	Carrot / <i>Daucus carota</i>	Pusa Asita (CMS plant) x IPC 126	Dark purple (black) colour main season tropical carrot CMS line developed indigenously. It has 'petaloid' type sterility and stable and easy to distinguish. Its roots are of acceptable size and of self core. It is suitable for main season sowing i.e mid-September onwards in north Indian plains.	Dr. Pritam Kalia, ICAR-IARI, Pusa campus, New Delhi	Recommended
2.	19143; IC0598343 IC0637028 INGR20116	IPC 98A & IPC 98B	Carrot / <i>Daucus carota</i>	Petaloid sterile cytoplasm was introgressed from IPC 122 A into an inbred line IPC 98A (developed by recurrent selection) i.e. IPC 122A x IPC 98.	First red colour main season tropical carrot CMS line developed indigenously. Roots are of acceptable size and suitable for main season sowing i.e. from mid-September onward in North Indian plains. It has been used in the development of commercial hybrid 'PusaVasuda' of tropical red carrot.	Dr. Pritam Kalia, ICAR-IARI, Pusa campus, New Delhi	Recommended
3.	20073; IC0633085 INGR20117	YF 5-2-7 (IC633085)	Watermelon/ <i>Citrullus lanatus</i>	Segregating material collected from Garda, Baran (Rajasthan)	Saffron coloured flesh with high carotenoid content. Non-lobed (entire) leaves	Dr. BR Choudhary, ICAR-CIAH, Beechwal, Rajasthan	Recommended