भारतीय पौधा किस्म जरनल

PLANT VARIETY JOURNAL OF INDIA

खण्ड - 08, अंक - 07, जुलाई 01, 2014

Vol. - 08, No. - 07, July 01, 2014



पौधा किस्म और कृषक अधिकार संरक्षण प्राधिकरण एनएएससी काम्प्लैक्स, डीपीएस मार्ग, निकट टोडापुर गांव, नई दिल्ली–110012

PROTECTION OF PLANT VARIETIES & FARMERS' RIGHTS AUTHORITY
NASC COMPLEX, DPS MARG, Opp. Todapur Village, New Delhi-110012

भारतीय पौधा किस्म जरनल, खण्ड 08, अंक 07 जुलाई 01, 2014 / आषाढ़ -शुक्ल 04. — शक् 1936

Plant Variety Journal of India, Vol. 08, No. 07 July 01, 2014 / Aasad-shukla 04, Saka 1936



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PROTECTION OF PLANT VARIETIES & FARMERS' RIGHTS AUTHORITY NASC Complex, DPS Marg, Opp. Todapur Village, New Delhi – 110 012

'भारतीय पौधा किस्म जरनल पौधा किस्म और कृषक अधिकार संरक्षण प्राधिकरण (पौ.कि.कृ.अ.सं.प्रा.) का आधिकारिक जरनल है। पीपीवी और एफआर अधिनियम, 2001 तथा पीपीवी और एफआर नियमावली, 2003 के नियम 2 (जी) के अंतर्गत अध्यक्ष, पीपीवी और एफआरए, एस.2, ए ब्लाक, एनएएससी काम्प्लैक्स, डीपीएस मार्ग, निकट टोडापुर गांव, नई दिल्ली—110012 की ओर से प्राधिकरण के रिजस्ट्रार द्वारा प्रकाशित किया जा रहा है।

Plant Variety Journal of India is the Official Journal of the Protection of Plant Varieties and Farmers' Rights Authority (PPV & FRA) published by the Registrar on behalf of the Chairperson, PPV & FRA, S-2 A Block, NASC Complex, DPS Marg, Opp. Todapur Village, New Delhi-110012 under the PPV & FR Act, 2001 and Rule 2 (g) of the PPV & FR Rules, 2003.

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PUBLIC NOTICE PUBLIC NOTICE FOR ON SITE DUS TESTING

GUIDELINES

Gladiolus Muskmellon Watermellon

Details of Registration Certificates Published for Inviting claims of Benefit Sharing

Passport data of Varieties for filing any Objection

Passport data of EVRC Recommended Applications

Public Notice

In exercise of the powers conformed by Section 19 of PPV&FR Act, 2001 read with Rule 29(9) of PPV&FR Rules, 2003. The Authority hereby notifies the General Guidelines for on-site DUS Testing.

General Guidelines for on-site DUS testing

- The applicant or his/her nominee on his/her behalf shall submit a request to the Authority for conducting a reliable trial according to Test Guidelines and the instructions from Authority before on-site examination of the candidate variety. It will be the responsibility of the applicant to conduct the trial of the candidate variety(s) along with suitable reference variety. This may be relaxed in case of farmers' variety, as the case may be.
- The Authority may engage a suitable resource Institute or resource person to assist in conducting a reliable trial, data collection and submission of DUS results, if the case need be. The payment for engagement of such institute/person shall be borne by the applicant.
- On-site testing may be conducted at the places specified by the applicant. The minimum age of the trees at on-site shall be 3 to 5 years unless otherwise mentioned specifically in crop specific guideline or separately published in the PVJ.
- The Plant Varieties Registry shall notify appropriate management practices for each of the perennial trees/vine crops notified for plant variety registration.
- In case of farmers' variety, at least one(1) mother plant/tree and four(4) vegetatively propagated plants/trees shall be available for inspection and examination for 'on site' DUS testing. The vegetatively propagated plants can also be inspected if located at nearby places. The trees must be healthy and free from pest & disease and raised under good management practices.
- The applicant or his/her nominee shall submit a request to the Authority at least 3 months prior for monitoring of the on-site testing of the candidate variety. If an institute or resource person is attached with the trial, then the applicant shall consult the concerned institute/person before sending the request to the Authority.
- Monitoring of the trial shall be arranged when essential and distinguishing characteristics of candidate variety can most easily be seen. The characteristics of the candidate variety can be examined and compared with those of the comparative reference varieties as per the Test guidelines.

- The Expert Committee constituted by the PPV & FRA in consultation with the DUS Centre will inspect conduct of the trial, recording and validation of the expression of the characters.
- Applicant or his/her nominee shall supply the Expert Committee with summary of distinct characteristics supported by photographs. The Expert Committee shall take notes and observations on distinctness and shall confirm preliminary data and/or summary of distinctness from applicant.
- The Expert Committee shall submit report for monitoring of the trial to the Authority.
- In the absence of <u>prescribed number of plants of the candidate variety for 'on site' testing</u> <u>for farmers' variety</u>, the DUS test duration shall be enhanced to include at least one more season.
- The Authority may relax the criteria for no of plants, spacing and other requirements maximum for a period upto 3 years from the date of publication of the general guideline in the Plant Varieties Journal of India.

Basic Information for DUS testing of perennial species as per Crop Specific DUS Guideline

SI No	Crop	Plant population for each center (DUS Guideline)	Crop geometry (DUS guideline)	On site plant population (if mentioned	Min Age of plants/ on site	No of DUS descriptor s & Type of assessment	Stages when data are to be recorded as per DUS Guideline
1	Ber	5 plants	4m x 4m	5 plants	3 yrs	36 VG:24 VS:0 MG: 0 MS:12	3 month after pruning
2	Mango	5 plants	5m x 5m	5	5 yrs	51 VG: NA VS: NA MG: NA MS: NA	Before active growth starts, Full flowering, mature fruit, ripe fruit
3	Cocon ut	12 plants	6m x 6m: Tall 12 m X 12 m : Dwarf	8 plants	8 yrs	32 VG:9 VS: Nil MG:23 MS: Nil	1 yr old seedling, 24+ months, tender fruits
4	Citrus	5 plants	6m x 6m	5	5 yrs	15 VG:3 VS: 2 MG:3 MS:7	Spring flush, Ripe fruit
5	Apple	6 plants	2.5m x 2.5m	NA	NA	35 VG:14 VS: 11 MG:1 MS:9	Dormant, 1 yr old, peak vegetative, Full bloom stage
6	Pear	6 plants	3m x 3m	NA	NA	37 VG:21 VS:7 MG:1 MS:8	Dormant, peak vegetative, Full bloom stage
7	Grape	12 plants	1.5 m x 3 m	5	4	40 VG:23 VS:6 MG:10 MS:1	Shoot maturity, 50 green shoot tip stage, 75% flowering, flowering and fruit set, Pre-

				_			veraison, 50% berry softening, harvest, after full maturity
8	Pomeg ranate	5 plants	4 m x 4 m	5	4 yr	36+2 Spl VG: 12 VS: 3 MG: 3 MS: 18	Vegetative, 1 st Flowering, Fruiting
9	Eucaly ptus	18 plants	3m x 2m	18 plants	5 yrs	33 VG: 19 VS: 6 MG: 8 MS: Nil	Coppice, tree ht stages 4/5/7/8 m
10	Casuar ina	15 plants	3m x 2m	15 plants	5 yrs	34 VG:7 VS: 15 MG: 4 MS: 8	Plant ht stages 1/3/4/5/6m
11	Tea	75 plants	90 cm x 45 cm(WB) 110 cm x 75 cm(North) 75 x 75 cm(South)	75 plants	3 yrs	20 VG:18 VG/MG:1 MG:1	Mature tea, Fully developed flower

PUBLIC NOTICE

Sub: Notice is given under Rule 29 (8 and 9) of the PPV & FR Rules, 2003.

As a requirement under Rule 29 (8 and 9) of the PPV & FR Rules, 2003, it is hereby informed that the specific DUS test guideline for **Gladiolus** (*Gladiolus* L.), **Muskmelon** (*Cucumis melo* L.) and **Watermelon** (*Citrullus lanatus* (Thunb.) Mansf.) is hereby published in 'Plant Variety Journal of India', Vol. 08, No. 07, July 01, 2014. Interested parties may read these guidelines and act accordingly.

Sd/-MANOJ SRIVASTAVA REGISTRAR

Gladiolus (*Gladiolus* L.)

I. Subject

These Test Guidelines shall apply to all varieties, hybrids and parental lines of *Gladiolus* spp. and its cultivars. Hybridization has produced many new varieties which are commercially important for the production of cut-flowers.

II. Plant Material Required

- 1. The Protection of Plant Varieties & Farmers' Rights Authority (PPV&FRA) shall decide when, where and in what quantity and quality the plant materials are required for testing of a variety denomination for registration under the Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001.
 - Applicants submitting such material from a country other than India shall make sure that all customs and quarantine requirements stipulated under relevant national legislations and regulations are complied with.
- 2. For all varieties, the materials are to be supplied in the form of corms (4.0-4.5 cm in diameter) which will flower in the same year and display all characteristics of the variety required for DUS testing. If, however, any material for DUS test has a specific requirement for the expression of characters, the same shall be specified by the applicant.
- 3. The plant material (corms) supplied should be healthy, free from pests and diseases.
- 4. The plant material should not be treated with any chemicals and bio-physical agents. If it has been treated, full details of the treatment must be provided along with the application.
- 5. The applicant should submit plant material having genetic purity and uniformity besides data on method of propagation \ multiplication for raising population.
- 6. The minimum quantity of plant material to be provided by the applicant should be 30 corms.

III. Conduct of Tests

- 1. The minimum duration of the DUS test should be one complete growing cycle (minimum one season / year). However, in case of any inconsistency of some characters, the test is to be extended further for another complete growing cycles of the crop.
- 2. The test should be conducted at two test locations planted in the field/bed for better expression of the phenotypic characters. In case of non-expression of any diagnostic character at that specific location, the test is to be shifted to other suitable location for further visual examination. Otherwise, the applicant must provide details about the specific requirement of the character.

- 3. The field test should be carried out at sunny location for expression of all test characteristics. The experimental beds / site should accommodate 15 corms in rows having spacing 30x30 cm for proper vegetative growth and flowering.
- 4. Any kind of growth Promoting Hormones should not be used throughout the vegetative growth period and flowering.
- 5. In case of any discrepancy, additional test protocols for special purpose shall be recommended by the PPV&FR Authority.

IV. Methods and Observations

- 1. The morphological characteristics described in the Table of characteristics should be used for the DUS testing of varieties (Section 7).
- 2. Unless otherwise indicated, all observations of vegetative and floral characteristics shall be made during the entire growth and flowering period of the plant.
- 3. All observations on vegetative and floral characters should be made on the five randomly selected plants.
- 4. For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 30 plants, 1 off type is allowed.
- 5. For the assessment of colour characteristics, the latest Royal Horticultural Society (RHS) colour chart shall be used. Because daylight varies, colour determinations made against colour chart shall be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The special distribution of illuminant for artificial daylight shall conform to the CIE Standard of Preferred daylight D 6500 and should fall within the tolerance set out in the British Standard 950, Part 1. These determinations shall be made with the plant part placed against a white background. The colour chart and version used should be specified in the variety description.
- 6. For the assessment of Distinctiveness and Stability, all observations should be made on 5 plants or parts taken from each of 5 plants.
- 7. In practice, it is not usual to perform tests of stability that produce results as certain as those of the testing of distinctness and uniformity. However, experience has demonstrated that, for many types of variety, when a variety has been shown to be uniform, it can also be considered to be stable. Where appropriate, or in cases of doubt, stability may be tested, either by growing a further generation, or by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

8. Additional tests protocols for special purpose shall be established by the PPV&FR Authority.

V. Grouping of Varieties

- 1. The candidate varieties for DUS testing shall be divided into groups to facilitate the assessment of Distinctiveness. Characteristics which are known from experience usually do not vary or to vary slightly with in a variety and which in their various states are fairly evenly distributed across all varieties in the collection are suitable for grouping purpose.
- 2. The following characteristics shall be used for grouping of *Gladiolus* varieties:
 - (a) Plant: Height up to the tip of leaves from ground level (Characteristic 1)
 - (b) Corm: Colour of outer skin (Characteristic 5)
 - (c) Flowers: Main colour (Characteristic 24) with the following groups:

VI. Characteristics and Symbols

- 1. To assess Distinctiveness, Uniformity and Stability, the characteristics and their states as given in the Table of characteristics (section 7) shall be used.
- 2. Notes (0-9) shall be used to describe the state of each character for the purpose of digital data processing.
- 3. Legend
- (*) Characteristics that shall be observed during every growing season on all varieties and shall always be included in the description of the variety, except when the state of expression of any of these characters is rendered impossible by a preceding phenological characteristic or by the environmental conditions of the testing region. Under such exceptional situation, adequate explanation should be provided.
- (+) See explanations on the Table of characteristics.
- 4. Characteristics containing the following key in the first column of the Table of characteristics shall be examined as indicated below:

QL: Qualitative characteristic

QN: Quantitative characteristic

PQ: Pseudo-qualitative characteristic

5. **(a)** See section 8 for explanation

6. Type of assessment of characteristics indicated in column six of the Table of characteristics is as follows:

MG: Measurement by a single observation of a group of plants or parts of plants

MS: Measurement of a number of individual plants or parts of plants

VG: Visual assessment by a single observation of a group of plants or parts of plants

VS: Visual assessment by observations of individual plants or parts of plants

VII. Table of Characteristics

S. No. & Examination	Characteristics	States	Notes	Example varieties	Type of Assess- ment
1.	Plant: Height	Short	3	Suvarna, Rashmi	MG
(*)	(up to the tip of leaves	Medium	5	Hall Mark, Green	
(+)	from ground level)			Woodpecker	
QN		Tall	7	Picardy, Praha	
2.	Corm: Number per plant	One	1	Aldebaran	MS
		Two	2	Tiger Flame	
		More than two	3	Sylvia	
3.	Corm: Diameter (cm.)	Narrow (<2.5)	3	Nichole, Fidelio	MS
(+)		Medium (2.5-4.0)	5	Roshni, American Beauty	
QN				Pink	
		Broad (>4.0)	7	Regency, Praha	
4.	Corm: Fresh Weight (g)	Lighter (<50)	3	Topaz	MS
(+)		Medium (50-100)	5	Chanson, Yellow Stone	
QN		Heavy (>100)	7	Regency, Snow flower	
5	Corm: Weight after	Lighter (<20)	3	Topaz	MS
	storage / before planting	Medium (20-40)	5	Chanson, Yellow Stone	
	(g)	Heavy (>40)	7	Regency, Snow flower	
6.	Corm: Number of	Few (< 15)	3	Topaz	VG
QN	cormlets / plant	Medium (15-50)	5	White Prosperity, Friendship Pink	
		More (>50)	7	Rose Supreme Shagun, Inter-Pearl	
7.	Corm: Colour of outer	Light Yellow	1	Aldebaran	VG
(+)	skin [#]	Dark Yellow	2	American Beauty Pink	
PQ		Yellowish-orange	3	Rose Supreme	
		Orange	4		
		Red	5	Black Beauty	
		Pink	6	Peter Pears	
		Purple	7	Nichole	
		Others	8		
8.	Leaf Blade: Length (cm.)	Short (<60)	3	Inter-Pearl, Suvarna	MS
QN		Medium (60-80)	5	Regency, Black Beauty	
		Long (>80)	7	Picardy, Agni	

QN	9.	Leaf Blade: Width (cm.)	Narrow (<2.5)	3	Suvarna, Topaz	MS
10. Leaf Blade: Main colour Light green 1 Dark Greeen 2 Roshni, Praha VG		Zour Ziude: Widen (enn.)	` /			1110
10.					*	
(*) (+) (+) Dark Green Yellowish-Green 2 Roshni, Praha	10.	Leaf Blade: Main colour #		1		VG
(+)	(*)			2		
QN 11. Leaf: Curvature of distal (+) half Weak 2 Regency Medium 3 Parade			Yellowish-Green	3		
11. Leaf: Curvature of distal Absent Weak 2 Regency Parade						
(+) QL half Weak Medium Strong 2 Medium Strong Regency Parade 12. Inflorescence: Lateral (+) branches (Secondary QN Spike) Absent Present 1 Grock, Her Majesty Tiger Flame, Rashmi VG 13. Rachis: Length (cm.) Short (<65) Medium (65-80) Short (<65) Amethyst, Tiger Flame Friendship Pink, Acharya J. C. Bose Amethyst, Tiger Flame Friendship Pink, Acharya J. C. Bose American Beauty Pink, Shagun, Her Majesty Grock, Urvashi Invitation, Friendship Pink VG (*) spike Medium (11-16) Shagun, Her Majesty Grock, Urvashi Invitation, Friendship Pink Grock, Urvashi Invitation, Friendship Pink VG 15. Spike: Number of open Hew (<5.0) Show Princess Medium (5.0-7.0) Show Princess Inter-Pearl Show Princess Inter-Pearl VG QN More (> 7.0) To Grock, Urvashi Invitation, Friendship Pink To Grock, Urvashi Invitation, Friendship Pink VG 15. Spike: Number of open Hew (<5.0) Show Princess Inter-Pearl To Grock, Urvashi Invitation, Friendship Pink VG 4 Spike: Arrangement of QN More (>7.0) To Grock, Urvashi Invitation, Friendship Pink VG 15. Spike: Arrangement of QN More (>5.0) To Grock, Urvashi Invitation, Friendship Pink VG (+) flowers Two rows Inter-Pearl <		Leaf: Curvature of distal	Absent	1	Roshni	VG
OIL				2		
Strong		11411				
12.	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				1 0.100	
(+) DN branches (Secondary Spike) Present 9 Tiger Flame, Rashmi MG 13. (*) (*) (*) (*) (*) (*) (*) (*) (*) (*)	12	Inflorescence: Leteral			Grank Har Majasty	VC
Name Spike Short Short						VU
13. Rachis : Length (cm.) Short (<65) 3 Medium (65-80) 5 Amethyst, Tiger Flame Friendship Pink, Acharya J. C. Bose 14. Spike: Number of flowers/ (*) spike Medium (11-16) Shagun, Her Majesty Grock, Urvashi Invitation, Friendship Pink 15. Spike: Number of open Few (<5.0) 3 Oscar, Peter Pears VG. (a) Spike: Arrangement of (+) flowers Grow (Straight) 1 Thamboliana VG. (b) flowers Two rows 2 Chanson Eurovision Irregular 4 Jester 17. Spike: Length of Second (+) Medium (4.0-6.5) 2 Topaz Long (>6.5) 3 Sydney Percy Lancaster 18. Bract: Shape of Apex Others 4 Oscar Oscar			Present	9	riger Flame, Kasiiiii	
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QN			` '			
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(*) Medium (3.0-5.0) 2 Thamboliana QN Long (>5.0) 3 Victor			Others	4		
QN Long (>5.0) 3 Victor	19.	Bract: Length (cm)	Short (<3.0)	1	Regency	MG
	(*)		Medium (3.0-5.0)	2	Thamboliana	
20. Bract: Anthocyanin Absent 1 White Prognetity VG	QN		Long (>5.0)	3	Victor	
20. Diac. Indiceyanii 1000ii Wille 1100peiity VO	20.	Bract: Anthocyanin	Absent	1	White Prosperity	VG
(*) colouration Weak 2 Roshni	(*)	colouration	Weak	2	Roshni	
(+) Medium 3 Topaz	(+)		Medium	3	Topaz	
QN Strong 4 American Beauty Blue			Strong	4	American Beauty Blue	
Very Strong 5 Urvashi			Very Strong	5	Urvashi	

21.	Flower: Shape in front	Triangular	1	Snow Princess, Rashmi	VG
	view	Star shaped	2	Grock	100
(+)	view	-	$\frac{2}{3}$		
QN		Round		Thamboliana	710710
22.	Flower: Attitude	Upright	1	Eurovision	VG/MS
(+)		Semi-upright	2	Parade	
		Horizontal	3	Agni	
23.	Flower: Length	Short (<7.5)	1	Hall Mark	
(*)	(excluding first flower)	Medium (7.5-9.0)	2	Aldebaran, Picardy	
(+)	(cm.)	Long (>9.0)	3	Agni, Red Beauty	
QN					
(a)					
24.	Flower: Width (excluding	Miniature <6.5)	1	Agni	VG
(*)	first flower)	Small (6.5-9.0)	2	Praha, Hunting Song	
(+)	(cm.)	Medium (9.0-11.5)	3	Video, Archana	
PQ		Large (11.5-14)	4	Acharya J.C.Bose,	
				Tambari	
		Giant (>14)	5		
25.	Flower: Main Colour [#]	White (pure)	0	White Prosperity, Snow	VG
(*)		(1,010)		Princess	
(+)		Yellowish-Green	1	Green Woodpecker	
PQ		Yellow	2	Yellow Stone, Vink's	
1 2				Glory	
		Orange	3	Orange Ginger	
		Pink	4	Friendship Pink,	
				Thamboliana	
		Red	5	Eurovision, Praha	
		Purple Red	6	Invitation, Candyman	
		Violet Blue	7	Her Majesty	
		Dark Blue	8		
26.	Flower: Secondary Colour	None	0		VG
QN	(shading)#	White (pure)	1		
		Yellowish-Green	2		
		Yellow	3	Wine & Roses	
		Orange	4	ArkaKesar	
		Pink	5	Invitation	
		Red	6		
		Purple Red	7	Fidelio	
		Violet Blue	8		
27.	Perianth Tube: Length	Short (<3.0)	1	Amethyst	VG/
(*)	(cm.)	Medium (3.0-4.5)	2	Tiger Flame	MS
PQ		Long (>4.5)	3	Usha	
28.	Perianth Tube: Colour#	Light Green	1	Aldebaran	VG
QN		Yellowish-Green	2	Roshni	
		Yellow	3	American Beauty Pink	
		Orange	4	Peter Pears	
		Pink	5		
		Red	6	Praha	
			7		
		Purple-Red		Topaz	
		Purple	8	Video	

29.	Tepal: Length (cm.)	Short (<4.0)	3	Shagun, Aldebaran	MS
(*)		Medium (4.0-7.5)	5	White Prosperity, Roshni	
QN		Long (> 7.5)	7	Sydney Percy Lancaster	
30.	Tepal: Width (cm.)	Narrow (<3.5)	3	Agni,	MS
(*)		Medium (3.5-5.5)	5	Candyman, Garden Glory	
(+)		Broad (>5.5)	7	Picardy	
(a)		, , ,			
PQ					
31.	Tepals Reflexing	Weak	1	Video	VG
(+)		Medium	2	Yellow Stone, Suverna	
QN		Strong	3	Tiger Flame, Jester	
		Others	4		
32.	Outer Whorl: Shape	Ovate	1	Black Beauty, Parade	VG/MS
(+)		Elliptic	2	Orange Ginger, Inter-Pearl	
$\mathbf{Q}\mathbf{N}$		Obovate	3	Suverna	
		Spurred			
33.	Outer Whorl:	Absent	1	Video, Vink's Glory	VG/
(+)	Undulation	Weak	2	Roshni, Her Majesty	MS
$\mathbf{Q}\mathbf{N}$		Medium	3	Topaz, Priscilla	
		Strong	4	Shagun	
		Very Strong	5	Parade	
34.	Inner Whorl Undulation	Absent	1	Usha, Yellow Stone	VG/
(+)		Weak	2	Rashmi, Oscar	MS
		Medium	3	Invitation, Neelima	
		Strong	4	Parade, Shagun	
		Very Strong	5		
35	Tepal: Texture	Papery	1	Friendship	VS
		Leathery	9	Regency	
36.	Inner Tepal: Stripe	Absent	1	White Prosperity	VG/MS
(*)		Present	9	Red Beauty Sport	
(+)					
QL					
37.	Inner Tepal: Colour of	White	0	Eurovision	VG/MS
(*)	stripe [#]	Yellowish-white	1		
PQ		Yellow	2	Topaz	
		Orange	3	Aldebaran	
		Pink	4		
		Red	5	Urvashi	
		Purple Red	6	Red Beauty Sport	
		Violet Blue	7		
		Dark Blue	8		
38.	Inner Tepal: Stripe Length	Short (<2.5)	1	Lavender Puff	MG
QN	(cm)	Medium (2.5-3.5)	2	Candyman	
		Long (>3.5)	3	Eurovision	
39.	Inner Tepal: Macule	Absent	1	Her Majesty	VG/MS
(*)		Present	9	Classic Pink	
\mathbf{QL}					

40.	Inner Tepal: Size of	Small	1	Shagun	VG/
(*)	macule in relation to size	Medium	2	Thamboliana	MS
			3	Peters Pear	IVIS
(+) PQ	of inner tepai	Large	3	Peters Pear	
41.	Inner Tepal: Position of Base		1	Thamboliana	VG/MS
	Macule		_	Thambonana	V G/IVIS
(*)	Macule	Between base and	2		
(+)		centre			
PQ		Centre	3		
42.	Inner Tepal: Shape of	Type 1	1	Roshni	VG
(*)	macule	Type 2	2	Classic Pink	
(+)		Type 3	3	Rose Supreme	
PQ		Type 4	4	Hall Mark	110
43.	Inner Tepal: Main colour	White	1	Roshni	VG
(*)	of macule*	Yellow	2	Picardy	
(+)		Greenish-yellow	3	Topic Sea	
PQ		Orange	4	Jester	
		Red	5	Orange Ginger	
		Pink	6	Classic Pink	
4.4	I T 1 C 1	Blue	7		NC
44.	Inner Tepal: Secondary colour of macule [#]	White	1	C	VG
(*)	colour of macule	Yellow	2 3	Suverna	
(+)		Greenish-yellow	4		
PQ		Orange Red	5		
		Pink	6		
		Blue	7		
45.	Inner Tepal: Margin of		1	Aldebaran	VG
	macule	irregular	1	Alucoaran	*0
(+)	macuie	~		C	
		Moderately-irregular	2	Suverna	
	T 1 D:00	Very irregular	3	Roshini	110
46.	Inner Tepal: Different	Absent	1	Freindship Pink	VG
PQ	colour of marginal zone	Present	9	Invitation	
477	I T 1 W'14 C	N	1	T '4 4'	N.C.
47.	Inner Tepal: Width of	Narrow	1	Invitation	VG
(+)	marginal zone	Medium	3	Wine & Roses	
		Broad	5	Priscilla	
48.	Inner Tepal: Border of	Slightly-irregular	1	Invitation	VG
PQ	marginal zone	Moderately-irregular	3	Priscilla	
		Very irregular	5		
49.	Inner Tepal: Colour of	White	1	Invitation	VG
(*)	marginal zone#	Yellow	2		
(+)		Greenish-yellow	3		
PQ		Orange	4		
•		Red	5		
		Pink	6	Priscilla	
		Blue	7	1 11501114	
50	Modion in T- 1			Craals	NC.
50.	Median inner Tepal:	Erect	1	Grock	VG
(+)	Attitude	Semi-erect	3	Classic Pink	
		Horizontal	5	Urvashi	

51.	Median inner Tepal:	Moderatel- recurved	1	1	VG
(+)	Attitude of apex	Straight	2	Green Woodpecker	VO
(+)	Attitude of apex	Moderately-reflexed	3	Chanson	
		Strongly-reflexed	4	Neelima	
52.	Androssiyan I sasth (sas)	Short (<4)	1		MG
	Androecium: Length (cm)	` /	_	Sydney Percy Lancaster	MG
(+)		Medium (4-5)	2	Nichole	
	T'' (T (1 ()	Long (> 5)	3	White Prosperity	110
53.	Filament: Length (cm)	Short (<2.5)	1	Fidelio	MG
(+)		Medium (2.5-3.5)	2	Snow Princess	
	#	Long (>3.5)	3	Sylvia	
54.	Filament: Main colour#	White	1	Roshni	VG
(*)		Light yellow	2		
(+)		Light pink	3		
PQ		Medium pink	4	Grock	
		Light red	5		
55.	Filament: Small spots at	Absent	1	Priscilla	VG
PQ	base	Present	9	Praha	
56.	Filament: Colour of apex	Same colour	1	Priscilla	VG
PQ	compared to main colour	Slightly different	2	Tiger Flame	
		colour			
		Very different colour	3	Praha	
57.	Anther: Length (cm.)	Short (<1.2)	1	Candyman	MG
(+)		Medium (1.2-1.5)	2	Lavender Puff	
		Long (>1.5)	3	Usha	
58.	Anther: Colour of	White	1		VG
(*)	stomium [#]	Yellow	2	Aldebaran	
(+)		Orange	3		
PQ		Red	4	Invitation	
		Pink purple	5	Sylvia	
		Blue purple	6		
		Violet	7	My Love	
59.	Style: Length (cm.)	Short (<5.5)	1	Zeus	MG
(+)		Medium(5.5-7.5)	2	Rashmi	
		Long (> 7.5)	3	Sylvia	
60.	Style: Main colour#	White	1	Friendship White	VG
(*)		Light yellow	2	Victor	
(+)		Light pink	3		
PQ		Medium pink	4		
- 4		Light red	5	Eurovision	
		Others	6		
61.	Style: Colour of base [#]	White	1	Snow Princess	VG
(*)	Style. Colour of buse	Yellow	2	SHOW TIMEOSS	
(+)		Orange	3		
PQ		Red	4		
10		Pink purple	5		
		Blue purple	6		
		Violet	7		

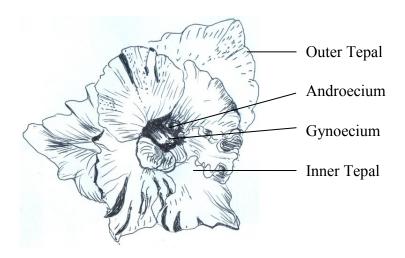
62.	Stigma Lobe: Colour#	White	1	Picardy	VG
(*)		Yellow	2	Aldebaran	
(+)		Orange	3	Red Beauty	
PQ		Red	4		
		Pink purple	5	Wine & Roses	
		Blue purple	6	My Love	
		Violet	7	Usha	
63.	Stigma Lobe: Length	Short (< 0.7)	1	Roshni	MG
(+)	(cm)	Medium (0.7-1.0)	2	Peter Pears	
		Long (> 1.0)	3	Regency	
64.	Time of beginning of	Early (<60)	3	Roshni	VG/
(+)	flowering (Number of	Medium (60-90)	5	Amethyst	MS
QN	days)	Late (>90)	7	Fidelio	
65.	Duration of Flowering	Short-Blooming	3	Peter Pears	VG/
(+)	(No. of days)	Period (<10)			MS
QN		Medium-Blooming	5	Eurovision	
		Period (10-15)			
		Long-Blooming	7	Friendship Pink	
		Period (>15)			
66.	Capsule: Shape	Oblong	1	Roshni	VG
PQ		Globose	2		
		Round	3		
		Ellipsoid	4	Yellow Stone	
		Others	5		

VIII. Explanations on the Table of Characteristics

1. Explanations covering several characteristics

Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

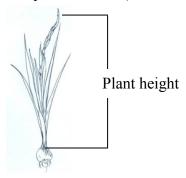
(a) Illustration of inner and outer tepals:



2. Explanations for individual characteristics

Characteristic 1: Plant: Height

Observations on plant height (upto the tip of the leaves).



Characteristic 3: Corm: Diameter

The diameter of the corm (3.0-4.5 cm) is to be observed with the help of scale; for measuring diameter take a good and healthy corm.

Characteristic 4: Corm: Fresh Weight

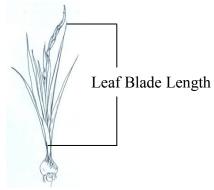
The weight of the corm is to be observed with the help of weighing machine, for measuring a weight.

Characteristic 7: Corm: Colour of outer skin

Observation of the colour shall be recorded by studying the outer skin of the corms.

Characteristic 8: Leaf Blade: Length

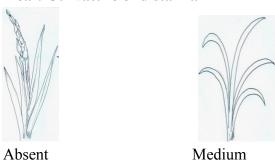
The height of the leaf blade is to be observed from base to the tip of the leaf.



Characteristic 9: Leaf Blade: width

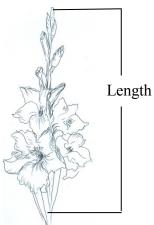
Observations on leaf width should be taken by measuring second or third leaf.

Characteristic 11: Leaf: Curvature of distal half



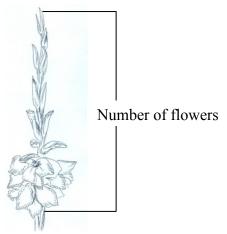
Characteristic 13: Rachis: Length

It was recorded with the help of scale from the base of spike (from second node) to the top of spike.



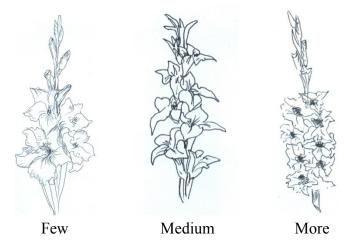
Characteristic 14: Rachis: Number of flowers

All flowers including the closed buds.

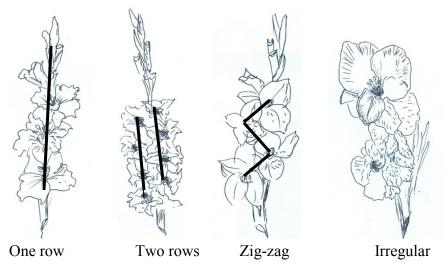


Characteristic 15 Rachis: Number of open flowers

The observation should be made on all flowers which are fully open at the same time, including the first flower.

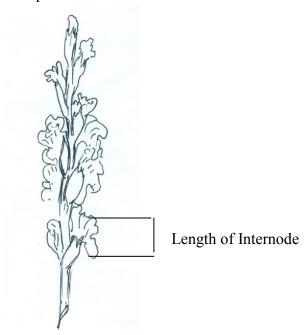


Characteristic 16: Rachis: Arrangement of flowers

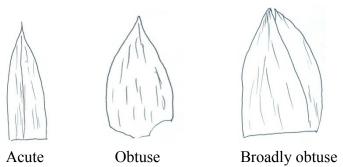


Characteristic 17: Rachis: Length of Internode

It was recorded with the help of scale from one node to the other of the spike.



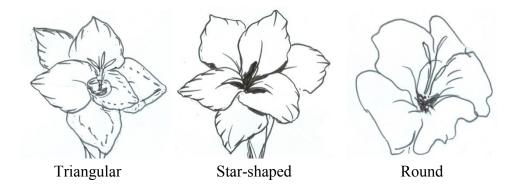
Characteristic 18: Bract: Shape of apex



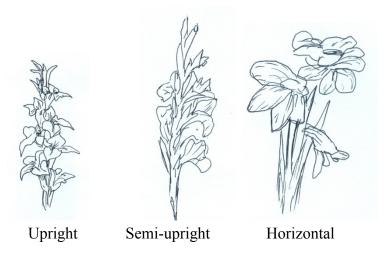
Characteristic 20: Bract: Anthocyanin Colouration

The anthocyanin colouration of bract is seen by the presence or absence or the area of the coppery colour on the bracts.

Characteristic 21: Flower: Shape in front view

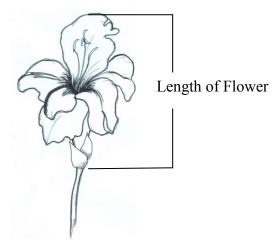


Characteristic 22: Flower: Attitude



Characteristic 22: Flower: Length

The length of individual flower was recorded by measuring the point of attachment of the flower to axis of the tip of central petal, with the help of scale.



Characteristic 23: Flower: Width

The width of individual flower was measured, across the flower, when it was fully opened with the help of scale (in metric unit). The width of the broadest part should be observed at the longest part of the flower.



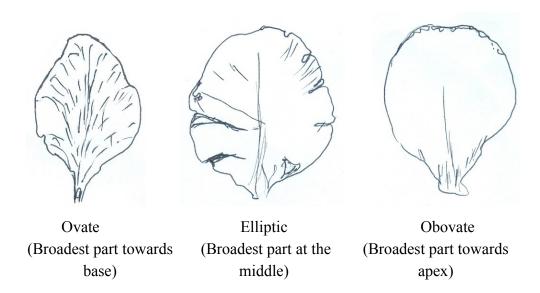
Characteristic 24: Flower: Main Colour

The main colour is the colour with the largest surface area. In cases where the areas of the main and secondary colour are too similar to reliably decide which colour has the largest area, the lightest colour is considered to be the main colour.

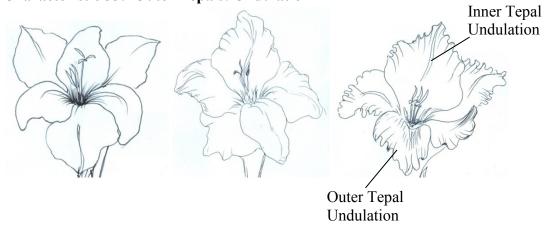
Characteristic 25: Width of Tepal

The width of individual petal was measured, across the central petal, when it was fully opened with the help of scale (in metric unit).

Characteristic 32: Outer Tepal: Shape



Characteristic 33: Outer Tepals: Undulation



Characteristic 34: Inner Tepals: Undulation As given in the above figures.

Characteristic 36: Inner Tepal: Stripe



Characteristic 38: Inner Tepal: Stripe Length







Characteristic 40: Inner Tepal: Size of Macule in relation to size of inner Tepal





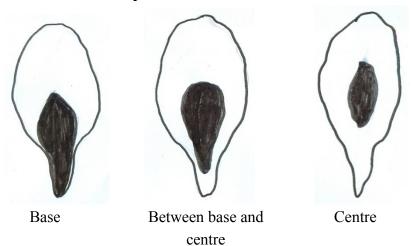


Medium

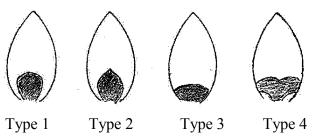


Large

Characteristic 41: Inner Tepal: Position of Macule



Characteristic 42: Inner Tepal: Shape of macule



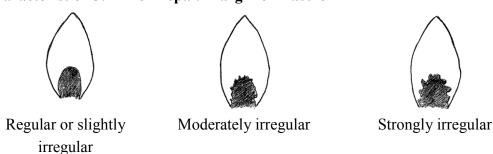
Characteristic 43: Inner Tepal: Main colour of macule

The main colour is the colour with the largest surface area. In cases where the areas of the main and secondary colour are too similar to reliably decide which colour has the largest area, the lightest colour is considered to be the main colour.

Characteristic 44: Inner Tepal: Secondary colour of macule

The secondary colour is the colour with the second largest surface area.

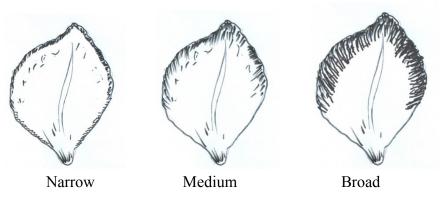
Characteristic 45: Inner Tepal: Margin of macule



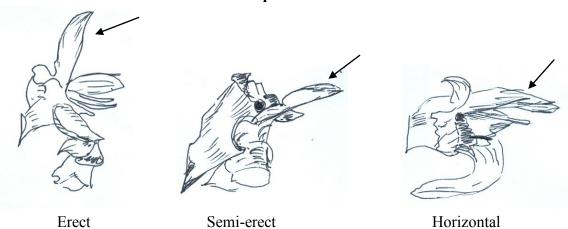
Characteristic 46: Inner Tepal: Marginal zone



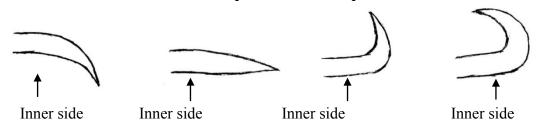
Characteristic 47: Inner Tepal: Width of marginal zone



Characteristic 50: Median inner Tepal: Attitude



Characteristic 51: Median inner Tepal: Attitude of apex

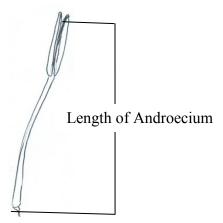


C Moderately Straight Moderately reflexed Strongly reflexed

harac recurved

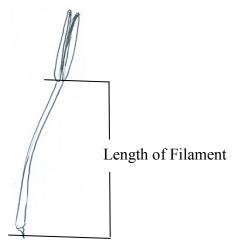
teristic 52: Androecium: Length

The length of andreocium was measured from the attachment of the filament with petal to tip of anther, with the help of scale.



Characteristic 53: Filament: Length

The length of filament was taken from the base of petal to attachment point of anther with the help of scale in cm.



Characteristic 54: Filament: Main colour

The main colour is the colour with the largest surface area.

Characteristic 57: Anther: Length

Anther length was measured from base to tip of the anther with the help of scale in cm.



Characteristic 59: Style: Length

Measurement was recorded from just above the ovary to splitting point of stigma lobes in cm.



Characteristic 60: Style: Main colour

The main colour of the style should be observed without the basal part. The main colour is the colour with the largest surface area. In cases where the areas of the main and secondary colour are too similar to reliably decide which colour has the largest area, the lightest colour is considered to be the main colour.

Characteristic 61: Style: Colour of Base



Characteristic 62: Stigma Lobe: Colour



Characteristic 63: Stigma Lobe: Length

Stigma lobe was measured at the split point from style to the tip of the lobe by the use of scale in cm.



Characteristic 64: Time of beginning of flowering

Time of beginning of flowering is the time when 50 % of the plants have the first flower fully opened.

Characteristic 65: Duration of Flowering

The numbers of days taken to flower - the whole spike from first flower to last.

X. Working Group Details:

These test guidelines have been developed by the task force constituted by the PPV&FRA in which an eminent group of Scientists and technical staff members in consultation with other experts in the field and in commensurate with the international guidelines specially UPOV, North American Gladiolus Council and British Gladiolus Council.

Name of DUS Test Centre:

Nodal DUS Centre	Other test centre
CSIR-National Botanical Research Institute, Lucknow	
Website:www.nbri.res.in	

Muskmelon (Cucumis melo L.)

I. Subject

These test guidelines apply to all varieties, hybrids and parental lines of muskmelon (*Cucumis melo* L.) including *C. melo* L. subsp. *cantalupensis* and *C. melo* L. subsp. *reticulatus*.

II. Seed Material Required

- 1. The Protection of Plant Varieties and Farmers' Rights Authority (PPV&FRA) shall decide when, where and in what quantity and quality of the seed material required for testing the variety is to be delivered. Applicants submitting seed material from a country other than India must make sure that all customs and formalities are complied with.
- 2. The minimum quantity of seed of varieties, hybrids and parental lines to be supplied by the applicant should be:
 - For open field cultivation: 100 g seeds (in one submission only).
- 3. The seed should meet the minimum requirement for germination capacity (80%), moisture content should not be more than 8% and physical purity (98%) prescribed for certified seed in India. Especially for storage, which requires a higher standard, the applicant should state the actual germination capacity, which should be as high as possible. The seed supplied should be visibly healthy, not lacking in vigour or affected by any important pest or disease.
- 4. The seed material must not have undergone any treatment unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

III. Conduct of Tests

- 1. The minimum duration of test should normally be two independent but similar growing seasons (summer).
- 2. The test should normally be conducted at two different locations. If any essential characteristic of the variety can not be observed at these places, the variety may be tested at an additional place.
- 3. The test should be carried out under conditions ensuring normal growth. The size of the plot should be such that plants or parts of plant may be removed for measuring and counting without prejudice to the observations which must be made upto the end of the growing period. Each test shall include 105 plants for open field cultivation, which should be divided among 3 replications. Separate plots for observations and for measuring can only be used if they have been subjected to similar environmental conditions.
- 4. Test plot design

TAT	1	of rows		_
Niin	าher	of rowe	•	`
INUII	1001	OLIUWS		J

Row length : 5.6 m

Row to row distance : 2.5 m

Plant to plant distance : 0.8 m

Number of replications : 3

- 5. Observations should not be recorded on plants in border rows.
- 6. Additional test protocols for special purpose shall be established by the PPV&FR Authority.

IV. Methods and Observations

- 1. The characteristics described in the Table of Characteristics (Section VII) should be used for the testing of varieties for DUS.
- 2. For the assessment of Distinctiveness and Stability, observations should be made on 30 plants or parts of plants selected randomly, which should be divided among 3 replications (10 plants in each replication).
- 3. For the assessment of Uniformity of characteristics in the plot as a whole (visual assessment by a single observation of a group of plants or parts of plants), a population standard of 1% with an acceptance probability of at least 95% should be applied. In case of a sample size of 105 plants, the number of off-types should not exceed 2.
- 4. Observations on the cotyledon should be made just before the development of the first true leaf.
- 5. All observations on the leaf should be made on fully developed but not old leaves, preferably between the 5th and 8th node when the plant has at least one fruit set.
- 6. All observations on the fruit should be made on 1st or 2nd well developed mature fruit.
- 7. All observations on the ovary shall be recorded on the day of anthesis.
- 8. All observations on width shall be recorded at the maximum point of width of the part concerned.
- 9. All observations on the seeds should be made on fully developed, matured and dry seeds, after washing and drying.
- 10. Stage of recording of different observations will be as follows:

	Description	Code
a.	Cotyledons completely unfolded	10
b.	Active vegetative growth	20
c.	Flowering stage: appearance of first perfect/ pistillate flower in 50% plants from date of sowing	30
d.	Commercial harvest stage (harvest maturity)	40

V. Grouping of Varieties

- 1. The collection of varieties to be grown should be divided into groups to facilitate the assessment of Distinctiveness. Characteristics which are suitable for grouping purposes are those, which are known from experience not to vary, or to vary only slightly, within a variety. Their various states of expression should be fairly evenly distributed throughout the collection.
- 2. It is recommended that the competent authorities use the following characteristics for grouping of muskmelon varieties:

a.	Inflorescence: sex expression (at full flowering)	Characteristic 10
b.	Fruit: shape in longitudinal section	Characteristic 17
c.	Fruit: rind colour	Characteristic 18
d.	Fruit: sutures	Characteristic 25
e.	Fruit: surface netting	Characteristic 27
f.	Fruit: flesh colour	Characteristic 29

VI. Characteristics and Symbols

- 1. To assess Distinctiveness, Uniformity and Stability, the characteristics and their states as given in the Table of Characteristics should be used.
- 2. Notes (1-9) should be used for the purpose of recording and electronic processing of data. Each state of expression is allotted a corresponding numerical note (1-9) for the different characteristics

3. Legend

- (*) Characteristics that should be used in every growing season on all varieties and shall always be included in the description of the variety, except when the states of expression of any of these characters is rendered impossible by a preceding characteristic or by the environmental conditions of the testing region. Under such exceptional situation, adequate explanation shall be provided.
- (+) See the Explanation on the Table of Characteristics in Section VIII.
- 4. Type of assessment of characteristics indicated in Section VII of Table of Characteristics is as follows:

MG	:	Measurement by a single observation of a group of plants or parts of plants.
MS	:	Measurement of a number of individual plants or parts of plants.
VG	:	Visual assessment by a single observation of a group of plants or parts of

	plants.
VS	Visual assessment by observations of individual plants or parts of plants.

VII. Table of Characteristics

S. No	Characteristic s	States	Note	Example varieties	Stage of observation	Type of assessmen t
1	2	3	4	5	6	7
1.	Cotyledon: length (cm)	Short (<2.75)	3	Punjab Sunehri	10	MS
	length (em)	Medium (2.75-3.25)	5	Arka Jeet		
		Long (>3.25)	7	RM-50, Pusa Madhuras		
2.	Cotyledon: width (cm)	Narrow (<1.5)	3	Kashi Madhu, Durgapura Madhu	10	MS
		Medium (1.5- 1.75)	5	GMM-3, RM-43		
		Broad (>1.75)	7	Pusa Madhuras		
3.	Leaf blade:	Short (<8)	3	RM-43	20	MS
	length (cm)	Medium (8- 10)	5	Kashi Madhu		
		Long (>10)	7	MHY-3, Durgapura Madhu		
4.	Leaf blade:	Narrow (<11)	3	GMM-3, RM-43	20	MS
	width (cm)	Medium (11- 13)	5	Kashi Madhu		
		Broad (>13)	7	Pusa Madhuras		
5.	denth of lobes	Weak	3	MHY-3	20	VG
(+)		Medium	5	GMM-3		
		Strong	7	RM-50		
6.	Leaf blade:	Short (<2.5)	3	-	20	MS
(+)	length of	Medium (2.5-	5	Kashi Madhu		

	terminal lobe	4.5)				
	(cm)	Long (>4.5)	7	RM-50		
7.	Leaf blade: dentation of margin	Weak	3	RM- 43	20	VG
(+)		Strong	7	Kashi Madhu, RM-50		
8.	Leaf blade: petiole length (cm)	Short (<7)	3	RM-43, Durgapura Madhu	20	MS
		Medium (7-9)	5	Pusa Madhuras, MHY-5		
		Long (>9)	7	RM-50, Hara Madhu		
9.	Appearance of first perfect/pistillate flower	Early (<45)	3	Durgapura Madhu	30	MG
	in 50% plants from date of	Medium (45- 50)	5	MHY-3, RM-43, Kashi Madhu		
	sowing (days)	Late (>50)	7	-		
10.	Sex expression	Monoecious	1	-	30	VG
(*)	(at full flowering)	Andro- monoecious	2	Kashi Madhu, Pusa Madhuras, Hara Madhu, Durgapura Madhu		
		Others	9	-		
11.	Male sterility	Absent	1	Kashi Madhu, Pusa Madhuras, Hara Madhu, Durgapura Madhu	30	VG
		Present	9	-		
12.	Ovary: length	Short (<1)	3	Punjab Sunehri	30	MS
	(cm)	Medium (1- 1.5)	5	MHY-5		
		Long (>1.5)	7	Durgapura Madhu, RM-50		
13.	Ovary: width	Narrow (<0.6)	3	Kashi Madhu	30	MS
	(cm)	Medium (0.6-	5	Hara Madhu		

		0.8)				
		Broad (>0.8)	7	MHY-5		
14.	Ovary:	Sparse	1	Arka Jeet	30	VG
	pubescence	Dense	2	Kashi Madhu		
15.	Fruit: length	Short (<10)	3	Arka Jeet	40	MG
	(cm)	Medium (10- 15)	5	Pusa Madhuras		
		Long (>15)	7	Durgapura Madhu		
16.	Fruit: diameter (cm)	Narrow (<9)	3	RM-43, Arka Jeet	40	MG
		Medium (9- 12)	5	RM-50		
		Broad (>12)	7	GMM-3, Kashi Madhu		
17.	Fruit: shape in	Ovate	1	MHY-5	40	VG
(*)	longitudinal section	Oval	2	-		
(+)		Elongated globe	3	Arka Rajhans		
		Round	4	-		
		Oblate (Flat globe)	5	GMM-3, Kashi Madhu		
		Obovate	6	Durgapura Madhu		
		Cylindrical	7	-		
18.	Fruit: rind	Creamy white	1	-	40	VG
(*)	colour	Yellow	2	Kashi Madhu		
		Yellow Green	3	Durgapura Madhu		
		Orange	4	Arka Jeet		
		Others	9	-		
19.	Fruit: patches	Absent	1	Arka Jeet, MHY-3	40	VG
		Present	9	Kashi Madhu, GMM-3		

20.	Fruit: peduncle	Slipable	1	Kashi Madhu	40	VG
	at maturity	Non-slipable	9	Hara Madhu		
21. (+)	Fruit: shape at peduncle end	Pointed	1	Durgapura Madhu	40	VG
()		Rounded	2	Hara Madhu, Pusa Madhuras		
		Truncate	3	Kashi Madhu		
22. (+)	Fruit: shape at blossom end	Pointed	1	Durgapura Madhu	40	VG
(')		Intermediate	2	-		
		Truncate	3	Kashi Madhu		
23.	Fruit: diameter of blossom end scar (cm)	Small (<1)	3	Arka Jeet, Durgapura Madhu	40	MS
		Medium (1-2)	5	Pusa Madhuras		
		Large (>2)	7	Kashi Madhu		
24.	Fruit: surface	Smooth	1	Arka Jeet, MHY-3	40	VG
		Grooved	9	RM-43, Kashi Madhu		
25. (*)	Fruit: sutures	Absent	1	Arka Jeet, MHY-3	40	VG
()		Present	9	Hara Madhu, Kashi Madhu		
26.	Fruit: suture	Creamy	1	Arka Rajhans	40	VG
	colour	Green	2	Kashi Madhu, Hara Madhu		
		Others	9	-		
27. (*)	Fruit: surface netting	Absent	1	Arka Jeet, MHY-5	40	VG
		Moderate	2	RM-50, Punjab Sunehri		
		Dense	3	-		
28.	Fruit: flesh	Thin (<2)	3	Arka Jeet	40	MS
	thickness at	Medium (2-3)	5	MHY-5		

	position of maximum fruit diameter (cm)	Thick (>3)	7	GMM-3		
29.	Fruit: flesh	Creamish white	1	Arka Jeet	40	VG
(*)	colour	Grey orange	2	GMM-3		
		Yellowish green	3	Durgapura Madhu		
		Green	4	Hara Madhu		
		Orange	5	Kashi Madhu		
30.	Fruit: flesh	Mealy	3	Hara Madhu	40	VS
	texture	Intermediate	5	-		
		Crispy	7	Kashi Madhu		
31.	Fruit : flavour	Mild	3	Arka Rajhans	40	VG
		Medium	5	Kashi Madhu, Durgapura Madhu		
		Strong	7	_		
32.	Seed: length (cm)	Short (<1)	3	Kashi Madhu, Hara Madhu	40	MS
		Long (>1)	5	Pusa Madhuras		
33.	Seed: width (cm)	Narrow (<0.4)	3	Durgapura Madhu	40	MS
		Broad (>0.4)	5	Pusa Madhuras		
34.	Seed: colour	Creamy white	1	Kashi Madhu, Arka Jeet	40	VG
		Yellowish	2	Durgapura Madhu, Hara Madhu		

VIII. Explanation on the Table of Characteristics

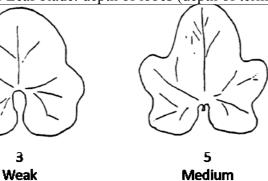
1. Explanation covering several characteristics

Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

a.	Seedling	All observations on the seedling should be made just before the development of the first true leaf.
b.	Leaf blade	All observations on the leaf blade should be made on fully developed but not old leaves, preferably between the 5 th and 8 th node when the plant has at least one fruit set.
c.	Fruit	The flesh colour should be measured at least one day after the harvest.
d.	Seed	All observations on the seed should be made on fully developed, matured and dry seeds, after washing and drying in the shade.

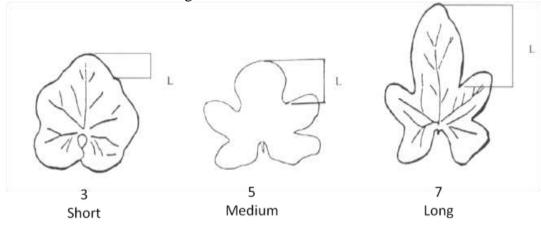
2. Explanation for individual characteristic

Characteristic 5. Leaf blade: depth of lobes (depth of terminal lobe)

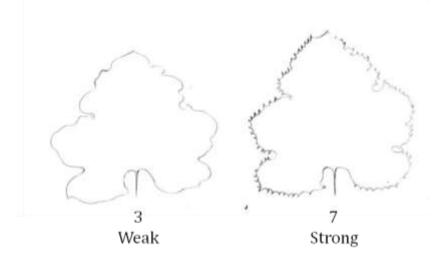




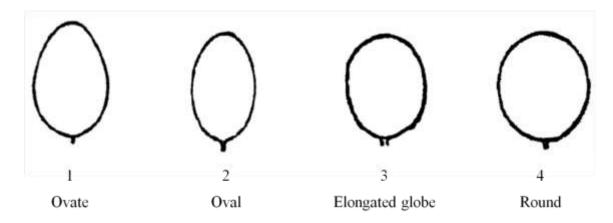
Characteristic 6. Leaf blade: length of terminal lobe

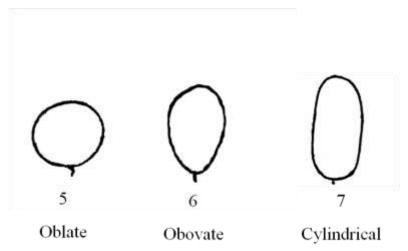


Characteristic 7. Leaf blade: dentation of margin



Characteristic 17. Fruit: shape in longitudinal section





Characteristic 21. Fruit: shape at peduncle end



Characteristic 22. Fruit: shape at blossom end



IX. Working Group Details

The Test guidelines were developed by the Task Force (12/2011) constituted by the PPV&FR Authority, New Delhi in consultation with the Director, Indian Institute of Vegetable Research (IIVR), Varanasi, Project Coordinator (Vegetable Crops), Nodal Officer and Co-Nodal Officers of DUS testing centres.

Nodal officer

Dr. S.K. Sharma, Director, Central Institute for Arid Horticulture, Sri Ganganagar Highway, Beechwal, Industrial Area P.O., Bikaner-334006 (Rajasthan).

Co-Nodal officer

Dr. Sudhakar Pandey, Senior Scientist, Division of Crop Improvement, Indian Institute of Vegetable Research, P.B. No.- 01, P.O.-Jakhini (Shahanshahpur), Varanasi-221305 (U.P.).

Dr. B.R. Choudhary, Scientist, Division of Crop Improvement, Central Institute for Arid Horticulture, Sri Ganganagar Highway, Beechwal, Industrial Area P.O., Bikaner-334006 (Rajasthan).

Dr. E. Sreenivas Rao, Senior Scientist, Division of Vegetable Science, Indian Institute of Horticultural Research, Hessarghatta, Lake Post, Bengaluru-560089 (Karnataka).

X. DUS Testing Centres

Nodal Centre	Other Centre
Central Institute for Arid Horticulture, Sri	Punjab Agricultural University, Ludiana,
Ganganagar Highway, Beechwal, Industrial	Punjab.
Area P.O., Bikaner-334006 (Rajasthan).	

Watermelon (Citrullus lanatus (Thunb.) Mansf.)

III. Subject

These test guidelines apply to all varieties, hybrids and parental lines of watermelon (*Citrullus lanatus* (Thunb.) Mansf.).

IV. Seed Material Required

- 5. The Protection of Plant Varieties and Farmers' Rights Authority (PPV&FRA) shall decide when, where and in what quantity and quality of the seed material required for testing the variety is to be delivered. Applicants submitting material from a country other than India must make sure that all customs and formalities are complied with.
- 6. The minimum quantity of seed of varieties, hybrids and parental lines to be supplied by the applicant should be:
 - For open field cultivation: 150 g seeds (in one submission only).
- 7. The seed should meet the minimum requirement for germination capacity (80%), moisture content (<8%) and physical purity (98%) prescribed for certified seed in India. Especially for storage, which requires a higher standard, the applicant should state the actual germination capacity, which should be as high as possible. The seed supplied should be visibly healthy, not lacking in vigour or affected by any important pest or disease.
- 8. The seed material must not have undergone any treatment unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

V. Conduct of Tests

- 7. The minimum duration of test should normally be two independent but similar growing seasons (summer) with reference to the eco-system of the variety submitted for DUS test.
- 8. The test should normally be conducted at two different locations. If any essential characteristic of the variety can not be observed at these places, the variety may be tested at an additional place.
- 9. The test should be carried out under conditions ensuring normal growth. The size of the plot should be such that plants or parts of plant may be removed for measuring and counting without prejudice to the observations which must be made upto the end of the growing period. Each test shall include 105 plants for open field cultivation, which should be divided among 3 replications. Separate plots for observations and for measuring can only be used if they have been subjected to similar environmental conditions.
- 10. Test plot design

Number of rows : 5

Row length : 5.6 m

Row to row distance : 3.0 m

Plant to plant distance : 0.8 m

Number of replications : 3

11. Observations should not be recorded on plants in border rows.

12. Additional tests for special purpose may be established by the PPV&FR Authority.

VI. Methods and Observations

- 11. The characteristics described in the Table of Characteristics (Section VII) should be used for the testing of varieties for DUS.
- 12. For the assessment of Distinctiveness and Stability, observations should be made on 30 plants or parts of plants selected randomly, which should be divided among 3 replications (10 plants in each replication).
- 13. For the assessment of Uniformity of characteristics in the plot as a whole (visual assessment by a single observation of a group of plants or parts of plants), a population standard of 0.5% with an acceptance probability of at least 95% should be applied. In case of a sample size of 105 plants, the number of off-types should not exceed 2.
- 14. Observations on the cotyledon should be made just before the development of the first true leaf.
- 15. All observations on the leaf should be made on fully developed but not old leaves, preferably between the 5th and 8th node when the plant has at least one fruit set.
- 16. All observations on the ovary shall be recorded on the day of anthesis.
- 17. All observations on width shall be recorded at the maximum point of width of the part concerned.
- 18. All observations on the fruit should be made on 1st or 2nd well developed mature fruits. The maturity shall be judged based on dull hollow sound on thumping and fruit peduncle tendril dried
- 19. All observations on the seeds should be made on fully developed, matured and dry seeds, after washing and drying.
- 20. Stage of recording of different observations will be as follows:

	Description	Code
a.	Cotyledons completely unfolded	10
b.	Active vegetative growth	20

c.	Flowering stage: appearance of first pistillate/ perfect flower in 50% plants from date of sowing	30
d.	Commercial maturity stage (harvest maturity)	40

VII. Grouping of Varieties

- 3. The collection of varieties to be grown in the trial should be divided into groups to facilitate the assessment of Distinctiveness. Characteristics, which are suitable for grouping purposes, are those, which are known from experience not to vary, or to vary only to lesser extent, within a variety. Their various states of expression should be fairly evenly distributed throughout the collection.
- 4. It is recommended that the competent authorities use the following characteristics for grouping of watermelon varieties:

a.	Leaf blade: degree of primary lobing	Characteristic 6	
b.	Fruit: shape in longitudinal section	Characteristic 16	
c.	Fruit: colour of rind	Characteristic 17	
d.	Fruit: stripes	Characteristic 19	
e.	Fruit: size	Characteristic 22	
f.	Fruit: colour of flesh	Characteristic 23	
g.	Seediness: number of seeds/fruit	Characteristic 24	
h.	Seed: colour of coat	Characteristic 27	

VII.Characteristics and Symbols

- 5. To assess Distinctiveness, Uniformity and Stability, the characteristics and their states as given in the Table of Characteristics should be used.
- 6. Notes (1-9) should be used for the purposes of recording and electronic processing of data. Each state of expression is allotted a corresponding numerical note (1-9) for the different characteristics.

7. Legend

(*) Characteristics that should be used in every growing season on all varieties and shall always be included in the description of the variety, except when the states of expression of any of these characters is rendered impossible by a preceding characteristic or by the environmental conditions of the testing region. Under such exceptional situation, adequate explanation shall be provided.

- (+) See Explanation on the Table of Characteristics in Section VIII.
- 4. Type of assessment of characteristics indicated in Section VII of Table of Characteristics is as follows:

MG	:	Measurement by a single observation of a group of plants or parts of plants.
MS	:	Measurement of a number of individual plants or parts of plants.
VG	:	Visual assessment by a single observation of a group of plants or parts of plants.
VS	:	Visual assessment by observations of individual plants or parts of plants.

VIII. Table of Characteristics

S. No	Characteristics	States	Not e	Example Varieties	Stage of observation	Type of assessmen t
1	2	3	4	5	6	7
1. (+)	Cotyledon: shape	Narrow elliptic	1	Sugar Baby, Charleston Grey	10	VG
		Medium elliptic	2	Arka Manik		
		Broad elliptic	3	Asahi Yamato, Thar Manak		
2.	Plant: length of	Short (<7)	3	-	20	MS
	internodes (cm)	Medium (7-8.5)	5	Durgapura Lal, Sugar Baby		
		Long (>8.5)	7	Arka Manik, Charleston Grey		
3.	Leaf blade: length (cm)	Short (<10)	3	Durgapura Lal, Thar Manak	20	MS
		Medium (10- 14)	5	Asahi Yamato		
		Long (>14)	7	Charleston Grey		
4.	Leaf blade: width	Narrow (<9)	3	Durgapura Lal	20	MS
	(cm)	Medium (9-12)	5	-		
		Broad (>12)	7	Charleston		

				Grey, Durgapura Kesar		
5.	Leaf blade:	Light green	1	-	20	VG
	colour	Green	3	Asahi Yamato		
		Dark green	5	-		
6.	Leaf blade:	Weak	3	Durgapura Lal	20	VG
(*)	degree	Medium	5	Sugar Baby		
(+)	of primary lobing	Strong	7	Arka Manik, Durgapura Kesar		
7.	Leaf blade:	Weak	3	Durgapura Lal	20	VG
(+)	degree	Medium	5	Sugar Baby		
	of secondary lobing	Strong	7	Thar Manak		
8.	Petiole: length (cm)	Short (<7)	3	Durgapura Lal	20	MS
		Medium (7-9)	5	Arka Manik, Asahi Yamato		
		Long (>9)	7	Charleston Grey		
9.	Appearance of	Early (<45)	3	Sugar Baby	30	MG
	first pistillate/ perfect flower in 50% plants from	Medium (45- 50)	5	Durgapura Kesar		
	date of sowing (days)	Late (>50)	7	Arka Manik, Durgapura Lal		
10.	Sex expression (at full	Monoecious	1	Arka Manik, Durgapura Lal	30	VG
	flowering)	Andro- monoecious	3	AHW-65		
11.	Male sterility	Absent	1	Sugar Baby, Durgapura Lal, Arka Manik	30	VG
		Present	9	-		
12.	Ovary: length	Short (<1)	3	Arka Manik	30	MS
	(cm)	Medium (1-2)	5	Durgapura Lal, Thar Manak		

		Long (>2)	7	Charleston Grey		
13.	Ovary: width (cm)	Narrow (upto 0.8)	3	Asahi Yamato, Sugar Baby	30	MS
		Broad (>0.8)	5	Durgapura Kesar		
14.	Ovary:	Sparse	1	Durgapura Lal	30	VG
	pubescence	Dense	2	Arka Manik, Durgapura Kesar		
15.	Ovary: colour	Yellow	3	Kashi Pitamber	30	VG
		Green	5	Sugar Baby, Arka Manik		
		Dark Green	7	-		
16.	Fruit: shape in	Round	1	-	40	VG
(*)	longitudinal section	Flat globe	2	Sugar Baby		
(+)		Oval	3	-		
		Cylindrical (Oblong)	4	Charleston Grey		
		Elongated	5	Asahi Yamato,		
		globe		Arka Manik		
17. (*)	Fruit: colour of rind	Yellow	3	Kashi Pitamber	40	VG
		Light Green	5	Asahi Yamato, Charleston Grey		
		Medium green	7	Durgapura Kesar		
		Dark Green	9	Sugar Baby		
18.	Fruit: grooves	Absent	1	Sugar Baby, Asahi Yamato,	40	VG
		Present	9	Thar Manak		
19.	Fruit: stripes	Absent	1	-	40	VG
(*)		Weak	3	Asahi Yamato, Charleston		

				Grey, Sugar Baby		
		Diffused	5	Arka Manik		
		Clearly defined	7	Thar Manak		
20.	Fruit: length (cm)	Short (<20)	3	Sugar Baby	40	MS
		Medium (20- 30)	5	Arka Manik, Durgapura Lal		
		Long (>30)	7	Charleston Grey		
21.	Fruit: diameter (cm)	Narrow (<15)	3	Charleston Grey	40	MS
		Medium (15- 25)	5	Durgapura Lal		
		Broad (>25)	7	Arka Manik		
22	Fruit: size (kg)	Small (<3)	3	Sugar Baby	40	MS
(*)		Medium (3-6)	5	Arka Manik, Durgapura Lal		
		Large (>6)	7	-		
23.	Fruit: colour of	White	1	-	40	VG
(*)	Flesh	Yellow	2	Durgapura Kesar		
		Orange	3	-		
		Reddish Pink	5	-		
		Light red	7	-		
		Dark Red	9	Sugar Baby, Asahi Yamato		
24. (*)	Seediness: number of seeds/ fruit	Absent or rudimentary (<20)	1	-	40	MS
	Secus/ Huit	Low (<150)	2	-		
		Medium (150- 350)	3	Charleston Grey, Sugar Baby		
		High (>350)	4	Durgapura Kesar		
25.	Seed: length (cm)	Short (<0.6)	3	Arka Manik	40	MS

		Medium (0.6-1)	5	Sugar Baby		
		Long (>1)	7	Charleston Grey		
26.	Seed: width (cm)	Narrow (<0.4)	3	Asahi Yamato	40	MS
		Medium (0.4- 0.7)	5	Sugar Baby		
		Broad (>0.7)	7	Charleston Grey		
27. (*)	Seed: colour of coat	White	1	Durgapura Kesar	40	VG
	or coat	Grey	2	AHW-65, Asahi Yamato		
		Red	3	-		
		Brown	5	Durgapur Lal		
		Black	7	Sugar Baby		
		Others	9	-		

IX. Explanation on the Table of Characteristics

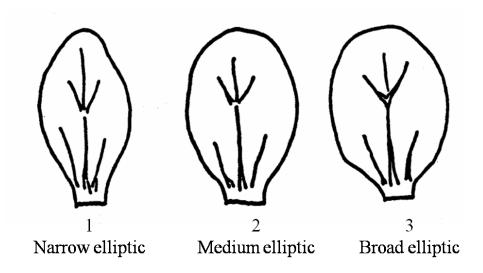
1. Explanation covering several characteristics

Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

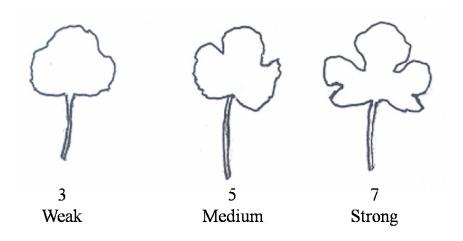
a.	Seedling	All observations on the seedling should be made just before the development of the first true leaf.
b.	Leaf blade	All observations on the leaf blade should be made on fully developed but not old leaves, preferably between the 5 th and 8 th node when the plant has at least one fruit set.
c.	Fruit	The flesh colour should be measured on the day of harvest.
d	Seed	All observations on the seed should be made on fully developed, matured and dry seeds, after washing and drying in the shade.

2. Explanation for individual characteristic

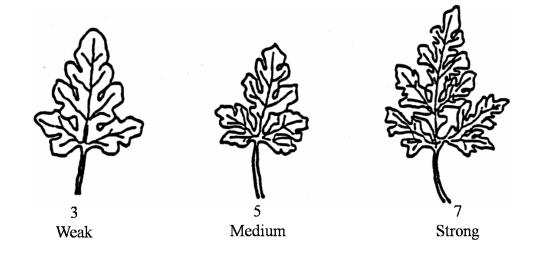
Characteristic 1. Cotyledon: shape



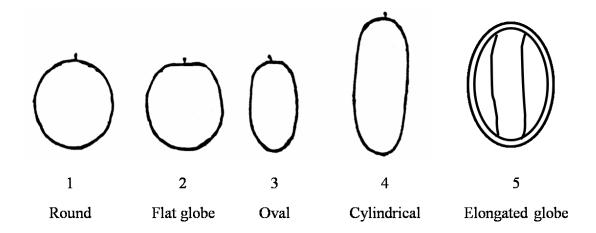
Characteristic 6. Leaf blade: degree of primary lobing



Characteristic 7. Leaf blade: degree of secondary lobing



Characteristic 16. Fruit: shape in longitudinal section



IX. Working Group Details

The Test guidelines were developed by the Task Force (12/2011) constituted by the PPV&FR Authority, New Delhi in consultation with the Director, Indian Institute of Vegetable Research (IIVR), Varanasi, Project Coordinator (Vegetable Crops), Nodal Officer and Co-Nodal Officers of DUS testing centres.

Nodal officer

Dr. S.K. Sharma, Director, Central Institute for Arid Horticulture, Sri Ganganagar Highway, Beechwal, Industrial Area P.O., Bikaner-334006 (Rajasthan).

Co-Nodal officer

Dr. Sudhakar Pandey, Senior Scientist, Division of Crop Improvement, Indian Institute of Vegetable Research, P.B. No.- 01, P.O.-Jakhini (Shahanshahpur), Varanasi-221305 (U.P.).

Dr. B.R. Choudhary, Scientist, Division of Crop Improvement, Central Institute for Arid Horticulture, Sri Ganganagar Highway, Beechwal, Industrial Area P. O., Bikaner-334006 (Rajasthan).

Dr. E. Sreenivas Rao, Senior Scientist, Division of Vegetable Science, Indian Institute of Horticultural Research, Hessarghatta, Lake Post, Bengaluru-560089 (Karnataka).

X. DUS Testing Centres

Nodal Centre	Other Centre
Central Institute for Arid Horticulture, Sri	Indian Institute of Horticultural Research,
Ganganagar Highway, Beechwal, Industrial	Hessarghatta, Lake Post, Bengaluru-560089
Area P.O., Bikaner-334006 (Rajasthan).	(Karnataka).

PUBLIC NOTICE

Details of registration certificate for inviting claims of benefit sharing under sub section 1 of section 26 of PPV&FR Act, 2001 read with rule 40 of PPV&FR Rules, 2003.

The details of registration certificates which have been issued under section 24 (2) of PPV &FR Act, 2001 are published herein for invitation of claims for benefit sharing.

Any person or group of persons, being citizen(s) of India or firm or governmental or non-governmental organization formed or established in India shall submit their claims for benefit sharing (under Section 26 (2) of PPV&FR Act, 2001 read with Rule 41 of PPV&FR Rules, 2003) in Form PV 7 of the First schedule (in triplicate) within a period of six months from the date of publication. Claims for benefit sharing if any shall be submitted to the Registrar, PPV&FR Authority, NASC Complex, DPS Marg, New Delhi-110012 accompanied with the fee of Rs. 5000/- (Rupees Five Thousand Only) by way of Demand Draft drawn in favour of the "Registrar, PPV&FR Authority" payable at New Delhi.

Certificate of Registration No. 171 of 2013

- (1) Registration Number and date of grant:- 171 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- CO-0218
- (4) Name of:

Family: Gramineae Genus: Saccharum

Species: *sp.*

Variety and common name: Extant/typical/sugarcane

(5) Parentage and geographical location of the variety:-

Co 8353 x MS 68011

(6) Details of the distinguishing features or the characteristics:-

For dense leaf sheath hairiness, green leaf sheath of colour of dewlap, curved tip leaf blade curvature, yellow-green internode colour (not exposed to sun), yellow internode colour (exposed to sun), cylindrical internode shape, heavy internode waxiness, absence of node bud cushion.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

CO-0218 has been commercialized since August 2010.

Certificate of Registration No. 172 of 2013

- (1) Registration Number and date of grant:- 172 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- Karan-5 (CO-0124)
- (4) Name of:

Family: Gramineae Genus: Saccharum

Species: *sp.*

Variety and common name: Extant/typical/sugarcane

(5) Parentage and geographical location of the variety:-

CoC 7314 x Co 775

(6) Details of the distinguishing features or the characteristics:-

For absence of leaf sheath hairiness, purple leaf sheath colour of dewlap, curved tip leaf blade curvature, weak plant adherence of leaf sheath, yellow-green internode colour (exposed to sun), thick internode diameter, medium internode waxiness, absence of node bud cushion etc.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

Karan-5 (CO-0124) has been commercialized since August 2010.

Certificate of Registration No. 173 of 2013

- (1) Registration Number and date of grant:- 173 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- Sweety (COS 96275)
- (4) Name of:

Family: Gramineae Genus: Saccharum

Species: *sp.*

Variety and common name: Extant/typical/sugarcane

(5) Parentage and geographical location of the variety:-

CoS 8119 x Co 62198

(6) Details of the distinguishing features or the characteristics:-

For absence of leaf sheath hairiness, incipient leaf sheath shape of inner auricle, purple leaf sheath colour of dewlap, green internode colour(not exposed to yellow-green, internode colour (exposed to sun), medium internode diameter, cylindrical internode shape, medium internode waxiness, absence of internode growth crack, medium plant cane height, medium plant number of millable canes/stool.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

Sweety (COS 96275) has been commercialized since July 2007.

Certificate of Registration No. 174 of 2013

- (1) Registration Number and date of grant:- 174 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- cose 96434 (Jalpari)
- (4) Name of:

Family: Gramineae Genus: Saccharum

Species: *sp*.

Variety and common name: Extant/typical/sugarcane

(5) Parentage and geographical location of the variety:-

BO 91 x Co 62198

(6) Details of the distinguishing features or the characteristics:-

For absence of leaf sheath hairiness, crescent leaf sheath shape of ligule, incipient leaf sheath shape of inner auricle, green leaf sheath colour of dewlap, medium leaf blade width, curved tip leaf blade curvature, weak plant adherence of leaf sheath, cylindrical internode shape, light internode waxiness, absence of internode growth crack, oval node shape of bud, high plant number of millable canes per stool.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. cose 96434 (Jalpari) has been commercialized since May 2004.

Certificate of Registration No. 175 of 2013

- (1) Registration Number and date of grant:- 175 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Gourachandra Patra R/O Ana, Block Hastadihi District Keonjhar, State Odisha

- (3) Denomination of the variety:- RAMACHANDRA BOITA
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Farmers/typical/rice

(5) Parentage and geographical location of the variety:-

NA

(6) Details of the distinguishing features or the characteristics:-

Medium amylose content in endosperm.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 176 of 2013

- (1) Registration Number and date of grant:- 176 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Purna Ch. Rout R/O Tarimul, Block-Ghasipur, District-Keonjhar, State Odisha

- (3) Denomination of the variety:- **SAMULEI**
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Farmers/typical/rice

(5) Parentage and geographical location of the variety:-

NA

(6) Details of the distinguishing features or the characteristics:-

Time maturity is medium.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 177 of 2013

- (1) Registration Number and date of grant:- 177 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Purna Chandra Behera R/O Rasulpur, Block-sadar, District-Balasore, State Odisha

- (3) Denomination of the variety:- MEDI
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Farmers/typical/rice

(5) Parentage and geographical location of the variety:-

NA

(6) Details of the distinguishing features or the characteristics:-

Absence of panicle awns.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 178 of 2013

- (1) Registration Number and date of grant:- 178 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Jogendra Sahu R/O Jamujodi, Block-Harichandrapur, District-Keonjhar, State-Odisha

- (3) Denomination of the variety:- KALAJIRA
- (4) Name of:

Family: Poaceae Genus: Oryza Species: sativa

Variety and common name: Farmers/typical/rice

(5) Parentage and geographical location of the variety:-

NA

(6) Details of the distinguishing features or the characteristics:-

Medium amylase content in endosperm, aromatic decorticated grain.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 179 of 2013

- (1) Registration Number and date of grant:- 170 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Umakanta Mohapatra R/O Kusudiha, Block-Sadar, District-Balasore, State-Odisha

- (3) Denomination of the variety:- KATHIA
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Farmers/typical/rice

(5) Parentage and geographical location of the variety:-

NA

(6) Details of the distinguishing features or the characteristics:-

Straw colour of lemma and palea.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 180 of 2013

- (1) Registration Number and date of grant:- 180 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Balaram Nayak R/O Dumra Guda, Block-Jeypore, District-Koraput, State-Odisha

- (3) Denomination of the variety:- KARAKOILI
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Farmers/typical/rice

(5) Parentage and geographical location of the variety:-

NA

(6) Details of the distinguishing features or the characteristics:-

Weigth of 1000 fully developed grain is high.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 181 of 2013

- (1) Registration Number and date of grant:- 181 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Basudha, Binodbati, P.O Layekbandh, Bankura-722157 West Bengal

- (3) Denomination of the variety:- RANI KAJAL
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Farmers/typical/rice

(5) Parentage and geographical location of the variety:-

NA

(6) Details of the distinguishing features or the characteristics:-

Black colours of lemma tip, purple black colour of lemma and Palea, very short grain length, Aromatic decorticated grain.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 182 of 2013

- (1) Registration Number and date of grant:- 182 of 2013 & 08/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Basudha, Binodbati, P.O Layekbandh, Bankura-722157 West Bengal

- (3) Denomination of the variety:- BAHURUPI
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Farmers/typical/rice

(5) Parentage and geographical location of the variety:-

NA

(6) Details of the distinguishing features or the characteristics:-

Weight of 1000 fully developed grains is low.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 183 of 2013

- (1) Registration Number and date of grant:- 183 of 2013 & 10/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- Birendra (COLK 94184)
- (4) Name of:

Family: Gramineae Genus: Saccharum

Species: *sp.*

Variety and common name: Extant/typical/sugarcane

- (5) Parentage and geographical location of the variety:- NA
- (6) Details of the distinguishing features or the characteristics:-

Absence of leaf sheath hairiness, deltoid leaf sheath shape of ligule, incipient leaf sheath shape of inner auricle, gren leaf sheath colour of dewlap, medium leaf blade width, erect leaf blade curvature, weak plant adherence of leaf sheath thin internode diameter, present internode growth crack, medium internode waxiness, present internode pithiness, ovate node shape of bud, absent node of bud groove, present node bud cushion

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

Birendra (COLK 94184) has been commercialized since October 2008.

Certificate of Registration No. 184 of 2013

- (1) Registration Number and date of grant: 184 of 2013 & 10/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- Pant Dhan 16 (IET-14807)
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

BG 380 x BG 367-4

(6) Details of the distinguishing features or the characteristics:-

For green basal leaf sheath colour, very strong leaf pubescence of blade surface, medium time of heading, erect flag leaf attitude of blade (early observation), strong spikelet density of pubescence of lemma, absent lemma anthocyanin, straight panicle curvature of main axis, yellowish spikelet colour of tip of lemma and spreading panicle attitude of branches colouration of apex, white spikelet colour of stigma, deflexed flag leaf attitude of blade (late observation).

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

Pant Dhan 16 (IET-14807) has been commercialized since November 2001.

Certificate of Registration No. 185 of 2013

- (1) Registration Number and date of grant: 185 of 2013 & 10/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety: Surya (BPT 4358)
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

Sona Mahsuri x ARC 6650

(6) Details of the distinguishing features or the characteristics:-

Medium density of pubescence of lemma, strong pubescence of leaf surface, semi straight curvature of main axis of panicle, semi erect attitude of panicle branches, semi straight curvature of main axis of panicles, mostly exerted panicle and straw colour of sterile lemma.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- NA
- (10) If the variety is sold or otherwise disposed of, details thereof.

Surva (BPT 4358) has been commercialized since February 2001.

Certificate of Registration No. 186 of 2013

- (1) Registration Number and date of grant: 186 of 2013 & 10/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- PKV-SKL-3-11-25-30-36
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

Daya x SKL 6

(6) Details of the distinguishing features or the characteristics:-

Medium leaf pubescence of blade surface, medium panicle length of main axis, mostly exerted panicle exertion, late time of heading, semi erect flag leaf attitude of blade, semi straight panicle curvature of main axis, white spikelet colour of tip of lemma, narrow decorticated grain width etc.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

PKV-SKL-3-11-25-30-36 has been commercialized since February 2005.

Certificate of Registration No. 187 of 2013

- (1) Registration Number and date of grant:- 187 of 2013 & 11/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- Cottondora Sannalu (MTU-1010)
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

Krishnaveni x IR 64

(6) Details of the distinguishing features or the characteristics:-

Medium pubescence of leaf blade surface, erect attitude of flag leaf blade, short stem length, deflexed flag leaf attitude of blade, semi straight panicle curvature of main axis, yellowish spikelet colour of tip of lemma, semi erect to spreading panicle attitude of branches, straw colour of sterile lemma etc.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

Cottondora Sannalu (MTU-1010) has been commercialized since September 2000.

Certificate of Registration No. 188 of 2013

- (1) Registration Number and date of grant: 188 of 2013 & 11/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- V.L Dhan 81 (IET-13792)
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

China 988 x HPR 741

(6) Details of the distinguishing features or the characteristics:-

Weak leaf pubescence of blade surface, weak spikelet density of pubescence of lemma, short stem length, horizontal flag leaf attitude of blade, long decorticated grain length and long bold decorticated grain shape.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.
 - V.L Dhan 81 (IET-13792) has been commercialized since June 1999.

Certificate of Registration No. 189 of 2013

- (1) Registration Number and date of grant:- 189 of 2013 & 11/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- Hema Vathi (DWR-4107)
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa.

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

Introduction from Bangladesh

(6) Details of the distinguishing features or the characteristics:-

Light purple basal leaf sheath colour, strong leaf pubescence of blade surface, purple leaf anthocyanin colouration of auricles, medium time of heading, medium spikelet density of pubescence, strong lemma anthocyanin colouration of apex, purple spikelet colour of stigma, short stem length, presence of stem anthocyanin colouration of nodes, purple spikelet colour of tip of lemma etc.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

Hema Vathi (DWR-4107) has been commercialized since February 2001.

Certificate of Registration No. 190 of 2013

- (1) Registration Number and date of grant:- 190 of 2013 & 11/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- CSR-23 (CSR-89IR-5)(IET 13769)
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa.

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

IR 64 x IR 4630-22-2-5-1-3/IR9764-45-2-2

(6) Details of the distinguishing features or the characteristics:-

Medium time of heading, purple spikelet colour of stigma, short stem length, well exerted panicle, straw colour of sterile lemma and medium slender decorticated grain shape.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

CSR-23 (CSR-89IR-5)(IET 13769) has been commercialized since February 2004.

Certificate of Registration No. 191 of 2013

- (1) Registration Number and date of grant:- 191 of 2013 & 11/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- GR-7
- (4) Name of:

Family: Poaceae Genus: Oryza Species: sativa.

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

GR3 x Basmati 370

(6) Details of the distinguishing features or the characteristics:-

Medium pubescence of leaf surface, strong density of pubescence of lemma, semi erect attitude of flag leaf, yellowish colour of tip of lemma, semi erect to spreading attitude of panicle branches and straw colour of sterile lemma.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

GR-7 has been commercialized since May 2004.

Certificate of Registration No. 192 of 2013

- (1) Registration Number and date of grant:- 192 of 2013 & 11/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- HKR-46
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa.

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

RP 6-516-31-6 x Pusa 33

(6) Details of the distinguishing features or the characteristics:-

Absence of leaf pubescence of blade surface, medium time of heading, erect attitude of flag leaf blade, medium spikelet density of pubescence of lemma, semi erect attitude of flag leaf blade, semi straight curvature of panicle main axis, yellowish colour of spikelet tip of lemma, present panicle awns etc.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

HKR-46 has been commercialized since April 2000.

Certificate of Registration No. 193 of 2013

- (1) Registration Number and date of grant:- 193 of 2013 & 11/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- Vedagiri (NLR-33641)
- (4) Name of:

Family: Poaceae Genus: Oryza Species: sativa.

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

NLR 9672-96 x IET 7230

(6) Details of the distinguishing features or the characteristics:-

Very strong pubescenc of leaf blade surface, very late time of heading, semi erect attitude of flag leaf blade, spreading attitude of panicle branches, well exserted panicles and straw colour of sterile lemma.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

Vedagiri (NLR-33641) has been commercialized since September 2000.

Certificate of Registration No. 194 of 2013

- (1) Registration Number and date of grant:- 194 of 2013 & 11/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- WGL 3962
- (4) Name of:

Family: Poaceae Genus: Oryza Species: sativa.

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

Phalguna x IR 36

(6) Details of the distinguishing features or the characteristics:-

Medium leaf pubescence of blade surface, medium of time of heading, weak spikelet density of pubescence of blade, mostly exerted panicle, straw sterile lemma colour, narrow decorticated grain width and medium slender decorticated grain shape.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

WGL 3962 has been commercialized since June 1999.

Certificate of Registration No. 195 of 2013

- (1) Registration Number and date of grant:- 195 of 2013 & 14/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Indian Council of Agri. Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001

- (3) Denomination of the variety:- Gurjari
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa.

Variety and common name: Extant/typical/rice

(5) Parentage and geographical location of the variety:-

Asha x Kranti

(6) Details of the distinguishing features or the characteristics:-

Medium pubescence of leaf blade surface, purple anthocyanin colouration of leaf auricles, medium time of heading, strong density of pubescence of spikelet lemma, medium anthocyanin colouration of lemma apex, purple colour of spikelet stigma, presence of anthocyanin colouration of stem nodes etc.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof.

Gurjari has been commercialized since June 1999.

Certificate of Registration No. 196 of 2013

- (1) Registration Number and date of grant:- 196 of 2013 & 14/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Ganga Kaveri Seeds Private Limited, 604-605, Babkhan Estate, Basheerbagh, Hyderabad-500001, Andhra Pradesh

- (3) Denomination of the variety:- GK 5003 (IET 18160)
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa.

Variety and common name: New/hybrid/rice

(5) Parentage and geographical location of the variety:-

GK 5003 A x GK 5003 R

(6) Details of the distinguishing features or the characteristics:-

Absence of panicle awns.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 197 of 2013

- (1) Registration Number and date of grant:- 197 of 2013 & 14/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Bioseed Research India Private Limited, Plot No.-206, Road No. 14, Jubilee Hills, Hyderabad-500033, India

- (3) Denomination of the variety:- BIO 4311 BH
- (4) Name of:

Family: Poaceae
Genus: Oryza
Species: sativa.

Variety and common name: New/hybrid/rice

(5) Parentage and geographical location of the variety:-

Introduction from Bangladesh

(6) Details of the distinguishing features or the characteristics:-

Long leaf length of blade and present panicle awns.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 198 of 2013

- (1) Registration Number and date of grant:- 198 of 2013 & 14/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Vibha Agrotech Limited, 501, subhan sirisampada, Raj Bhawan Road, Somajiguda, Hyderabad, Andhra Pradesh-500082

- (3) Denomination of the variety:- VSFH-1008 (CLEO)
- (4) Name of:

Family: Compositae
Genus: *Halianthus*Species: *annuus*.

Variety and common name: Extant(VCK)/hybrid/sunflower

(5) Parentage and geographical location of the variety:-

210022A x 230021

(6) Details of the distinguishing features or the characteristics:-

Convex lead grain side.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 199 of 2013

- (1) Registration Number and date of grant:- 199 of 2013 & 14/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Bioseed Research India Private Limited, Plot No.-206, Road No. 14, Jubilee Hills, Hyderabad-500033, India

- (3) Denomination of the variety:- BIO 60502 IO
- (4) Name of:

Family: Malvaceae Genus: Gossypium Species: hirsutum.

Variety and common name: New/typical/cotton

(5) Parentage and geographical location of the variety:-

HSR 4105 x HSR 6309

(6) Details of the distinguishing features or the characteristics:-

Bioseed Research India Private Limited, Plot No.-206, Road No. 14, Jubilee Hills, Hyderabad-500033, India

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

Certificate of Registration No. 200 of 2013

- (1) Registration Number and date of grant:- 200 of 2013 & 14/10/2013
- (2) Name and address of applicant or breeder in whose name the certificate has been issued or registered:-

Rashi Seeds Private limited, Kamarajanar Road, Attur, Salem Dist-636102

- (3) Denomination of the variety:- RCH 317 Bt
- (4) Name of:

Family: Malvaceae Genus: Gossypium Species: hirsutum.

Variety and common name: Extant (VCK)/hybrid/cotton

(5) Parentage and geographical location of the variety:-

RC 64 Bt x RC 65 YC

(6) Details of the distinguishing features or the characteristics:-

Yellow flower petal colour.

- (7) In case of 'essentially derived variety', the details of the 'initial variety' from which the 'essentially derived variety' is claimed to have been derived:- **NA**
- (8) Name and address of the contributor, nature and amount of the contribution or the community knowledge used in the development of the plant variety:- **NA**
- (9) Terms and conditions of the agreement, if any, entered into between the breeder and contributor:- **NA**
- (10) If the variety is sold or otherwise disposed of, details thereof. **NA.**

PUBLIC NOTICE

Sub: Advertisement is given under sub-section (2) and (3) of Section 21 of the Protection of Plant Varieties and Farmers' Rights Act, 2001 and Rules 30 and 31 of PPV & FR Rules, 2003

It is hereby advertised that the application (s) for registration of varieties listed herein have been accepted subject to the condition of fulfillment of provisions under section 19 of the Act read with Rule 29 of PPV&FR Rules, 2003. The passport data of each variety furnished by the applicant are herewith advertised as specified for calling objections from the interested persons in the matter.

The place or places where the specimen of the variety may be inspected can be obtained in writing from the Registrar of the PPV & FR Authority.

Any person may, within three months from the date of advertisement of the application(s) give notice of opposition in writing to the registration of variety (as per Form PV-3 of the First Schedule of PPV&FR Rules, 2003). Oppositions, if any, to the registration must be submitted, in triplicate, to the Registrar, PPV&FRA, NASC Complex, DPS Marg, New Delhi -110 012 accompanied with the fee of Rs.1,500/-(Rupees One Thousand and Five Hundred Only) by way of Demand Draft drawn in favour of "The Registrar, PPV & FR Authority" payable at New Delhi.

FORM 0 - 1

(See Rule 30)

Government of India, Plant Varieties Registry Advertisement of accepted application for registration

The convention application no. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar, PPV & FR Authority, New Delhi – 110 012.**

Passport data of the variety : PARASMANI-1⁺

Applicant : M/S Shakti Vardhak Hybrid Seeds Pvt. Ltd.

Address of the Applicant : Tilak Bazar, Hisar-125001

(Haryana)

Nationality of Applicant : Indian

Application details
a. Number

E2
BJ3
12
403

b. Date of receipt : 14.09.2012

c. Date of acceptance : --

Crop (Taxonomical Lineage) : Indian Mustard [Brassica juncea L. Czern & Coss]

Denomination : PARASMANI-1⁺

Type of Variety : Extant (Variety of Common Knowledge)

Classification of Variety : Typical Variety **Previously proposed** : Not applicable

Denomination

Name of Parental Material : SVGP-02 X RH 30

Name of Reference Varieties : RH 30, Bio 902

Variety Description:

A. Group Characteristics	Remarks measured values, example
	varieties, etc.
Leaf: Number of lobes	High
Flower: Time of flowering (50% of the plant with at	Late
least one open flower)	
Plant: Main shoot length (cm)	Very long
Siliqua: Number of seeds per siliqua	Medium

B. Distinct Characteristics: PARASMANI-1⁺ has distinguishing characters as

- 1. Leaf: Dentation of margin: Serrate.
- 2. Flower: Length of petals (cm): Short.
- 3. Plant Height (cm): Very tall.
- 4. Siliqua: Angle with main shoot: Semi appressed.
- 5. Maturity period: Very late.
- 6. Seed: Seed colour: Brown.

C. Reference variety: RH-30 has distinguishing character as

- 1. Leaf: Dentation of margin: Dentate.
- 2. Flower: Length of petals(cm): Medium
- 3. Plant Height(cm): Tall.
- 4. Siliqua: Angle with main shoot: Open.
- 5. Maturity period: Late.

Reference variety: Bio-902 has distinguishing character as

- 1. Leaf: Dentation of margin: Dentate
- 2. Siliqua: Angle with main shoot: Open.
- 3. Maturity period: Late.
- 4. Seed: Seed colour: Dark Brown

D. Date of commercialization of the	10/09/2009
variety	

02. Application No. E4 BJ5 12 405

filed on 14.09.2012 by Dr. Raj

Bahadur Sr. Scientist (Plant Breeding) & Head, Research & Development Division, Shakti Vardhak Hybrid Seeds Pvt. Ltd. Hisar (Haryana)-125001 on behalf of M/S Shakti Vardhak Hybrid Seeds Pvt. Ltd., Tilak Bazar, Hisar-125001 (Haryana) for a Extant (Variety of Common Knowledge) of crop Indian Mustard(Sarso) [Brassica juncea L. Czern & Coss] having denomination PARASMANI-3, the specification includes its drawing and or

The convention application no. ----NA-----, in respect of the said variety has been filed on ----NA-----, in ---NA-----

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar, PPV & FR Authority, New Delhi – 110 012.**

Passport data of the variety : PARASMANI-3

Applicant : M/S Shakti Vardhak Hybrid Seeds Pvt. Ltd.

Address of the Applicant : Tilak Bazar, Hisar-125001

(Haryana)

Nationality of Applicant : Indian

Application details

a. Number E4 BJ5 12 405

b. Date of receipt : 14.09.2012

c. Date of acceptance : --

Crop (Taxonomical Lineage) : Indian Mustard [*Brassica juncea* L. Czern & Coss]

Denomination : PARASMANI-3

Type of Variety : Extant (Variety of Common Knowledge)

Classification of VarietyPreviously proposed
: Typical Variety
: Not applicable

Denomination

Name of Parental Material : SVGP-09 x RH 30 Name of Reference Varieties : RH 30, Bio-902

Variety Description:

A. Group Characteristics	Remarks measured values, example varieties, etc.
Leaf: Number of lobes	Medium
Flower: Time of flowering (50% of the plant with at least one open flower)	Medium
Plant: Main shoot length (cm)	Very long
Siliqua: Number of seeds per siliqua	Medium

B. Distinct Characteristics: PARASMANI-3 has distinguishing character as

Plant Height (cm): Very tall.
 Siliqua: Length(cm): Medium

3. Siliqua: No. of seeds per siliqua: Medium

C. Reference variety: RH-30 has distinguishing character as

1. Plant Height (cm): Tall.

Reference variety: Bio 902 has distinguishing character as

1. Siliqua: Length(cm): Short

2. Siliqua: No. of seeds per siliqua: few

D. Date of commercialization of the	19/09/2007
variety	

03. Application No.

E5 BJ6 12	406
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filed on 14.09.2012 by Dr. Raj

The convention application no. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority, New Delhi – 110 012.**

Passport data of the variety : PARASMANI-8

Applicant : M/S Shakti Vardhak Hybrid Seeds Pvt. Ltd.

Address of the Applicant : Tilak Bazar, Hisar-125001

(Haryana)

Nationality of Applicant Application details

: Indian

E5 BJ6	12	406
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a. Number :

b. Date of receipt : 14.09.2012

c. Date of acceptance : --

Crop (Taxonomical Lineage) : Indian Mustard [Brassica juncea L. Czern & Coss]

Denomination : PARASMANI-8

Type of Variety : Extant (Variety of Common Knowledge)

Classification of Variety : Typical Variety **Previously proposed** : Not applicable

Denomination

Name of Parental Material : SVGP-15 x RH 30 Name of Reference Varieties : RH 30, Bio-902

Variety Description:

A. Group Characteristics	Remarks measured values, example
	varieties, etc.
Leaf: Number of lobes	Medium
Flower: Time of flowering (50% of the plant with at	Medium
least one open flower)	
Plant: Main shoot length (cm)	Long
Siliqua: Number of seeds per siliqua	Few

B. Distinct Characteristics: PARASMANI-8 has distinguishing character as

1. Leaf colour: Dark green

C. Reference variety: RH-30 & Bio-902 has distinguishing character as

1. Leaf colour: Medium green

D. Date of commercialization of the	13/09/2008
variety	

04. Application No. **E6 BJ7 12 407**

filed on 14.09.2012 by Dr. Raj

Bahadur Sr. Scientist (Plant Breeding) & Head, Research & Development Division, Shakti Vardhak Hybrid Seeds Pvt. Ltd. Hisar (Haryana)-125001 on behalf of M/S Shakti Vardhak Hybrid Seeds Pvt. Ltd., Tilak Bazar, Hisar-125001 (Haryana) for a Extant (Variety of Common Knowledge) of crop Indian Mustard(Sarso) [Brassica juncea L. Czern & Coss] having denomination ALBELI-1, the specification includes its drawing and or photograph(s) of

which are given below, has been accepted and given registration number -----NA ------on -----NA ------

The convention application no. ----NA-----, in respect of the said variety has been filed on ----NA-----, in ---NA-----

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar, PPV & FR Authority, New Delhi – 110 012.**

Passport data of the variety : ALBELI-1

Applicant : M/S Shakti Vardhak Hybrid Seeds Pvt. Ltd.

Address of the Applicant : Tilak Bazar, Hisar-125001

(Haryana)

Nationality of Applicant : Indian

Application details

a. Number : E6 BJ7 12 407

b. Date of receipt : 14.09.2012

c. Date of acceptance : --

Crop (Taxonomical Lineage) : Indian Mustard [*Brassica juncea* L. Czern & Coss]

Denomination : ALBELI-1

Type of Variety : Extant (Variety of Common Knowledge)

Classification of VarietyPreviously proposed
: Typical Variety
: Not applicable

Denomination

Name of Parental Material : Parasmani-1⁺ X Bio-902

Name of Reference Varieties : RH 30, Bio-902

Variety Description:

A. Group Characteristics	Remarks measured values, example varieties, etc.
Leaf: Number of lobes	High
Flower: Time of flowering (50% of the plant with at least one open flower)	Medium
Plant: Main shoot length (cm)	Long
Siliqua: Number of seeds per siliqua	Few

B. Distinct Characteristics: ALBELI-1 has distinguishing character as

1. Siliqua: Length: Medium

2. Siliqua: Number of seeds per siliqua: Few

3. Seed: seed colour: Black.

C. Reference variety: RH-30 has distinguishing character as

1. Siliqua: Number of seeds per siliqua: Medium

2. Seed: seed colour: Brown.

Reference variety: Bio-902 has distinguishing character as

1. Siliqua: Length: Short

2. Seed: seed colour: Dark Brown

D. Date of commercialization of the	10/09/2011
variety	

05. Application No. **E7 BJ8 12 408**

filed on 14.09.2012 by Dr. Raj

The convention application no. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar, PPV & FR Authority, New Delhi – 110 012.**

Passport data of the variety : LADLI

Applicant : M/S Shakti Vardhak Hybrid Seeds Pvt. Ltd.

Address of the Applicant : Tilak Bazar, Hisar-125001

(Haryana)

Nationality of Applicant Application details

: Indian

a. Number : E7 BJ8 12 408

b. Date of receipt : 14.09.2012

c. Date of acceptance : --

Crop (Taxonomical Lineage) : Indian Mustard Brassica juncea L. Czern & Coss

Denomination : LADLI

Type of Variety : Extant (Variety of Common Knowledge)

Classification of Variety : Typical Variety **Previously proposed** : Not applicable

Denomination

Name of Parental Material : SVGP 49-1 x RH 8812.

Name of Reference Varieties : RH 30, Bio-902

Variety Description:

A. Group Characteristics	Remarks measured values, example varieties, etc.
Leaf: Number of lobes	High
Flower: Time of flowering (50% of the plant with at least one open flower)	Late
Plant: Main shoot length (cm)	Very long
Siliqua: Number of seeds per siliqua	Medium

B. Distinct Characteristics: Ladli has distinguishing character as

- 1. Leaf: colour: Dark green.
- 2. Flower: Time of flowering (50% of the plant with at least one open flower): Late.
- 3. Maturity period: Very late.

C. Reference variety: RH-30 & Bio-902 has distinguishing character as

- 1. Leaf: colour: Medium green.
- 2. Flower: Time of flowering (50% of the plant with at least one open flower): Medium.
- 3. Maturity period: Late.

D. Date of commercialization of the	10/09/2011
variety	

06. Application No. E2 BJ2 11 1271 filed on 13.10.2011 by I.S. Halakude, Research Coordinator, Nirmal Seeds Pvt. Ltd., P.O. Box-63, Bhadgaon Road, Pachora-424201, Dist. Jalgaon (MS) on behalf of Nirmal Seeds Pvt. Ltd., P.O. Box-63, Bhadgaon Road, Pachora-424201, Dist. Jalgaon (MS) for a Extant (Variety of Common Knowledge) of crop Indian Mustard(Sarso) [Brassica juncea L. Czern & Coss] having denomination BLACK GOLD (NML-100), the specification includes its drawing and or photograph(s) of which are

given below, has been accepted and given registration number -----NA ------on ------

The convention application no. ----NA-----, in respect of the said variety has been filed on ----NA-----, in ---NA-----

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar, PPV & FR Authority, New Delhi – 110 012.**

Passport data of the variety : BLACK GOLD (NML-100)

Applicant : Nirmal Seeds Pvt. Ltd.

Address of the Applicant : P.O. Box-63, Bhadgaon Road,

Pachora-424201, Dist. Jalgaon (MS)

Nationality of Applicant : Indian

Application details
a. Number

E2
BJ2
11
1271

b. Date of receipt : 13.10.2011

c. Date of acceptance : --

Crop (Taxonomical Lineage) : Indian Mustard [Brassica juncea L. Czern & Coss]

Denomination : BLACK GOLD (NML-100)

Type of Variety : Extant (Variety of Common Knowledge)

Classification of VarietyPreviously proposed
: Typical Variety
: Not applicable

Denomination

Name of Parental Material : NML-30 x NML 18. Name of Reference Varieties : Bio-902, Kranti

Variety Description:

A. Group Characteristics	Remarks measured values, example varieties, etc.
Leaf: Number of lobes	Medium
Flower: Time of flowering (50% of the plant with at least one open flower)	Medium
Plant: Main shoot length (cm)	Long
Siliqua: Number of seeds per siliqua	Medium

B. Distinct Characteristics: BLACK GOLD (NML-100) has distinguishing character as

1. Seed: seed colour: Brown.

2. Seed: Size: (Weight of 1000 seeds): Medium

C. Reference variety: Bio-902 & Kranti has distinguishing character as

1. Seed: seed colour: Dark brown & Reddish brown.

2. Seed: Size: (Weight of 1000 seeds): Bold & Small.

D. Date of commercialization	of the
variety	

18/08/2009

07. Application No. **E1 BJ1 11 1270**

filed on 13.10.2011 by I.S. Halakude,

The convention application no. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar, PPV & FR Authority, New Delhi – 110 012.**

Passport data of the variety : PALAK

Applicant: Nirmal Seeds Pvt. Ltd.

Address of the Applicant : P.O. Box-63, Bhadgaon Road,

Pachora-424201, Dist. Jalgaon (MS)

Nationality of Applicant : Indian

Application details
a. Number

E1 BJ1 11 1270

b. Date of receipt : 13.10.2011

c. Date of acceptance : --

Crop (Taxonomical Lineage) : Indian Mustard [Brassica juncea L. Czern & Coss]

Denomination : PALAK

Type of Variety : Extant (Variety of Common Knowledge)

Classification of Variety : Typical Variety **Previously proposed** : Not applicable

Denomination

Name of Parental Material : NML-17 x NML 32.

Name of Reference Varieties : RH-30, GM-2, Kranti, Varuna.

Variety Description:

A. Group Characteristics	Remarks measured values, example
	varieties, etc.
Leaf: Number of lobes	Medium
Flower: Time of flowering (50% of the plant with at	Medium
least one open flower)	
Plant: Main shoot length (cm)	Long
Siliqua: Number of seeds per siliqua	Medium

B. Distinct Characteristics: PALAK has distinguishing character as

1. Maturity period: Medium.

2. Siliqua: Angle with main shoot: Appressed

C. Reference variety: RH-30,GM-2, Kranti & Varuna has distinguishing character as

1. Maturity period: Late.

2. Siliqua: Angle with main shoot: Open

D. Date of commercialization of the	31/08/2007
variety	

PUBLIC NOTICE

Sub: Advertisement is given under sub-section (2) of Section 21 of PPV&FR Act, 2001 for registration of extant variety [Section 2(j) (i) of the Act] read with Rules 30 and 31 of PPV & FR Rules, 2003.

It is hereby advertised that on the recommendations of the Extant Variety Recommendation Committee duly constituted by the Authority under Regulation 6 of PPV & FR Regulations, 2006 the following application(s) for extant variety [notified under Seeds Act, 1966] have been accepted by the Registrar, Protection of Plant Varieties & Farmers' Rights Authority. The passport data of each variety as furnished by the applicant are advertised herewith calling for objections from interested persons in the matter.

Any person may, within three months from the date of advertisement of the application(s) give notice of opposition in writing to the registration of variety (as per Form PV-3 of the First Schedule of PPV&FR Rules, 2003). Oppositions, if any, to the registration must be submitted, in triplicate, to the Registrar, PPV&FRA, NASC Complex, DPS Marg, New Delhi -110 012 accompanied with the fee of Rs.1,500/- (Rupees One Thousand and Five Hundred Only) by way of Demand Draft drawn in favour of "The Registrar, PPV & FR Authority" payable at New Delhi.

FORM O - 1 (See Rule 30)

Government of India, Plant Varieties Registry Advertisement of accepted application for registration

01. Application No. **E1 PV1 09 446** filed on 29/10/2009 by Indian Council of Agricultural Research (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 114, India for a extant plant variety notified under the Seed Act, 1966 of crop Kidney bean (Rajmah) (*Phaseolus vulgaris* L.) having denomination Varun (ACPR-94040), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety Varun (ACPR-94040):

Crop (Taxonomical Lineage) : Kidney bean (Rajmah) (Phaseolus vulgaris L.)

Denomination : Varun (ACPR-94040)

Classification of Variety : Typical

Notification Details : Number: 937 (E)

: Dated: 04.09.2002

: Denomination: Varun (ACPR-94040)

Variety Description:

Distinct Characteristics:

Varun (ACPR-94040) has distinguishing characters like early time of flowering, medium pod curvature, kidney shaped seed, large seed size, white seed testa colour, green pod colour, present pod stringiness, present seed testa variegation and medium plant height.

Date of commercialization of the variety

Varun (ACPR-94040) has been commercialized since 04/09/2002.

02. Application No. **E22 OS18 11 493** filed on **29/08/2011** by **Indian Council of Agricultural Research** (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 114, India for a **extant plant variety notified under the Seed Act**, 1966 of crop Rice (*Oryza sativa* L.) having denomination **Nua Chinikamini** (IET 18394) (CR2580), the specification including its drawing and or

photograph(s) of which are given below has been accepted and given registration number -----NA------ on -----NA-----.

The convention application No. ----NA----, in respect of the said variety has been filed on -----NA-----, in ---NA----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety Nua Chinikamini (IET 18394) (CR2580):

Crop (Taxonomical Lineage) : Rice (*Oryza sativa* L.)

Denomination: Nua Chinikamini (IET 18394) (CR2580)

Classification of Variety : Typical

Notification Details : Number: 632 (E)

: Dated: 25.03.2011

: Denomination: Nua Chinikamini (IET 18394) (CR2580)

Variety Description:

Distinct Characteristics:

Nua Chinikamini (IET 18394) (CR2580) has distinguishing characters like late time of heading, medium stem length and short bold decorticated grain shape (in lateral view).

Date of commercialization of the variety

Nua Chinikamini (IET 18394) (CR2580) has been commercialized since 25/03/2011.

3. Application No. | **E21** | •

filed on 29/08/2011 by Indian Council of

Agricultural Research (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 114, India for a extant plant variety notified under the Seed Act, 1966 of crop Rice (*Oryza sativa* L.) having denomination Phalguni (IET 18720) (CRAC2224-1041), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA-------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety Phalguni (IET 18720) (CRAC2224-1041):

Crop (Taxonomical Lineage) : Rice (*Oryza sativa* L.)

Denomination: Phalguni (IET 18720) (CRAC2224-1041)

Classification of Variety : Typical

Notification Details : Number: 632 (E)

: Dated: 25.03.2011

: Denomination: Phalguni (IET 18720) (CRAC2224-1041)

Variety Description:

Distinct Characteristics:

Phalguni (IET 18720) (CRAC2224-1041) has distinguishing characters like present leaf auricles, early time of heading (50 % of plant with panicle), short stem length, long slender decorticated grain shape and present panicle awns.

Date of commercialization of the variety

Phalguni (IET 18720) (CRAC2224-1041) has been commercialized since 25/03/2011.

04. Application No. **E20 OS18 11 496** filed on 29/08/2011 by Indian Council of Agricultural Research (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 114, India for a extant plant variety notified under the Seed Act, 1966 of crop Rice (*Oryza sativa L.*) having denomination Luna Suvarna (IET 18697), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------

The convention application No. ----NA-----, in respect of the said variety has been filed on -----NA-----, in --NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is Office of the Registrar, PPV & FR Authority, New Delhi – 110 012.

Passport data of the variety Luna Suvarna (IET 18697):

Crop (Taxonomical Lineage) : Rice (*Oryza sativa* L.)

Denomination : Luna Suvarna (IET 18697)

Classification of Variety : Typical

Notification Details : Number: 632 (E)

: Dated: 25.03.2011

: Denomination: Luna Suvarna (IET 18697)

Variety Description:

Distinct Characteristics:

Luna Suvarna (IET 18697) has distinguishing characters like late time of heading (50% of plants with panicles), medium stem length, short grain length and medium grain weight of 1000 fully developed grains.

Date of commercialization of the variety

Luna Suvarna (IET 18697) has been commercialized since 25/03/2011.

05. Application No.

E13 12 **LL29** 382

filed on 23/08/2012 by Indian Council of Agricultural Research (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 114, India for a extant plant variety notified under the Seed Act, 1966 of crop Tomato (Lycopersicon Lycopersicum (L.) Karsten ex. Farw) having denomination Swarna Naveen, the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA-----on -----NA-----.

The convention application No. ----NA----, in respect of the said variety has been filed on -----NA----, in ---NA----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is Office of the Registrar, PPV & FR Authority, New Delhi -110 012.

Passport data of the variety Swarna Naveen:

Crop (Taxonomical Lineage) : Tomato (*Lycopersicon Lycopersicum* (L.) Karsten ex.Farw)

Denomination : Swarna Naveen Classification of Variety : Typical

Notification Details : Number: 2035 (E)

: Dated: 28.11.2006

: Denomination: Swarna Naveen

Variety Description:

Distinct Characteristics:

Swarna Naveen has distinguishing characters like determinate early time of flowering, many plant number of inflorescence on main stem, very small fruit size, medium fruit length and small fruit width.

Date of commercialization of the variety

Swarna Naveen has been commercialized since 28/11/2006.

6. Application No. E14 LL30 12 383 filed on 23/08/2012 by Indian Council of Agricultural Research (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 114, India for a extant plant variety notified under the Seed Act, 1966 of crop Tomato (Lycopersicon Lycopersicum (L.) Karsten ex. Farw) having denomination Swaprna Baibhay (CHTH-1), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number -----NA----- on -----NA-----.

The convention application No. ----NA----, in respect of the said variety has been filed on -----NA----, in ---NA----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is Office of the Registrar, PPV & FR Authority, New Delhi -110 012.

Passport data of the variety Swaprna Baibhay (CHTH-1):

Crop (Taxonomical Lineage) : Tomato (*Lycopersicon Lycopersicum* (L.) Karsten ex.Farw)

Denomination : Swaprna Baibhay (CHTH-1)

Classification of Variety : Typical

Notification Details : Number: 642 (E)

: Dated: 31.05.2004

: Denomination: Swaprna Baibhay (CHTH-1)

Variety Description:

Distinct Characteristics:

Swaprna Baibhay (CHTH-1) has distinguishing characters like long stem length of internode between 1^{st} and 4^{th} inflorescence, early time of flowering, few plant number of inflorescence on main stem, small fruit size, medium fruit length and medium fruit width.

Date of commercialization of the variety

Swaprna Baibhay (CHTH-1) has been commercialized since 31/05/2004.

07. Application No. E15 LL31 12 384 filed on 23/08/2012 by Indian Council of Agricultural Research (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 114, India for a extant plant variety notified under the Seed Act, 1966 of crop Tomato (*Lycopersicon Lycopersicum* (L.) Karsten ex. Farw) having denomination Swarna Lalima, the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number -----NA------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety Swarna Lalima:

Crop (Taxonomical Lineage) : Tomato (Lycopersicon Lycopersicum (L.) Karsten ex.Farw)

Denomination : Swarna Lalima **Classification of Variety** : Typical

Notification Details : Number: 2035 (E)

: Dated: 28.11.2006

: Denomination: Swarna Lalima

Variety Description:

Distinct Characteristics:

Swarna Lalima has distinguishing characters like early time of flowering, medium plant number of inflorescence on main stem, small fruit size, small fruit length and medium fruit width.

Date of commercialization of the variety

Swarna Lalima has been commercialized since 28/11/2006.

08. Application No. E16 LL32 12 385 filed on 23/08/2012 by Indian Council of Agricultural Research (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 114, India for a extant plant variety notified under the Seed Act, 1966 of crop Tomato (*Lycopersicon Lycopersicum* (L.) Karsten ex. Farw) having denomination Swarna Sampada (HA TH-3), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number -----NA------ on -----NA------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety Swarna Sampada (HA TH-3):

Crop (Taxonomical Lineage) : Tomato (*Lycopersicon Lycopersicum* (L.) Karsten ex.Farw)

Denomination : Swarna Sampada (HA TH-3)

Classification of Variety : Typical

Notification Details : Number: 2035 (E)

: Dated: 28.11.2006

: Denomination: Swarna Sampada (HA TH-3)

Variety Description:

Distinct Characteristics:

Swarna Sampada (HA TH-3) has distinguishing characters like early time of flowering, medium plant number of inflorescence on main stem, small fruit size, small fruit length and small fruit width.

Date of commercialization of the variety

Swarna Sampada (HA TH-3) has been commercialized since 28/11/2006.

09. Application No.

E17 BJ18 12 647

filed on 05/12/2012 by Indian Council

of Agricultural Research (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 114, India for a extant plant variety notified under the Seed Act, 1966 of crop Indian Mustard (*Brassica juncea L. Czern & Coss*), having denomination RRN-505 (RN-505), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA-------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety RRN-505 (RN-505):

Crop (Taxonomical Lineage) : Indian Mustard (Brassica juncea L. Czern & Coss)

Denomination : RRN-505 (RN-505) **Classification of Variety** : Typical

Notification Details : Number: 599 (E)

: Dated: 25.04.2006

: Denomination: RRN-505 (RN-505)

Variety Description:

Distinct Characteristics:

RRN-505 (RN-505) has distinguishing characters like medium green leaf colour, present leaf lobes, dentate leaf dentation of margin, tall plant height, medium siliqua no. of main shoot, small seed size (weight of 1000 seeds) and medium seed oil content.

Date of commercialization of the variety

RRN-505 (RN-505) has been commercialized since 25/04/2006.

10. Application No.

E1 VR1 14 66

filed on **08/01/2014** by by **Punjab**

Agricultural University, Ferozpur Road, Ludhaina-141004, Punjab,India for a extant plant variety notified under the Seed Act, 1966 of crop Green gram (*Vigna radiata* (L.) Wilczek), having denomination SML-832 the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------.

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety SML-832:

Crop (Taxonomical Lineage) : Green gram (*Vigna radiata* (L.) Wilczek)

Denomination : SML-832

Classification of Variety : Typical

Notification Details : Number: 2817 (E)

: Dated: 19.09.2013

: Denomination: SML-832

Variety Description:

Distinct Characteristics:

SML-832 has distinguishing characters like medium pod length, above canopy pod position, shiny seed lusture, oval seed shape and medium seed size.

Date of commercialization of the variety

SML-832 has been commercialized since 19/09/2013.

11. Application No. **E1 VM1 14 176** filed on 22/01/2014 by by Punjab Agricultural University, Ferozpur Road, Ludhaina-141004, Punjab, India for a extant plant variety notified under the Seed Act, 1966 of crop Black gram (*Vigna mungo* (L.) Hepper), having denomination Mash 479 (KUG 479), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------.

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety Mash 479 (KUG 479):

Crop (Taxonomical Lineage) : Black gram (*Vigna mungo* (L.) Hepper)

Denomination : Mash 479 (KUG 479)

Classification of Variety : Typical

Notification Details : Number: 632 (E)

: Dated: 25.03.2011

: Denomination: Mash 479 (KUG 479)

Variety Description:

Distinct Characteristics:

Mash 479 (KUG 479) has distinguishing characters like brown pod colour of mature pod, dark green foliage colour, medium pod length, oval seed shape and medium seed size.

Date of commercialization of the variety

Mash 479 (KUG 479) has been commercialized since 25/03/2011.

12. Application No. E3 OS28 14 335 filed on 10/02/2014 by Central Soil Salinity Research Institute, Zarifa Farm, Kachhwa Road, Karnal-132 001, Haryana, India for a extant plant variety notified under the Seed Act, 1966 of crop Rice (*Oryza sativa* L.) having denomination CSR 30 (88-H5-1-1-2 (IET-14720) (Yamini), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA----- on -----NA-----

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety CSR 30 (88-H5-1-1-2 (IET-14720) (Yamini):

Crop (Taxonomical Lineage) : Rice (*Oryza sativa* L.)

Denomination : CSR 30 (88-H5-1-1-2 (IET-14720) (Yamini)

Classification of Variety : Typical

Notification Details : Number: 1134 (E)

: Dated: 15.11.2001

: Denomination: CSR 30 (88-H5-1-1-2 (IET-14720) (Yamini)

Variety Description:

Distinct Characteristics:

CSR 30 (88-H5-1-1-2 (IET-14720) (Yamini) has distinguishing characters like green basal leaf sheath colour, late time of heading, very long stem length, extra long decorticated grain length, extra long slender decorticated grain shape, medium endosperm content of amylose and present decorticated grain aroma.

Date of commercialization of the variety

CSR 30 (88-H5-1-1-2 (IET-14720) (Yamini) has been commercialized since 15/11/2001.

13. Application No. **E4 OS28 14 336** filed on 10/02/2014 by Central Soil Salinity Research Institute, Zarifa Farm, Kachhwa Road, Karnal-132 001, Haryana, India for a extant plant variety notified under the Seed Act, 1966 of crop Rice (*Oryza sativa* L.) having denomination CSR-36 (Naina) (IET 17340), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety CSR-36 (Naina) (IET 17340):

Crop (Taxonomical Lineage) : Rice (Oryza sativa L.)

Denomination : CSR-36 (Naina) (IET 17340)

Classification of Variety : Typical

Notification Details : Number: 1566 (E)

: Dated: 05.11.2005

: Denomination: CSR-36 (Naina) (IET 17340)

Variety Description:

Distinct Characteristics:

CSR-36 (Naina) (IET 17340) has distinguishing characters like green basal leaf sheath colour, medium time of heading, long stem length, long decorticated grain length, long slender decorticated grain shape, medium endosperm content of amylose and absent decorticated grain aroma.

Date of commercialization of the variety

CSR-36 (Naina) (IET 17340) has been commercialized since 05/11/2005.

14. Application No. E1 GH1 14 422

14. Application No. Filed on 24/02/2014 by University of Agricultural Sciences (UAS), Dharwad-580005, Karnataka, India for a extant plant variety notified under the Seed Act, 1966 of crop Tetraploid Cotton (Gossypium hirsutum L.) having denomination Sahana (JK-276-8-2), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------.

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety Sahana (JK-276-8-2):

Crop (Taxonomical Lineage) : Tetraploid Cotton (Gossypium hirsutum L.)

Denomination : Sahana (JK-276-8-2)

Classification of Variety : Typical

Notification Details : Number: 92 (E)

: Dated: 02.02.2001

: Denomination: Sahana (JK-276-8-2)

Variety Description:

Distinct Characteristics:

Sahana (JK-276-8-2) has distinguishing characters like medium leaf hairiness, present leaf nectaries, medium plant stem hairiness, cream flower petal colour, absent flower petal spot, smooth boll surface, pointed boll prominence of tip, medium boll weight of seed cotton/boll, medium seed index, very high ginning % and white fibre colour.

Date of commercialization of the variety

Sahana (JK-276-8-2) has been commercialized since 02/02/2001.

15. Application No. **E2 VM4 14 423** In 24/02/2014 by University of Agricultural Sciences (UAS), Dharwad-580005, Karnataka, India for a extant plant variety notified under the Seed Act, 1966 of crop Black gram (*Vigna mungo* (L.) Hepper) having denomination DU-1, the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety DU-1:

Crop (Taxonomical Lineage) : Black gram (*Vigna mungo* (L.) Hepper)

Denomination : DU-1

Classification of Variety : Typical

Notification Details : Number: 312 (E)

: Dated: 01.02.2013

: Denomination: DU-1

Variety Description:

Distinct Characteristics:

DU-1 has distinguishing characters like black pod colour of mature pod, medium pod length and large seed size.

Date of commercialization of the variety

DU-1 has been commercialized since 01/02/2013.

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety BGD-103:

Crop (Taxonomical Lineage) : Chickpea (*Cicer arietinum* L.)

Denomination : BGD-103

Classification of Variety : Typical

Notification Details : Number: 2187 (E)

: Dated: 27.08.2009

: Denomination: BGD-103

Variety Description:

Distinct Characteristics:

BGD-103 has distinguishing characters like semi erect plant growth habit, large leaflet size, medium seed size, dark brown seed colour, medium green plant colour of foliage and one no. of seeds per pod.

Date of commercialization of the variety

BGD-103 has been commercialized since 27/08/2009.

17. Application No. **E1 AH1 14 425** filed on **24/02/2014** by **University of Agricultural Sciences (UAS), Dharwad-580005, Karnataka, India** for a **extant plant variety notified under the Seed Act, 1966** of crop **Groundnut (***Arachis hypogaea* **L.)** having denomination **GPBD-4 (Vikas),** the specification including its drawing and or photograph(s) of which are given below has been accepted and

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety GPBD-4 (Vikas):

Crop (Taxonomical Lineage) : Groundnut (Arachis hypogaea L.)

Denomination : GPBD-4 (Vikas) **Classification of Variety** : Typical

Notification Details : Number: 642 (E)

given registration number -----NA----- on -----NA-----.

: Dated: 31.05.2004

: Denomination: GPBD-4 (Vikas)

Variety Description:

Distinct Characteristics:

GPBD-4 (Vikas) has distinguishing characters like erect plant growth habit, medium leaflet size, dark green leaflet colour, simple inflorescence, present pod presence of beak, tan kernel colour of testa, spheroid kernel shape, low kernel weight of 100 kernels, high kernel oil percentage, medium time of maturity and present fresh seed dormancy.

Date of commercialization of the variety

GPBD-4 (Vikas) has been commercialized since 31/05/2004.

18. Application No. **E2 AH2 14 426** iled on 24/02/2014 by University of Agricultural Sciences (UAS), Dharwad-580005, Karnataka, India for a extant plant variety notified under the Seed Act, 1966 of crop Groundnut (*Arachis hypogaea* L.) having denomination GPBD 5, the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------.

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety GPBD 5:

Crop (Taxonomical Lineage) : Groundnut (*Arachis hypogaea* L.)

Denomination : GPBD 5

Classification of Variety : Typical

Notification Details : Number: 2137 (E)

: Dated: 31.08.2010

: Denomination: GPBD 5

Variety Description:

Distinct Characteristics:

GPBD 5 has distinguishing characters like semi spreading plant growth habit, sequential flower arrangement on side branches, medium leaflet size, light green leaflet colour, simple inflorescence, 2 seeded pod number of kernels, present pod presence of beak, tan kernel colour of testa, spheroid kernel shape, medium kernel weight of 100 kernels, medium kernel oil percentage, medium time of maturity and absent fresh seed dormancy.

Date of commercialization of the variety

GPBD 5 has been commercialized since 31/08/2010.

19. Application No. **E3 AH3 14 427**

filed on 24/02/2014 by University of

Agricultural Sciences (UAS), Dharwad-580005, Karnataka, India for a extant plant variety notified under the Seed Act, 1966 of crop Groundnut (*Arachis hypogaea* L.) having denomination Prutha (Dh-86), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------- NA------ on ------NA------.

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety Prutha (Dh-86):

Crop (Taxonomical Lineage) : Groundnut (Arachis hypogaea L.)

Denomination : Prutha (Dh-86) **Classification of Variety** : Typical

Notification Details : Number: 122 (E)

: Dated: 02.02.2005

: Denomination: Prutha (Dh-86)

Variety Description:

Distinct Characteristics:

Prutha (Dh-86) has distinguishing characters like erect plant growth habit, sequential flower arrangement on side branches, small leaflet size, dark green leaflet colour, simple inflorescence, 2 seeded pod number of kernels, present pod prominence of beak, tan kernel colour of testa, cylindrical kernel shape, medium kernel weight of 100 kernels, medium kernel oil percentage, early time of maturity and absent fresh seed dormancy.

Date of commercialization of the variety

Prutha (Dh-86) has been commercialized since 02/02/2005.

20. Application No. **E4 AH4 14 428** on **24/02/2014** by **University of Agricultural Sciences (UAS), Dharwad-580005, Karnataka, India** for a **extant plant variety notified under the Seed Act, 1966** of crop **Groundnut** (*Arachis hypogaea* **L.**) having denomination **Vasundhara** (**DH-101**), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety Vasundhara (DH-101):

Crop (Taxonomical Lineage) : Groundnut (Arachis hypogaea L.)

Denomination : Vasundhara (DH-101)

Classification of Variety : Typical

Notification Details : Number: 122 (E)

: Dated: 06.02.2007

: Denomination: Vasundhara (DH-101)

Variety Description:

Distinct Characteristics:

Vasundhara (DH-101) has distinguishing characters like erect plant growth habit, sequential flower arrangement on side branches, medium leaflet size, dark green leaflet colour, simple inflorescence, medium pod reticulation, 2 seeded pod number of kernels, present pod prescence of beak, tan kernel

colour of testa, cylindrical kernel shape, low kernel weight of 100 kernels, high kernel oil percentage, very late time of maturity and absent fresh seed dormancy.

Date of commercialization of the variety

Vasundhara (DH-101) has been commercialized since 06/02/2007.

21. Application No. **E5 AH5 14 429** filed on 24/02/2014 by University of Agricultural Sciences (UAS), Dharwad-580005, Karnataka, India for a extant plant variety notified under the Seed Act, 1966 of crop Groundnut (*Arachis hypogaea* L.) having denomination TGLPS-3 (TDG-39), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety TGLPS-3 (TDG-39):

Crop (Taxonomical Lineage) : Groundnut (Arachis hypogaea L.)

Denomination : TGLPS-3 (TDG-39)

Classification of Variety : Typical

Notification Details : Number: 449 (E)

: Dated: 11.02.2009

: Denomination: TGLPS-3 (TDG-39)

Variety Description:

Distinct Characteristics:

TGLPS-3 (TDG-39) has distinguishing characters like semi spreading plant growth habit, sequential flower arrangement on side branches, medium leaflet size, dark green leaflet colour, simple inflorescence, medium pod reticulation, present pod prescence of beak, rose kernel colour of testa, cylindrical kernel shape, very high kernel weight of 100 kernels, medium kernel oil percentage, late time of maturity and absent fresh seed dormancy.

Date of commercialization of the variety

TGLPS-3 (TDG-39) has been commercialized since 11/02/2009.

22. Application No. E29 GH67 14 1241 filed on 28/05/2014 by CCS Haryana Agricultural University, Hisar-125 004, Haryana, India for a extant plant variety notified under the Seed Act, 1966 of crop Tetraploid Cotton (Gossypium hirsutum L.) having denomination H 1098-

improved, the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------.

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety H 1098-improved:

Crop (Taxonomical Lineage) : Tetraploid Cotton (*Gossypium hirsutum* L.)

Denomination : H 1098-improved **Classification of Variety** : Typical

Notification Details : Number: 2137 (E)

: Dated: 31.08.2010

: Denomination: H 1098-improved

Variety Description:

Distinct Characteristics:

H 1098-improved has distinguishing characters like present hypocotyl pigmentation, medium time of flowering, cream flower petal colour, cream flower pollen colour, round boll shape, small boll weight of seed cotton/boll, dense seed fuzz, grey seed fuzz colour, very high ginning%, medium fibre length and very good fibre maturity.

Date of commercialization of the variety

H 1098-improved has been commercialized since 31/08/2010.

given registration number -----NA----- on -----NA-----.

23. Application No. E30 GH68 14 124 filed on 28/05/2014 by CCS Haryana Agricultural University, Hisar-125 004, Haryana, India for a extant plant variety notified under the Seed Act, 1966 of crop Tetraploid Cotton (Gossypium hirsutum L.) having denomination H 1236, the specification including its drawing and or photograph(s) of which are given below has been accepted and

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety H 1236:

Crop (Taxonomical Lineage) : Tetraploid Cotton (*Gossypium hirsutum* L.)

Denomination : H 1236

Classification of Variety : Typical

Notification Details : Number: 2137 (E)

: Dated: 31.08.2010

: Denomination: H 1236

Variety Description:

Distinct Characteristics:

H 1236 has distinguishing characters like flat leaf appearance, late time of flowering, round boll shape, small boll weight of seed cotton/boll, dense seed fuzz and medium fibre strength.

Date of commercialization of the variety

H 1236 has been commercialized since 31/08/2010.

24. Application No. E31 GH69 14 124 filed on 28/05/2014 by CCS Haryana Agricultural University, Hisar-125 004, Haryana, India for a extant plant variety notified under the Seed Act, 1966 of crop Tetraploid Cotton (Gossypium hirsutum L.) having denomination H-1300, the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety H-1300:

Crop (Taxonomical Lineage) : Tetraploid Cotton (Gossypium hirsutum L.)

Denomination : H-1300

Classification of Variety : Typical

Notification Details : Number: 1708 (E)

: Dated: 26.07.2012

: Denomination: H-1300

Variety Description:

Distinct Characteristics:

H-1300 has distinguishing characters like flat cup leaf appearance, cream flower petal colour, high ginning% and medium long fibre length.

Date of commercialization of the variety

H-1300 has been commercialized since 26/07/2012.

25. Application No. **E1**

E1 GA1 14 124

filed on 28/05/2014 by CCS Haryana

Agricultural University, Hisar-125 004, Haryana, India for a extant plant variety notified under the Seed Act, 1966 of crop Diploid Cotton (*Gossypium arboreum* L.) having denomination HD 432, the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------.

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety HD 432:

Crop (Taxonomical Lineage) : Diploid Cotton (Gossypium arboreum L.)

Denomination : HD 432

Classification of Variety : Typical

Notification Details : Number: 2137 (E)

: Dated: 31.08.2010

: Denomination: HD 432

Variety Description:

Distinct Characteristics:

HD 432 has distinguishing characters like digitate leaf shape, late time of flowering, embedded flower stigma, very high ginning%, medium fibre length and weak fibre strength.

Date of commercialization of the variety

HD 432 has been commercialized since 31/08/2010.

26. Application No. E1 BJ21 14 125 filed on 06/06/2014 by Indian Council of Agricultural Research (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 114, India for a extant plant variety notified under the Seed Act, 1966 of crop Indian Mustard (*Brassica juncea* L. Czern & Coss), having denomination DRMR 601 (NRCDR 601), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------.

The convention application No. ----NA----, in respect of the said variety has been filed on -----NA-----, in ---NA----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety DRMR 601 (NRCDR 601):

Crop (Taxonomical Lineage) : Indian Mustard (Brassica juncea L. Czern & Coss)

Denomination: DRMR 601 (NRCDR 601)

Classification of Variety : Typical

Notification Details : Number: 733 (E)

: Dated: 01.04.2010

: Denomination: DRMR 601 (NRCDR 601)

Variety Description:

Distinct Characteristics:

DRMR 601 (NRCDR 601) has distinguishing characters like late time of flowering, short siliqua length and small seed size.

Date of commercialization of the variety

DRMR 601 (NRCDR 601) has been commercialized since 01/04/2010.

27. Application No. E1 BR5 14 125 filed on 06/06/2014 by Indian Council of Agricultural Research (ICAR), Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 114, India for a extant plant variety notified under the Seed Act, 1966 of crop Rapeseed (*Brassica rapa* L.) having denomination NRCYS-05-02, the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety NRCYS-05-02:

Crop (Taxonomical Lineage) : Rapeseed (Brassica rapa L.)

Denomination : NRCYS-05-02

Classification of Variety : Typical

Notification Details : Number: 454 (E)

: Dated: 11.02.2009

: Denomination: NRCYS-05-02

Variety Description:

Distinct Characteristics:

NRCYS-05-02 has distinguishing characters like broad leaf width, medium time of flowring, medium plant main shoot length, tall plant height, low sliqua density on main shoot and high seed oil contant.

Date of commercialization of the variety

NRCYS-05-02 has been commercialized since 11/02/2009.

28. Application No.

E9 OS807 14 1271

filed on 12/06/2014 Sardar Vallabhbhai

Patel University of Agriculture & Technology, Meerut-250 110, Post office-Modipuram, Uttar Pradesh, India for a extant plant variety notified under the Seed Act, 1966 of crop Rice (*Oryza sativa* L.) having denomination Vallabh Basmati-21 (IET 19493) (MAUB-21), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety Vallabh Basmati-21 (IET 19493) (MAUB-21):

Crop (Taxonomical Lineage) : Rice (*Oryza sativa* L.)

Denomination: Vallabh Basmati-21 (IET 19493) (MAUB-21)

Classification of Variety : Typical

Notification Details : Number: 2817 (E)

: Dated: 19.09.2013

: Denomination: Vallabh Basmati-21 (IET 19493) (MAUB-21)

Variety Description:

Distinct Characteristics:

Vallabh Basmati-21 (IET 19493) (MAUB-21) has distinguishing characters like light leaf intensity of green colour, medium time of heading, semi-erect flag leaf attitude of blade, medium stem length, straw lemma and paleas colour, absent panicle awns, well exerted panicle exertion, medium grain weight of 1000 fully developed grains, long slender decorticated grain shape (in lateral view) and present decorticated grain aroma.

Date of commercialization of the variety

Vallabh Basmati-21 (IET 19493) (MAUB-21) has been commercialized since 02/04/2009.

29. Application No.

E10 OS808 14 1272

filed on 12/06/2014 Sardar

Vallabhbhai Patel University of Agriculture & Technology, Meerut-250 110, Post office-Modipuram, Uttar Pradesh, India for a extant plant variety notified under the Seed Act, 1966 of crop Rice (*Oryza sativa* L.) having denomination Vallabh Basmati-22 (IET 19492) (MAUB-162), the specification including its drawing and or photograph(s) of which are given below has been accepted and given registration number ------NA------ on -----NA------

The convention application No. -----NA-----, in respect of the said variety has been filed on -----NA-----, in ---NA-----.

Appropriate office for the opposition of proceeding under Rule 29, of the Protection of Plant Varieties and Farmers' Rights Rules, 2003 is **Office of the Registrar**, **PPV & FR Authority**, **New Delhi – 110 012**.

Passport data of the variety Vallabh Basmati-22 (IET 19492) (MAUB-162):

Crop (Taxonomical Lineage) : Rice (*Oryza sativa* L.)

Denomination: Vallabh Basmati-22 (IET 19492) (MAUB-162)

Classification of Variety : Typical

Notification Details : Number: 2187 (E)

: Dated: 27.08.2009

: Denomination: Vallabh Basmati-22 (IET 19492) (MAUB-162)

Variety Description:

Distinct Characteristics:

Vallabh Basmati-22 (IET 19492) (MAUB-162) has distinguishing characters like late time of heading, short stem length, present panicle awns, well exerted panicle exertion, medium grain weight of 1000 fully developed grains, long slender decorticated grain shape (in lateral view) and present decorticated grain aroma.

Date of commercialization of the variety

Vallabh Basmati-22 (IET 19492) (MAUB-162) has been commercialized since 11/03/2010.