भारतीय पौधा किस्म जरनल

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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 10, अंक 06,
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'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 रजिस्ट्रार 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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Sl.No. Item **Page No.**

S.No.	Denomination	Acknowledgement No.	Crop
1	**S07H878 BGII**	**REG/2011/427**	**Tetraploid Cotton**
2	**NC-106**	**REG/2009/174**	**Tetraploid Cotton**
3	**OmkarBt (NCS 950 Bt)**	**REG/2008/476**	**Tetraploid Cotton**
4	**Super Mallika Bt (NCS 955 Bt)**	**REG/2008/480**	**Tetraploid Cotton**
5	**NC-185**	**REG/2009/202**	**Tetraploid Cotton**
6	**NC-1171**	**REG/2009/228**	**Tetraploid Cotton**
7	**NC-113**	**REG/2009/177**	**Tetraploid Cotton**
8	**NC-1108**	**REG/2009/205**	**Tetraploid Cotton**
9	**NC-90**	**REG/2009/171**	**Tetraploid Cotton**
10	**NC-62**	**REG/2009/168**	**Tetraploid Cotton**
11	**NC-167**	**REG/2009/193**	**Tetraploid Cotton**
12	**NC-181**	**REG/2010/35**	**Tetraploid Cotton**
13	**NC-91**	**REG/2009/172**	**Tetraploid Cotton**
14	**NC-172**	**REG/2009/196**	**Tetraploid Cotton**
15	**NC-174**	**REG/2009/198**	**Tetraploid Cotton**
16	**NC-170**	**REG/2009/232**	**Tetraploid Cotton**
17	**NC-47**	**REG/2009/165**	**Tetraploid Cotton**
18	**NCS-9028 Bt2**	**REG/2011/486**	**Tetraploid Cotton**
19	**AC-1910**	**REG/2012/271**	**Tetraploid Cotton**
20	**AC-1207**	**REG/2012/270**	**Tetraploid Cotton**
21	**7493870 B**	**REG/2008/296**	**Tetraploid Cotton**
22	**PC-P711**	**REG/2012/276**	**Tetraploid Cotton**
23	**PC-P3812**	**REG/2012/282**	**Tetraploid Cotton**
24	**NOKH-1003**	**REG/2010/453**	**Okra**
25	**OK-199**	**REG/2011/77**	**Okra**
26	**LR62216**	**REG/2012/380**	**Okra**
27	**DI62459**	**REG/2012/387**	**Okra**

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 crop specific DUS test guideline namely: Betelvine (*Piper betle L.*) is hereby published in 'Plant Variety Journal of India', Vol. 10, No. 06, JUne 03, 2016.

Sd/-
(R.C.Agrawal)
Registrar-General

Betelvine(*Piper betle L.)*

I. Subject

These test guidelines shall apply to all varieties and hybrids of Betelvine (*Piper betle L.*) grown under open system of cultivation and closed (*Boroj*)system of cultivation.

The open system of cultivation under natural condition is practiced in north eastern and southern states. Betelvine is grown with arecanut (*Areca catechu* L.) and *Sesbaniagrandiflora* as support crop for the vine.

Boroj is an artificially erected closed hut structure, the main frame work of which is made of bamboo poles to a height of 2m. Its sides and roof are made of locally available materials like jute stick, straw, grass banana leaf etc. For support of the vine, jute sticks or slicedbamboo sticks or reeds are used.

II. Planting material required

The protection of Plant Varieties and Farmer's Rights Authority (PPV & FRA) shall decide when, where and in what quantity and quality the planting material is required for testing a variety denomination applied for registration under the protection of Plant Varieties and Farmer's Rights Act, 2001. Applicants submitting such planting 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. The minimum number of planting materials (rooted cuttings) to be supplied by the applicant shall be 15/30 rooted cuttings of cultivars or hybrids depending on the testing condition.

1. The planting material supplied shall be healthy, not lacking in vigor or affected by any pest or diseases as well as nutrient deficiency. The age of the rooted cutting from the terminal shoots shall be 3 months from the date of planting in the polythene bags [20cm x 10cm size with soil mixture (1:1:1 soil, FYM and sand)]. The rooted cutting shall be of minimum height of 25 cm.

2. The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety. The planting material shall not have undergone any chemical or bio-physical treatment unless the Competent Authority allow or request such treatments. If it has been treated, full details of the treatment must be given.

III. Conduct of tests

1. 1. The minimum duration of DUS tests shall be two crop years from the date of planting from same plants or till the observations recorded on leavesfromplagiotropic branches. For the purpose of these test guidelines, crop years include continuous leaf harvestable years (Leaves from Plagiotropic shoot(open system of cultivation and leaves from orthotropic shoot(closed system of cultivation).
2. 2. The test shall normally be conducted at one place suitable to its growing systems. If any essential characteristics of the candidate variety are not expressed for visual observation at this location, the variety shall be considered for further examinations at another test site or under special test protocol on expressed request of the applicant.
3. The field test shall be carried out under favoring normal growth and expression of all test characteristics. In particular, a satisfactory crop must be produced in at least two crop years. As a minimum, each test shall include fifteen/thirty vines which shall be divided between two or more replicates.

4. Test plot design

Open system of cultivation

Standard	: Under Areca nut
Duration	: 3 years
Spacing	: 2.7/2.7m
Number of replications	: 3
Plants/ replication	: 5
Standard	: Under Sesbania
Duration	: 2 years
Spacing	: 100 cm x 20 cm
Number of replications	: 3
Plants/ replication	: 10

Closed system of cultivation

Standard	: Bamboo sticks
Duration	: 2 years
Spacing	: 70 cm x 10 cm
Number of replications	: 3
Plants/ replication	: 10

5. Additional test protocols for special tests established by the PPV & FR Authority.

IV. Methods and observation

1. The characteristics described in the Table of characteristics (section VII) shall be used for testing of varieties and hybrids for their DUS.
2. Unless otherwise indicated, all observations determined by measurement or counting shall be made on five vines or parts of five vines.
3. All the leaf characters shall be recorded on harvestable mature leaves of orthotropic shoot which may be present on or beyond 8^{th} node from the tip under closed system of cultivation. All the leaf characters shall be recorded on the 2^{nd} /3^{rd} (harvestable) leaf from plagiotropic shoot (lateral branch)or orthotropic shoot in open system of cultivation.
4. All observations shall be taken only from the established vines which shall be at least one year after the planting of cuttings.

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 not to vary or to vary only slightly, within a variety and which in their various states are evenly distributed across all varieties in the collection, are suitable for grouping purposes.

2. The following characteristics shall be used for grouping of Betelvine varieties.
   i. Plant: Orthotropic shoot stripe colour (Characteristic 3)
   ii. Plant: Orthotropic shoot intermodal length (Characteristic 4)
   iii. Leaf: Orthotropic leaf l/b ratio (Characteristic 8)
   iv. Leaf: Orthotropic leaf petiole length (Characteristic 9)
   v. Leaf: Orthotropic leaf -Depth /width of lobe (Characteristic 13)
   vi. Leaf: Leaf lamina colour (orthotropic/plagiotropic) (characteristic 5&19)
   vii. Plagiotropic leaf:l/b ratio (characteristic 23)
   viii. Plant:Sex of the plant (characteristic 24)
   ix. Flowering habit: (characteristic 25)
   x. Female Catkin: Colour (characteristic 26)
   xi. Male Catkin:Length (characteristic 28)

VI. Characteristics and symbols

1. To assess Distinctiveness, uniformity and stability, the characteristics and their states are given in the table of characteristics (Section VII) shall be used. The characters shall be recorded in open and closed system of cultivation as specified in the table (Section VII).
2. Notes (1 to 9) shall be used to describe the state of each character for the purpose of digital data processing and these notes shall be given against the state of each characteristic.
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 phenomenal characteristic or by the environmental conditions of the testing region. Under such exceptional situation, adequate explanation shall be provided.

   (*) :Closed condition(Boroj)

   (**) : Open condition

   (*,**) : open/closed condition

   (+) See explanation on the table of characteristics in section VIII. It is to be noted that for certain characteristics the plant parts on which observations to be taken are given in the explanation or figure(s) for clarity and not for the colour variation.

5. The optimum stage of plant growth for assessment of each characteristic is given in the sixth column of the characteristic.
6. Type of assessment of characteristics indicated in column seven 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 observation of individual plant or parts of plants

VII. Table of characteristics

S. No	Characteristics	States	Note	Example variety	Stage of observation	Type of assessment
1	2	3	4	5	6 (Decimal or a,b,c,d)	7
1 (+)	Plant:Adventitious root production (Closed)	Few (< 5.0) Medium (5-10) Many (> 10)	3 5 7	HalisaharSanchi Kali Bangla DogapanSada	Fully established vines (at least one year after planting)	MS
2 (+)	Plant:Orthotropic Shoot base colour (Closed)	Light Green Green Moderately Green Dark Green	1 2 3 4	Swarna Kapoori CARI-6 Ghanegette Gangarampur Sanchi	Fully established vines	VG
3 (*) (+)	Plant:Orthotropic Shoot Stripe colour (Closed)	Green Light Brown Brown Dark Brown	1 2 3 4	CARI-6 Kapoori Pedacheppali Kalibaghini Kadwa	Fully established vines	VG
4 (*,**) (+)	Plant:Orthotropic Shoot Internodal length (cm) (Closed/open)	Short (< 6.0) Medium (6.0-7.5) Long (> 7.5)	3 5 7	Ghanagette KutkiBangala, Godi Bangla CARI-2	Fully established vines	MS
5 (*,**) (+)	Leaf:Orthotropic Leaf lamina colour (Closed/open)	Light Green Green Dark Green	1 2 3	Swarna Kapoori Ghanegette ,Godi Bangla CARI-2	Harvestable /mature leaves on orthotropic shoots	VG
6 (+)	Leaf:Orthotropic Leaf Length (l) (cm) (Closed)	Short (< 11.50) Medium (11.50-14.50) Long (> 14.50)	3 5 7	Kadwa Kali Bangla KutkiBangala	Harvestable /mature leaves on orthotropic shoots	MS
7 (+)	Leaf:Orthotropic Leaf Breadth (b) (cm) (Closed)	Short (<9.50) Medium (9.50-12.50) Broad (> 12.50)	3 5 7	Kadwa Lakshman Kari Bangla	Harvestable /mature leaves on orthotropic shoots	MS
8 (*)	Leaf:Orthotropic Leaf l/b ratio	Low (<1.30)	3	Lakshman	Harvestable /mature leaves	MS

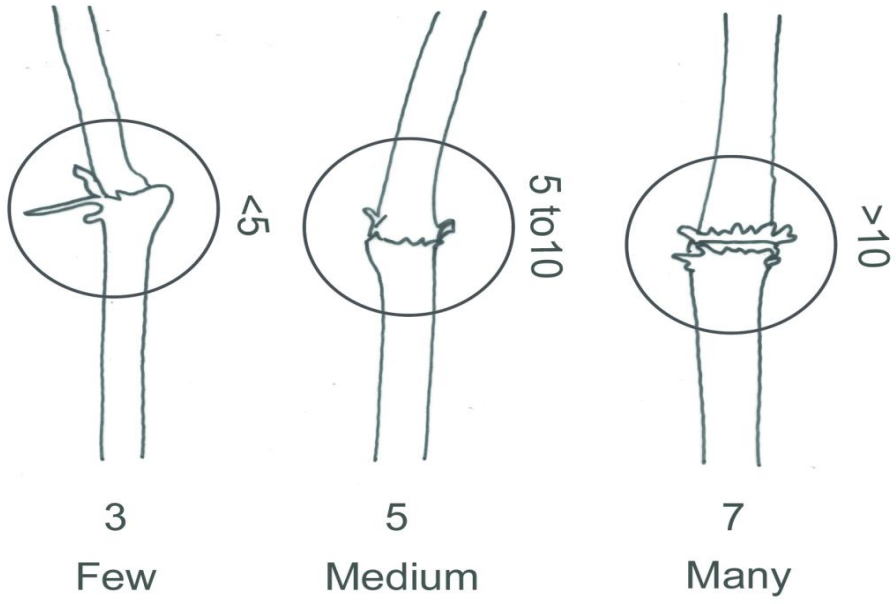
(+)	(Closed)	Medium (1.30-1.50) High (> 1.50)	5 7	Meetha-2 GangarampurSanchi	on orthotropic shoots	
9 (*) (+)	Leaf: Orthotropic Leaf Petiole length (cm) (Closed)	Short (< 6.0) Medium (6.0-8.0) Long (> 8.0)	3 5 7	SimuraliSanchi Lakshman Ghanagette	Harvestable /mature leaves on orthotropic shoots	MS
10 (+)	Leaf:Orthotropic Leaf Thickness (µm) (Closed)	Thin (<190) Medium (190-230) Thick (> 230)	3 5 7	Kalbaghini Bagherhat	Harvestable /mature leaves on orthotropic shoots	MS
11 (+)	Leaf:Depth of Orthotropic leaf lobe (cm) (Closed)	Shallow (<0.60) Medium (0.60-1.20) Deep (>1.20)	3 5 7	Kalbaghini SimuraliBhabna Kari Bangla	Harvestable /mature leaves on orthotropic shoots	MS
12 (+)	Leaf:Width of Orthotropic leaf lobe (cm) (Closed)	Short (<3.50) Medium (3.50-5.00) Long (> 5.00)	3 5 7	Kalbaghini Ghanagette Kari Bangla,	Harvestable /mature leaves on orthotropic shoots	MS
13 (*) (+)	Leaf:Depth / Width of Orthotropic leaf lobe (Closed)	Entire or Slightly lobed (< 0.15) Moderately lobed (0.15- 0.25) Deeply lobed (>0.25)	1 2 3	SimuraliSanchi Kalbaghini Ghanagette	Harvestable /mature leaves on orthotropic shoots	MS
14 (+)	Leaf:Orthotropic leaf apex Shape (open)	Acuminate Acute	1 2	Sirugamani-1 Banavalli	Harvestable leaves on orthotropic shoots six monthly assessment	VG
15 (+)	Leaf:Orthotropic leaf Texture (open)	Glabrous Coriaceous Glabrous membranous	1 2	Banavalli Maghai	Harvestable leaves on Orthotropic shoots	VG
16 (+)	Leaf:Relative distance between basal lobes of Orthotropic leaf (Closed)	Overlapped Close to overlap Separate	1 2	Ghanagette Bankura Bangla	Harvestable /mature leaves on orthotropic shoots	VG

			3	CARI-2		
17 (+)	Number of plagiotropic shoots/unit length (No/m) (open)	Medium (3 to6) High (>6)	5 7	Bangla(UP) Sirugamani 1	Six months after it starts plagiotropic shoot production	MS
18 (+)	Plant:Plagiotropic Shoot Colour (open)	Light Green Green	1 2	SwarnaKapoori CARI-6	After it starts plagiotropic shoot production	VG
19 (**) (+)	Leaf:Plagiotropic leaf colour (open)	Light Green Green Dark Green	1 2 3	Swarna Kapoori Godi Bangla CARI-6	Harvestable leaves on plagiotropic shoots	VG
20 (+)	Leaf:Plagiotropic leaf lamina shape (open)	Elliptic Wide Elliptic Ovate	1 2 3	SwarnaKapoori Sirugamani-I Godi Bangla	Harvestable leaves on plagiotropic shoots	VG
21 (+)	Leaf:Plagiotropic leaf apex Shape. (open)	Acuminate Acute	1 2	Swarna Kapoori Banavalli	Harvestable leaves on plagiotropic shoots	VG
22 (+)	Leaf:Plagiotropic leaf texture. (open)	Glabrous coriaceous Glabrous membraneous	1 2	Banavalli Swarna Kapoori	Harvestable leaves on plagiotropic shoots	VG
23 (**) (+)	Leaf:Plagiotropic leaf l/b ratio (open)	Low (<1.5) Medium (1.5 to 2.0) High (>2.0)	3 5 7	Godi Bangla Sirugamani-1 CARI-6	Harvestable leaves on plagiotropic shoots	MS
24 (**) (+)	Plant:Sex of the plant (open)	Female Male	1 2	HalisaharSanchi Swarna Kapoori	During flowering period	VG
25 (**) (+)	Flowering Habit (open)	Shy flowering Moderateflowering Profuse flowering	3 5 7	Maghai Halisahar Sanchi Swarna Kapoori	During flowering period	VG

26 (**) (+)	Female Catkin: colour (open)	Beige Yellow	2 4	Sirugamani 1 HalisaharSanchi	During flowering period	VG
27 (+)	Female Catkin:length (cm) (open)	Short (<2.5cm) Medium (2.5 to 4cm) Long (>4cm)	3 5 7	Maghai Sirugamani-1 Halisahar Sanchi	During flowering period	MS
28 (**) (+)	Male Catkin:length (cm) (open)	Medium (7.0 to 10 cm) Long (>10cm)	5 7	Swarna Kapoori, IIHR BV96-1	During flowering period	MS
29 (+)	Number of inflorescence /Plagiotropic branch (open)	Low (<2.0) Medium (2.0 to 4.0) High (>4)	3 5 7	Maghai HalisaharSanchi CARI-6	During flowering period	MS

VIII. Explanation for the Table of characteristics

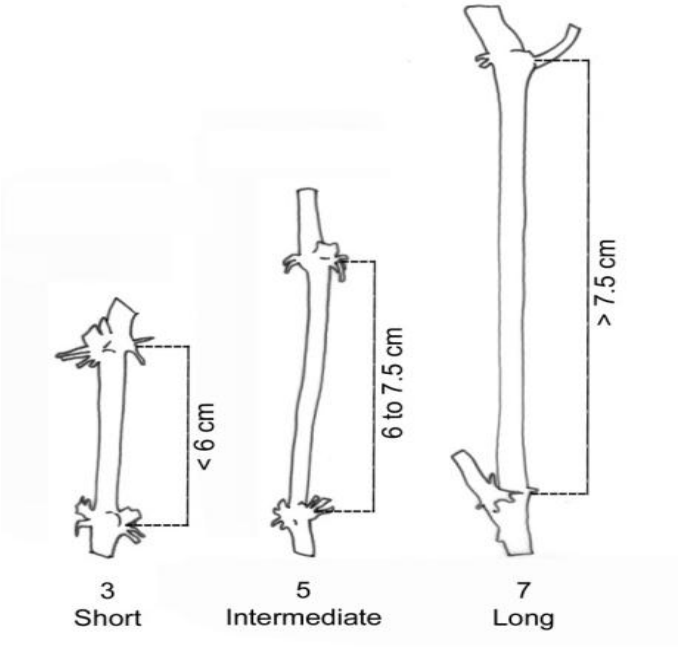
Characteristic 1. Plant: Adventitious root production (Boroj)



Adventitious roots shall be counted at 4th, 5th& 6th nodes from the tip of the orthotropic shoot (mean of 3nodes) from five vines.

Characteristics 2 & 3. Plant: Orthotropic shoot base colour & Orthotropic shoot stripe colour: The overall colour of shoot of betelvine is the combination of ground colour of the stem and colour of the longitudinal stripes on it. Orthotropic shoot colour shall be noted at 3rd and 4th nodes from tip of the vine. The visual assessment of the appearance shall be noted.

Characteristic 4. Plant: Orthotropic shoot internodal length (cm)

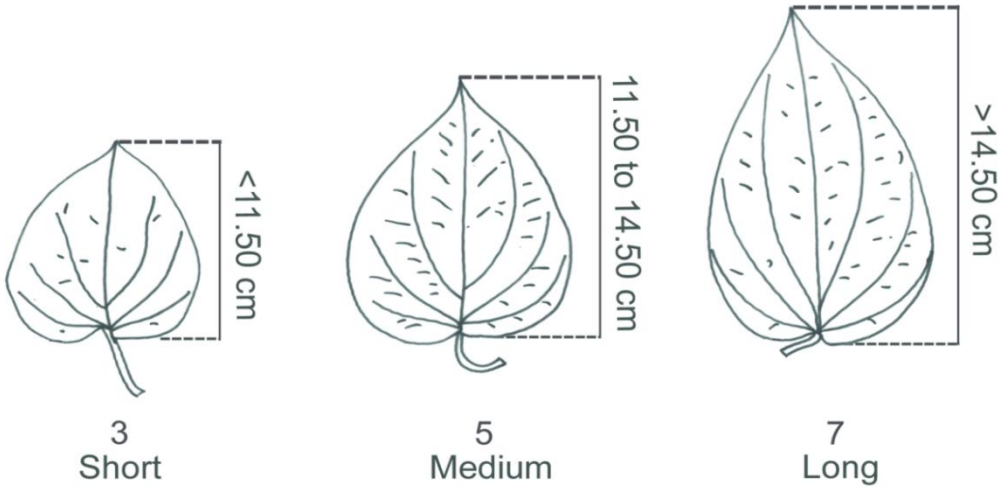


Orthotropic shoot internodal length shall be measured from 5th to 8th internodes from the tip of the orthotropic shoot as mean of 3 nodes from five vines.

Characteristic 5.Leaf: Orthotropic Leaf lamina Colour

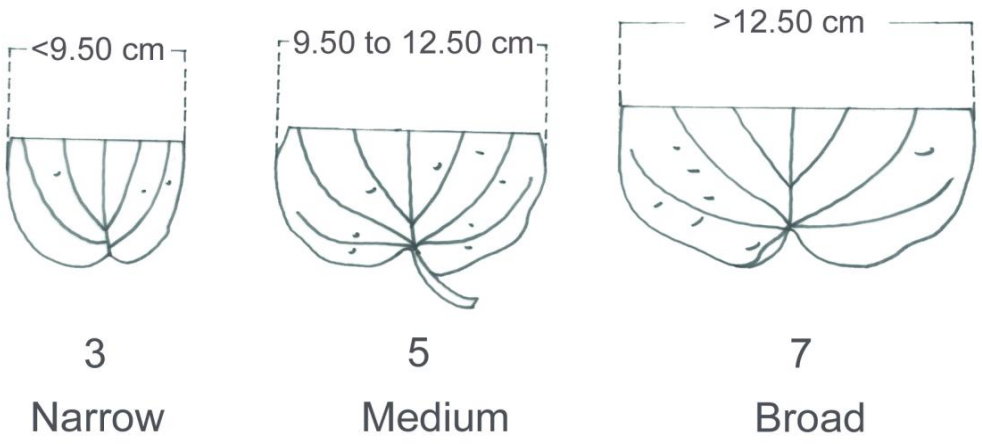
Orthotropic leaf colour shall be observed on harvestable leaves from orthotropic shoot

Characteristic 6. Leaf: Orthotropic Leaf length(l)(cm)



Leaf length will be measured as distance between point of attachment of lamina with petiole and the tip of the leaf from 25 mature leaves of five randomly selected vines.

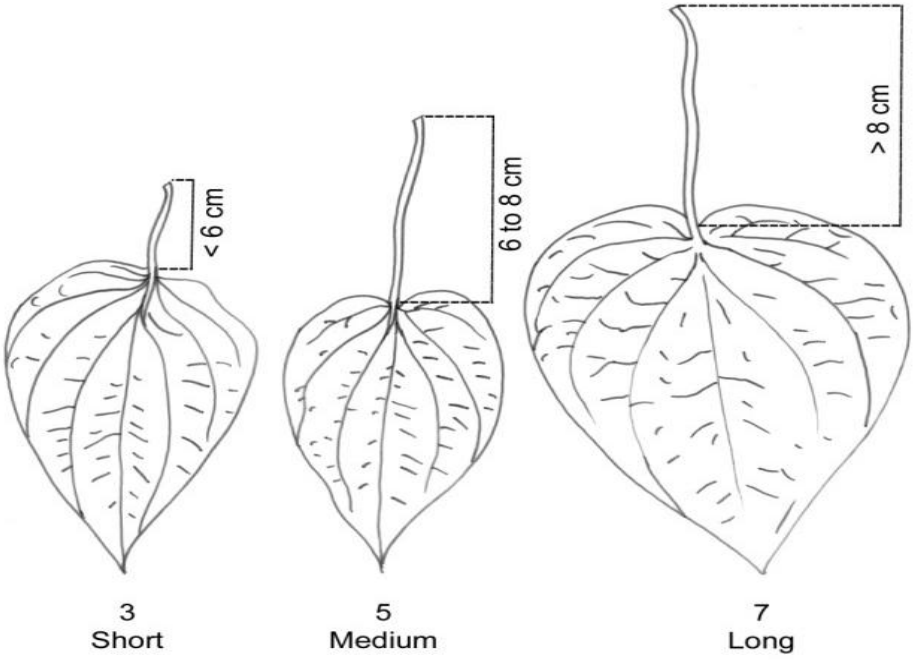
Characteristic 7.Leaf: OrthotropicLeaf breadth (b)(cm)



Leaf width will be measured as maximum distance between two lateral margins with the help of a scale from 25 mature leaves of five randomly selected vines.

Characteristic 8.Leaf: Orthotropic leaf l/b ratio Orthotropic leaf l/b ratio will be calculated as length of leaf divide by width of leaf from 25 observations from five vines.

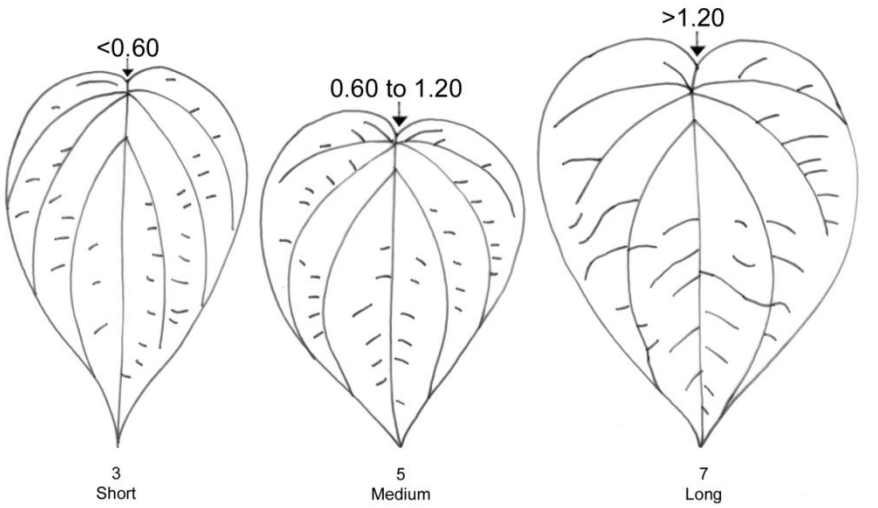
Characteristic 9.Leaf: OrthotropicLeaf petiole length (cm)



Leaf petiole length will be measured as distance between points of attachment of the petiole with shoot and lamina from 25 mature leaves of five randomly selected vines.

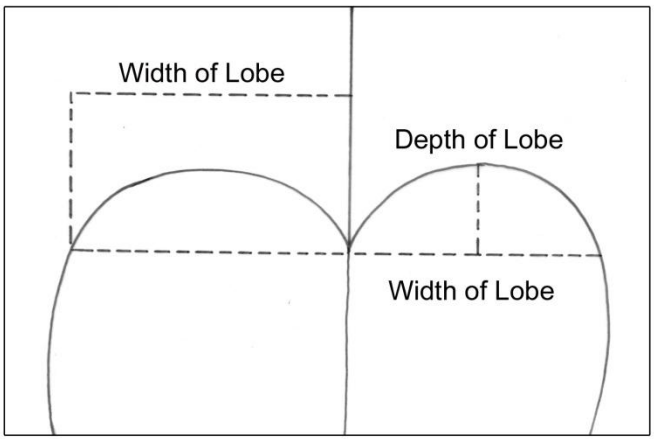
Characteristic 10.Leaf:Orthotropic leaf thickness(µm)Orthotropic leaf thickness will be measured from 25 mature leaves of five randomly selected vines with the help of stereo microscope.

Characteristic 11&12.Leaf:Depth &Width of Orthotropic leaf lobe



(cm)

Depth of lobe will be calculated as length of leaf including lobe subtracted by leaf length (Leaf length from midrib) and measured from 25 mature leaves of five randomly selected vines.



Leaf lobe width will be measured from one side, left or right.

Characteristic 13.Leaf:Depth/ Width of Orthotropicleaf Lobe

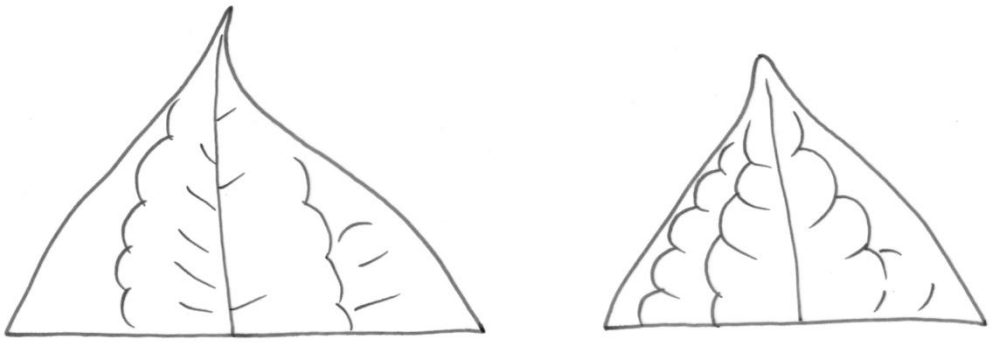
Ratio of lobe depth to width will be calculated. According to ratios, three categories will be made as follows:

Entire or slightly lobed with value (< 0.15) and (Note=1)

Moderately lobed with value (0.15- 0.25) and (Note=2)

Deeply lobed with value (>0.25) and (Note=3)

Characteristic 14.Leaf:Orthotropic leaf apex Shape



1
Acuminate

2
Acute

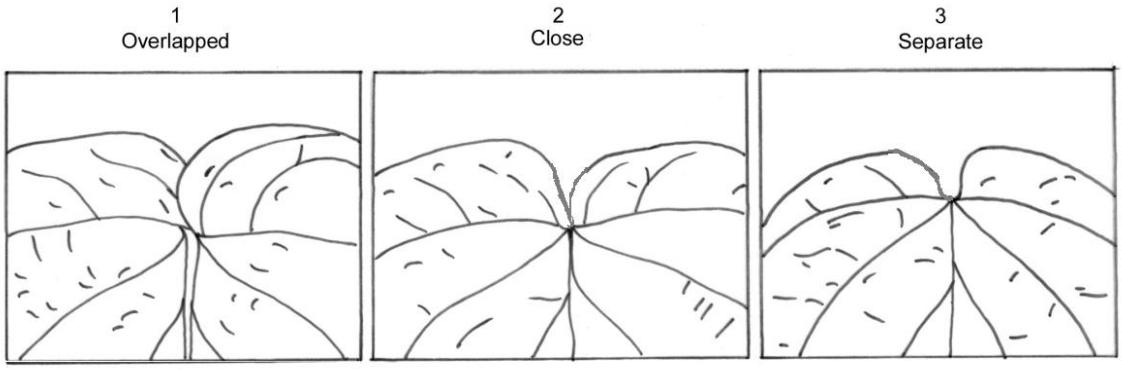
Orthotropic leaf apex Shape is assessed from the harvestable leaves from orthotropic shoot as given below:-

Acuminate- The margins between the apex and 0.75L is concave, curving toward the center of the leaf, or is convex basally and concave apically
Acute-the margin between the apex and 0.75L curves away from the center of the leaf (L=Leaf length)

Characteristic 15.Leaf: Orthotropic leaf Texture

Orthotropic leaf Texture is observed on the harvestable leaves from orthotropic Shoot.
Glabrous coriaceous-Leaf texture is thick and leathery devoid of trichomes
Glabrous membranaceous-Leaf texture is thin devoid of trichomes

Characteristic 16.Leaf: Relative distance between basal lobes of Orthotropic leaf (Boroj)



On the basis of relative distance between basal lobes of leaf, three categories will be made as follows:-

Lobes overlapped (Note=1): when lobes are physically overlapping each other near the point of attachment of lamina and petiole.

Close to overlap (Note=2): when lobes are physically very close but not overlapping.

Separate (Note-3): when lobes are sufficiently apart from each other.

The visual assessment of the appearance shall be noted.

Characteristic 17. Number of Plagiotropic shoots /unit length (No/m)

Number of Plagiotropic shoots /unit length shall be counted in one meter length on the orthotropic shoot leaving 30 cm from the base in five vines.

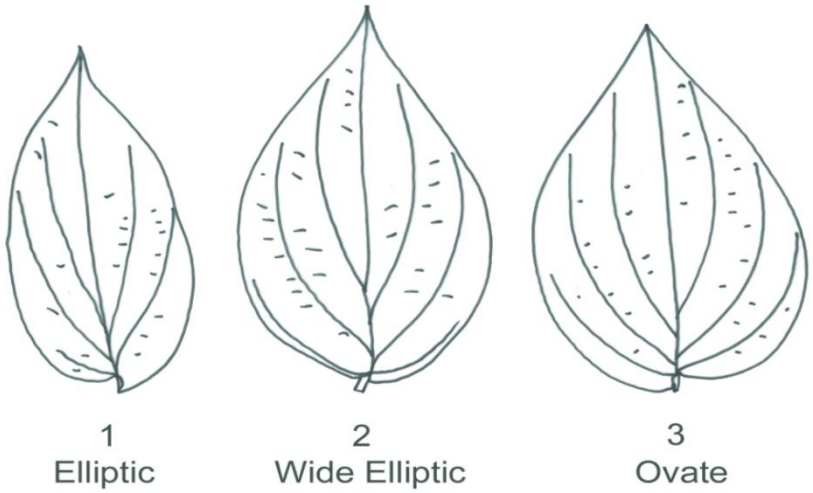
Characteristic18.Plant:Plagiotropic Shoot Colour

Plagiotropic Shoot Colour shall be assessed on Terminal Shoot of plagiotropic shoot between 3rd& 4th node.

Characteristic 19.Leaf:Plagiotropic leaf lamina colour

Plagiotropic leaf colourshall be assessedon harvestable leaves of plagiotropic shoot

Characteristic 20.Leaf:Plagiotropic leaf lamina shape



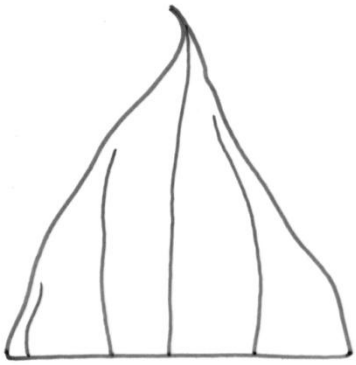
Plagiotropic leaf lamina shape shall be observed from the harvestable leaves of plagiotropic shoots as described below

Elliptic- The widest part of the leaf is on an axis in the middle fifth of the long axis of the leaf

Ovate-The Widest part of the leaf is on axis in the basal 2/5 of the leaf.

Wide Elliptic- The widest part of the leaf is on an axis in the middle fifth of the long axis of the leaf but ovate in shape.

Characteristic 21. Leaf: Plagiotropic leaf apex Shape



1

Acuminate

2

Acute

Plagiotropic leaf apex Shape shall be assessed on the harvestable leaves of plagiotropic shoot

Acuminate- The margins between the apex and 0.75L is concave, curving toward the center of the leaf, or is convex basally and concave apically

Acute-the margin between the apex and 0.75L curves away from the center of the leaf (L= Leaf Length)

Characteristic 22.Leaf: Plagiotropic leaf texture.

Plagiotropic leaf texture shall be observed from the harvestable leaves of plagiotropic shoot

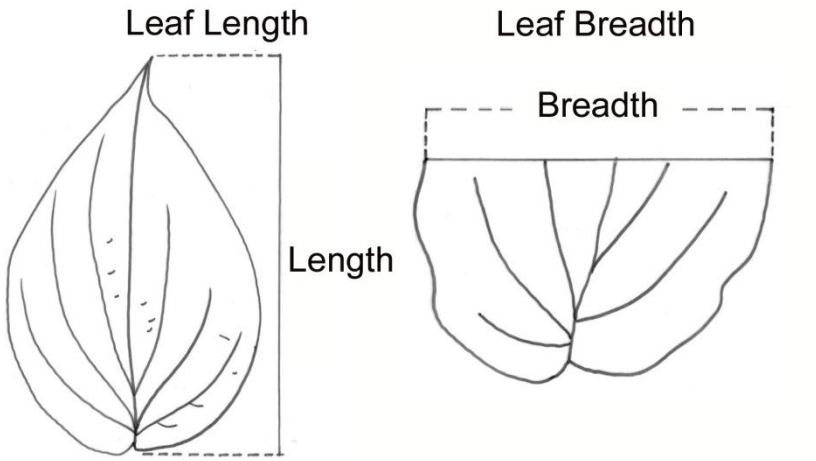
Glabrous coriaceous-Leaf texture is thick and leathery devoid of trichomes

Glabrous membranaceous-Leaf texture is thin and devoid of trichomes

Characteristic 23.Leaf: Plagiotropic leaf l/b ratio

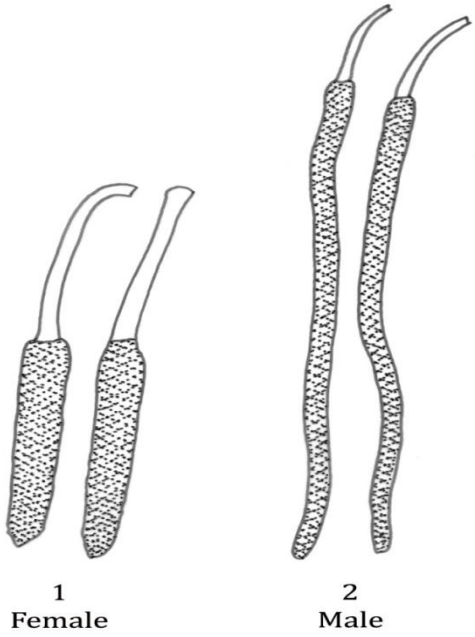
Plagiotropic Leaf length (l): Leaf length will be measured as distance between point of attachment of lamina with petiole and the tip of the leaf from 25 harvestable plagiotropic leaves of five randomly selected vines.

Plagiotropic Leaf breadth (b): Maximum leaf width will be measured as maximum distance between two lateral margins from 25 harvestable plagiotropic leaves of five randomly selected vines.



Plagiotropic leaf l/b ratio is calculated by dividing length /breadth of the leaf (average of 25 leaves from five vines)

Characteristic 24.Plant: Sex of the plant



Sex of the vine shall be assessed from inflorescences borne on plagiotropic shoots

Female- vine with pistillate flowers only.

Male - vine with staminate flowers only.

Characteristic 25:Flowering Habit

Flowering Habit shall be assessed on duration of flowering and number of inflorescences per Plagiotropic shoot

Profuse flowering: Flowering is observed throughout the year and>4 number of inflorescences per plagiotropic shoot

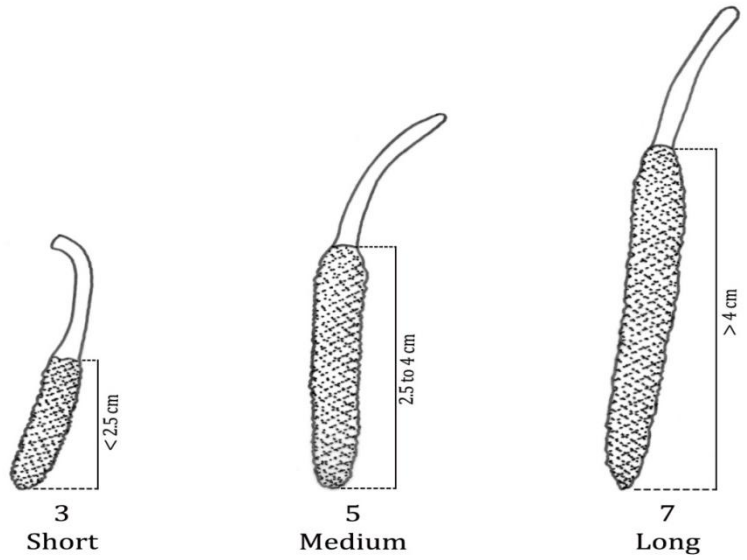
Moderate flowering: Flowering observed for 4-5 months and 2 to 4 inflorescences per plagiotropic shoot

Shy flowering: Flowering is observed for 1-2 months or less and < 2 inflorescence per plagiotropic shoot

Characteristic 26.Female Catkin:colour

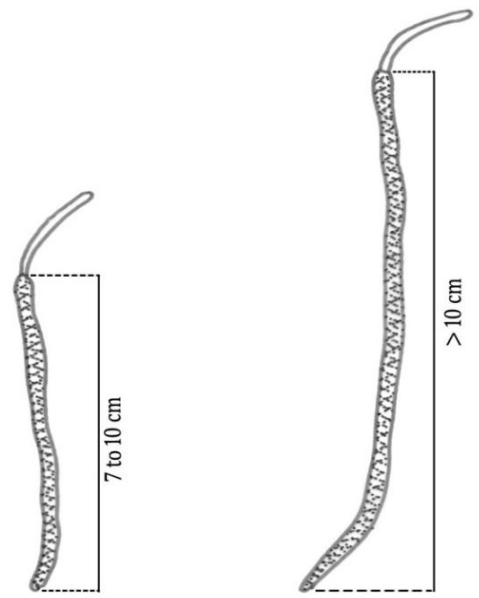
Inflorescence colourshall be observedon inflorescences found on plagiotropic shoots of female varieties/hybrids

Characteristic 27.Female Catkin: length (cm)



Inflorescence length shall be measured on Inflorescences on plagiotropic shoots at full bloom stage in female varieties/hybrids (average of 10 female inflorescences)

Characteristic 28.maleCatkin: length (cm)



Inflorescence length shall be measured on Inflorescences on plagiotropic shoots at full bloom stage in male varieties/hybrids (average of observations on 10 male inflorescences)

Characteristic 29: Number of inflorescence /plagiotropic shoots

Number of inflorescence /plagiotropic shoots shall be counted on plagiotropic shoots (average of 15 plagiotropic shoots from five vines)

IX. Literature

1. Smithsonian Institution,1999, Manual of leaf Architecture, Morphological description and categorization of dicotyledonous and net-veined monocotyledonous angiosperms, page nos:18, 23,24,47

2. American Journal of Botany, Classification of the Architecture of Dicotyledonous Leaves Author(s): Leo J. Hickey Source: American Journal of Botany, Vol. 60, No. 1 (Jan., 1973), pp. 17-33 Published by: Botanical Society of America Stable URL: http://www.jstor.org/stable/2441319

3. Vascular Plant Systematics, Radford, A. E., W. C. Dickison, J. R. Massey, C. R. Bell. 1976, URL: http://www.ibiblio.org/botnet/glossary**/,**pagenos:107,130,132,134,144

4. Guidelines for the conduct of Test for Distinctiveness, Uniformity and Stability on Black Pepper (*Piper nigrum L.*)

X. Working group details

The test guidelines developed by the task force (09/2014) constituted by the PPV & FR Authority for **Betelvine** with consultation by Indian Institute of Horticultural Research (IIHR) Bangalore and Bidhan Chandra KrishiViswavidyalaya (BCKV), Kalyani, West Bengal and Technical inputs also provided by the PPV & FR Authority and nodal officer.

The members of the Task Force

1. **Dr. D.P. Biradar** — **Chairman**
   Vice – Chancellor
   University of Agricultural Sciences, Yettinagudda Campus,
   Krishinagar, Dharwad – 580 005 (Karnataka)

2. **Dr. Kandipudi Nirmal Babu** — **Member**
   Project Coordinator,
   All India Coordinated Research Project on Spices (AICRPS)
   Indian Institute of Spices Research, Manikunnu Post, Calicut-673012

3. **Dr. Z. Abraham** — **Member**
   Principal Scientist (Retd.)
   B-104, Gardenia Jasminoides, Second Cross, Lakshmaiah Layout,
   Opposite Agara Lake, Horamavu, Bangalore - 560043, Karnataka

4. **Dr. (Mrs) K. Hima Bindu**
   Senior Scientist (Plant Breeding) & PI Nodal Centre, — **Member**
   Section of Medicinal Crops, Indian Institute of Horticultural Research,
   Bengaluru-560089

5. Dr. B.K. Das **Member**
Associate Professor & Officer-in-Charge,
AICRP & PI Co-Nodal Centre
on Medicinal and Aromatic Plants & Betelvine,
Directorate of Research, Bidhan Chandra Krishi Viswavidyalaya,
Kalyani, Nadia, West Bengal - 741 235

6. Dr. N. K. Biradarpatil **Special Invitee**
Dean (Agriculture)
College of Agriculture, Bijapur**,** Karnataka

7. Dr. Ravi Prakash **Member**
Registrar, PPV & FRA, New Delhi **Secretary**

XI. DUS testing centers

Nodal DUS test centre	**Co nodal DUS Test Center**
ICAR-Indian Institute Horticultural Research(IIHR),Hessaraghatta lake post,Bangalore-560089	Bidhan Chandra KrishiViswavidyalaya (BCKV), Kalyani, Nadia, West Bengal- 741 235

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.10,000/- (Rupees Ten Thousand Only) by way of Demand Draft drawn in favour of " 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

1. Application No. | **E5** | **GH13** | **11** | **424** | filed on 18.07.2011by **Monsanto Holdings Pvt. Ltd, Ahura Centre, 5th floor, 96, Mahakali Caves Road, Andheri (East), Mumbai-400093** fora **Extant (VCK)** of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **S07H878 BGII** 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 **: S07H878 BGII**
Applicant : **Monsanto Holdings Pvt. Ltd.**
Address of the Applicant : Ahura Centre, 5th floor, 96, Mahakali Caves Road, Andheri (East), Mumbai-400093

Nationality of Applicant : Indian
Application details
a. Number : **E5** | **GH13** | **11** | **424**
b. Date of receipt : 18.07.2011
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : S07H878 BGII
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Transgenic (Hybrid)
Previously proposed Denomination : Not applicable

Name of Parental Material:IC1153N X IC1156B2
Source of Parental material **: In-house germplasm of Monsanto Holding Pvt. Ltd.**
Name of Reference Varieties : Sahana, Supriya
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream

Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Round
Fibre: Length (2.5% span length)(mm)	Long to very long
B. Distinct Characteristics: S07H878 BGII has distinguishing character as Leaf hairiness : **Medium,** Boll shape(longitudinal section):**Round**	
C. Reference varieties: Sahana has distinguishing character as Leaf hairiness : **Sparse,** Boll shape (longitudinal section): **Ovate** **Supriya** has distinguishing character as Leaf hairiness : **Sparse**	
D. Date of commercialization of the variety	16/04/2010 sold as MaxxCot BG II
E. Agronomic and commercial attributes	The candidate variety, S07H878 BGII is a *G. hirsutum x G. hirsutum* Cotton hybrid recommended for Haryana, Punjab and Rajasthan states under assured irrigation cultivation. It needs a spacing of 105 x 60 cm or 67.5 x 75 cm in medium to heavy soils and a RDF of 120-60-40 kg NPK per hectare for optimum yields. It is a semi spreading hybrid maturing in 160-170 days. It is moderately tolerant to sucking pests like white fly, Jassids and Thrips. It is a big boll hybrid with good boll opening and good fiber qualities.

Photographs: (See Figure-1)

2. Application No. | **E60** | **GH71** | **09** | **174** | filed on 16.04.2009by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-106** 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 **: NC-106**

Applicant : **Nuziveedu Seeds Ltd.**

Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian

Application details

a. Number : | **E60** | **GH71** | **09** | **174** |

b. Date of receipt : 16.04.2009

c. Date of acceptance : --

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

Denomination : NC-106

Type of Variety : Extant(Variety of Common Knowledge)

Classification of Variety : Other (Parental line)

Previously proposed Denomination : Not applicable

Name of Parental Material :**(**NCGP-745 X HS 6)-16-8-8-3-1

Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.

Name of Reference Varieties **:** G. cot 12

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Yellow
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Long to medium long
B. Distinct Characteristics: NC-106 has distinguishing character as Flower: Petal colour : **Yellow**	
C. Reference variety: **G. cot 12**has distinguishing character as Flower: Petal colour : **Cream**	
D. Date of commercialization of the variety	12/06/2001
E. Agronomic and commercial attributes	Plant Height: Tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll shape & size: Ovate & Medium, Response to fertilizer and irrigation: Responds to added fertilizers, Reaction to major pests: Moderate tolerance to jassids and thrips, Quality characteristics of the variety: Ginning > 37%, Strength: 21.0-24.0, Mic: 3.0-3.9, Expected yield of the variety: 1200-1400 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining

	ability and moderately tolerant to sucking pest.

Photographs: (See figure-2)

3. Application No. | **E340** | **GH145** | **08** | **476** | filed on 27.10.2008by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **Omkar Bt (NCS 950 Bt)** 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 **: OmkarBt (NCS 950 Bt)**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : **E340** | **GH145** | **08** | **476**
b. Date of receipt : 27.10.2008
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : Omkar Bt (NCS 950 Bt)
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Transgenic & Hybrid
Previously proposed Denomination : Not applicable
Name of Parental Material : (NC 142 Bt X NC 1102 Bt)
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** Sahana
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Yellow

Boll: Shape (longitudinal section)	Round
Fibre: Length(2.5% span length)(mm)	Long
B. Distinct Characteristics: OmkarBt (NCS 950 Bt)has distinguishing character as Flower: Pollen colour: **Yellow**	
C. Reference variety: **Sahana** has distinguishing character as Flower: Pollen colour: **Cream**	
D. Date of commercialization of the variety	08/06/2007
E. Agronomic and commercial attributes	Plant Height: Tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll shape & size: Round&Large, Response to fertilizer and irrigation: Responds to added fertilizers, Reaction to major pests: Resistant to American Bollworm, Quality characteristics of the variety: Ginning 33-34%, Strength: 21.0-24.0, Mic: 4.0-4.9, Expected yield of the variety: 2200-2500 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a long staple length with big boll.

Photographs: (See figure-3)

4. Application No. | **E344** | **GH148** | **08** | **480** | filed on 03.11.2008 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** for a **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **Super Mallika Bt (NCS 955 Bt)** 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 **: Super Mallika Bt (NCS 955 Bt)**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : **E344** | **GH148** | **08** | **480**
b. Date of receipt : 03.11.2008
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : Super Mallika Bt (NCS 955 Bt)
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Transgenic & Hybrid
Previously proposed Denomination : Not applicable
Name of Parental Material : (NC 113Bt X NC 1102 Bt)
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** Sahana

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Yellow
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Long

B. Distinct Characteristics: Super Mallika Bt (NCS 955 Bt) has distinguishing character as Flower: Pollen colour : **Yellow**	
C. Reference variety: **Sahana** has distinguishing character as Flower: Pollen colour: **Cream**	
D. Date of commercialization of the variety	**13.06.2007**
E. Agronomic and commercial attributes	Plant Height: Tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll shape & size: Ovate&very large, Response to fertilizer and irrigation: Responds to added fertilizers, Reaction to major pests: Resistant to American Bollworm, Quality characteristics of the variety: Ginning 35-36%, Strength: 21.0-24.0, Mic: 3.0-3.9, Expected yield of the variety: 2600-3100 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a high ginning with big boll.

Photographs: (See figure-4)

5. Application No. | **E86** | **GH98** | **09** | **202** | filed on 22.04.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-185** 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 **: NC-185**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : | **E86** | **GH98** | **09** | **202** |
b. Date of receipt : 22.04.2009
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : NC-185

Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Other (Inbred Parent Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : **(**NCGP-741 X AKH-081)-15-7-5-2-1
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** Kanchana
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Yellow
Flower: Pollen colour	Yellow
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Medium long
B. Distinct Characteristics: NC-185has distinguishing character as Leaf: Colour: **Light green**, Seed: Index (100 seed wt in gram) : **Bold.**	
C. Reference variety: **Kanchana** has distinguishing character as Leaf: Colour: **Green**, Seed: Index (100 seed wt in gram) : **Medium**	
D. Date of commercialization of the variety	The candidate variety NC-185 is one of the Parental lines of our Cotton Hybrid NCS-109 registered in 19-05-1999. Which was first sold on 24-04-2001.
E. Agronomic and commercial attributes	Plant Height: Medium Tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll shape & size: Ovate &Medium, Response to fertilizer and irrigation: Responds to added fertilizers, Reaction to major pests: Tolerance to Thrips, Jassids and grey mildew, Quality characteristics of the variety: Ginning 35-36%, Strength: 21.0-24.0, Mic: 3.0-3.9, Expected yield of the variety: 1000-1400 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability and good tolerance to sucking pest.

Photographs: (See figure-5)

6. Application No. | **E107** | **GH119** | **09** | **228** | filed on 05.05.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-1171** 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 **: NC-1171**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : **E107** | **GH119** | **09** | **228**
b. Date of receipt : 05.05.2009
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : **NC-1171**
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Other (Inbred Parent Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : (NDL-1325X BN-1)
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** MCU 8 & Narasimha
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Long

B. Distinct Characteristics: NC-1171has distinguishing character as Leaf: Colour: **Light green**.	
C. Reference variety: **MCU 8 and Narasimha** has distinguishing character as Leaf: Colour: **Green.**	
D. Date of commercialization of the variety	The candidate variety NC-1171 is one of the Parental lines of our Cotton Hybrid NCS-999 registered in 2005. Which was first sold on 07-05-2005.
E. Agronomic and commercial attributes	Plant Height: Tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll shape & size: Ovate &Small, Response to fertilizer and irrigation: Responds to added fertilizers, Reaction to major pests and stress: Moderate tolerance to Thrips, Jassids and drought tolerance, Quality characteristics of the variety: Ginning> 37%, Strength: 25.0-28.0, Mic: 4.0-4.9, Expected yield of the variety: 1300-1500 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability and good bearing ability.

Photographs: (See figure-6)

7. Application No. | **E63** | **GH74** | **09** | **177** | filed on 16.04.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-113** 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 **: NC-113**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : | **E63** | **GH74** | **09** | **177** |
b. Date of receipt : 16.04.2009

c. Date of acceptance : --

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

Denomination : **NC-113**

Type of Variety : Extant(Variety of Common Knowledge)

Classification of Variety : Other (Inbred Parent Line)

Previously proposed Denomination : Not applicable

Name of Parental Material : (DS 59 X NCGP-692)

Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.

Name of Reference Varieties **:** Supriya

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Long
B. Distinct Characteristics: NC-113 has distinguishing character as Flower: Pollen colour: **Cream**.	
C. Reference variety: **Supriya** has distinguishing character as Flower: Pollen colour: **Yellow.**	
D. Date of commercialization of the variety	The candidate variety NC-113 is one of the Parental lines of our Cotton Hybrid NCS-104 registered in 1999. Which was first sold on 19-05-1999.
E. Agronomic and commercial attributes	Plant Height: Tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Response to fertilizer and irrigation: Responds to added fertilizers, Quality characteristics of the variety: Ginning 33-34%, Strength: 25.0-28.0, Mic: <3.0, Expected yield of the variety: 900-1000 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability and good boll size.

Photographs: (See figure-7)

8. Application No. | **E99** | **GH111** | **09** | **215** | filed on 22.04.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-1108** 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 **: NC-1108**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : **E99** | **GH111** | **09** | **215**
b. Date of receipt : 22.04.2009
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : **NC-1108**
Type of Variety : Extant (Variety of Common Knowledge)
Classification of Variety : Other (Inbred Parent Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : [BN x (F 846 x RST 9)]-12-8-3-3-1
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** Supriya, Sahana

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Long

B. Distinct Characteristics: NC-1108 has distinguishing character as Flower: Pollen colour: **Cream**.	
C. Reference variety: **Supriya** has distinguishing character as Flower: Pollen colour: **Yellow.**	
D. Date of commercialization of the variety	The candidate variety NC-1108 is one of the Parental lines of our Cotton Hybrid NCS-165 and NCS-175 registered in 2000. Which was first sold on 29-04-2000.
E. Agronomic and commercial attributes	Plant Height: Tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll size: Large, Response to fertilizer and irrigation: Responds to added fertilizers, Reaction to major pests: Moderate tolerance to white flies and thrips, Quality characteristics of the variety: Ginning >37%, Strength: 21.0-24.0, Mic: 3.0-3.9, Expected yield of the variety: 1300-1500 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability and good yielder.

Photographs: (See figure-8)

9. Application No. | **E57** | **GH68** | **09** | **171** | filed on 16.04.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-90** 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 **: NC-90**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : **E57** | **GH68** | **09** | **171**
b. Date of receipt : 16.04.2009
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]

Denomination : **NC-90**
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Other (Inbred Parent Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : (NCGP-633 x SURAT DWARF) 13-9-2-3-1
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** G Cot 16 & Abadhita

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Round
Fibre: Length(2.5% span length)(mm)	Medium long
B. Distinct Characteristics: NC-90 has distinguishing character as Leaf: Colour: **Light Green**, Boll : Shape: **Round**, Seed: Index (100 seed wt in gram): **Medium**, Fibre : Length (2.5% span length)(mm): **Medium long**.	
C. Reference variety: **G Cot 16** has distinguishing character as Leaf: Colour: **Green**, Boll : Shape: **Ovate**, Seed: Index (100 seed wt in gram): **Bold**, Fibre : Length (2.5% span length)(mm): **Long**. **Abadhita** has distinguishing character as Leaf: Colour : **Green**, Boll : Shape: **Ovate**, Seed: Index (100 seed wt in gram): **Bold**.	
D. Date of commercialization of the variety	The candidate variety NC-90 is one of the Parental lines of our Cotton Hybrid NCS-88 registered in 1999. Which was first sold on 12/05/1999.
E. Agronomic and commercial attributes	Plant Height: Semi dwarf, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll Shape & size: Round and Small, Response to fertilizer and irrigation: Responds to added fertilizers, Quality characteristics of the variety: Ginning 35-36%, Strength: 17.0-20.0, Mic: 3.0-3.9, Expected yield of the variety: 1200-1600 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability and good bearing ability with good yielder in production.

Photographs: (See figure-9)

10. Application No. | **E54** | **GH65** | **09** | **168** | filed on 16.04.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401**

fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-62** 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 **: NC-62**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : **E54** **GH65** **09** **168**
b. Date of receipt : 16.04.2009
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : **NC-62**
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Other (Inbred Parent Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : NCGP-707(having GM source) x NCGP-449
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** G Cot 12 & Anjali
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Round
Fibre: Length(2.5% span length)(mm)	Medium long
B. Distinct Characteristics: NC-62has distinguishing character as Leaf: Hairiness: **Medium,** Flower: Petal colour **: Yellow**	
C. Reference variety: **G Cot 12**has distinguishing character as Leaf: Hairiness: **Dense,** Flower: Petal colour **: Cream Anjali**has distinguishing character as Flower: Petal colour **: Cream.**	

D. Date of commercialization of the variety	The candidate variety NC-62 is one of the Parental lines of our Cotton Hybrid NCS-88 registered in 1999. Which was first sold on 27/04/2001.
E. Agronomic and commercial attributes	Plant Height: Medium tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll size: Small, Response to fertilizer and irrigation: Responds to added fertilizers, Reaction to major pests: Moderate tolerance to jassids and thrips, Quality characteristics of the variety: Ginning 35-36%, Strength: 21.0-24.0, Mic: 3.0-3.9, Expected yield of the variety: 600-800 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability.

Photographs: (See figure-10)

11. Application No. | **E77** | **GH89** | **09** | **193** | filed on 22.04.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-167** 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 **: NC-167**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : | **E77** | **GH89** | **09** | **193** |
b. Date of receipt : 22.04.2009
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : **NC-167**
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Other (Inbred Parent Line)
Previously proposed : Not applicable

Denomination

Name of Parental Material : (MCU 7 x NCGP-980)-14-4-4-2-1

Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.

Name of Reference Varieties **:** G Cot 16, Abadhita

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Long
B. Distinct Characteristics: NC-167has distinguishing character asSeed: Index (100 seed wt in gram): **Medium.**	
C. Reference variety: **G Cot 16, Abadhita** has distinguishing character as Seed: Index (100 seed wt in gram): **Bold.**	
D. Date of commercialization of the variety	The candidate variety NC-167 is one of the Parental lines of our Cotton Hybrid NCS-113 registered in 1999. Which was first sold on 27-04-2001.
E. Agronomic and commercial attributes	Plant Height: Tall, Growth Habit: Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll size: Medium, Response to fertilizer and irrigation: Responds to added fertilizers, Reaction to major pests: Moderate tolerance to jassids and thrips, Quality characteristics of the variety: Ginning 35-36%, Strength: 21.0-24.0, Mic: <3.0, Expected yield of the variety: 1100-1400 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability and good boll size.

Photographs: (See figure-11)

12. Application No. | **E3** | **GH27** | **10** | **35** | filed on 08.02.2010 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-181** 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 **: NC-181**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : **E3** | **GH27** | **10** | **35**
b. Date of receipt : 08.02.2010
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : **NC-181**
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Other (Inbred Parent Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : **(AK 32 x (NCGP-990 x SURAT DWARF))-13-8-3-2-1**
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** Kanchana, LRA 5166

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Yellow
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Round
Fibre: Length(2.5% span length)(mm)	Medium
B. Distinct Characteristics: NC-181has distinguishing character as Leaf: Colour: **Light Green,** Flower: Petal colour: **Yellow,** Fibre: Length (2.5% span length)(mm): **Medium.**	
C. Reference variety: **Kanchana** has distinguishing character as Leaf: Colour: **Green,** Fibre: Length (2.5% span length)(mm): **Long.** **LRA 5166** has distinguishing character as Flower: Petal colour: **Cream,** Fibre: Length (2.5% span length)(mm): **Long.**	
D. Date of commercialization of the variety	The candidate variety NC-181 is one of the Parental lines of our Cotton Hybrid NCS-113 was sold on dt 19.05.1999

E. Agronomic and commercial attributes	Plant Height: Semi dwarf, Growth Habit: Compact, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll shape & size: Round & Small, Response to fertilizer & irrigation: Responds to added fertilizers, Quality characteristics of the variety: Ginning 35-36%, Strength: 17.0-20.0, Mic: 4.0-4.9, Expected yield of the variety: 800-1000 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability and good plant type..

Photographs: (See figure-12)

13. Application No. | **E58** | **GH69** | **09** | **172** | filed on 16.04.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-91** 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 **: NC-91**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : **E58** | **GH69** | **09** | **172**
b. Date of receipt : 16.04.2009
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : **NC-91**
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Other (Inbred Parent Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : **(NC-99 X L 389)-11-8-5-3-1**
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** MCU 12, MCU 5 VT
Variety Description:

A. Group Characteristics	Remarks measured values, example varieties, etc.
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Yellow
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Extra long
B. Distinct Characteristics: NC-91 has distinguishing character as Fibre: Colour : **White.**	
C. Reference variety: **MCU 12, MCU 5 VT**has distinguishing character as Fibre: Colour: **Cream.**	
D. Date of commercialization of the variety	The candidate variety NC-91 is one of the Parental lines of our Cotton Hybrid NCS-999 registered in 2005.
E. Agronomic and commercial attributes	Plant Height: Very tall, Growth Habit: Semi spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll shape & size: Ovate&Very large, Response to fertilizer & irrigation: Responds to added fertilizers, Reaction to major pests: Moderate tolerance to thrips, Quality characteristics of the variety: Ginning 33-34%, Strength: 25.0-28.0, Mic: 3.0-3.9, Expected yield of the variety: 1000-1200 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability and has good fiber quality with good plant type.

Photographs: (See figure-13)

14. Application No. | **E80** | **GH92** | **09** | **196** | filed on 22.04.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-172** 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 : NC-172

Applicant : **Nuziveedu Seeds Ltd.**

Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian

Application details

a. Number : **E80** | **GH92** | **09** | **196**

b. Date of receipt : 22.04.2009

c. Date of acceptance : --

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

Denomination : **NC-172**

Type of Variety : Extant(Variety of Common Knowledge)

Classification of Variety : Other (Inbred Parent Line)

Previously proposed Denomination : Not applicable

Name of Parental Material : **[LPS 141 (L 389 x NCGP-683)]-11-8-6-2-1**

Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.

Name of Reference Varieties **:** F1378

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Ovate
Fibre: Length (2.5% span length)(mm)	Long
B. Distinct Characteristics: NC-172has distinguishing character asGinning %: **Very high.**	
C. Reference variety: **F1378**has distinguishing character as Ginning %: H**igh.**	
D. Date of commercialization of the variety	The candidate variety NC-172 is one of the Parental lines of our Cotton Hybrid NCS-556 registered in 2004. The first sold on 03-06-2003.
E. Agronomic and commercial attributes	Plant Height: Medium tall, Growth Habit: Semi spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll shape & size: Round&Medium, Response to fertilizer & irrigation: Responds to added fertilizers, Quality characteristics of the variety: Strength: 25.0-28.0, Mic: 3.0-3.9, Expected yield of the variety: 1000-1200 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability.

Photographs: (See figure-14)

15. Application No. | **E82** | **GH94** | **09** | **198** | filed on 22.04.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-174** 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 **: NC-174**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : **E82** | **GH94** | **09** | **198**
b. Date of receipt : 22.04.2009
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : **NC-174**
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Other (Inbred Parent Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : **(NCGP 707 (GMS) x NCGP 610)**
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** Sahana, Supriya

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Yellow
Boll: Shape (longitudinal section)	Ovate
Fibre: Length (2.5% span length)(mm)	Medium long
B. Distinct Characteristics: NC-174has distinguishing character as Flower: Pollen colour**: Yellow,** Fibre: strength**: Weak.**	

C. Reference variety: **Sahana** has distinguishing character as Flower: Pollen colour**: Cream,** Fibre: strength**: Medium.** **Supriya** has distinguishing character as Fibre: strength**: Medium.**	
D. Date of commercialization of the variety	The candidate variety NC-174 is one of the Parental lines of our Cotton Hybrid ANITHA registered in 1997. The first sold on 29-05-1999.
E. Agronomic and commercial attributes	Plant Height: Very tall, Growth Habit: Semi spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll shape & size: Round &Large, Response to fertilizer & irrigation: Responds to added fertilizers, Reaction to major Pests: Good tolerance to jassids, thrips and resistance to grey mildew, Quality characteristics of the variety: Ginning 31-32% Strength: 25.0-28.0, Mic: 3.0-3.9, Expected yield of the variety: 800-1000 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability and good plant type.

Photographs: (See figure-15)

16. Application No. | **E111** | **GH123** | **09** | **232** | filed on 05.05.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-170** 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 **: NC-170**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : | **E111** | **GH123** | **09** | **232** |
b. Date of receipt : 05.05.2009
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]

Denomination : **NC-170**
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Other (Inbred Parent Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : **[F 1378 x (F 286 x NCGP-359)]-17-11-6-3-2**
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** Abadhita, F 1378
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Round
Fibre: Length(2.5% span length)(mm)	Medium long
B. Distinct Characteristics: NC-170 has distinguishing character asBoll: Shape (longitudinal section)**: Round**	
C. Reference variety: **Abadhita, F 1378**has distinguishing character asBoll: Shape (longitudinal section)**: Ovate** **.**	
D. Date of commercialization of the variety	The candidate variety NC-170 is one of the Parental lines of our Cotton Hybrid NCS-109 registered in 1999. The first sold on 27-04-2001.
E. Agronomic and commercial attributes	Plant Height: Tall, Growth Habit: Semi spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll shape & size: Round &Medium, Response to fertilizer & irrigation: Responds to added fertilizers, Quality characteristics of the variety: Ginning 35-36% Strength: 17.0-20.0, Mic: <3.0, Expected yield of the variety: 1100-1300 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability.

Photographs: (See figure-16)

17. Application No. | **E56** | **GH62** | **09** | **165** | filed on 16.04.2009 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NC-47** 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 **: NC-47**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : **E56** **GH62** **09** **165**
b. Date of receipt : 16.04.2009
c. Date of acceptance : --
Crop (Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : **NC-47**
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Other (Inbred Parent Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : **[G 67 x (NCGP-690 x NCGP-693)]**
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** F 1378, Abadhita

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Round
Fibre: Length(2.5% span length)(mm)	Long
B. Distinct Characteristics: NC-47has distinguishing character asBoll: Shape (longitudinal section)**: Round,** seed index (100 seed wt. in gram)**: Bold.**	
C. Reference variety: **F 1378**has distinguishing character asBoll: Shape (longitudinal section)**: Ovate,** seed index (100 seed wt. in gram)**: Medium.** **Abadhita** has distinguishing character as Boll: Shape (longitudinal section)**: Ovate.**	
D. Date of commercialization of the variety	The candidate variety NC-47 is one of the Parental lines of our Cotton Hybrid NCS-165 registered in 1999.
E. Agronomic and commercial attributes	Plant Height: Medium tall, Growth Habit: Semi spreading, Days to 50% flowering: >60 days, Maturity Group: Late, Boll

	shape & size: Round & Medium, Response to fertilizer & irrigation: Responds to added fertilizers, Reaction to major pests: Moderate tolerance to thrips, Quality characteristics of the variety: Ginning >37% Strength: 21.0-24.0, Mic:4.0-4.9, Expected yield of the variety: 1200-1600 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: it has a good combining ability.

Photographs: (See figure-17)

18. Application No. | **E15** | **GH47** | **11** | **486** | filed on 18.08.2011 by **Nuziveedu Seeds Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **NCS-9028 Bt2** 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 **: NCS-9028 Bt2**
Applicant : **Nuziveedu Seeds Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana-501401

Nationality of Applicant : Indian
Application details
a. Number : | **E15** | **GH47** | **11** | **486** |
b. Date of receipt : 18.08.2011
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : NCS-9028 Bt2
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Transgenic & Hybrid
Previously proposed Denomination : Not applicable
Name of Parental Material : **(**NC 158 Bt2 X NC 185)
Source of parental material : R&D Farm, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** Suvin

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Yellow
Flower: Pollen colour	Yellow
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Long
B. Distinct Characteristics: NCS-9028 Bt2 has distinguishing character as Flower Petal colour: **Yellow**, Flower: Pollen colour: **Yellow,** Boll shape (Longitudinal section)**: Ovate,** Fibre Length**: Week.**	
C. Reference variety: **Suvin** has distinguishing character as Flower Petal colour: **Deep Yellow**, Flower: Pollen colour: **Deep Yellow,** Boll shape (Longitudinal section)**: Elliptic,** Fibre Length**: Strong.**	
D. Date of commercialization of the variety	19/06/2010
E. Agronomic and commercial attributes	Plant Height: Tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll size: Large, Response to fertilizer and irrigation: Responds to added fertilizers, Reaction to major pests: Resistant to American Bollworm and spotted bollworm, Quality characteristics of the variety: Ginning >37%, Strength: 21.0-24.0, Mic: 3.0-3.9, Expected yield of the variety: 2500-3000 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: It has good sucking pest tolerance and high ginning out turn (GOT).

Photographs: (See figure-18)

19. Application No. | **E17** | **GH34** | **12** | **271** | filed on 29.06.2012 by **Asian Agri Genetics Ltd., #3-5-821, First Floor, Doshi Square, Hyderguda, Hyderabad-500029, A.P., India** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **AC-1910** 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 : AC-1910

Applicant : **Asian Agri Genetics Ltd.**

Address of the Applicant : #3-5-821, First Floor, Doshi Square, Hyderguda, Hyderabad-500029, A.P., India

Nationality of Applicant : Indian

Application details

a. Number : **E17** | **GH34** | **12** | **271**

b. Date of receipt : 29.06.2012

c. Date of acceptance : --

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

Denomination : AC-1910

Type of Variety : Extant(Variety of Common Knowledge)

Classification of Variety : Typical & Other (Parental Line)

Previously proposed Denomination : Not applicable

Name of Parental Material : AC-99 x L 389

Source of parental material : R&D Farm, Asian Agri Genetics Ltd.

Name of Reference Varieties **:** MCU 5 VT, MCU 12

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Yellow
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Long
B. Distinct Characteristics: AC-1910 has distinguishing character as Seed Fuzz colour: **White.**	
C. Reference variety: **MCU 5 VT, MCU 12**has distinguishing character as Seed Fuzz colour: **Grey.**	
D. Date of commercialization of the variety	27-05-2004
E. Agronomic and commercial attributes	Plant Height: Very tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll Shape & size: Ovate & Very large, Response to fertilizer and irrigation: Responds to added fertilizers, Quality characteristics of the variety: Ginning 33-34%, Strength: 25.0-28.0, Mic: 3.0-3.9, Expected yield of the variety: 1100-1200 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: It has good combining ability.

Photographs: (See figure-19)

20. Application No. | **E16** | **GH33** | **12** | **270** | filed on 29.06.2012 by **Asian Agri Genetics Ltd., #3-5-821, First Floor, Doshi Square, Hyderguda, Hyderabad-500029, A.P., India** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **AC-1207** 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 **: AC-1207**
Applicant : **Asian Agri Genetics Ltd.**
Address of the Applicant : #3-5-821, First Floor, Doshi Square, Hyderguda, Hyderabad-500029, A.P., India

Nationality of Applicant : Indian
Application details
a. Number : **E16** | **GH33** | **12** | **270**
b. Date of receipt : 29.06.2012
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : AC-1207
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Typical & Other (Parental Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : (Supriya x MCU 5)-11-2-2-1-1
Source of parental material : R&D Farm, Asian Agri Genetics Ltd.
Name of Reference Varieties **:** F 1378, F 846
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Cream
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Extra long
B. Distinct Characteristics: AC-1207 has distinguishing character as Seed Fuzz: **Dense,** Seed: Index (100 seed wt in gram)**: Very bold.**	

C. Reference variety: **F 1378, F 846** has distinguishing character as Seed Fuzz: **Medium,** Seed: Index (100 seed wt in gram)**: Medium.**	
D. Date of commercialization of the variety	10-06-2004
E. Agronomic and commercial attributes	Plant Height: Very tall, Growth Habit: Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll Shape & size: Round&Large, Response to fertilizer and irrigation: Responds to added fertilizers, Quality characteristics of the variety: Ginning 33-34%, Strength: 25.0-28.0, Mic: <3.0, Expected yield of the variety: 1200-1500 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: It has good combining ability and long staple length with big boll.

Photographs: (See figure-20)

21. Application No. | **E217** | **GH65** | **08** | **296** | filed on 02.04.2008 by **Bharati Seeds., M/S Bharati Seeds, Opp. Petrol pump Noonepalli, Nandyal-518503, A.P.** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **7493870 B** 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 **: 7493870 B**
Applicant : **Bharati Seeds.**
Address of the Applicant : M/S Bharati Seeds, Opp. Petrol pump Noonepalli, Nandyal-518503, A.P.

Nationality of Applicant : Indian
Application details
a. Number : **E217** | **GH65** | **08** | **296**
b. Date of receipt : 02.04.2008
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : 7493870 B
Type of Variety : Extant (Variety of Common Knowledge)
Classification of Variety : Hybrid
Previously proposed : Not applicable

Denomination
Name of Parental Material : BSC 1401 x BSC 1402
Source of parental material :Own material
Name of Reference Varieties **:** JLH 168, MCU 10
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Yellow
Flower: Pollen colour	Yellow
Boll: Shape (longitudinal section)	Round
Fibre: Length(2.5% span length)(mm)	Extra long
B. Distinct Characteristics: 7493870 B has distinguishing character as Seed: Index (100 seed wt in gram)**: Bold.**	
C. Reference variety: **JLH 168, MCU 10** has distinguishing character as Seed: Index (100 seed wt in gram)**: Medium.**	
D. Date of commercialization of the variety	01-06-2002
E. Agronomic and commercial attributes	Highly branched monopodial hybrids of cotton require more spacing than non-branchedsympodial type. Factor affecting yield and quality is the availability of adequate balanced nutrition. Application of organic manures at the time of planting enhances the nutrient and water holding capacity of soil. In case of fertilizers, split application is recommended for better utilization.

Photographs: (See figure-21)

22. Application No. | **E22** | **GH39** | **12** | **276** | filed on 29.06.2012 by **Prabhat Agri Biotech Ltd, 6-3-541/B, Opp. Heritage Office, Punjagutta, Hyderabad-500082, A.P.** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **PC-P711** 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 **: PC-P711**

Applicant : **Prabhat Agri Biotech Ltd.**

Address of the Applicant : 6-3-541/B, Opp. Heritage Office, Punjagutta, Hyderabad-500082, A.P.

Nationality of Applicant : Indian

Application details

a. Number : **E22** **GH39** **12** **276**

b. Date of receipt : 29.06.2012

c. Date of acceptance : --

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

Denomination : PC-P711

Type of Variety : Extant(Variety of Common Knowledge)

Classification of Variety : Hybrid

Previously proposed Denomination : Not applicable

Name of Parental Material : PCGP-707 x PCGP-944

Source of parental material : R&D, Prabhat Agri Biotech Ltd

Name of Reference Varieties **:** G Cot 12, PKV Rajat

Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Yellow
Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Ovate
Fibre: Length(2.5% span length)(mm)	Long
B. Distinct Characteristics: PC-P711has distinguishing character as Plant Stem hairiness: **Medium**, Boll Weight of seed cotton/boll (g): **Medium**, Seed: Index (100 seed wt in gram)**: Very bold,** Fibre Length (2.5% span length)(mm)**: Long.**	
C. Reference variety: **G Cot 12** has distinguishing character as Plant Stem hairiness: **Dense**, Boll Weight of seed cotton/boll (g): **Large**, Fibre Length (2.5% span length)(mm)**: Medium long.** **PKV Rajat** has distinguishing character as Seed: Index (100 seed wt in gram)**: Medium**, Fibre Length (2.5% span length)(mm)**: Medium long.**	
D. Date of commercialization of the variety	18-06-2001
E. Agronomic and commercial attributes	Plant Height: Medium tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll Shape & size: Ovate & Medium, Response to fertilizer and irrigation: Responds to added fertilizers, Reaction to major pests: Good tolerance to jassids & thrips, Quality characteristics of the variety: Strength: 25.0-28.0, Mic: 4.0-4.9, Expected yield of the variety: 1000-1200

	Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: It has good combining ability.

Photographs: (See figure-22)

23. Application No. | **E28** | **GH45** | **12** | **282** | filed on 29.06.2012by **Prabhat Agri Biotech Ltd, 6-3-541/B, Opp. Heritage Office, Punjagutta, Hyderabad-500082, A.P.** fora **Extant** (Variety of Common Knowledge) of crop **Tetraploid Cotton** [*Gossypium hirsutum* L.] having denomination **PC-P3812** 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 **: PC-P3812**
Applicant : **Prabhat Agri Biotech Ltd.**
Address of the Applicant : 6-3-541/B, Opp. Heritage Office, Punjagutta, Hyderabad-500082, A.P.

Nationality of Applicant : Indian
Application details
a. Number : **E28** | **GH45** | **12** | **282**
b. Date of receipt : 29.06.2012
c. Date of acceptance : --
Crop(Taxonomical Lineage) : **Tetraploid Cotton** [*Gossypium hirsutum* L.]
Denomination : PC-P3812
Type of Variety : Extant(Variety of Common Knowledge)
Classification of Variety : Hybrid
Previously proposed Denomination : Not applicable
Name of Parental Material : PCGP-619 x (PCGP-953 x KHANDWA 2)
Source of parental material : R&D, Prabhat Agri Biotech Ltd
Name of Reference Varieties **:** Kanchana
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Leaf: Shape	Palmate
Flower: Petal colour	Yellow

Flower: Pollen colour	Cream
Boll: Shape (longitudinal section)	Round
Fibre: Length(2.5% span length)(mm)	Long
B. Distinct Characteristics: PC-P3812 has distinguishing character as Plant Stem hairiness: **Medium**, Seed: Fuzz colour: **White.**	
C. Reference variety: **Kanchana** has distinguishing character as Plant Stem hairiness: **Sparse**, Seed: Fuzz colour: **Grey.**	
D. Date of commercialization of the variety	First developed hybrid first sale invoice is 06-05-2006
E. Agronomic and commercial attributes	Plant Height: Very tall, Growth Habit: Semi Spreading, Days to 50% flowering: 50-60 days, Maturity Group: Medium, Boll size: Medium, Response to fertilizer and irrigation: Responds to added fertilizers, Reaction to major pests: tolerance to jassids & moderately tolerant white flies, Quality characteristics of the variety: Ginning 35-36%, Staple Length: 27.5-32.0 mm, Strength: 21.0-24.0, Mic: 5.0-5.9, Expected yield of the variety: 1600-1800 Kg/ha., Adoptability: Suitable to varied agro-climatic conditions, Commercial attributes: It has good combining ability and good plant type with good yielder.

Photographs: (See figure-23)

24. Application No. | **N9** | **AE9** | **10** | **453** | filed on 27.12.2010 by **Nuziveedu Seeds Pvt. Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401.** fora **New Variety** of crop **Okra** [*Abelmoschus esculentus* (L.) Moench] having denomination **NOKH-1003,** 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 : **NOKH-1003**
Applicant : **Nuziveedu Seeds Pvt. Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401.

Nationality of Applicant : Indian
Application details

N9	**AE9**	**10**	**453**

a. Number :
b. Date of receipt : 27.12.2010
c. Date of acceptance : --
Crop (Taxonomical Lineage) : Okra [*Abelmoschus esculentus* (L.) Moench]
Denomination : NOKH-1003
Type of Variety : New
Classification of Variety : Hybrid
Previously proposed Denomination : Not applicable
Name of Parental Material : OK-189 x OK-199
Source of Parental material **:** Nuziveedu Seeds Pvt. Ltd. At its R & D Centre
Name of Reference Varieties **:** Varsha Uphar
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Stem: Colour	Green
Leaf blade: Depth of lobbing	Deep
Stem: Number of nodes at first flowering	Medium
Fruit : colour	Green
Fruit : Number of locules	<6
Plant: Number of branches	Many
B. Distinct Characteristics: NOKH-1003 has distinguishing character as Leaf blade: Depth of lobbing: **Deep**	

C. Reference variety: Varsha Uphar has distinguishing character as Leaf blade: Depth of lobbing: **Shallow**	
D. Date of commercialization of the variety	28/06/2010
E. Agronomic and commercial attributes	Days to Produce: **47-48 days**, Fruit Colour: **Lusk Dark Green,** Fruit Length (CM): **10-12,** Fruit Tenderness**: Tender Fruits,** Leaf type**: Okra,** No. of Locules**: 5,** Plant height**: Medium Tall**

Photographs: (See Figure-24)

25. Application No | **E11** | **AE6** | **11** | **77** | filed on 13.01.2011 by **Nuziveedu Seeds Pvt. Ltd., Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana - 501401.**fora **Extant (Variety of Common Knowledge)** of crop **Okra** [*Abelmoschus esculentus* (L.) Moench] having denomination **OK-199,** 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 : **OK-199**
Applicant : **Nuziveedu Seeds Pvt. Ltd.**
Address of the Applicant : Survey No. 69, Gundlapochampally (Vill. &Panchayat), Medchal-Mandal, Rangareddy- Dist, Telangana -501401.

Nationality of Applicant : Indian
Application details
a. Number : **E11** | **AE6** | **11** | **77**
b. Date of receipt : 13.01.2011
c. Date of acceptance : --
Crop(Taxonomical Lineage) : Okra [*Abelmoschus esculentus* (L.) Moench]
Denomination : OK-199
Type of Variety : Extant (Variety of Common Knowledge)
Classification of Variety : Other (Parental Line)
Previously proposed Denomination : Not applicable
Name of Parental Material : OKHI-17-7-5-1-4-2-1
Source of Parental material **:** R&D Centre, Nuziveedu Seeds Ltd.
Name of Reference Varieties **:** KashiLalima, Arka Anamika
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Stem: Colour	Green
Leaf blade: Depth of lobing	Deep
Stem: Number of nodes at first flowering	Medium
Fruit : colour	Green
Fruit : Number of locules	<6
Plant: Number of branches	Medium
B. Distinct Characteristics: OK-199 has distinguishing character as Fruit Colour: **Green.**	

C. Reference variety: KashiLalima has distinguishing character as Fruit Colour: **Red.**	
D. Date of commercialization of the variety	This candidate variety OK-199 is one of the parental lines of our hybrid NBH-24 commercialize since 20-06-2006
E. Agronomic and commercial attributes	Days to Produce: 45-47 days, Fruit Colour: **Deep dark green,** Fruit Length (CM): **10-12,** Fruit Tenderness**: Tender Fruits,** Leaf type**: Okra,** No. of Locules**: 5,** Plant height**: Medium tall,** Flower petal spot**: Bothside,** Remarks**:**

	Tolerant to YVM virus in field condition.

Photographs: (See Figure-25)

26. Application No. | **N5** | **AE7** | **12** | **380** | filed on 21.08.2012 by **DCM Shriram Limited, 5th Floor Kanchenjunga Building, 18 Barakhamba Road, New Delhi-110001, India.**fora **New Variety** of crop **Okra** [*Abelmoschus esculentus* (L.) Moench] having denomination **LR62216,** 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 : **LR62216**
Applicant : **DCM Shriram Limited.**
Address of the Applicant : 5th Floor Kanchenjunga Building, 18 Barakhamba Road, New Delhi-110001, India.

Nationality of Applicant : Indian
Application details
a. Number | **N5** | **AE7** | **12** | **380** |
b. Date of receipt : 21.08.2012
c. Date of acceptance : --
Crop(Taxonomical Lineage) : Okra [*Abelmoschus esculentus* (L.) Moench]
Denomination : LR62216
Type of Variety : New
Classification of Variety : Other (Inbred parent line)
Previously proposed Denomination : Not applicable
Name of Parental Material : SSR25 x OK0213
Source of Parental material **: R&D farm Bioseed Research india.**
Name of Reference Varieties **:** Arka Anamika
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Stem: Colour	Green
Leaf blade: Depth of lobbing	Deep
Stem: Number of nodes at first flowering	Few
Fruit : colour	Light Green

Fruit : Number of locules	<6
Plant: Number of branches	Medium
B. Distinct Characteristics: LR62216 has distinguishing character as Fruit: Colour: **Light green**, Plant: Number of branches: **Medium**.	

C. Reference variety: Arka Anamika has distinguishing character as Fruit: Colour: **Green**, Plant: Number of branches: **Many**.	
D. Date of commercialization of the variety	One of the parental lines in development of an okra hybrid having denomination BIO 228 H, which is commercially marketed as Avantika, and was first sold on 16-02-2008.
E. Agronomic and commercial attributes	Plant height at maturity is short with a range of 80-90 cm as per our R&D farm observation. 4-5 Average numbers of branches. It takes 40-45 days for first picking in summer and 43-48 days in kharif. Light green fruit colour. Leaf blade is deeply lobed. Fair tolerant YVM.

Photographs: (See Figure-26)

27. Application No. | **N6** | **AE8** | **12** | **387** | filed on 31.08.2012 by **DCM Shriram Limited, 5th Floor Kanchenjunga Building, 18 Barakhamba Road, New Delhi-110001, India.**fora **New Variety** of crop **Okra** [*Abelmoschus esculentus*(L.) Moench] having denomination **DI62459,** 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 : **DI62459**
Applicant : **DCM Shriram Limited.**
Address of the Applicant : 5th Floor Kanchenjunga Building, 18 Barakhamba Road, New Delhi-110001, India.

Nationality of Applicant : Indian
Application details
a. Number | **N6** | **AE8** | **12** | **387** |
b. Date of receipt : 31.08.2012
c. Date of acceptance : --
Crop(Taxonomical Lineage) : Okra [*Abelmoschus esculentus* (L.) Moench]

Denomination : DI62459
Type of Variety : New
Classification of Variety : Other (Inbred parent line)
Previously proposed Denomination : Not applicable
Name of Parental Material : CH02 x CH06
Source of Parental material **: R&D farm Bioseed Research india.**
Name of Reference Varieties **:** VRO-3
Variety Description:

A. Group Characteristics	**Remarks measured values, example varieties, etc.**
Stem: Colour	Green
Leaf blade: Depth of lobbing	Shallow
Stem: Number of nodes at first flowering	Medium
Fruit : colour	Green
Fruit : Number of locules	<6
Plant: Number of branches	Medium
B. Distinct Characteristics: DI62459 has distinguishing character as Fruit: Colour: **Green**, Fruit: Length of physiologically mature fruit: **Medium.**	

C. Reference variety: VRO-3 has distinguishing character as Fruit: Colour: **Light green**, Fruit: Length of physiologically mature fruit: **Many.**	
D. Date of commercialization of the variety	One of the parental lines in development of an okra hybrid having denomination BIO 228 H, which is commercially marketed as Avantika, and was first sold on 16-02-2008.
E. Agronomic and commercial attributes	Plant height at maturity is Tall as per our R&D farm observation. It takes 43-46 days for first picking in summer and 47-49 days in kharif. Green fruit colour. Fruit surface between is flat. Fair tolerant to YVM.

Photographs: (See Figure-27)

Tetraploid cotton / S07H878 BGII	**Tetraploid cotton** / **NC-106**
	
Figure-1: Boll: Shape (longitudinal section): Round	Figure-2: Flower: Pollen Colour: Yellow
Tetraploid cotton / **Omkar Bt (NCS 950 Bt)**	**Tetraploid cotton** / Super Mallika Bt (NCS 955 Bt)
	
Figure-3: General view of Boll	Figure-4: General view of Plant
Tetraploid cotton / **NC-185**	**Tetraploid cotton** / **NC-1171**

	
Figure-5: Flower: Pollen Colour: Yellow	Figure-6: Leaf: Colour : Light green
Tetraploid cotton / NC-113	**Tetraploid cotton/ NC-1108**
	
Figure-7: Flower: Pollen Colour: Cream	Figure-8: Flower: Pollen Colour: Cream
Tetraploid cotton / NC-90	**Tetraploid cotton / NC-62**
	
Figure-9: Boll shape: Round	Figure-10 Flower: Petal Colour : Yellow

Tetraploid cotton / NC-167	**Tetraploid cotton / NC-181**

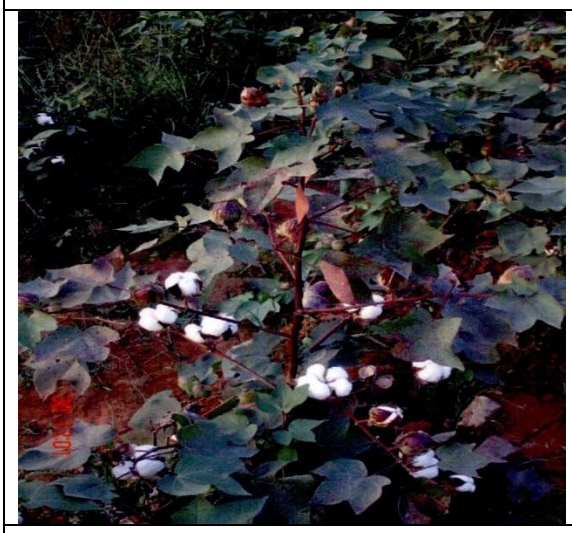



Figure-11 : General view of Plant	Figure-12: Leaf colour: Light green
Tetraploid cotton / NC-91	**Tetraploid cotton / NC-172**

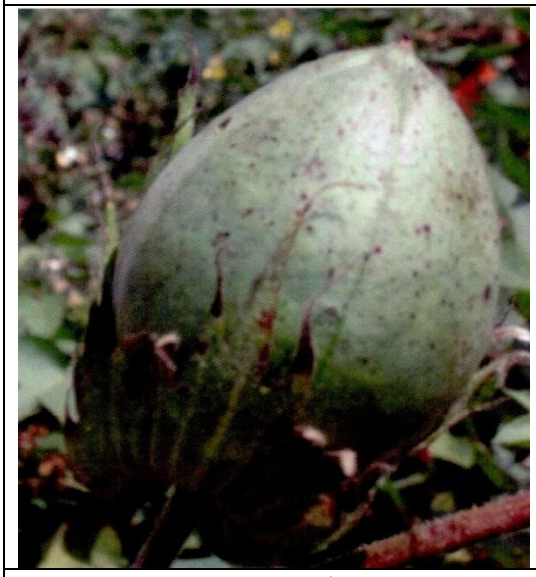



Figure-13: General view of Boll	Figure-14: General view of Boll
Tetraploid cotton / NC-174	**Tetraploid cotton / NC-170**

	
Figure-15: Flower: Pollen Colour: Yellow	Figure-16: Boll shape (longitudinal section): Round
Tetraploid cotton / NC-47	**Tetraploid cotton / NCS-9028 Bt2**
	
Figure-17: Boll shape (longitudinal section): Round	Figure-18: Flower petal colour: Yellow
Tetraploid cotton / AC-1910	**Tetraploid cotton / AC-1207**
	

Figure-19: General view of boll	Figure-20: General view of boll
Tetraploid cotton /7493870 B	**Tetraploid cotton / PC-P711**
	
Figure-21: General view of plant	Figure-22: General view of plant
Tetraploid cotton / PC-P3812	**Okra / NOKH-1003**

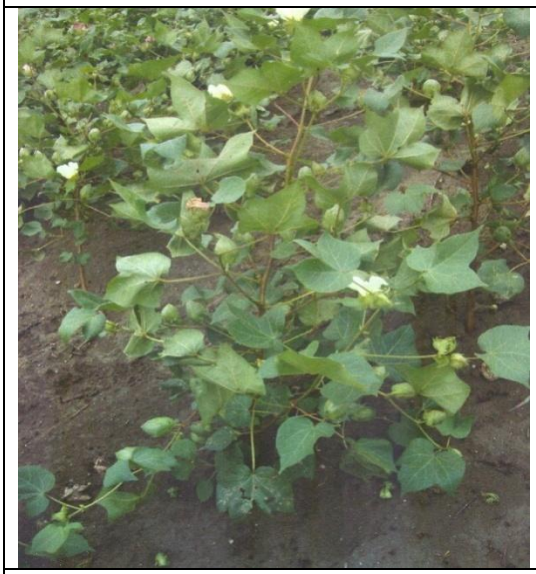



Figure-23: Plant stem hairiness: Medium	Figure-24: Leaf blade: Depth of lobing: Deep
Okra / OK-199	**Okra / LR62216**

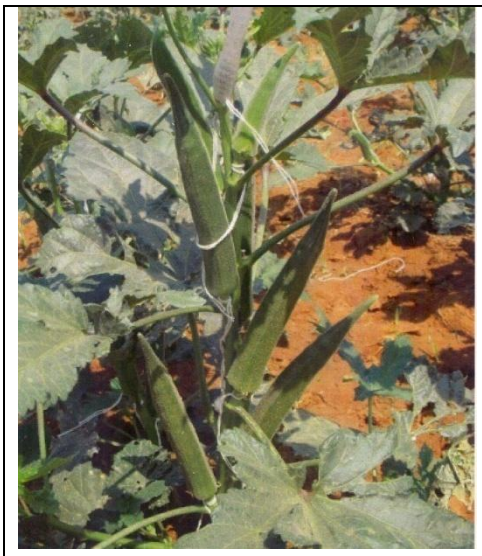


Figure-25: Fruit: Colour: Green	Figure-26: Leaf blade: Colour between veins: Green
Okra / DI62459	

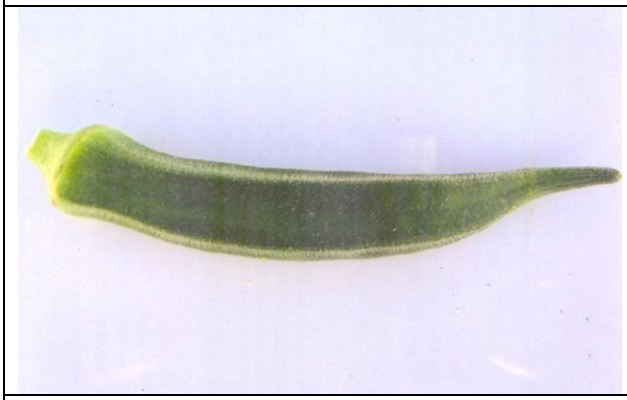



Figure-27: Fruit colour: Green	