CROP VARIETIES

FROM KERALA AGRICULTURAL UNIVERSITY

GOPALAKRISHNAN T. R. and ALEXANDER D.





DIRECTORATE OF RESEARCH KERALA AGRICULTURAL UNIVERSITY

KAU P.O. VELLANIKKARA THRISSUR – 680 651, KERALA, INDIA

English

Crop Varieties from Kerala Agricultural University

Editing:

Gopalakrishnan T.R & Alexander D

Compilation:

Gopalakrishnan T.R. Meagle Joseph Prameela K.P. Savithri K.E. Rajan S. Latha A. and Devadas V.S.

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FOREWORD

The prime concern of the day is "climate change" and the declining food production which lead to famine in the near future. This necessitates comprehensive approaches to increase productivity of food crops. India has to double agriculture production by increasing the present annual growth rate from 2% to 4% for ensuring food security. Improved varieties and seeds play a key role in the productivity of crops and 20-30% of crop production is decided by varieties and seeds alone.

Kerala is endowed with diverse soil and climatic conditions suitable for cultivation of a variety of crops in different parts of the state. Research in the Kerala Agricultural University since its inception in 1972, resulted in the development of 271 varieties in different crop plants. This include high yielding varieties, pest and disease resistant varieties and varieties suited for specific agro climatic conditions in cereals, pulses, vegetables, fruits, spices, medicinal plants, oil seeds, tuber crops, forage crops etc.

KAU is also undertaking large scale production and distribution of quality seeds and planting materials for popularization of improved varieties developed in the University. During 2009-10, the University has almost doubled the production of improved seeds and planting materials as evidenced by revenue of Rs 6.45 crores during 2009-10 compared to Rs 3.25 crores during the previous year.

The large number of varieties developed and released after clearance of statutory bodies help in maintaining the biodiversity of the nature. The documentation of these released varieties and the land races which are popular among the farmers and existed even during pre –independence period became a felt need in the context of WTO or IIPR issues.

I congratulate all the scientists who have taken earnest efforts for developing varieties having specific advantages. In this age, where variety protection and patenting is the rule, the document will be a useful reference guide in varietal identification and protecting the Plant Breeders Right. I also appreciate the efforts of Directorate of Research, KAU for bringing out this compilation. I hope this document will be highly useful for the scientists, development officers and farmers of the State.

K.R. Viswambharan, I.A.S. Vice Chancellor Kerala Agricultural University Vellanikkara

PREFACE

Diverse soil and climatic conditions prevailing in different parts of Kerala offer scope for cultivation of a variety of crops in this State. Kerala Agricultural University has to its credit 271 improved varieties in different crop plants for different agro climatic zones of the State. Of these, 49 varieties were developed earlier before inception of the Kerala Agricultural University in 1972. The improved varieties include 113 in rice, 57 in vegetable crops, 3 in fruit crops, 12 in pulses, 7 in tuber crops, 6 in coconut, 17 in spices and aromatic plants, 16 in cashew, 10 in cocoa, 4 in sugarcane, 7 in sesamum, 5 in orchids, 9 in medicinal plants, 5 in forage crops and one in mushroom. All the varieties were approved by the State Seed Sub Committee meeting and a good number were later cleared by "Central Sub committee on crop standards, notification and release of varieties" for notification and large scale cultivation. The varieties were released for characters like high yield, resistance to pests and diseases, quality attributes, either for the state or for specific location/farming systems like Pokkali, Kole land, Cheradi tract, High range zones etc. All the 271 varieties of the University are described in this document. In order to avoid duplication and to save space, the "Meetings of Central Sub committee on crop standards, notification and release of varieties" is abridged as "Central Committee meeting" in the text. Similarly for saving space, fertiliser recommendation only is given under "Tips for cultivation" of individual varieties. Hence organic manure application should be followed as per the "Package of Practice Recommendations- crops".

It is observed that approval and notification by the Central sub committee meeting is not obtained for majority of varieties for want of registration number from NBPGR. Hence in future, the registration number should be obtained by submitting required seed samples at National Bureau of Plant Genetic Resources (NBPGR) or National Active Germplasm Sites before submission of proposals to State seed sub committee meetings and Central Sub Committee meetings.

Hope this document will be useful for selecting the best variety/ varieties for specific agro climatic situations. It will be helpful for the scientists, development officer and farmers for cultivation and seed production purposes and also for protection of varieties in the context of WTO or IIPR issues.

The University is thankful to the Directorate of Seed Research and ICAR for funding the seed production programmes and documentation of varieties from the University.

T.R. Gopalakrishnan

Officer on Special Duty (Seeds) & Associate Director of Research (Vegetable Mission)
Directorate of Research, KAU. P.O
Thrissur - 680 656, Vellanikkara

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Rice (Oryza sativa)

1. Crop Rice

2. Variety Jvothi (PTB 39)

3. Method of breeding Hybridization and selection

4. Source / parent / pedigree PTB 10 x IR 8

Year of release and authority 5. 1974 - Kerala State Seed Sub Committee meeting

6. **Evolved** at RARS, Pattambi

IC No.263552, Notified as per S.O.NO.271(E)dt.7-3-77 7. Registration / notification details :

8. Specific advantages / features : High yielding, short duration(105 – 110 days), with

> adaptable to a wide range of cropping situations. Photo insensitive, tolerant to BPH, susceptible to sheath blight and blast. Excessive shedding of grains

at maturity. Hulling % - 72.9

9. Key characters for identification: Dwarf (75 - 85 cm), non-lodging with compact panicle.

Long bold grains with red kernel.

10. Productivity 6 t/ha

11. Area of adaptation Throughout Kerala

12. Tips on cultivation Suited for all the three seasons. Apply Organic

manure-5t/ha and NPK-70:35:35 kg/ha

13. Scientists responsible for developing the variety

Crop improvement division of RARS, Pattambi

1. Crop Rice

2. Variety Sabari (PTB 40)

3. Method of breeding Hybridization and selection

Source / parent / pedigree Annapoorna x IR 8/2

Year of release and authority 1974 - Kerala State Seed Sub Committee meeting

Evolved at RARS, Pattambi

7. Registration / notification details: IC No.263709, Notified as per S.O.NO.13(E)dt.19-12-78

8. Specific advantages / features : High yielding, medium duration (130 - 135 days), photo-

insensitive variety susceptible to sheath blight. Hulling % - 76

Dwarf (80-90 cm), non-lodging with compact panicle. 9. Key characters for identification:

Medium bold grains with red kernel

10. Productivity 5 - 6 t/ha

11. Area of adaptation Throughout Kerala.

12. Tips on cultivation Suited for all the three seasons. Apply Organic manure

5t/ha and NPK - 90:45:45 kg/ha

13. Scientists responsible for

developing the variety

Crop improvement division of RARS. Pattambi

2. Variety : Bharathy (PTB 41)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : PTB 10 x IR-8

5. Year of release and authority : 1974 - Kerala State Seed Sub Committee meeting

6. Evolved at ; RARS, Pattambi

7. Registration / notification details : IC No.263710, Notified as per S.O.NO.13(E)dt.19-12-78

8. Specific advantages / features : High yielding, medium duration (120 to 125 days),

photo insensitive, tolerant to BPH and moderately

resistant to blast.

9. Key characters for identification: Dwarf (90-95 cm), non-lodging variety having compact

panicle. Long bold grains with red kernel

10. Productivity : 6 t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Suited for all the three seasons, Apply Organic

manure - 5t/ha and NPK - 90:45:45 kg/ha

13. Scientists responsible for

developing the variety

Crop improvement division of RARS, Pattambi

1. Crop : Rice

2. Variety : Suvarna Modan (PTB 42)

3. Method of breeding : Selection
4. Source / parent / pedigree : ARC - 11775

5. Year of release and authority : 1976 - Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Pattambi
 7. Registration / notification details : IC No.263603

8. Specific advantages / features : Photo insensitive, short duration (110-115 days) variety

suitable for dry sown conditions. Tolerant to drought,

moderately resistant to pests and diseases.

Hulling % - 75

9. Key characters for identification: Tall (110-120 cm) variety having straw coloured,

medium slender grains with white kernel.

10. Productivity : 5 t/ha

11. Area of adaptation ; Modan lands and other uplands

12. Tips on cultivation : Apply - Organic manure - 5t/ha and NPK - 60:30:30 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

developing the variety

2. Variety : Swarnaprabha (PTB 43)
3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : Bhavani x Triveni

5. Year of release and authority : 1985 - Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Pattambi 7. Registration / notification details : IC No. 263602

8. Specific advantages / features : Short duration (105-110 days), photo insensitive,

suitable for transplanting and direct seeding. Modertely resistant to blast and stem borer,

susceptible to sheath blight and tolerant to drought.

Hulling % - 75

9. Key characters for identification : Semi tall (110 cm), non-lodging variety having straw

coloured grains.

10. Productivity : 4 t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Suited for uplands and for all the three seasons in

the wet lands. A good first crop component in Koottumundakan Apply - NPK-60:30:30 kg/ha for uplands; 70:35:35 kg/ha for low lands and 20:10:10 for

koottumundakan

13. Scientists responsible for developing the variety

Crop improvement division of RARS, Pattambi

1. Crop : Rice

2. Variety : Rasmi (PTB 44)

3. Method of breeding : Mutation4. Source / parent / pedigree : Oorpandy

5. Year of release and authority : 1985 - Kerala State Seed Sub Committee meeting

Evolved at : RARS, Pattambi
Registration / notification details : IC No.264045

8. Specific advantages / features : Long duration (150-160 days), photosensitive, high

straw yield. Moderately resistant to BPH, gall midge, stem borer, leaf roller and sheath blight. Hulling % - 75

9. Key characters for identification: Tall (140-145 cm) variety with low tendency for logging.

Short, bold black coloured grains with red kernel

10. Productivity : 3.5 – 4 t/ha

developing the variety

11. Area of adaptation : Palakkad, Onattukara and Southern Districts of Kerala

12. Tips on cultivation : Suited for second crop as the *Mundakan* component of *Koottumundakan* system. Apply NPK 30:15:15 kg/ha

3

when component of Koottumundakan

13. Scientists responsible for : Crop improvement

Crop improvement division of RARS, Pattambi

Rice 1. Crop

Matta Triveni (PTB 45) 2. Variety

Reselection Method of breeding 3. : Triveni Source / parent / pedigree 4.

1990 - Kerala State Seed Sub Committee meeting 5. Year of release and authority

: RARS. Pattambi 6. Evolved at 7. Registration / notification details : IC No.263553

High yielding, photo-insensitive, short duration (100 Specific advantages / features : 8.

> to 105 days), moderately resistant to BPH, but susceptible to blast and sheath blight. Hulling % - 75

Dwarf (80-85 cm), non-lodging, with compact panicle Key characters for identification: 9. . .

and red kernel

5 - 5.5 t/ha 10. Productivity

Throughout Kerala especially Kuttanad and Kole areas 11. Area of adaptation

Suited for all the three seasons. Apply Organic manure-Tips on cultivation 12.

5t/ha and NPK - 70:35:35 kg/ha

Scientists responsible for 13. developing the variety

Karunakaran K.

Rosamma C.A., Sukumara Dev V.P., Elsv C.R.,

Baby P Skariah

Rice 1. Crop

Javathi (PTB 46) 2. Variety

: Hybridization and selection 3. Method of breeding

Triveni x IR 2061 4. Source / parent / pedigree

1990 - Kerala State Seed Sub Committee meeting 5. Year of release and authority

RARS. Pattambi 6. Evolved at IC No.263555 Registration / notification details : 7.

High yielding, medium duration (120-125 days) variety 8. Specific advantages / features :

with wide range of adaptability outside Kerala and India. Photoinsensitive, moderately resistant to blast,

blight, BPH, GLH and leaf folder. Hulling % - 75

Dwarf (90-95 cm), non-lodging with semi compact Key characters for identification:

panicle and white kernel.

5 - 5.5 t/ha 10. Productivity

Diverse agro-climatic situations of India and outside 11. Area of adaptation

: Suited for all the three seasons . Apply Organic manure-12. Tips on cultivation

5t/ha and NPK- 90:45:45 kg/ha

13. Scientists responsible for developing the variety

: James K.I. .

Rajappan Nair N., Karunakaran K., Rosamma C.A.

1. Crop Rice

2. Variety Neeraja (PTB 47)

Method of breeding Hybridization and selection

4. Source / parent / pedigree 1R 20 x IR 5

5. Year of release and authority 1990 - Kerala State Seed Sub Committee meeting

Evolved at 6. RARS, Pattambi

IC No.263958, Notified as per S.O.NO.17-23dt.19-7-2000 7. Registration / notification details :

Specific advantages / features : Photo insensitive, long duration (135-140 days during

kharif and 120-125days during rabi), resistant to blast, sheath rot and leaf folder. Susceptible to sheath blight and tolerant to temporary floods. Hulling % - 75.8

9. Key characters for identification: Semi-tall (100 -110 cm), non-lodging with straw

coloured grains and white kernel.

10. Productivity 5 - 5.5 t/ha

11. Area of adaptation Suited to flood prone and waterlogged areas and

poonthalpadams

12. Tips on cultivation Suited for Virippu season. Apply Organic manure - 5t/

ha and NPK - 40:20:20 kg/ha

13. Scientists responsible for developing the variety

Rajappan Nair N.,

Rosamma C.A., Karunakaran K.

1. Crop Rice

Variety 2. Nila (PTB 48)

Method of breeding Hybridization and Selection

Source / parent / pedigree (Triveni x Vellathil Kolappala) x CO - 25

Year of release and authority 1992 - Kerala State Seed Sub Committee meeting

15 th Central Sub Committee meeting

6. Evolved at RARS, Pattambi 7. Registration / notification details: IC No.264046

Specific advantages / features : Photo sensitive, long duration (160-180 days) variety

> capable of producing good grain and straw yields under low fertilizer application. Moderately resistant to sheath blight, gall midge, thrips, stem borer and

BPH. Susceptible to blast. Hulling % - 73.5

9. Key characters for identification: Semi tall (125 cm) and non-lodging variety. Panicles

long and attractive with short, bold straw coloured

grains and red kernels

10. Productivity 4 t/ha

11. Area of adaptation Suitable for the koottumundakan and karimkora

systems of cultivation

12. Tips on cultivation Suited to Mundakan season. Apply - Organic manure-

5t/ha and NPK - 40:20:20 kg/ha

13. Scientists responsible for developing the variety

Rosamma C.A.

Elsy C.R., Karunakaran K., Rajappan Nair N.,

Pushkaran K., Dev V.P.S. Baby P Skariah, Rajan K.M.,

Pillai G.R.

2. Variety : Kairali (PTB 49)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : IR 36 x Jyothi

5. Year of release and authority : 1993 Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Pattambi
7. Registration / notification details : IC No.263559

8. Specific advantages / features : High yielding, photo - insensitive, short duration (110-

115 days), moderately resistant to blast, sheath blight,

gall midge and leaf folder. Hulling % - 72

9. Key characters for identification: Dwarf (90-95 cm) and non-lodging plants with long

panicles. Bold grains with red kernel

10. Productivity : 5 - 5.5 t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Suited for all the three seasons. Apply Organic manure-

5t/ha and NPK - 70:35:35 kg/ha

13. Scientists responsible for developing the variety

r : Rosamma C.A.,

Elsy C.R., Karunakaran K., Rajappan Nair N.,

Pushkaran K., Dev V.P.S., Baby P. Skariah, Rajan K.M.,

Pillai G.R.

1. Crop : Rice

2. Variety : Kanchana (PTB 50)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : IR 36 x Pavizham

5. Year of release and authority : 1993 Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Pattambi 7. Registration / notification details : IC No. 263560

8. Specific advantages / features : High yielding, short duration (105 - 110 days), photo

insensitive variety having excellent milling and cooking qualities. Moderately resistant to blast, brown spot, sheath blight, gall midge and tungro virus.

Hulling % - 80

N. Key characters for identification: Dwarf (88 cm) and non-lodging plants with long, bold

grains and red kernel

10. Productivity : 5.5 t/ha

11. Area of adaptation : Throughout Kerala especially Kole and Kuttanad

regions

12. Tips on cultivation : Suited for all the three seasons. Apply Organic manure-

5t/ha and NPK-70:35:35 kg/ha

13. Scientists responsible for

developing the variety

Rosamma.C.A.

Elsy C.R., Pushkaran K., Karunakaran K.,

Rajappan Nair N., Dev V.P.S., Baby P.Skariah,

Rajan K.M., Pillai G.R.

2.. Variety : Aathira (PTB 51)

Method of breeding : Hybridization and selection
Source / parent / pedigree : BR 51-46-1 x Culture 23332-2

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Pattambi7. Registration / notification details : IC No.263711

8. Specific advantages / features : Medium duration (120 days in kharif and 105 days in

summer), photo insensitive, moderately resistant to blast, sheath blight, BPH and gall midge. Excellent milling recovery and cooking quality. Hulling % - 78

9. Key characters for identification : Semi tall (110-115 cm) and non-lodging plants having

short, bold grains and red kernel

10. Productivity : 5 - 5.5 t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Suited to Virippu and Mundakan seasons. Apply

Organic manure - 5t/ha and NPK - 90:45:45 kg/ha

13. Scientists responsible for : Rosamma.C.A.,

developing the variety Elsy C.R., Rajappan Nair N., Karunakaran K.,

Dev V.P.S., Rajan K.M., Girija. T., Baby P.Sariah, Pillai G.R.

1. Crop : Rice

2. Variety : Aiswarya (PTB 52)

3. Method of breeding : Hybridization

4. Source / parent / pedigree : Jyothi x BR 51- 46-1

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Pattambi7. Registration / notification details : IC No.263712

8. Specific advantages / features : Photo insensitive, medium duration (120 days during

kharif and 105-110 days during rabi and summer seasons), moderately resistant to blast, sheath blight,

BPH and gall midge. Hulling % - 79

9. Key characters for identification : Semi tall (105-108 cm) and non- lodging plants with

long, bold grains and red kernel.

10. Productivity : 5 - 5.5 t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Suited to Virippu and Munadakan seasons. Apply

Organic manure - 5t/ha and NPK - 90:45:45 kg/ha

13. Scientists responsible for : Rosamma C.A.,

developing the variety Elsy C.R., Rajappan Nair N., Karunakaran K., Dev V.P.S.,

Rajan K.M., Girija T., Baby P.Skariah, Pillai G.R.

1. Crop

Rice

2. Variety

Mangala Mashuri (PTB 53)

Method of breeding

Reselection

Source / parent / pedigree

Mashuri

Year of release and authority

1998 - 19th Kerala State Seed Sub Committee meeting

Fvolved at 6.

RARS, Pattambi

Registration / notification details:

IC No.263974

Specific advantages / features : Photo insensitive, long duration (140-145 days) variety tolerant to flood, iron toxicity and pests like gall midge,

stem borer, whori maggot and blue beetle. Good

response at low fertilizer regimes

Key characters for identification: 9.

Tall (140cm) and non-lodging plants with medium

slender brown grains and red kernel

10. Productivity

4.5 - 5 t/ha

11. Area of adaptation

Adapted to the central zone of Kerala. Highly suited for ill-drained and temporarily flooded areas and also

Chittoor black soils

Tips on cultivation 12.

Suited for Virippu and Mundakan seasons. Apply -Organic manure - 5t/ha and NPK - 50:25:25 kg/ha

Elsv.C.R.

13. Scientists responsible for

Rosamma C.A., Rajappan Nair N., Sukumara Dev V.P.,

Baby P.Skariah, Rajan K.M., Krishnan V.

1. Crop

Rice

2. Variety

Karuna (PTB 54)

Method of breeding

Hybridization and selection

Source / parent / pedigree

CO - 25 x H,

5. Year of release and authority

1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at

RARS, Pattambi

Registration / notification details : 7.

IC No.264052, Notified as per S.O.NO.837(E)dt.4-9-2002

Specific advantages / features : 8.

Weakly photosensitive, late duration (140-145 days) variety with low fertilizer requirement. Moderately resistant to sheath blight, blast, stem borer and iron toxicity. Performs well even under poor management

conditions

Key characters for identification: 9.

Tall (155cm) and sturdy plants with stiff straw. Shows slight tendency to lodge if grown on highly fertile soil.

Long, bold straw coloured grains with red kernel

Productivity 10.

: 4.5 t/ha

11. Area of adaptation 12. Tips on cultivation Palakkad and Malappuram districts (Central zone) Specific for Mundakan season. Apply - Organic

manure-5t/ha and NPK 40:20:20 kg/ha

Scientists responsible for 13. developing the variety

K. Karunakaran,

Rosamma C.A., Leenakumari S., Rajappan Nair.N, Nair N. K., Elsy C. R., Valarmathy G., Sukumara Dev V.P.,

Rehumath Niza T. J., Natarajan L.

2. Variety : Harsha (PTB 55)

3. Method of breeding : Hybridization and selection

4 Source / parent / pedigree : M.210 x PTB 28

5 Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Pattambi

7. Registration / notification details : Notified as per S.O.No.837(E)dt.4-9-2002

8. Specific advantages / features : Photo insensitive, early duration (105-110 days) with

moderate resistance to blue beetle and moisture stress. Low susceptibility to blast and sheath blight. Non-lodging and non-shattering with excellent milling and cooking qualities, straw coloured grains with red

kernel.

10. Productivity : 4.5-5 t/ha

11. Area of adaptation : Suitable for direct seeding in uplands and rain fed low lands

12. Tips on cultivation : Suited to Virippu and Mundakan seasons. Apply

Organic manure - 5t/ha and NPK - 70:35:35 kg/ha

13. Scientists responsible for developing the variety

: Leenakumari S,

Valarmathi G., Elsy C.R., Tessy Joseph, Rosamma C.A., Girija T., Karunakaran K., Varkey P.A., Natarajan L.

Rehmath Niza, Balachandran P.V.

1. Crop : Rice

2. Variety : Varsha (PTB 56)

3. Method of breeding : Hybridization and selection
4. Source / parent / pedigree : M 210 x (M 210 x PTB 28)

5. Year of release and authority : 2002 - 21st State Seed Sub Committee meeting

6. Evolved at : RARS, Pattambi

7. Registration / notification details :

8. Specific advantages / features : Photo insensitive, early duration (110-120 days)

moderately resistant to blast, blue beetle and WBPH.

9. Key characters for identification: Semi-dwarf (96cm), compact and non-lodging plants with long bold, straw coloured grains having red kernel

10. Productivity : 4.5 – 5 t/ha

11. Area of adaptation : Suitable for direct seeding in uplands and rain fed low

lands. Also suited for transplanting. Good for kole areas

12. Tips on cultivation : Suited for *Virippu* and *Mundakan* seasons. Apply - Organic manure - 5t/ha and NPK - 70:35:35 kg/ha

13. Scientists responsible for developing the variety

Leenakumari S

Gregory Zacharia, Pushkaran K., Tessy Joseph, Rosamma C.A., Valarmathi G., Elsy C.R., Karunakaran K., Rajappan Nair N., Natarajan L., Rehmath Niza, Johnkutty I., Rose Mary Francis, Balachandran P.V.

Rice⁻ 1. Crop Swetha (PTB 57) 2. Variety Hybridization and selection 3. Method of breeding 1R 50 x C 14-8 Source / parent / pedigree 4. 2002 - 21st State Seed Sub Committee meeting Year of release and authority RARS, Pattambi Funived at 6. 7. Registration / notification details : Photoinsensitive, long duration (135-145 days), Specific advantages / features : resistant to gall midge and stem borer, moderately resistant to sheath blight, sheath rot, brown spot and blast Semi-tall (108.5cm), non-lodging plants producing 9. Key characters for identification: long, compact and well exerted panicles with short bold straw coloured grains and white kernels 4.5 - 5 t/ha 10. Productivity Suitable for the irrigated lowlands of Palakkad district. 11. Area of adaptation Suited for Mundakan season. Apply -Organic manure-12. Tips on cultivation 5t/ha, and NPK - 90:45:45 kg/ha Leenakumari S. Scientists responsible for 13. Ram T., Majumdar, Gregory Zacharia, developing the variety Rose Mary Francis, Johnkutty I., Balachandran P.V Rice 1. Crop Anashwara Variety Induced mutagenesis (22- KR Gamma Rays) followed 3. Method of breeding by selection PTB 20 (Vadakkan Chitteni) Source/parent/ pedigree 4. 2006- 23rd Kerala State Seed Sub Committee meeting. 5. Year of release and authority RARS, Pattambi 6. Evolved at 7. Registration/notification details : Semi-tall, photo sensitive, long duration (125-130 days) Specific advantages/features with tendency to lodge at maturity and tolerant to major pests and diseases Broad leaves with more number of panicles. 9. Key characters for identification: higher thousand grain weight, red kernel 3.5 - 4.5t/ha 10. Productivity Irrigated wet lands of Thrissur and Ernakulam districts 11. Area of adaptation during Rabi season Photo sensisitive variety suitable for second crop 12. Tips on cultivation

> Gregory Zachariah Jiji Joseph, Balachandran P. V, Rosamma C. A. Elsy C. R, Rajappan Nair N, Pushkaran K.,Tessy Joseph, Valarmathi. G. , Karthikeyan, Purushothaman S. M.

season only. Raise nursery in the first week of August

Scientists responsible for

developing the variety

13.

and transplant 30 DAS.

2. Variety : Vaishakh

3. Method of breeding : Pureline selection4. Source / parent / pedigree : Swarnaprabha

5. Year of release and authority : 2010 - 24th Kerala State Seed Sub Committee meeting.

6. Evolved at : RARS, Pattambi 7. Registration / notification details : IC 583765

8. Specific advantages / features : Suitable for direct sowing in Virippu season in

garden lands. Tolerant to moisture stress, resistant to blue beetle, moderate resistance to stem borer

and whorl maggot.

9. Key characters for identification: Duration 117-125 days. Plant height 118.82 cm, photo

insensitive, early maturity, non lodging, low

shattering, short bold red grains

10. Productivity : 2.2 t/ha

11. Area of adaptation : Rainfed uplands of Central Kerala

12. Tips on cultivation : Moderately susceptible to gall midge, leaf folder,

blast and sheath blight, highly susceptible to bacterial leaf blight. Performs well in low land when

transplanted.

13. Scientists responsible for : Rose Mary Francis

developing the variety Jiji Joseph, Leena kumari.S, Gregory Zachariah,

Valarmathi.G, Balachandran.P.V, Raji.P,

Karthikeyan K, Sudarshan Rao, Pathummal Beevi

1. Crop : Rice

2. Variety : Samyuktha

3. Method of breeding : Pure line selection

4. Source / parent / pedigree : Culture C2

5. Year of release and authority : 2010 - 24th Kerala State Seed Sub Committee meeting.

6. Evolved at : RARS, Pattambi 7. Registration / notification details : IC 583751

8. Specific advantages / features : High yielding medium tall variety suitable for Kootumundakan

cultivation. Moderate resistance to stem borer, whorl maggot, blue beetle, BPH and sheath blight.

9. Key characters for identification: Plant height 123 cm, early maturing (112-117 days),

photo insensitive, medium tall, non lodging with

short bold red grains.

10. Productivity : Grains 4t/ha + Straw 13 t/ha for Kootumundakan

system with Makaram variety during virippu.

11. Area of adaptation : Suitable for rainfed low lands of Central Kerala for

direct seeding during Kharif under Kootumundakan system of cultivation

12. Tips on cultivation : Moderately susceptible to blast and highly

susceptible to gall midge. Apply NPK @ 90:45:45 kg/ha

13. Scientists responsible for : Rose Mary Francis developing the variety .liii Joseph Leena

Jiji Joseph, Leena kumari.S, Gregory Zachariah, Valarmathi.G, Rosamma C.A, Elsy C.R, Karunakaran.K, Tessy Joseph, T.Girija, Balachandran.P.V, Raji.P, Karthikeyan.K, Sudarshan Rao, Pathummal Beeyi

Rice 1. Crop

Bhadra (MO 4) 2. Variety

Hybridization and selection 3. Method of breeding

IR 8 x PTB 20 Source / parent / pedigree

1978 Kerala State Seed Sub Committee meeting 5. Year of release and authority

RRS. Moncompu 6. Evolved at

IC No.263713, Notified as per S.O.NO.2103 dt.12-8-80 7. Registration / notification details:

High yielding, weakly photosensitive, medium duration Specific advantages / features :

(120 days for Puncha and 140 days for Kharifin Kuttanad) variety suited for the additional crop (Kharif) in Kuttanad, Resistant to BPH, susceptible to sheath

blight, Hulling % - 79.5

Dwarf (75 - 80 cm) and non-lodging plants producing 9. Key characters for identification:

compact panicles having short bold straw coloured

grains with brown furrows. Kernel colour red.

4.5 - 5.5 t/ha 10. Productivity

Kuttanad, Kole and Chittoor regions 11. Area of adaptation

Apply - Organic manure - 5t/ha and NPK - 90:45:45 kg/ha 12. Tips on cultivation

Rajappan Nair N. 13. Scientists responsible for

Sukumaran Nair S., Rema Bai N. developing the variety

: Rice 1. Crop

: Asha (M0 5) 2. Variety

Hybridization and selection 3. Method of breeding

IR 11-1-66 x Kochuvithu 4 Source / parent / pedigree

1980 Kerala State Seed Sub Committee meeting 5. Year of release and authority

RRS, Moncompu 6. Evolved at

IC No.263714, Notified as per S.O.NO.569 (E)dt.13-8-84 7. Registration / notification details:

Photo insensitive, medium duration (120 days) variety Specific advantages / features :

suited for additional crop (kharif) also. Resistant to BPH, moderately resistant to sheath blight and stem

borer. Susceptible to blast. Hulling % - 80.

Dwarf (80-85 cm) and non-lodging plants producing Key characters for identification: 9.

medium bold, straw coloured grains with red kernel.

5 - 6 t/ha10. Productivity

Kuttanad and kole areas of Kerala 11. Area of adaptation

Suited for Puncha Season. Apply - Organic manure -12. Tips on cultivation

5t/ha and NPK - 90:45:45 kg/ha

Rajappan Nair N. Scientists responsible for 13.

Sukumaran Nair S., Rema Bai N. developing the variety

1. Crop Rice 2. Variety Pavizham (MO 6) 3. Method of breeding Hybridization and selection 4. Source / parent / pedigree IR 8 x Karivennel Year of release and authority : 1982 - Kerala State Seed Sub Committee meeting 6. Evolved at RRS. Moncomou 7. Registration / notification details: IC No.263715, Notified as per S.O.NO.258 (E)dt.14-5-86 Specific advantages / features : Photoinsensitive, medium duration (115 - 120 days) suitable for the additional crop (Virippu season) of Kuttanad. Resistant to BPH, moderately resistant to sheath blight, sheath rot and stack burn. Easy to thresh. Hulling % - 79.5 9. Key characters for identification: Dwarf (85-90 cm), non-lodging. Semi compact panicle with short, bold, straw coloured grains and red kernel. 10. Productivity 5 - 6 t/ha 11. Area of adaptation Kuttanad, Kole and Northern regions of Kerala, 12. Tips on cultivation Suited to all the three seasons and Puncha season of Kuttanad and Kole. Apply - Organic manure-5t/ha and NPK - 90:45:45 kg/ha 13. Scientists responsible for Rajappan Nair N., developing the variety Sukumaran Nair S. Rema Bai N., Thomas M.J. 1. Crop Rice 2. Variety Karthika (MO 7) 3. Method of breeding Hybridization and selection Source / parent / pedigree Triveni x IR 1539 5. Year of release and authority 1987 - Kerala State Seed Sub Committee meeting 6. Evolved at RRS. Moncompu 7. Registration / notification details: IC No.263716 Specific advantages / features : Photo insensitive, short duration (110 to 115 days) variety suitable for additional crop (Virippu) of Kuttanad. Resistant to BPH, moderately resistant to sheath blight, sheath rot and BLB 9. Key characters for identification: Dwarf (90-95cm), and non-lodging plants producing compact panicles with straw coloured, medium bold grains and red kernel. 10. Productivity 6- 6.5 t/ha 11. Area of adaptation Throughout Kerala 12. Tips on cultivation Suited for all the three seasons and puncha season of Kuttanad and Kole. Apply - Organic manure - 5t/ha,

Scientists responsible for

developing the variety

13.

Sukumaran Nair. S., Rajappan Nair N.

and NPK - 70:35:35 kg/ha

2. Name of the variety : Aruna (MO 8)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : Jaya x PTB 33

5. Year of release and authority : 1990 - Kerala State Seed Sub Committee meeting

6. Evolved at : RRS, Moncompu 7. Registration / notification details : IC No.263640

8. Specific advantages / features : Photo insensitive, short duration (100 to 110 days)

variety having seed dormancy up to one month, specially suited to wet harvest season. Resistant to BPH, moderately resistant to sheath blight, BLB, brown spot, stem borer and gall midge. Susceptible to neck

blast. Hulling % - 74

9. Key characters for identification: Dwarf (85 cm), non-lodging plants producing straw

coloured, short bold grains with golden furrows.

Kernel colour - red

10. Productivity : 5.5 - 6 t/ha

11. Area of adaptation : Kuttanad, Kole and Onattukara region

12. Tips on cultivation : Suited to Kharif and Puncha seasons. Apply - Organic

manure - 5t/ha and NPK - 70:35:35 kg/ha

13. Scientists responsible for

developing the variety

Rema Bai.N., Rajappan Nair. N., Leenakumari S., Radha Devi D.S.,

Devika R., Ahmed Rejina

1. Crop : Rice

2. Variety : Makom (MO 9)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : ARC 6650 x Jaya

5. Year of release and authority : 1990 - Kerala State Seed Sub Committee meeting

6. Evolved at : RRS, Moncompu
7. Registration / notification details : IC No.263641

8. Specific advantages / features : Photo insensitive, short duration (100 to 110 days)

with seed dormancy up to 3 weeks. Specially suited for wet harvest season. Resistant to BPH, moderately resistant to sheath blight, sheath rot, brown spot, stem

borer, gall midge and leaf roller. Hulling % 79

9. Key characters for identification: Dwarf (80 cm), non-lodging plants with semi-compact

panicle. Straw coloured, short bold grains with golden

furrows and red kernel

10. Productivity : 6 - 6.5 t/ha

11. Area of adaptation : Through out Kerala

12. Tips on cultivation : Suited for all the three seasons. Apply - Organic

manure - 5t/ha and NPK - 70:35:35 kg/ha

13. Scientists responsible for : Rema Bai.N.,

c'avaloping the variety Rajappan Nair N., Leenakumari S., Radha Devi D.S.

Devika R., Ahmed Rejina

2. Variety : Remya (MO 10)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : Jaya x PTB 33

5. Year of release and authority : 1990 - Kerala State Seed Sub Committee meeting

6. Evolved at : RRS, Moncompu 7. Registration / notification details : IC No.263797

Registration / notification details : IC No.263797
 Specific advantages / features : High yielding, photo insensitive, medium duration (120)

days) variety with seed dormancy up to one month. Suited to wet harvest season. Resistant to BPH and moderately resistant to blast, sheath blight, sheath

rot and gall midge

9. Key characters for identification : Semi tall (110 cm), non-lodging plants with semi-

compact panicle and golden yellow coloured, medium

bold grains with red kernel

10. Productivity : 6.5 t/ha

11. Area of adaptation : Southern districts of Kerala.

12. Tips on cultivation : Suited to all the three seasons. Apply - Organic

manure - 5t/ha and NPK - 90:45:45 kg/ha

13. Scientists responsible for : F developing the variety F

Rema Bai.N. , Rajappan Nair N., Leenakumari S., Radha Devi D.S.,

Devika R., Ahmed Rejina

1. Crop : Rice

2. Variety : Kanakom (MO 11)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : IR 1561 x PTB 33

5. Year of release and authority : 1990 - Kerala State Seed Sub Committee meeting

6. Evolved at : RRS, Moncompu
7. Registration / notification details : IC No.263717

8. Specific advantages / features : Photo insensitive, medium duration (120 to 125 days),

multiple resistant variety. Highly resistant to BHP, moderately resistant to sheath blight, sheath rot, blast,

BLB, RTV, stem borer, gall midge and WBPH.

Hulling % - 76.5

9. Key characters for identification : Semi-tall (115 cm), non-lodging variety with compact

panicle and short bold, straw coloured grains with

red kernel

10. Productivity : 5.5 - 6 t/ha

11. Area of adaptation : Palakkad, Kuttanad, Kole and Onattukara regions

12. Tips on cultivation : Suited to all the three seasons. Apply - Organic

manure - 5t/ha and NPK - 90:45:45 kg/ha

13. Scientists responsible for developing the variety

: Rema Bai N.,

Rajappan Nair N., Leenakumari S., Radha Devi D.S.,

Devika R., Ahmed Rejina

Rice 1. Crop

Raniini (MO 12) 2. Variety Pediaree selection 3. Method of breeding

MO 5 x Improved Sona KAU M 28-1-1 4. Source / parent / pedigree

1996 - Kerala State Seed Sub Committee meeting Year of release and authority 5.

RRS, Moncompu 6. Evolved at

7. Registration / notification details:

Medium duration (118-120 days), medium tillering, non-8. Specific advantages / features :

photosensitive variety with good culm strength and better anchorage. Resistant to BPH, blast, sheath blight and sheath rot and moderately resistant to gall

midge biotypes 1 to 4 and stem borer

Dwarf (90-95 cm), non-lodging plants with compact and 9. Key characters for identification:

well exerted panicle and short, bold, straw coloured

grains. Kernel colour red.

: 5 - 6 t/ha 10. Productivity

: Throughout Kerala especially blast endemic areas of 11. Area of adaptation

the state

: Suited for all the three seasons. Apply - Organic manure-12. Tips on cultivation

5t/ha and NPK-90:45:45 kg/ha

:. Devika R., 13. Scientists responsible for

Rema Bai N., Ahmed Rejina, Leenakumary S., developing the variety

Joseph C.A.

: Rice 1. Crop

Pavithra (MO 13) 2. Variety Pedigree method 3. Method of breeding

4. Source / parent / pedigree 1998 - 19th Kerala State Seed Sub Committee meeting Year of release and authority

Surekha x MO 5

RRS, Moncompu 6. Evolved at

IC No.263879, Notified as per S.O.NO.837(E)dt.4-9-2002 Registration / notification details : 7.

Medium duration (115-120 days) variety resistant to BPH Specific advantages / features :

and gall midge biotype 5.

Dwarf, medium tillering plants with medium bold grains 9. Key characters for identification:

and red kernel

: 6 - 7 t/ha 10. Productivity

: Throughout Kerala 11. Area of adaptation

Suited for all the three seasons. Apply - Organic manure-12. Tips on cultivation

5t/ha and NPK - 90:45:45 kg/ha

13. Scientists responsible for developing the variety

: Rema Bai N.

Devika R., Ahmed Regina, Leenakumary S., Joseph C.A., Rema Devi L., Ambika Devi D., Vasudevan Nair K.P.

2. Variety : Panchami (MO 14)

3. Method of breeding : Pedigree method

4. Source / parent / pedigree : Pothana x MO 5

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : RRS, Moncompu

7. Registration / notification details: IC No.263880, Notified as per S.O.NO.837(E)dt.4-9-2002

B. Specific advantages / features : Medium duration (115-120 days) variety resistant to

BPH and gall midge biotype 5

9. Key characters for identification: Dwarf, medium tillering plants with medium bold grains

and red kernel

10. Productivity : 6 - 7 t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Suited for all the three seasons. Apply - Organic manure-

5t/ha and NPK - 90:45:45 kg/ha

13. Scientists responsible for : Rema Bai N.

developing the variety Devika R., Ahmed Regina, Leenakumari S., Joseph C.A.,

Rema Devi, L., Ambika Devi D., Vasudevan Nair K.P.

1. Crop : Rice

2. Variety : Remanika (MO 15)

3. Method of breeding : Mutation 4. Source / parent / pedigree : M0 1

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : RRS Moncompu

7. Registration / notification details: Notified as per S.O.NO.837(E)dt.4-9-2002

8. Specific advantages / features : Short duration (100-105 days) variety resistant to BPH

and tolerant to gall midge

9. Key characters for identification: Dwarf, medium tillering plants with short bold grains

and red kernel

10. Productivity : 5.5 - 6 t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Suited for all the three seasons. Apply - Organic manure-

5t/ha and NPK - 70:35:35 kg/ha

13. Scientists responsible for : Devika.R., developing the variety Rema Bai :

Rema Bai N., Ahmed Regina, Leenakumari S.,

Joseph C.A., Reena Mathew, Rema Devi L., Ambika

Devi D., Vasudevan Nair K.P.

Rice 1. Crop

Uma (MO 16) 2. Variety

Pediaree selection 3. Method of breeding

MO 6 x Pokkali 4. Source / parent / pedigree

5. Year of release and authority • 1998 - 19th Kerala State Seed Sub Committee meeting

6 Evolved at RRS. Moncompu

IC No.263881, Notified as per S.O.NO.837(E)dt.4-9-2002 7. Registration / notification details:

Medium duration (115-120 days during Mundakan and 8. Specific advantages / features :

120-135 days during Virippu) resistant to BPH and gall

midge biotype 5. Dormancy upto 3 weeks.

Dwarf plants with medium bold grains and red kernel 9. Key characters for identification:

6.5 - 7 t/ha 10. Productivity

11. Area of adaptation : Through out Kerala

Suited to all the three seasons especially to additional 12. Tips on cultivation

crop season of Kuttanad. Apply Organic manure 5t/ha

and NPK - 90:45:45 kg/ha

13. Scientists responsible for

developing the variety

Devika R.,

Rema Bai N., Ahmed Regina, Leenakumary S., Joseph C.A., Rema Devi L., Ambika Devi D.,

Vasudevan Nair K.P.

1. Crop Rice

Revathy (MO 17) 2. Variety

Pedigree selection 3. Method of breeding

Cul.12814 x MO 6 4. Source / parent / pedigree

1998 - 19th Kerala State Seed Sub Committee meeting 5. Year of release and authority

6. Evolved at RRS, Moncompu

IC No.263882, Notified as per S.O.NO.837(E)dt.4-9-2002 7. Registration / notification details:

Short duration (105-110 days) variety resistant to BPH Specific advantages / features :

and medium resistant to gall midge. Dormancy upto 3 weeks

Dwarf, medium tillering plants with medium bold grains 9. Key characters for identification:

and red kernel

5.5 - 6 t/ha 10. Productivity

: Throughout Kerala 11. Area of adaptation

Suited to all the three seasons especially to additional 12. Tips on cultivation

crop season of Kuttanad. Apply - Organic manure 5t/

ha, and NPK - 70:35:35 kg/ha

13. Scientists responsible for

developing the variety

Devika R.,

Rema Bai N., Ahmed Regina, Leenakumary S., Joseph C.A., Rema Devi L., Ambika Devi D.,

1. Crop Rice

2. Variety Karishma (MO 18)

3. Method of breeding Pedigree selection

4. Source / parent / pedigree MO 1 x MO 6

5. Year of release and authority 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at RRS, Moncompu

7. Registration / notification details : Notified as per S.O.NO.837(E)dt.4-9-2002

Specific advantages / features : Medium duration (115-120 days) variety resistant to

BPH and medium resistant to gall midge. Tolerant to

iron toxicity

9. Key characters for identification: Dwarf, medium tillering plants with medium bold grains

and red kernel

10. Productivity : 5 - 5.5 t/ha

11. Area of adaptation Suited to kari lands of Kuttanad

12. Tips on cultivation Suited to all the three seasons, Apply - Organic

manure-5t/ha and NPK - 90:45:45 kg/ha

13. Scientists responsible for Rema Bai N.,

developing the variety Devika R., Ahmed Regina, Leenakumari S., Joseph C.A.,

Madhusoodanan Nair, Soosamma Jacob, Rema Devi L.

Vasudevan Nair K.P.

1. Crop Rice

2. Variety Krishnanjana (MO 19)

3. Method of breeding Pedigree selection

Source / parent / pedigree M01xM06

5. Year of release and authority 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at RRS, Moncompu

7. Registration / notification details : Notified as per S.O.NO.837(E)dt.4-9-2002

Specific advantages / features : High yielding, short duration(105-110 days), resistant

to BPH and tolerant to iron toxicity. Dormancy upto 3

weeks.

9. Key characters for identification: Medium tillering with medium bold grains and red

kernel

10. Productivity 5 - 5.5 t/ha

11. Area of adaptation Suited to kari lands of Kuttanad

12. Tips on cultivation Suited to all seasons. Apply - Organic manure 5t/ha

and NPK - 70:35:35 kg/ha

13. Scientists responsible for developing the variety

Rema Bai.N.,

Devika.R., Smt. Ahmed Regina, Leenakumari. S., Joseph.C.A., Madhusoodanan Nair, Soosamma Jacob,

- Rema Devi. L, Vasudevan Nair. K.P.

2. Variety : Gouri (MO 20)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : MO 4 x Cul. 25331

5. Year of release and authority : 2002 - 21st Kerala State Seed Sub Committee meeting

6. Evolved at : RRS, Moncompu

7. Registration / notification details:

8. Specific advantages / features : Medium duration (115-120 days), moderately resistant

to major pests like BPH, leaf roller and gall midge and

diseases like sheath blight and sheath rot.

9. Key characters for identification: Semi-tali (94.5 cm), medium tillering and non-lodging

plants with medium bold, red kernelled grains

10. Productivity : 5.8 t/ha

11. Area of adaptation : Suitable for Kuttanad and kole areas

12. Tips on cultivation : Apply - Organic manure - 5t/ha and NPK - 90:45:45 kg/ha

13. Scientists responsible for : Fl. Devika,

developing the variety Flema Bai.N., Leenakumari. S., Joseph.C. A., Rema Devi. L.,

Vasudevan Nair, K. P.

1. Crop : Rice

2. Variety : Prathyasha (MO - 21)

3. Method of breeding : Pedigree method

4. Source / parent / pedigree : IET 4786 x MiO8 (Aruna)

5. Year of release and authority : 2010- 24th Kerala State Seed Sub Committee meeting.

6. Evolved at : RRS, Moncompu

7. Registration / notification details: 1C 583749, 2010 - 55th Central Sub Committee meeting

8. Specific advantages / features : Moderately tolerant to gall midge, BPH, sheath blight

and sheath rot. High yielding with duration 25 days lesser than Uma. Grains contain higher Iron and Zinc

9. Key characters for identification: Semi dwarf, non lodging, photo insensitive, long bold

and red kernel.

10. Productivity ; 5.5 t/ha

11. Area of adaptation : Irrigated areas of Kuttanad.

12. Tips on cultivation : Seed to flowering 70-80 days. Seed rate 100 kg/ha for

broadcasting and 80 kg/ha for transplanting.

13. Scientists responsible for

developing the variety Leenakumari.S, Rema Bai.N, Surendran.M,

Devika.R

Annie Koruth, Abraham Varghese

2. Variety : Lekshmi (KYM))

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : Kottarakkara I x Poduvi

5. Year of release and authority : 1981 - Kerala State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details : IC No.397779, Notified as per S.O.NO.19 (E) dt.14-1-82

8. Specific advantages / features : Sturdy, photosensitive, long duration (165-180 days)

variety with high straw yield. Moderately resistant to

blast, leaf spot, stem borer and case worm.

Hulling % - 80

9. Key characters for identification: Tall (128 cm) and non-lodging plants with long, bold

grains and red kernel.

10. Productivity : 4 t/ha

11. Area of adaptation : Eastern laterite regions of southern districts and sandy

tracts of Onattukara

12. Tips on cultivation : Suited to mundakan season in double crop wetlands

characterized by waterlogged deep soils. Apply -Organic manure - 5t/ha and NPK - 40:20:20 kg/ha

13. Scientists responsible for developing the variety

Sreedhara Kurup. A.E.,

Santhakumari. S.

1. Crop : Rice

2. Variety : Bhagya (KYM 2)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : Tadukkan x Java

5. Year of release and authority : 1985 - Kerala State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details:

B. Specific advantages / features : Photo insensitive, short duration (95 to 100 days) variety

suitable for dry sowing. Tolerant to drought in the early growth phases, moderately tolerant to blight, stem

borer, leaf roller and case worm.

9. Key characters for identification : Semi tall (115 cm), non-lodging plants with light brown

grains and red kernel

10. Productivity : 4.4 t/ha

11. Area of adaptation : Onattukara and Eastern laterite regions of South Kerala

12. Tips on cultivation : Suited to dry sown crop (Virippu season) Apply -

Organic manure - 5t/ha and NPK - 70:35:35 kg/ha

13. Scientists responsible for

developing the variety

: Santhakumari.S.

1. Crop

Rice

2. Variety

Onam (KYM 3)

3. Method of breeding

Recombination breeding

4. Source / parent / pedigree

Kochuvithu x T(N)-I X Triveni

5. Year of release and authority

1985 - Kerala State Seed Sub Committee meeting

6. Evolved at

: ORARS, Kayamkulam

7. Registration / notification details:

8. Specific advantages / features :

Photo insensitive, short duration (95 days) variety suitable for dry sowing. Tolerant to drought in the early growth phase, resistant to BPH and tolerant to sheath

blight and blast.

9. Key characters for identification:

Semital (105 cm), non-lodging plants with light brown

grains and red kernel

10. Productivity

: 4 t/ha

11. Area of adaptation

Onattukara region

12. Tips on cultivation

Suited to dry sown crop (Virippu season) Apply-

Organic manure - 5t/ha and NPK - 70:35:35 kg/ha

13. Scientists responsible for developing the variety

Santhakumari.S.

1. Crop

Rice

2. Variety

: Dhanya (KYM 4)

3. Method of breeding

: Recombination breeding

4. Source / parent / pedigree

Jaya x PTB 4

5. Year of release and authority

1992 - Kerala State Seed Sub Committee meeting

6. Evolved at

ORARS, Kayamkulam

7. Registration / notification details:

IC No.397780

8. Specific advantages / features :

Long duration (165 days), photosensitive variety with high straw yield; tolerant to drought in later stages.

Moderately resistant to leaf roller, stem borer, sheath

blight and blast.

9. Key characters for identification:

Tall (141 cm), medium lodging plants with medium bold

grains and red kernel colour

10. Productivity

: 4.3 t/ha

11. Area of adaptation

Onattukara region

12. Tips on cultivation

Suited to Mundakan season, Apply - Organic

manure - 5t/ha and NPK - 60:30:30 kg/ha

13. Scientists responsible for developing the variety

Sreekumaran Nair.S.

2. Variety : Sagara (KYM 5)
3. Method of breeding : Mass Selection

4. Source / parent / pedigree : Oorumundakan local

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details: IC No.397781

8. Specific advantages / features : Highly photosensitive, sturdy, heavy tillering long

duration (180 to 190 days) variety highly tolerant to salinity and flood. Tolerant to blast, sheath blight and

stem borer and susceptible to leaf roller.

9. Key characters for identification: Tall (165 cm), medium lodging plants with brown, short

bold grains and red kerne! colour.

10. Productivity : 5 t/ha

11. Area of adaptation : Oru mundakan area

12. Tips on cultivation : Suited to Mundakan season in single crop of coastal

saline, ill drained situation Apply - Organic manure-

5t/ha and NPK - 40:20:20 kg/ha

13. Scientists responsible for : Sivan Pillai.K.,

developing the variety Sukumaran Nair.S., Suja.G.

1. Crop ; Rice

Variety : Makaram (KTR-2)
 Method of breeding : Mass selection

4. Source / parent / pedigree : Cheradi local

5. Year of release and authority : 1998 - 19th Kerala Kerala State Seed Sub Committee

meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details : IC No.397782 Notified as per S.O.NO.837(E)dt.4-9-2002

8. Specific advantages / features : Strongly photosensitive, long duration (168 days)

variety tolerant to major pests and diseases.

9. Key characters for identification: Tall (111cm) plants with long panicles having large

no. of grains. Kernel colour is red.

10. Productivity : 5.2 t/ha

11. Area of adaptation : Suited to cherady tracts during Mundakan season

12. Tips on cultivation : Apply - Organic manure - 5t/ha and NPK - 40:20:20 kg/ha

13. Scientists responsible for : Sverup John, developing the variety Mohanakumar

developing the variety Mohanakumaran.N., Vijayagopal.P.D.,

Ramachandran Nair. N., Kunjamma P. Mathew,

Vasantha kumar.K.

Variety : Kumbham (KTR-3)
 Method of breeding : Mass selection

4. Source / parent / pedigree : Cheradi local

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details: IC No.397783, Notified as per S.O.NO.837(E)dt.4-9-2002

8. Specific advantages / features : Strongly photosensitive, long duration (165-178 days)

variety tolerant to major pests and diseases and also

to lodging

9. Key characters for identification: Tall (95 cm) variety with bold grains and red kernel.

10. Productivity : 4.7 t/ha

11. Area of adaptation : Suited to Cheradi tracts during Mundakan season

12. Tips on cultivation : Apply - Organic manure - 5t/ha and NPK - 40:20:20 kg/ha

13. Scientists responsible for : Sverup John,

developing the variety Mohanakumaran.N., Vijayagopal.P.D.,

Ramachandran Nair. N. Kunjamma P. Mathew,

Vasantha kumar.K.

1. Crop : Rice

2. Variety : Chingam

3. Method of breeding : Re-Combination breeding

4. Source / parent / pedigree : Mutant PTB 9 x mutant (IR 8 x PTB 8)

5. Year of release and authority : 2002 - 21st State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details: IC No.397784

. Specific advantages / features : Photo insensitive, short duration (95-100 days) variety

suitable for dry sowing. Tolerant to drought during early stages. Non- lodging and non-shattering. Tolerant to stem borer and moderately tolerant to

sheath blight and brown leaf spot

9. Key characters for identification: Semi-tall plants with short bold grains and red kernel

colour.

10. Productivity : 4.1 t/ha

11. Area of adaptation : Onattukara region

12. Tips on cultivation : Apply-Organic manure-5t/ha and NPK-70:35:35 kg/ha

13. Scientists responsible for : Bindu.M.R.,

developing the variety Sverup John, Alexander D., Nair N.R., Suja.G., Indira.M.

Sushamakumari.P., Sukumaran Nair.S.

1. Crop : Rice 2. Variety : Dhanu

3. Method of breeding : Mutation breeding

4. Source / parent / pedigree : PTB 20

5. Year of release and authority : 2002 - 21st State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details: IC No.397785

8. Specific advantages / features : Long duration (159 days), photo sensitive variety

moderately tolerant to sheath blight, brown leaf spot and stem borer. Resistant to shattering. Tolerates

drought and flood conditions.

9. Key characters for identification : Semi-tall (123 cm), non-lodging plants producing grains

with red kernel colour.

10. Productivity : 3.8 t/ha

11. Area of adaptation : Onattukara region

12. Tips on cultivation : Suitable for Mundakan season Apply -Organic manure-

5t/ha and NPK-40:20:20 kg/ha

13. Scientists responsible for : Sverup John,

developing the variety Bindu.M.R., Alexander.D., Nair.N.R., Indira.M., Suja.G.

Sushamakumari.P., Sukumaran. S.

1. Crop : Rice

2. Variety : Thulam
3. Method of breeding : Mutation breeding (Ga

3. Method of breeding : Mutation breeding (Gamma irradiation)4. Source / parent / pedigree : Local Cheradi

5. Year of release and authority : 2010 - 24th Kerala State Seed Sub Committee meeting.

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details: IC 584687

8. Specific advantages / features : High yield, early maturity, long duration. Suitable for

Mundakan in Cheradi tract. Tolerant to stem borer,

leaf roller, lodging and unexpected flooding.

9. Key characters for identification : Photo sensitive, semi tall, non lodging and non

shattering, with red kernel belonging to long

duration group (150 days),

10. Productivity : 6.0 t/ha grains + 6.5 t/ha straw

11. Area of adaptation : For Mundakan crop of Cheradi tracts.

12. Tips on cultivation : Transplant at 30-45 days after sowing, Apply organic

manure 5 t/ha and NPK 60:50:25 kg/ha

13. Scientists responsible for developing the variety

Sverup John

Bindhu.M.R, Alexander.D,

Susamma P. George, Sushamakumari P.

Vilasini.T.N, Indira.M, Suia.G

1. Crop : Rice
2. Variety : Vyttila 3

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : Vyttila 1 x T (N) 1

5. Year of release and authority : 1987 - Kerala State Seed Sub Committee meeting

6. Evolved at : RRS, Vyttila
7. Registration / notification details : IC No. 263761

8. Specific advantages / features : Photoinsensitive, medium duration (110 to 115 days)

variety with good cooking quality. Tolerant to salinity, soil acidity and to major pests and diseases. Escapes

flood and water stagnation.

9. Key characters for identification: Tall(160 cm) plants susceptible to lodging and with

long bold grains. Kernel colour red

10. Productivity : 2 - 2.5 t/ha
11. Area of adaptation : Pokkali region

12. Tips on cultivation : Suited to Virippu season Apply Organic manure -

5t/ha and NPK - 20:40:0 kg/ha

13. Scientists responsible for : George,T.U. developing the variety, Tomy.P.J.

1. Crop : Rice

2. Variety : Vyttila 4

3. Method of breeding : Hybridization and selection
4. Source / parent / pedigree : Chettivirippu x IR 4630-22-2-17

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : RRS, Vyttila
7. Registration / notification details : IC No. 263765

8. Specific advantages / features : Photo insensitive, medium duration (120 to 125 days)

variety with good cooking quality. Tolerant to salinity and soil acidity, escapes flash floods and water stagnation. Tolerant to major pests and diseases.

9. Key characters for identification: Tall (161 cm) plants having lodging habit with kneeing

ability. Produces straw coloured, medium bold grains

with red kernel.

10. Productivity : 3.25 t/ha

11. Area of adaptation : Pokkali region - tidal wet lands and coastal saline

single crop rice fields of Ernakulam and Alappuzha

districts

12. Tips on cultivation : Suited to Virippu season; Apply - NPK-20:40:0 kg/ha

13. Scientists responsible for : George T.U.

developing the variety George.K.M., Shylaraj.K.S., Tomy. P.J.,

Reena Grittle Pinhero

2. Variety : Vyttila 5

3. Method of breeding : Mutation4. Source / parent / pedigree : Mashuri

5. Year of release and authority : 1996 - Kerala State Seed Sub Committee meeting

6. Evolved at : RRS, Vyttila7. Registration / notification details : IC No. 470140

8. Specific advantages / features : Non-photosensitive, medium duration (115 days) variety

with seed dormancy of two weeks. Hulling %- 82

9. Key characters for identification: Tall (140 cm) and moderately lodging plants with

golden seed coat and white kernel.

10. Productivity : 3.25 t/ha

11. Area of adaptation : Pokkalirice ecosystem and flood prone and deep water

areas

12. Tips on cultivation : Suited for Virippu season; Apply- NPK - 20:40:0 kg/ha

13. Scientists responsible for : George.T.U.

developing the variety George.K.M., Shylaraj.K.S., Sasidharan.N.K.

1. Crop : Rice

2. Variety : VTL- 6

3. Method of breeding : Hybridization and selection
4. Source / parent / pedigree : (Cheruvirippu x IR.5) x Jaya

5. Year of release and authority : 2004 - Kerala State Seed Sub Committee meeting

6. Evolved at : RRS, Vyttila7. Registration / notification details : IC No. 470140

8. Specific advantages / features : Medium duration (105 –110 days), non-photosensitive.

tolerant to salinity, acidity and water stagnation.

Hulling %-80,

9. Key characters for identification: Generally semi tall (115-120 cm) and non-lodging

plants with light green leaves. Auricles absent. Golden

seed coat and red kernel.

10. Productivity : 3.5 t/ha

11. Area of adaptation : Pokkali and other waterlogged coastal saline areas.

12. Tips on cultivation : Suited to Virippu season; Apply - NPK- 20:40:0 kg /ha

13. Scientists responsible for : Shylaraj, K.S.

developing the variety George.K.M., Sivan Pillai, Sreekumaran.V.,

Rajendran.C.G., Anilakumar. K., Sasidharan.N. K.

1. Crop : Rice
2. Variety : VTL -7

3. Method of breeding : Hybridization followed by selection

4. Source/parent/ pedigree : IR-8 X Patnai-23

5. Year of release and authority : 2006- 23rd Kerala State Seed Subcommittee meeting.

6. Evolved at : Rice Research Station, Vyttila:

7. Registration/Notification details : IC 583747

8. Specific advantages/features : Semi-tail, non-lodging variety having tolerance to

salinity, acidity and flood.

9. Key characters for identification: Medium duration, Long slender white grains

10. Productivity : 4t/ha (Average); 4.5t/ha (Potential)

11. Area of adaptation : Pokkali and other waterlogged coastal saline areas

12. Tips on cultivation : Seed rate 100 kg/ha, plant at closing spacing of

20 x 15 cm, duration 115-120 days

13. Scientists responsible for

developing the variety

Shylaraj K. S

George K. M, Sivan Pillai, Sasidharan N. K Sreekumaran V, Rajendran C. G, Anilakumar K.

1. Crop : Rice
2. Variety : VTL 8

3. Method of breeding : Hybridization followed by selection

4. Source / parent / pedigree : IR 47310-94-4-1 x CSR 10

5. Year of release and authority : 2010- 24th Kerala State Seed Sub Committee meeting.

6. Evolved at : RRS Vyttila

7. Registration / notification details: IC 583748, 2010 - 55th Central Sub Committee meeting

8. Specific advantages / features : High yield, semi tall, tolerant to salinity (8 dS/m),

acidity and submergence

9. Key characters for identification: Photo insensitive, 130-135 cm height, non lodging,

medium bold, awn less red kernel variety

10. Productivity : 4.05 t/ha

11. Area of adaptation : Pokkali rice eco system

12. Tips on cultivation : 85 days for 50% flowering and 115 days from seed

to seed. Seed rate 100kg/ha

13. Scientists responsible for : Shyalaraj.K.S

developing the variety George. K.M, Sivan Pillai, Sasidharan.N.K,

Sreekumaran.V, Anilakumar.K, Alice Antony

2. Variety : Arathy (ACV – 1)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : Jaya x PTB 33

5. Year of release and authority : 1992 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details :

8. Specific advantages / features : High yielding, photoinsensitive, medium duration (120

to 127 days) variety. Tolerant to transplanting of overaged seedlings. Tolerant to sheath blight and sheath

rot.

9. Key characters for identification : Semi tall (100 cm), non-lodging plants with long bold

grains and red kernel.

10. Productivity : 3.8 t/ha

11. Area of adaptation : Thiruvananthapuram district

12. Tips on cultivation : Suited to Virippu season Apply -Organic

manure - 5t/ha and NPK - 90:45:45 kg/ha

13. Scientists responsible for : Sreekumar.S.G.

developing the variety Rema Bai.N., Gopinathan

Rema Bai.N., Gopinathan Nair.V., Mohanakumaran.N.

1. Crop : Rice

2. Variety : Hraswa

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : IR - 8 x T - 140

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : Agricultural Research Station, Mannuthy

7. Registration / notification details:

8. Specific advantages / features : Extra short duration (75 to 80 days), high yielding variety,

suitable for direct seeding. Photoinsensitive, moderately resistant to water stress and tolerant to major pests

and diseases.

9. Key characters for identification: Dwarf (80 cm), non-lodging plants with straw coloured,

medium bold grains having red kernel.

10. Productivity : 2.9 t/ha
11. Area of adaptation : Kole lands

12. Tips on cultivation : Suited to Puncha season; Apply - Organic manure - 5t/

ha and NPK - 70:35:35 kg/ha

13. Scientists responsible for : Radhakrishnan.V.V.

developing the variety Kuriakose.T.F., Gopinathan.R., Ibrahim.K.K.,

Usha.K.E., Maya Devi.P.

Rice 1. Crop

Ahaiya (Cul.10-1-1) 2. Variety

Hybridization and selection 3. Method of breeding

(PTB 10 x TN 1) x TN 1 Source / parent / pedigree 4.

1998 - 19th Kerala State Seed Subcommittee meeting 5. Year of release and authority

Agricultural Research Station, Mannuthy 6. Evolved at

Registration / notification details: 7.

Short duration (90-100 days) variety with good cooking Specific advantages / features :

quality. Tolerant to leaf folder and moisture stress in the early growth phase. Moderately resistant to blast.

Dwarf (85cm) plants with broad leaf lamina, non-9. Key characters for identification:

drooping, persistently green, erect boot leaf and compact panicle with medium bold grains having red

kernel colour.

5 t/ha 10. Productivity

Double cropped wet lands especially kole lands 11. Area of adaptation

Apply - Organic manure-5t/ha and NPK - 70:35:35 kg/ha 12. Tips on cultivation

Radhakrishnan. V.V., 13. Scientists responsible for

Tessy Joseph, Jaikumaran.U., Pushkaran.K., developing the variety

Varkey.P.A

Rice 1. Crop

Manu Priya 2. Variety

Hybridization and selection 3. Method of breeding

Hybrid derivative of PK 3355 - 5-14xBhadra Source/parent/ pedigree

2006 - 23rd Kerala State Seed Sub Committee meeting Year of release and authority 5.

Agricultural Research Station, Mannuthy 6. Evolved at

Registration/Notification details: 7.

High yield, photo insensitive, short duration (100-105 8. Specific advantages/features

days), non-lodging and tolerant to major pests and

diseases

Broad leaves with more number of panicles, Key characters for identification: 9.

higher thousand grain weight, red kernel

: 7 - 8 t/ha 10. Productivity

: Wet lands and Kole lands of Central zone of Kerala 11. Area of adaptation

: Transplant 20-22 days after sowing; Apply organic Tips on cultivation 12.

manure 5 t/ha and N:P:K 90:45:45 kg/ha

Kanakamany M. T. Scientists responsible for 13. Jaikumaran U, V. V. Radhakrishnan, Rosamma C. A, developing the variety

Vidhu F P, Vanaja D...

1. Crop : Rice

2. Variety : Deepthi (WND - 3)
3. Method of breeding : Pedigree selection

4. Source / parent / pedigree : Edavaka

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Ambalavayal

7. Registration / notification details: Notified as per S.O.NO.837(E)dt.4-9-2002

8. Specific advantages / features : Photo insensitive, long duration (150-160 days) variety

moderately resistant to blast, leaf folder, stem borer

and drought conditions

9. Key characters for identification: Semi-tall variety with red kernel colour

10. Productivity : 4 t/ha

11. Area of adaptation : Wayanad and Idukki districts

12. Tips on cultivation : Apply-Organic manure - 5t/ha and NPK - 40:20:20kg/ha

13. Scientists responsible for : Susamma P. George,

developing the variety Kannan K., Sansamma George, Manomohan Das T.P.

George C.M., Pillai G. R., Pillai P. B., Kumaran, K.,

Aipe K.C.

1. Crop : Rice

2. Variety : Kunjukunju Varna

3. Method of breeding : Pure line selection (Farmer Participatory)

4. Source / parent / pedigree : Kunjukunju, a local rice cultivar

5. Year of release and authority : 2002 - 21st Kerala State Seed Sub Committee meeting

6. Evolved at : College of Horticulture, Vellanikkara

Palakkad District Panchayat, GALASA,

Anchathani & Nenmeni Padasekharams, Palakkad

7. Registration / notification details:

8. Specific advantages / features : Photo insensitive, short duration (110-115 days) variety,

moderately tolerant to major pests. Suitable for double cropped areas, for direct seeding and transplanting.

9. Key characters for identification : Semi-tall, non- lodging plants with purple pigmented

leaf sheath and apiculus. Red coloured kernel.

10. Productivity : 5.3 t/ha

11. Area of adaptation : Double cropped areas of Palakkad.

Thrissur and Ernakulam districts

12. Tips on cultivation : Apply - Organic manure - 5t/ha and NPK - 70:35:35 kg/ha

13. Scientists responsible for : Elsy C.R.,

developing the variety Gopinathan R., Radhakrishnan V.V., Karunakaran K.,

Estellita S., Jose Mathew, Rose Mary Francis, Vimi Louis, Karthikeyan K., Raji P., Pushkaran K.

Rice 1. Crop

Kunjukunju Priya Variety

Pure line selection (Farmer participatory) 3. Method of breeding

Kuniukunju, a local rice cultivar 4. Source / parent / pedigree

2002 - 21st State Seed Sub Committee meeting 5. Year of release and authority

College of Horticulture, Vellanikkara 6. Evolved at

Palakkad District Panchayat, GALASA,

Anchathani & Nenmeni Padasekharams, Palakkad

Registration / notification details: 7.

Photo insensitive, short duration (105-110 days) variety Specific advantages / features :

moderately tolerant to major pests. Suitable for double cropped areas, for direct seeding and transplanting

Semi-tall, non-lodging plants with short bold grains Key characters for identification: 9.

and red kernel.

5.2 t/ha 10. Productivity

Palakkad, Ernakulam and Thrissur districts 11. Area of adaptation

Suited to Virippu and Mundakan seasons 12. Tips on cultivation

Apply - Organic manure - 5t/ha and NPK - 70:35:35 kg/ha

13. Scientists responsible for developing the variety

: Elsv C.R.,

Gopinathan R., Radhakrishnan V.V., Karunakaran K., Estellita S., Jose Mathew, Rose Mary Francis, Vimi Louis, Karthikeyan K., Raji P., Pushkaran K.

Rice (oryza sativa) 1. Crop

2. Variety

Ezhome 1 Pediaree method of breeding 3. Method of breeding

4. Source / parent / pedigree Java x Kuthiru

2010- 24th Kerala State Seed Sub Committee meeting. 5. Year of release and authority

Pepper Research Station, Panniyur 6. Evolved at

IC 557500 7. Registration / notification details :

High yielding, non lodging, tolerant to medium Specific advantages / features :

salinity and flooding. Resistant to gall midge, leaf folder, case worm and moderately resistant to whirl maggot, sheath blight and bacterial leaf blight

Plant height100-110 cm, photo insensitive, non lodging 9. Key characters for identification

with strong and sturdy culms. Non shattering variety with dormancy of 25 days. Leaf sheath green, apiculas purple at flowering, grains extra long,

awnless and red kernel.

3.5 t/ha 10. Productivity

Saline prone Kaipad tracts of N. Kerala. 11. Area of adaptation

115-125 days from seed to 50 % flowering. Seed rate 12. Tips on cultivation 80-100kg/ha for sowing sprouted seeds on mounds,

suitable for organic rice production.

13. Scientists responsible for developing the variety

: Vanaia.T

Neema.V.P, Mammotty.K.P, Balakrishnan.P.C, Jayaprakash Naik, Jayaraj.P, Raji.P, Karthikeyan 1. Crop : Rice (oryza sativa)

2. Variety : Ezhome 2

3. Method of breeding : Pedigree method of breeding

4. Source / parent / pedigree : Jaya x Orkayma

5. Year of release and authority : 2010- 24th Kerala State Seed Sub Committee meeting.

6. Evolved at : Pepper Research Station, Pannivur

7. Registration / notification details: 1C 557503

8. Specific advantages / features : High yield, non lodging, awnless, suitable to saline

prone areas and for organic production

9. Key characters for identification: Plant height110-120 cm, photo insensitive, non

lodging with strong and steady culms, non shattering variety with dormancy of 25 days. Leaf

sheath green, apiculas non pigmented,

medium bold red kernels.

10. Productivity : 3.2 t/ha

11. Area of adaptation : Saline prone Kaipad tracts of N. Kerala.

12. Tips on cultivation : No major incidence of pests and diseases under

Kaipad system, Duration 125-130 days, seed rate 80- 100kg/ha. Sow sprouted seeds on mounds.

13. Scientists responsible for : Vanaja.T

developing the variety Neema.V.P, Mammotty.K.P, Balakrishnan.P.C.

Jayaprakash Naik, Jayaraj.P, Raji.P, Karthikeyan

Coconut (Cocos nucifera L.)

1. Crop Coconut

2. Variety Lakshaqanga 3. Method of breeding Hybridization

4. Source / parent / pedigree Laccadive Ordinary x Gangabondam

1988 - Kerala State Seed Subcommittee meeting 5. Year of release and authority

6. Evolved at RARS, Pilicode

7. Registration / notification details:

Specific advantages / features : Early bearer five years for flowering. Suitable for 8.

rain fed conditions also. Tolerant to drought. Weight

of copra 195 g. oil content 70.0 %

Tall trees with nut weight of 677 g, 9. Key characters for identification :

weight of husked nut 380 g

108 nuts / tree / year 10. Productivity Entire state of Kerala 11. Area of adaptation

Irrigated areas - NPK @ 1.0:0.5:2.0 kg/palm/year-12. Tips on cultivation

Rain fed areas - and NPK @ 0.5:0.32:1.2 kg/palm/year.

13. Scientists responsible for

developing the variety

Cron Improvement Division of RARS, Pilicode

Coconut 1. Crop 2. Variety Keraganga

Hybridization 3. Method of breeding

West Cost Tall x Gangabondam 4. Source / parent / pedigree

1989 - Kerala State Seed Sub committee meeting 5. Year of release and authority

RARS, Pilicode 6. Evolved at

Registration / notification details: 7.

Takes five years for flowering and gives 75 % more 8. Specific advantages / features :

copra yield (201g) than WCT. Oil content - 69%

Tall trees with nuts having 20.20 cm polar diameter. 9. Key characters for identification:

16.45 cm equatorial diameter and 1182 g weight. Weight of husked nut is 760 g and kernel thickness is 1.20 cm.

100 nuts / tree / year 10. Productivity

Coastal and midland regions; suitable for rainfed 11. Area of adaptation

condition also

Planting season: May - June, August - September 12. Tips on cultivation

Irrigated areas - NPK @ 1.0: 0.5: 2.0 kg/palm/annum; Rainfed areas - NPK @ 0.5:0.32:1.2 kg/palm/ annum

Scientists responsible for 13.

developing

Balakrishnan.P.C.,

Sukumaran Nair, S. Rajaram, K.P., Kannan, K.

Narayanan Nambiar.P.K.

1. Crop Coconut 2. Variety Ananthaganga 3. Method of breeding Hybridization Source / parent / pedigree Andaman Ordinary x Gangabondam 5. Year of release and authority 1989 - Kerala State Seed Subcommittee meeting Evolved at RARS, Pilicode 7. Registration / notification details : 8. Specific advantages / features : Six years for first harvest. Copra yield (216 g) is 77 % more than WCT. Tolerant to drought. Oil content 68.0 %, 9. Key characters for identification: Tall trees. Nuts with polar diameter 22.6 cm, equatorial diameter 16.85 cm, weight 1100 g and husked nut 795 g, kernel thickness 1.29 cm. 10. Productivity 95 nuts / tree / year 11. Area of adaptation Coastal and midland regions. Suitable for rain fed conditions also. 12. Tips on cultivation Planting season: May-June, August-September Irrigated areas - NPK @ 1.0: 0.5: 2.0 kg/ palm/year Rain fed areas - NPK @ 0.5:0.32:1.2 kg/palm/year 13. Scientists responsible for Balakrishnan P.C., developing Sukumaran Nair S. Rajaram K.P., Nair R.R., Kannan K. Narayanan Nambiar P.K. 1. Crop Coconut Variety Kerasree 3. Method of breeding Hybridization 4. Source / parent / pedigree West Cost Tall x Malayan Yellow Dwarf 5. Year of release and authority 1992 - Kerala State Seed Subcommittee meeting 6. Evolved at RARS, Pilicode 7. Registration / notification details : Specific advantages / features : Six years for first harvest. Adapted to all types of soils, not resistant to pests and diseases, suitable to rain fed conditions also. Copra yield - 216g. Oil content 66% Key characters for identification: Tall trees, light green nuts with polar diameter 17.02 cm. equatorial diameter 16.52 cm and weight of nut ·1011 g weight of husked nut 524.65 g, kernel thickness 1.13 cm 10. Productivity 140 nuts / tree / year 11. Area of adaptation Coastal and midland regions. Suitable for rainfed conditions. 12. Tips on cultivation Planting season: May-June, August-September Irrigated areas - NPK @ 1.0: 0.5:2.0 kg/palm/year Rainfed areas - NPK @ 0.5:0.32:1.2 kg/palm/year 13. Scientists responsible for Balakrishnan. P.C., developing Neema V.P., Kannan K., Narayanan Nambiar P.K,

Rajamony L., Sumangala S Nambiar, Krishnan Nair N.

Coconut 1. Crop

Kerasowbhagya Variety

Hybridization Method of breeding 3.

WCT x Straight Settlement Apricot Source / parent / pedigree

1993 - Kerala State Seed Subcommittee meeting Year of release and authority 5.

RARS, Pilicode 6. Evolved at

Registration / notification details: 7.

Suitable for moderate management conditions, Specific advantages / features

Tolerant to drought. Copra content 196g.

Oil content 68%

Tall tree with light orange nuts, polar diameter 21.8 cm, Key characters for identification: 9.

equatorial diameter 17.7 cm, nut weight 1091g, weight

of husked nut 694 g, kernel thickness 1.3 cm

130 nuts / tree / year 10. Productivity Coastal regions 11. Area of adaptation

Planting season : May-June, August- September 12. Tips on cultivation

Irrigated areas - NPK @ 1.0: 0.5: 2.0 kg/palm/year. Rain fed areas - NPK @ 0.5:0.32:1.2 kg/palm/year

13. Scientists responsible for

developing

Balakrishnan P.C., Neema V.P., Kannan K., Narayanan Nambiar P.K,

Rajamony L., Sumangala S Nambiar, Nair R.R. Jayaprakash Naik R.R., Krishnan Nair N.

: Coconut 1. Crop Kerasagara 2. Variety

Selection 3. Method of breeding

Sevenelles (South East Asia) 4. Source/parent/ pedigree

2006- 23rd Kerala State Seed Subcommittee meeting. Year of release and authority 5.

RARS, Pilicode 6. Evolved at

Registration/Notification details: 7.

Takes 8 years for flowering and gives 75% more Specific advantages/features 8.

copra yield (203.4 g) than WCT. Oil content-68%

Tall palms with light green nuts having 27cm polar Key characters for identification: 9.

diameter, 16.5cm equatorial diameter and 1300g weight. Weight of husked nut 575a and kernel thickness

is 1.5cm

: 99 nuts / palm / year 10. Productivity : Throughout Kerala 11. Area of adaptation

: Plant during May-June or August-September. Apply 12. Tips on cultivation

NPK @ 1:0.5:2 kg/palm/year for irrigated crop

: Jayaprakash Naik B., Scientists responsible for 13. developing the variety

Kannan K., Balakrishnan P.C, K.P.P.Nambiar, Joseph C. A., L. Rajamony, Narayanan Nambiar P. K., Ramachandran Nambiar P.K. Abdul Khader K. M, Sumangala S. Nambiar,

Neema V. P.

Cashew (Anacardium occidentale L.)

1. Crop : Cashew

2. Variety : Anakkayam - 1

3. Method of breeding : Selection

4. Source / parent / pedigree : Bapatla collection - Tree 139 - 1

5. Year of release and authority : 1982 - Kerala State Seed Sub Committee meeting

6. Evolved at : Cashew Research Station, Anakkayam

7. Registration / notification details: IC No. 302054

8. Specific advantages / features : Early variety, vigorous and short flowering duration.

Shelling % - 27.99

9. Key characters for identification: Compact canopy with intensive branching habit.

Pinkish yellow apples

10. Productivity : 12 kg/ tree/ year

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Planting time - June-July. Spacing : 7.5-10m.

Apply NPK 750:325:750g/tree

13. Scientists responsible for : Crop Improvement Division of CRS, Anakkayam

developing the variety

1. Crop : Cashew

2. Variety : Dharasree (H-3-17)

3. Method of breeding : Hybridization

4. Source / parent / pedigree : Tree no. 30 x Brazil - 18

5. Year of release and authority : 1996 - Kerala State Seed Sub Committee meeting

6. Evolved at : Cashew Research Station, Anakkayam

7. Registration / notification details: IC No. 302055

8. Specific advantages / features : Moderately spreading variety with high yield, bold nut

size, superior grade kernel, and moderately tolerant to stem borer and tea mosquito. Shelling % - 30.5

9. Key characters for identification: Erect, tall, moderately spreading and intensively

branching plants. Apple colour - yellowish pink

10. Productivity : 15.02 kg / tree/ year

11. Area of adaptation : Throughout Kerala.

12. Tips on cultivation : Spacing - 7.5 x7.5m. Apply NPK - 750:325:750 g/ tree

13. Scientists responsible for : Nalini P.V.

developing the variety Pushpalatha P.B., Chandy K.C., Sreekantan Nair G.

1. Crop : Cashew

2. Variety : Sulabha (K-10-2)

3. Method of breeding : Introduction and selection
4. Source / parent / pedigree : T 28 of RCRS, Kottarakkara

5. Year of release and authority : 1996 - Kerala State Seed Sub Committee meeting

6. Evolved at : Cashew Research Station, Anakkayam

7. Registration / notification details: IC No. 302079

8. Specific advantages / features : High yield with superior nut characters. Tolerant to

drought and moderately resistant to tea mosquito and

stem borer. Apple characters are also good.

Shelling % - 29.4. Export grade - W210

9. Key characters for identification: Moderately spreading trees with light orange apples.

10. Productivity : 21.9 kg / tree/ year

11. Area of adaptation : All over Kerala. Suited to laterite and red loam soils

12. Tips on cultivation : Spacing – 7.5m x 7.5m. Apply NPK - 750:325:750 g/tree

13. Scientists responsible for : Nalini P.V.

developing the variety Pushpalatha P.B., Chandy K.C., Sreekantan Nair G.

1. Crop : Cashew

2. Variety : Anagha (H-8-1)

3. Method of breeding : Hybridization and Selection

4. Source / parent / pedigree : Tree 20 x K-30-1

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : Cashew Research Station, Anakkayam

7. Registration / notification details : IC No.302087 2002 - 9th Central Sub Committee meeting

8. Specific advantages / features : Mid season variety with. shelling % - 29. Export grade-

W180

9. Key characters for identification: Intensively branched compact canopy and orange red

apples

10. Productivity : 13.7 kg/tree/year

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Planting - June-July; Spacing - 7.5m-10m;

Apply NPK - 750:325:750 g/tree

13. Scientists responsible for : Crop Improvement Division of CRS, Anakkayam

developing the variety

1. Crop : Cashew

2. Variety : Akshaya (H-7-6)

3. Method of breeding : Hybridization and Selection

4. Source / parent / pedigree : H-4-7 x K-30-1

5. Year of release and authority : 1998 - 19th State Seed Sub committee meeting

6. Evolved at : Cashew Research Station, Anakkavam

7. Registration / notification details: IC No. 302086, 2002 - 9th Central Sub Committee meeting

8. Specific advantages / features : Mid season variety with shelling % - 28.36

9. Key characters for identification : Compact canopy and intensive branching. Yellow apples.

10. Productivity : 11.78 kg/ tree/ year

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Planting June-July. Spacing - 7.5m - 10m.

Apply NPK - 750:325:750 g/tree

13. Scientists responsible for : Crop Improvement Division of CRS, Anakkayam

developing the variety

1. Crop : Cashew

2. Variety : Sree

3. Method of breeding : Selection

4. Source / parent / pedigree : Anakkayam-1

5. Year of release and authority : 2010- 24th Kerala State Seed Sub Committee meeting.

6. Evolved at : CRS, Anakkayam

7. Registration / notification details :

8. Specific advantages / features : High yield, bold nuts (export grade - W 180), high

shelling percentage, early flowering, tolerant to tea mosquito bug. Apple with high TSS and

suitable for processing

9. Key characters for identification: Golden yellow and medium sized apple

10. Productivity : 23.78 kg/tree

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Early and harvest can be completed

before April.

13. Scientists responsible for : Rajendran.P

developing the variety Abdurazak.M, Nalini.P.V, Chandy.K.C,

Sreekantan Nair.G, Nandini.K, Raju.V.K

1. Crop Cashew : K-22-1 2. Variety : Selection 3. Method of breeding : Kottarakkara 22 4. Source / parent / pedigree 5. Year of release and authority : 1987 - Kerala State Seed Sub Committee meeting Cashew Research Station, Madakkathara 6. Evolved at IC No. 250126 7. Registration / notification details : Mid season flowering, shelling % -26.5 8. Specific advantages / features : Extensive branching. Apples red in colour 9. Key characters for identification: 10. Productivity 13.2 kg / tree / year Throughout Kerala 11. Area of adaptation 12. Tips on cultivation Planting time - June-July; Spacing - 7.5-10m. Apply NPK - 750:325:750 g/tree Crop Improvement Division of CRS, Madakkathara 13. Scientists responsible for developing the variety Cashew 1. Crop : Madakkathara - 1 2. Variety 3. Method of breeding : Selection : Bapatla collection - Tree 39-4 4. Source / parent / pedigree 5. Year of release and authority 1990 - Kerala State Seed Sub Committee meeting Cashew Research Station, Madakkathara 6. Evolved at IC No. 249792 7. Registration / notification details: Mid season (Nov – Dec) flowering, medium sized Specific advantages / features : nuts. Shelling % - 26.8 Erect growth and extensive branching. Apples yellow 9. Key characters for identification: in colour 13.8 kg / tree / year 10. Productivity Throughout Kerala 11. Area of adaptation Planting: June - July: Spacing - 7.5-10m. 12. Tips on cultivation Apply NPK 750:325:750 g/tree

13.

Scientists responsible for developing the variety

Crop Improvement Division of CRS, Madakkathara

1. Crop : Cashew

2. Variety : Madakkathara - 2 (NDR - 2 - 1)

3. Method of breeding : Selection

4. Source / parent / pedigree : Local collection from Thaliparamba

5. Year of release and authority : 1990 - Kerala State Seed Sub Committee meeting

6. Evolved at : CRS, Madakkathara

7. Registration / notification details: IC No. 250127

8. Specific advantages / features : Late flowering, export grade kernels - W. 210

9. Key characters for identification: Semi erect trees with intensive branching

10. Productivity : 17.14 kg / tree / year

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Planting: June – July. Spacing ~ 7.5-10m.

Apply NPK - 750:325:750 g/tree

13. Scientists responsible for : Crop Improvement Division of CRS,

developing the variety Madakkathara

1. Crop : Cashew

2. Variety : Kanaka (H-1598)

3. Method of breeding : Hybridization

4. Source / parent / pedigree : Anakkayam 1 x H-3-13

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : Cashew Research Station, Madakkathara

7. Registration / notification details: IC No. 250129

8. Specific advantages / features : Mid season variety with export grade nuts.

Shelling % - 30.58

9. Key characters for identification: Nuts are bold with mean weight of 8.2 g.

Apple colour yellow

10. Productivity : 13.36 kg / tree/ year

developing the variety

11. Area of adaptation : Laterite and red loam soils of Kerala

12. Tips on cultivation : Planting June /July. Spacing - 7.5m-10m.

Apply NPK - 750:325:750 g/tree

13. Scientists responsible for : Scientists under Co-ordinated Cashew Improvement

Project

1. Crop Cashew 2. Variety Dhana (H-1608) 3. Method of breeding Hybridization 4. Source / parent / pedigree LGD 1-1 x K 30-1 5. Year of release and authority 1993 - Kerala State Seed Subcommittee meeting 6. Evolved at Cashew Research Station, Madakkathara 7. Registration / notification details: IC No. 250128 8. Specific advantages / features : Bold nuts, good shelling percentage (29.8), good export grade - W 210 9. Key characters for identification: Erect and tall plants with compact canopy and intensively branching habit 10. Productivity 10.66 kg / tree / year 11. Area of adaptation Throughout Kerala 12. Tips on cultivation Planting: June - July. Spacing - 7.5-10m. Apply NPK - 750:325:750 g/tree 13. Scientists responsible for Scientists under Co-ordinated Cashew Improvement developing the variety Project 1. Crop Cashew 2. Variety Priyanka (H-1591) 3. Method of breeding Hybridization 4. Source / parent / pedigree BLA 139-1 x K 30-1 5. Year of release and authority 1996 - Kerala State Seed Sub Committee meeting 6. Evolved at Cashew Research Station, Madakkathara 7. Registration / notification details : IC No. 250140, 2002 - 9th Central Sub Committee meeting 8. Specific advantages / features : Jumbo nuts Key characters for identification: Erect, tall plants with spreading canopy and extensive branching 10. Productivity : 16.9 kg/tree/year 11. Area of adaptation : Throughout Kerala Planting - June-July; Spacing - 7.5m-10m; 12. Tips on cultivation

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: Damodaran.V.K. and others

13. Scientists responsible for

developing the variety

Apply NPK - 750:325:750 g/tree

1. Crop : Cashew

2. Variety : Amrutha (H-1597)

3. Method of breeding : Hybridization

4. Source / parent / pedigree : BLA- 139 -1 x H-3-13

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : Cashew Research Station, Madakkathara

7. Registration / notification details: IC No. 302065, 2002 - 9th Central Sub Committee meeting

8. Specific advantages / features : Mid season variety. Export grade nuts - W. 210.

Shelling % - 31.58

9. Key characters for identification: Erect and tall plants with spreading canopy,

Yellow apples

10. Productivity : 17.6 kg / tree / year
11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Planting: June – July; Spacing - 7.5m-10m.

Apply NPK - 750:325:750 g/tree

Scientists responsible for developing the variety

Damodaran V.K. and others

1. Crop : Cashew

2. Variety : Damodar (H-1600)

3. Method of breeding : Hybridization

4. Source / parent / pedigree : Anakkayam 1x H 3-13

5. Year of release and authority : 2002- 21st State Seed Sub Committee meeting
6. Evolved at : Cashew Research Station, Madakkathara

7. Registration / notification details: IC No. 302066

8. Specific advantages / features : Bold nuts with mean weight of 8.2g, Export grade -

W 210. Apple with 53.26% juice content. Shelling % - 27.27. Tolerant to tea mosquito

9. Key characters for identification: Golden yellow apple with bold nuts

10. Productivity : 13.36 kg /tree

11. Area of adaptation : Suited to all regions of Kerala except high altitude.

12. Tips on cultivation : Planting - June - July; Spacing - 7.5m-10m;

Apply NPK - 750:325:750 g/tree

13. Scientists responsible for

developing the variety

Damodharan V. K.

Veeraraghavan P.G., Vidhyadharan, Sreekandan Nair G., Abdul Salam, Seetha Rama Rao M., Mallika V. K., Jayalekshmi V. G., Pushpalatha P. B., George T. E., Suma B., Susannamma Kurien, Pathummal Beevi, Celine V.A., Usha K. E., Joseph, Aravindakshan K. E., Gopi C. S.,

Jagadeeshkumar and John P.S.

Cashew 1. Crop

Haghav (H-1610) 2. Variety Hybridization 3. Method of breeding

(ALGD-1-1 x K-30-1) Source / parent / pedigree

Year of release and authority 2002 - 21st State Seed Sub Committee meeting 5. Cashew Research Station, Madakkathara ĥ. Evolved at

7. Registration / notification details: IC No. 302068

Bold nuts - with export grade of W 210. Apple has Specific advantages / features :

58.92 % juice content

Golden yellow apple and bold nuts 9. Key characters for identification:

14.65 kg/tree/year 10. Productivity

Suited to laterite and red loam soils of Kerala 11. Area of adaptation Planting - June-July; Spacing - 7.5m-10m: 12. Tips on cultivation

Apply NPK - 750:325:750 g/tree

Damodaran V. K. Scientists responsible for 13.

Veeraraghayan P.G., Vidhyadharan, Sreekandan Nair.G., developing the variety

Abdul Salam, Seetha Rama Rao.M., Mallika.V. K., Jayalekshmi.V. G., Pushpalatha.P. B., George.T. E., Suma B., Susannamma Kurien, Pathummal Beevi, Celine.V. A., Usha.K. E., Joseph, Aravindakshan K. E., Gopi C. S.,

Jagadeeshkumar and John P.S.

Cashew 1. Crop

Poornima Variety 2. Hybridization Method of breeding 3. BLA 139-1 x K-30-1

5. Year of release and authority 2006- 23rd Kerala State Seed Sub Committee meeting.

Cashew Research Station, Madakkathara 6. Evolved at:

Registration/Notification details: 7.

Source/parent/ pedigree

High yield (14.08kg/tree/year), good nut size (7.8g), Specific advantages/features

high kernel weight (2.6g), high shelling percent

(31%) and export grade (W 210)

Upright, compact tree habit with intensive branching 9. Key characters for identification:

and mid season flowering behaviour.

14.08kg/tree/year 10. Productivity

Throughout Kerala except at high altitude 11. Area of adaptation

Pllant seedling during June-July at distance of 12. Tips on cultivation

7.5 m - 10.0 m

: Vidhyadharan Scientists responsible for 13. developing the variety

Damodharan V. K. Vijayaraghavan P. G., Abdul Salam M,

Suma B., Susannamma Kurien, Pathummal Beevi Seetha Rama Rao, Pushpalatha P. B., Mallika V. K, Usha K. E. Jayalekshmy V. G, Meagle Joseph, Gopi C. Sub:, John P. S. Mareen Abraham, Jose Mathew, Mini C, Mahapatro G. K.

Gregory Zachariah

Sugarcane (Saccharum officinarum)

1. Crop : Sugarcane

2. Variety : Madhuri (Co T1 88322)

3. Method of breeding : Biparental crossing

4. Source / parent / pedigree : Co 740 x Co 775

5. Year of release and authority : 1990 - Kerala State Seed Sub Committee meeting

6. Evolved at : Sugarcane Reserch Station, Thiruvalla

7. Registration / notification details :

8. Specific advantages / features : Good ratooner with good jaggery recovery. Moderately

resistant to red rot. Suitable for flood prone areas.

9. Key characters for identification: Mid late maturity group

10. Productivity : Cane yield: 120.5 t/ha; C.C.S. yield: 13.55 t/ ha

11. Area of adaptation : Central Travancore region- low lands with acidic

alluvial soils.

12. Tips on cultivation : Density: 1.32 lakh setts/ha

Apply NPK - 165:82.5:82.5 kg/ha

13. Scientists responsible for : Potty N.N.,

developing the variety Chandy K.C. and six other scientists

1. Crop : Sugarcane

2. Variety : Thirumadhuram (Cul. 57/84)

3. Method of breeding : Biparental crossing 4. Source / parent / pedigree : Co 740 x Co 6806

5. Year of release and authority : 1992 - Kerala State Seed Sub Committee meeting

6. Evolved at : Sugarcane Reserch Station, Thiruvalla

7. Registration / notification details :

B. Specific advantages / features : Good jaggery recovery, moderately resistant to red

rot, suitable for semi arid tracts as well as flood prone

areas.

9. Key characters for identification: Mid late maturity, non-lodging, erect growth with

greenish purple stem

10. Productivity : Cane yield: 133 t/ha; CCS yield: 15.14 t/ha

11. Area of adaptation : Semi arid tracts of Palghat districts

12. Tips on cultivation : Density : 1.32 lakh setts/ha

Apply NPK - 165:82.5:82.5 kg/ha

13. Scientists responsible for : Chandy K.C.,

developing the variety Jessy M. Kuriakose and five other scientists

1. Crop : Sugarcane

2. Variety : Madhurima (Cul.527/85)

3. Method of breeding : Biparental crossing4. Source / parent / pedigree : CO 740 x CO 7318

5. Year of release and authority : 1996 - Kerala State Seed Sub Committee meeting

6. Evolved at : Sugarcane Research Station, Thiruvalla

7. Registration / notification details:

8. Specific advantages / features : High yield, moderately resistant to red rot. Tolerant

to drought and water logging. Less incidence of top

shoot borer

9. Key characters for identification: Mid-late variety having erect cane with purple colour

10. Productivity : Cane yield: 125 t/ha; CCS yield: 12.02 t / ha

11. Area of adaptation : Central Travancore region and semi arid tracts of

Palakkad

12. Tips on cultivation : Density: 1.32 lakh setts/ha

Apply NPK- 165:82.5:82.5 kg/ha

13. Scientists responsible for : Potty N.N.,

developing the variety Chandy K. C., Alexander D.

1. Crop : Sugarcane

2. Variety : Madhumathi (Co 88017)

3. Method of breeding : Biparental crossing

. Source / parent / pedigree : CO 63 x CO 740

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : Sugarcane Research Station, Thiruvalla

7. Registration / notification details:

in

B. Specific advantages / features : High yield, high jaggery quality and high sugar

content. Resistant to red rot disease and tolerant to

drought and water logging

9. Key characters for identification: Erect plants with reddish stalk. Rind hard and pith

absent. Round, medium sized buds.

10. Productivity : Cane yield : 125 t/ha; CCS yield : 14 tons / ha

11. Area of adaptation : Command areas of Travancore Sugars and Chemicals,

Thiruvalla, Mannam Sugar Mills, Pandalam, and Co-operative Sugar Mill, Chittoor, Ideal for garden land

flooded areas.

12. Tips on cultivation : Density: 1.32 lakh setts/ha;

Apply NPK - 165:82.5:82.5 kg/ha

13. Scientists responsible for : Alexander D.,

developing the variety Sreekumar K., Thomas Mathew, Babu George, Jessy

M. Kuriakose, Elankovan R., Santhakumari S., Ittyaverah

P.J., Vasudevan Nair K.P.

Cocoa (Theobroma cacao)

1. Crop : Cocoa

2. Variety : CCRP 1 (M 16.9)

3. Method of breeding : Selection

4. Source / parent / pedigree : Local population

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : Cadbury KAU Co-op. Cocoa Research Project.

College of Horticulture, Vellanikkara

7. Registration / notification details:

8. Specific advantages / features : High yield and tolerance to vascular streak die back

9. Key characters for identification: Pods medium sized and green in colour changing to

yellow on ripening. Pods have a slight constriction at the base and small blunt beak at the tip with

moderately deep ridges and furrows

10. Productivity : 56 pods/plant/year (wet bean weight – 6.2 kg/plant/yr)

11. Area of adaptation : All cocoa growing regions of the State

12. Tips on cultivation : Density - 1100 pl/ha as pure crop and 500-600 as mixed

crop of coconut; Apply - NPK- 200:80:280g/tree

13. Scientists responsible for : Vikraman Nair R.,

developing the variety Mallika V.K., Kos

Mallika V.K., Koshy Abraham, Kumaran K.

1. Crop : Cocoa

2. Variety : CCRP 2 (M 13.12)

3. Method of breeding : Single plant selection4. Source / parent / pedigree : Local population

5. Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

6. Evolved at : Cadbury KAU Co-op. Cocoa Research Project,

College of Horticulture, Vellanikkara

7. Registration / notification details:

8. Specific advantages / features : High yield and tolerance to vascular streak die back

9. Key characters for identification: Pods smooth, large sized and green in colour changing

to yellow on ripening. Pods almost spherical without any basal constriction and the apex almost obtuse. Ridges and furrows almost absent and the rind is very

smooth with a thin pericarp.

10. Productivity : 54 pods/plant/year (wet bean weight - 5.2 kg/plant/

year)

11. Area of adaptation : All cocoa growing regions of the State

12. Tips on cultivation : Density - 1100 pl/ha as pure crop and 500-600 as mixed

crop of coconut; Apply NPK - 200:80:280g/tree

13. Scientists responsible for

developing the variety

: Vikraman Nair R.,

Mallika V.K., Koshy Abraham

1. Crop : Cocoa

2. Variety : CCRP 3 (GI 5.9)

3. Method of breeding : Single plant selection
4. Source / parent / pedigree : Germplasm collection

5. Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

6. Evolved at : Cadbury KAU Co-op. Cocoa Research Project,

College of Horticulture, Vellanikkara

7. Registration / notification details :

8. Specific advantages / features : High yield and tolerance to vascular streak die back

9. Key characters for identification: Large number of medium sized green pods changing

to yellow on ripening. Pods elliptic with moderate ridges and furrows. A slight constriction present at the base and the apex is slightly acute. The pod

surface slightly rugose.

10. Productivity : 68.5 pods/pl/year (wet bean weight - 6.5 kg/plant/

year)

11. Area of adaptation : All cocoa growing regions of the State

12. Tips on cultivation . Density- 1100 pl/ha as pure crop and 500-600 as mixed

crop of coconut, Apply NPK - 200:80:280g/tree

13. Scientists responsible for : Vikraman Nair R.,

developing the variety Mallika V.K., Koshy Abraham

1. Crop : Cocoa

2. Variety : CCRP 4

3. Method of breeding : Single plant selection
4. Source / parent / pedigree : Local population

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : Cadbury KAU Co-op. Cocoa Research Project,

College of Horticulture, Vellanikkara.

7. Registration / notification details:

8. Specific advantages / features : Wigh yield of large pods with high individual bean weight.

Tolerant to vascular streak die back

9. Key characters for identification : Pods large with purple tinge turning deep yellow on

ripening. Pods beaked with prominent acute tip.Basal constriction shallow or absent and pericarp deeply

rugose having deep ridges and furrows.

10. Productivity : 66 pods /tree/year (Wet bean weight 8.3 kg/plant/year

11. Area of adaptation : All cocoa growing regions of the country

12. Tips on cultivation : Density - 1100 plants/ ha as pure crop and 500-600 as

mixed crop of coconut, Apply NPK- 200:80:280g/tree

13. Scientists responsible for : Vikraman Nair R.,

developing the variety Mallika V.K., Koshy Abraham

1. Crop Cocoa

2. Variety **CCRP 5 (GIV 18.5)**

3. Method of breeding Single plant selection

4. Source / parent / pedigree : Germplasm IV

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at Cadbury KAU Co-op. Cocoa Research Project,

College of Horticulture, Vellanikkara

7. Registration / notification details:

8. Specific advantages / features : High yield and tolerant to vascular streak die back

9. Key characters for identification: Pods large and elliptical and are green when immature.

They turn yellow on ripening. Pods have moderately deep ridges and furrows and apex is almost acute.

38 pods/tree/year (Wet bean weight 4.3 kg/tree/year) 10. Productivity

11. Area of adaptation All cocoa growing regions of the State

12. Tips on cultivation Density - 1100 plants/ ha as pure crop and 500-600 as

mixed crop of coconut; Apply NPK- 100:40:140 g/tree

Vikraman Nair R., 13. Scientists responsible for

developing the variety Mallika V.K., Koshy Abraham

1. Crop Cocoa

CCRP 6 (GVI 55) 2. Variety

3. Method of breeding Selection 4. Source / parent / pedigree : Germplasm VI

5. Year of release and authority 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at Cadbury KAU Co-op. Cocoa Research Project,

College of Horticulture, Vellanikkara

7. Registration / notification details:

8. Specific advantages / features : High yield and tolerant to vascular streak die back

9. Key characters for identification: Pods very big and green in colour having thick rind.

> Pods turn yellow on ripening. Pods are almost elliptical without basal constriction, apex obtuse and pod surface is rugose with shallow ridges and furrows.

Oven dry bean weight 1.9g

50 pods/tree/year (wet bean weight 11.3 kg/tree/year) 10. Productivity

11. Area of adaptation Ail cocoa growing regions of the State.

12. Tips on cultivation Density- 1100 plants/ ha as pure crop and 500-600 as

mixed crop of coconut; Apply NPK- 200:80:280g/tree

13. Scientists responsible for developing the variety

Vikraman Nair R.,

Mallika V.K., Koshy Abraham

 Сгор Cocoa

2. Variety CCRP 7 (GVI 56)

Selection 3. Method of breeding 4. Source / parent / pedigree Germplasm VI

5. Year of release and authority 1998 - 19th Kerala State Seed Sub Committee meeting

Cadbury KAU Co-op.Cocoa Research Project, 6. Evolved at

College of Horticulture, Vellanikkakra

7. Registration / notification details:

High yield and tolerant to vascular streak die back 8. Specific advantages / features :

9. Key characters for identification: Pods large, elongated and green turning yellow on

ripening. Pods beaked with slightly acute apex and a slight basal constriction. Pod surface rugose with

moderately deep ridges and furrows.

10. Productivity 78 pods/tree/year (Wet bean weight 9.7 kg/tree/year)

All cocoa growing regions of the State 11. Area of adaptation

Density - 1100 pl/ ha as pure crop and 500-600 as 12. Tips on cultivation

mixed crop of coconut, Apply NPK- 200:80:280g/tree

13. Scientists responsible for developing the variety

Vikraman Nair R.,

Mallika V.K., Koshy Abraham

1. Crop : Cocoa

2. Variety CCRP 8 (P1 1.21)

Hybridization and selection Method of breeding

M 16.9 (CCRP1) x G VI 56 (CCRP 7) 4. Source / parent / pedigree

2002 - 21st State Seed Sub Committee meeting 5. Year of release and authority Cadbury KAU Co-op. Cocoa Research Project, 6. Evolved at

College of Horticulture, Veilanikkara

7. Registration / notification details :

High yield and tolerant to vascular streak die back Specific advantages / features : 8.

Tree producing very vigorous growth with green 9. Key characters for identification: medium sized pods turning yellow on ripening. Pod

apex attenuate, base intermediate and rugosity

intermediate.

90 pods /tree/year (11.4 kg wet beans / plant / year) 10. Productivity

All cocoa growing regions of the State 11. Area of adaptation

Density- 1100 pl/ ha as pure crop and 500-600 as 12. Tips on cultivation

mixed crop of coconut, Apply- NPK- 200:80:280g/tree

13. Scientists responsible for

Vikraman Nair R., developing the variety

Mallika V.K., Koshy Abraham, Prasannakumari Amma S.,

George Thomas C.

1. Crop Cocoa : 2. Variety CCRP 9 (S1 H 7.1) 3. Method of breeding Hybridization and selection 4. Source / parent / pedigree M 16.9 (CCRP1) x G II 19.5 (CCRP 4) 5. Year of release and authority 2002 - 21st State Seed Sub Committee meeting 6. Evolved at Cadbury KAU Co-op. Cocoa Research Project. College of Horticulture, Vellanikkara 7. Registration / notification details: 8. Specific advantages / features : High yield and tolerant to vascular streak die back under field conditions 9. Key characters for identification: Tree producing very vigorous growth with green medium sized pods turning yellow on ripening, apex attenuate, base strong, rugosity intermediate. 10. Productivity 106 pods /tree/year (8.97 kg wet beans / plant / year) 11. Area of adaptation All cocoa growing regions of the State 12. Tips on cultivation Density- 1100 plants/ ha as pure crop and 500-600 as mixed crop of coconut, Apply NPK- 200:80:280g/tree 13. Scientists responsible for Vikraman Nair R., developing the variety Mallika V.K., Koshy Abraham, Prasannakumari Amma S., George Thomas C. 1. Crop Cocoa 2. Variety CCRP 10 (S11 H 4.13) 3. Method of breeding Hybridization and selection 4. Source / parent / pedigree CCRP 3 x GV 168 5. Year of release and authority 2002 - 21st State Seed Sub Committee meeting 6. Evolved at: Cadbury KAU Co-op.Cocoa Research Project. College of Horticulture, Vellanikkara 7. Registration / notification details: 8. Specific advantages / features : High yield and tolerance to vascular streak die back under field conditions 9. Key characters for identification: Tree producing very vigorous growth with green medium sized pods turning yellow on ripening. Pod apex attenuate, base intermediate, rugosity intermediate. 10. Productivity 80 pods /tree/year (8.15 kg wet beans / plant / year) 11. Area of adaptation All cocoa growing regions of the State. 12. Tips on cultivation Density- 1100 pl/ ha as pure crop and 500-600 as mixed crop of coconut, Apply NPK- 200:80:280g/tree 13. Scientists responsible for Vikraman Nair R., developing the variety Mallika V.K., Koshy Abraham, Prasannakumari Amma S.,

George Thomas C.

Vegetable Crops

Brinial (Solanum melangena L.) 1. Crop

Surva (SM 6-7) 2. Variety

Single Plant Selection 3. Method of breeding

4. Source / parent / pedigree SM6

1990 - Kerala State Seed Sub Committee meeting 5. Year of release and authority

1992 - Central Sub Committee meeting

6. Evolved at Department of Olericulture, College of Horticulture

IC No. 415084 7. Registration / notification details:

Resistant to bacterial wilt caused by Ralstonia Specific advantages / features

solanacearum E.F. Smith, Duration 5-6 months

Non-prickly stem and leaves. Green leaves with violet 9. Key characters for identification:

> tinged vein. Glossy, oval and medium sized purple coloured fruits. Fruit length 8.16 cm and weight 90 q.

Days to first harvest 70 days

30 t/ha 10. Productivity

11. Area of adaptation Throughout the country where bacterial wilt is a problem

Season: May - June and September - October: 12. Tips on cultivation

Seed rate: 500 g/ha; Spacing: 60 x 60 cm.

Apply NPK 75:40:25 kg/ha

13. Scientists responsible for developing the variety

Gopalakrishnan T.R.,

Ushamani P.

1. Crop Brinial

2. Variety Swetha (SM 6-6)

Single plant selection 3. Method of breeding

SM-6 Source / parent / pedigree

1996 - 18th Kerala State Seed Sub Committee meeting 5. Year of release and authority

1997 - Central Sub Committee meeting

Department of Olericulture, College of Horticulture 6. Evolved at

IC No.415085, Notified as per Gazette notification No. Registration / notification details : 7.

17-102/97 SD - IV, GOI, MOA, DAC, New Delhi dt. 21/09/

1998

Resistant to bacterial wilt, early harvesting with short Specific advantages / features

span, ideal for close planting, excellent cooking

quality. Duration 4.5 – 5 months

Bushy growth habit with light purple tinge on the leaf 9. Key characters for identification:

stalk- Violet flowers. Plants non- prickly, Fruits white,

medium to long (12.67 cm), borne solitary or occasionally in clusters, average weight 43 g

10. Productivity 30 t/ha

Throughout Kerala and Zone No.1, IV and VIII of the 11. Area of adaptation

country

Season - May - August, September-December and 12. Tips on cultivation

January-March; Spacing: 60 x 45 cm; Seed rate: 500g/ha.

Apply NPK - 75:25:25 kg/ha

Gopalakrishnan T.R.,

Scientists responsible for 13.

Peter K.V., Abdul Wahab M., Sally K. Mathew developing the variety

1. Cróp : Brinjal

2. Variety : Haritha (SM 141)
3. Method of breeding : Single plant selection

4. Source / parent / pedigree : Local collection from Edappally, Kochi

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

2002 - 9th Central Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details: IC No.415086

8. Specific advantages / features : Resistant to bacterial wilt caused by Ralstonia

solanacearum E.F. Smith. Long duration (8 months – 2

years). Suitable for ratooning.

9. Key characters for identification: Spreading habit, non prickly stem, green leaves, fruits

with less seeds. Fruit length 18 cm, average fruit

weight 123 g.

10. Productivity : 62 t/ha

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Planting Season – May –June; Seed rate : 400 g/ha;

Spacing: 100 x 75 cm; Apply NPK 75:40:25 kg/ha

13. Scientists responsible for : Gopalakrishnan T.R.,

developing the variety Sally K. Mathew, Nirmala Devi S., Ramachandran Nair S.

1. Crop : Brinjal

Variety : Neelima (F, Hybrid)
 Method of breeding : Heterosis breeding

4. Source / parent / pedigree : Surya x SM 116

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details : 2002 - 9th Central Sub Committee meeting

8. Specific advantages / features : High yield and resistant to bacterial wilt caused by

Raistonia solanacearum E.F. Smith. Duration 6 months

9. Key characters for identification: Spreading, non prickly stem, green leaves with violet

veins, purple flowers. Large, oval to round, glossy violet fruits. Fruit length 12 cm, fruit diameter 6.7 cm, fruit

weight 176 g.

10. Productivity : 65 t/ha

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Season – May –June and September-October; Seed

rate: 450 g/ha; Spacing: 100 x 60 cm

Apply NPK 75:40:25 kg/ha

13. Scientists responsible for developing the variety

: Gopalakrishnan T.R.,

Singh P.K., Narayanan Kutty C., Devadas V.S.,

Ramachandran Nair S.

Chilli (Capsicum annuum L.) Crop 1. Jwalamukhi (Culture 57) 2 Variety 3. Source / parent / pedigree Recombination breeding Vellanotchi x Pusa Jwala Method of breeding 4. 1990 - Kerala State Seed Subcommittee meeting 5. Year of release and authority Department of Plant Breeding and Genetics. Evolved at College of Agriculture, Vellayani 7. Registration / notification details : High yield, protracted fruiting, low pungency, Specific advantages / features : 8. consumer acceptance, tolerant to partial shade. Duration 137 days. Annual, moderate branching plants with green leaves. 9. Key characters for identification: Pendulous, green, medium long fruits with wrinkled thick skin. Average fruit length - 9.6 cm 22.5 t/ha of green chilli 10. Productivity : South zone of Kerala 11. Area of adaptation Season - Kharif, Rabi and Summer; Seed rate: 2.0 kg / ha; 12. Tins on cultivation Spacing: 60 x 45 cm; Apply FYM - 20 - 25 t/ha NPK-- 75:40:25 kg/ha Manikantan Nair P. 13. Scientists responsible for Gopinathan Nair V. developing the variety Chilli 1. Crop Jwalasakhi (Culture 45) 2. Variety Recombination breeding 3. Method of breeding Vellanotchi x Pusa Jwala 4. Source / parent / pedigree 1990 - Kerala State Seed Subcommittee meeting 5. Year of release and authority Department of Plant Breeding and Genetics, 6. Evolved at College of Agriculture, Vellayani 7. Registration / notification details : High yield, protracted fruiting, low pungency, ideal for 8. Specific advantages / features : green chilli purpose. Duration - 4-5 months Annual, small statured plants, moderate branching. 9. Key characters for identification: Fruits pendulous, tapering from stalk end, smooth, sulphur colored, medium long and thick skinned. Average fruit length - 7.6 cm : 19.6 t/ha of green chilli 10. Productivity Southern Districts of Kerala 11. Area of adaptation Season - Kharif, Rabi and Summer; Seed rate: 1.0 kg 12. Tips on cultivation per ha; Spacing: 45 x 45 cm. Apply FYM 20 - 25 t /ha NPK - 75:40:25kg/ha Manikantan Nair P. 13. Scientists responsible for Gopinathan Nair V. developing the variety

1. Crop : Chilli

2. Variety : Ujwala (CA 219)

3. Method of breeding : Single plant selection

Source / parent / pedigree : CA 219-1-19-6

5. Year of release and authority : 1996 - 18th Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details: IC No. 415087

8. Specific advantages / features : Resistant to bacterial wilt, ideal for close planting,

highly pungent fruits, tolerant to leaf curl virus and mosaic under field conditions, duration 4 - 5 months

9. Key characters for identification: Plants determinate, bushy and low branching, Erect

fruits in clusters of 8-10. Fruits are dark green at immature stage turning deep red on ripening.

10. Productivity : 18 t/ha of green chilli
11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Season – May - June and August - September;

Spacing: 60 x 45 cm; Apply FYM - 20 - 25 t/ha and

NPK- 75:40:25 kg/ha

13. Scientists responsible for : Gopalakrishnan T.R. developing the variety Peter K.V., Indira P.

1. Crop : Chilli

2. Variety : Anugraha

3. Method of breeding : Back cross method4. Source / parent / pedigree : Ujwala x Pusa Jwala

5. Year of release and authority : 2002 - 21st State Seed Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details :

8. Specific advantages / features : High yield, bacterial wilt resistant, more suitable

as green chilli. Medium pungency.

9. Key characters for identification: Short statured, spreading plants. Attractive, light

green and long pendant fruits. Fruit length 12 cm

10. Productivity : 27 t/ha of green chilli

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Season – May-June and September-October;

Seed rate: 1kg/ha; Spacing 45 x 45 cm;

Apply FYM 20 - 25 t /ha NPK- 75:40:25 kg/ha

13. Scientists responsible for : Baby Lissy Markose,

developing the variety Abdul Vahab M, Peter K.V., Sadhankumar P.G.,

Rajan S., Gopalakrishnan T. R.

1. Crop Chilli

2. Variety Vellayani Athulya

3. Method of breeding Pure line selection

4. Source/parent/ pedigree Local collection from Aryanadu, Thiruvananthapuram

5. Year of release and authority 2006- 23rd Kerala State Seed Subcommittee meeting.

6. Evolved at Dept of Olericulture, College of Agriculture, Vellayani

7. Registration /Notifications IC 584160

8. Specific advantages/features : High yield. Early with long and medium pungent fruits

for use as green chilli, tolerant to partial shade

9. Key characters for identification: Medium statured plants with attractive long

pendant light green fruits at immature stage,

which turns deep red on ripening

10. Productivity 32t/ha

11. Area of adaptation Southern districts of Kerala

12. Tips on cultivation Seed rate 1kg/ha. Transplant seedling at 45 x 45 cm

13. Scientists responsible for Sreelathakumary I.

developing the variety Rajamony L, Abdul Vahab M., Celine V. A.

1. Crop Chilli (Capsicum frutescens L.)

2. Variety Samrudhi 3. Method of breeding Selection

4. Source / parent / pedigree Muttakkad (Thiruvananthapuram Local)

5. Year of release and authority 2010- 24th Kerala State Seed Sub Committee meeting.

6. Evolved at Dept of Olericulture, College of Agriculture,

Vellayani

7. Registration / notification details : IC 584161

8. Specific advantages / features : High vielding and shade tolerant

9. Key characters for identification: Tall plants with good spread, take 80days to flower.

> Fruits erect creamy white and orange red on ripening with average length 4.83 cm, weight 1.98

qm, capsaicin content 0.84%.

10. 30 - 32 t green chilli/ha Productivity

11. Area of adaptation Southern Kerala

12. Tips on cultivation Seed rate 1kg/ha, provide wider spacing. Long

pre baring period. Provide isolation of 400 m for seed

production.

13. Scientists responsible for

Sreelathakumari, I

developing the variety Abdul Vahab, Celine. V.A., Rajamony.L. 1. Crop Tomato (Solanum lycopersicum L.)

2. Variety Sakthi (LE 79)

3. Method of breeding Single seed descent method of selection Source / parent / pedigree A North Carolina Line (32d-0-1-19 GS)

5. Year of release and authority 1990 - 14th State Seed Sub Committee meeting 6.

Evolved at Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details:

8. Specific advantages / features : Resistant to bacterial wilt caused by Ralstonia

solanacearum - E.F. Smith, duration 115 - 120 days.

9. Key characters for identification: Semi determinate growth habit. Fruits flat round.

medium sized and green shouldered with jointed

pedicel. Average fruit weight 48.3 g

10. Productivity 32 t/ha

11. Area of adaptation Throughout the country where bacterial wilt is a

problem

12. Tips on cultivation Season: September—December and January-February:

Seed rate: 400 g per ha; Spacing: 60 x 60 cm

Apply NPK 150:60:60 kg/ha

13. Scientists responsible for developing the variety

Rajan. S.,

Celine V. A., Peter K.V.

1. Crop Tomato

2. Variety Mukthi (LE 79-5) 3. Method of breeding Pure line Selection

4. Source / parent / pedigree LE 79

Year of release and authority 1997 - Central Sub Committee meeting

1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at Dep. of Olericulture, College of Horti., Vellanikkara

7. Registration / notification details: Notified as per Gazette notification No. 17-102/ 97 SD

- IV, GOI, MOA, DAC, New Delhi dt. 21/09/1998

8. Specific advantages / features : High yield, resistant to bacterial wilt caused by

Raistonia solanacearum - E.F. Smith, Tolerant to heat.

Crop duration-95-100 days.

9. Key characters for identification: Determinate growth habit, fruits white, round, medium

sized, without green shoulder, jointed pedicel. Average

fruit weight – 53 g

Productivity 10. 43.5 t/ha

11. Area of adaptation Throughout the country where bacterial wilt is a

problem (States of Kerala, Karnataka, Maharashtra,

Orissa and Himachal Pradesh)

12. Tips on cultivation Season: Sept-Dec and Jan-Feb; Seed rate: 400 g /

ha; Spacing: 60 x 60 cm Apply NPK 150:60:60 kg/ha

13. Scientists responsible for Raian S.

> developing the variety Prasanna K.P., Sadhankumar P.G.

Crop : Tomato
 Variety : Anagha (LE 415)
 Method of breeding : Pure line selection
 Source / parent / pedigree : Exotic collection (segregating)

5. Year of release and authority : 2002 - 21st State Seed Sub Committee meeting

Recommended for national released by 22nd Group

Meeting of AICVIP held during at APAU, Hyderabad

for Zones I, V and VIII of the Country.

6. Evolved at : Dep. of Olericulture, College of Horti., Vellanikkara

7. Registration / notification details :

8. Specific advantages / features : High yield. Bacterial wilt and crack resistant, tolerant

to leaf curl and mosaic.

9. Key characters for identification: Semi determinate in growth. Round, red and medium

sized fruits free from green shoulder. Average fruit

weight 45 g

10. Productivity : 30 t/ha

11. Area of adaptation : Thrissur, Palakkad and Ernakulam Districts of Kerala

12. Tips on cultivation : Season : Sept - Dec and Jan - Feb - Seed rate : 400 g/ha;

Spacing: 60x60 cm; Apply NPK 150:60:60 kg/ha

13. Scientists responsible for : Sadhankumar P.G.,

developing the variety Rajan S., Sally K. Mathew, Nirmala Devi S., George.T.E.,

Gopalakrishnan T.R.

1. Crop : Tomato

2. Variety : Vellayani Vijai

3. Method of breeding : Introduction and Selection
4. Source/parent/ pedigree : CLN 1621 F from AVRDC, Taiwan

Source/parent/ pedigree : CLN 1621 F from AVRDC, Taiwan
 Year of release and authority : 2006- 23rd Kerala State Seed Subcommittee meeting.

6. Evolved at : Dept of Olericulture, College of Agriculture, Vellayani

7. Registration /Notifications : IC 584163

8. Specific advantages/features : High yielding, tolerant to bacterial wilt, high

temperature and partial shade

9. Key characters for identification: Determinate, short statured and compact plants

with light green fruits at immature stage, which turns

attractive red on ripening

10. Productivity : 37.26t/ha

11. Area of adaptation : Southern districts of Kerala

12. Tips on cultivation : Sow seed during September and transplant during

October-November at 16-60 cm.

13. Scientists responsible for developing the variety

: Celine V. A.

Rajamony L, Abdul Vahab M., Gokulapalan C,

Sreelathakumary I., Chandramony D.

1. Crop Okra (Abelmoschus esculentus L.) 2. Variety Kiran (AE 1) 3. Method of breeding Single plant selection 4. Source / parent / pedigree Kilichundan local 5. Year of release and authority 1990 - Kerala State Seed Sub Committee meeting 6. Evolved at Department of Plant Breeding and Genetics, College of Agriculture, Vellavani 7. Registration / notification details : 8. Specific advantages / features : High yield, light green and long fruits, duration 3-4 months, Tolerant to YVMV 9. Key characters for identification: Shy branching, plant with light green and long fruits. Duration 100 days. 10. Productivity 11.2 t/ha 11. Area of adaptation South zone of Kerala. 12. Tips on cultivation Sowing: May - June and September - January Seed rate: 7 kg/ha, Spacing: 60 x 45 cm; Apply NPK - 50:8:25 kg/ha 13. Scientists responsible for Ramachandran Nair N., developing the variety Manikantan Nair P., Gopinathan Nair V. 1. Crop Okra 2. Variety : Aniitha 3. Method of breeding Interspecific hybridization followed by mutation breeding (gamma irradiation of F, seeds) and selection Source/parent/ pedigree : Abelmoschus esculentus (Kiran) x Abelmoschus manihot (wild) 5. Year of release and authority 2006- 23rd Kerala State Seed Sub committee meeting. 6. Evolved at Dept of Plant Breeding & Genetics, College of Agriculture, Vellayani 7. Registration /notifications IC 584167 8. Specific advantages/features High yield, early maturity, yellow vein mosaic resistant with tolerance to shoot and fruit borer 9. Key characters for identification: Long, smooth, green fruits with prominent ridges 10. Productivity 14.6t/ha 11. Area of adaptation Suitable summer season in Thiruvananthapuram district 12. Tips on cultivation Seed rate 8.5 kg/ha for summer crop and 7.0 kg/ha for Khariff crop. 13. Scientists responsible Maniu P.

Gopimony R., Chandramony D., Rajagopalan B.

for developing the variety

1. Crop : Okra

2. Variety : Manjima (F1 Hybrid)

3. Method of breeding : Heterosis Breeding

4. Source/parent/ pedigree : Gowreesapattom local (P1) x NBPGR / TCR-874 (P4)

5. Year of release and authority : 2006- 23rd Kerala State Seed Sub committee meeting.

6. Evolved at : Dept of Plant Breeding & Genetics, College of

Agriculture, Vellayani

7. Registration /Notifications : IC 584168

8. Specific advantages/features : High yielding, early maturing, yellow vein mosaic

resistant with tolerance to shoot and fruit borer

9. Key characters for identification: Long light green fruits

10. Productivity : 16t/ha

11. Area of adaptation : Suitable for Kharif of Southern Kerala

12. Tips on cultivation : Avoid sowing during peak summer period.

13. Scientists responsible for : Manju P.

developing the variety Chandramony D, Naseema A.

1. Crop : Okra

2. Variety : Salkeerthi (AE 202)

3. Method of breeding : Reselection
4. Source / parent / pedigree : NBPGR No. 144

5. Year of release and authority : 2000 - 20th State Seed Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details: IC No - 470862, 2002 - 9th Central Sub Committee meeting

8. Specific advantages / features : High yield, attractive light green and long fruits.

9. Key characters for identification: Light green and long fruits. Purple tinge at the

base and terminal portions of the petiole. Fruit length

24-30 cm., number of ridges 5. Duration 120 days.

10. Productivity : 16.2 t / ha

11. Area of adaptation : Central zone of Kerala.

12. Tips on cultivation : Sowing : May - June, September - October;

Seed rate: 7 kg/ha; Spacing: 60 x 45 cm

Apply NPK - 50:8:25 kg/ha

13. Scientists responsible for : Suresh Babu K.V.,

developing the variety Rajan S., Baby Lissy Markose, Prasanna K.P.

1. Crop : Okra

2. Variety : Aruna (AE 198)
3. Method of breeding : Pure line selection

Source / parent / pedigree : NBPGR No. 777

5. Year of release and authority : 2000 - 20th State Seed Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details: IC No - 479863, 2002 - 9th Central Sub Committee meeting

8. Specific advantages / features : High yield, attractive red colored long fruits rich in

anthôcyanin

9. Key characters for identification: Petiole, stem and fruits are purple coloured, long fruits

(25-30 cm), seven ridges on fruit. Duration 120 days.

10. Productivity : 15.8 t/ha

11. Area of adaptation : Central zone of Kerala.

12. Tips on cultivation : Sowing : May - June; and September-October

Seed rate: 7 kg / ha; Spacing: 60 x 45 cm;

Apply NPK - 50:8:25 kg/ha

13. Scientists responsible for

developing the variety

Suresh Babu K.V.,

Rajan S., Baby Lissy Markose, Prasanna K.P.

1. Crop : Bhindi (Abelmoschus manihot var.ghana)

2. Variety : Susthira

3. Method of breedinge : Pure line selection

l. Source / parent / pedigree : AM-4, a collection from Mannarkkad, Palakkad

5. Year of release and authority : 2002 - 21st Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details: IC No 470864

8. Specific advantages / features : Resistant to YVMV. Late and long duration variety

suitable for homesteads during kharif season.

Duration 120-145 days.

9. Key characters for identification: Large lobbed leaves, stout stem, yellow, showy flowers

and attractive, light green fruits. Fruit length - 22 cm.

Days to first harvest 52 - 53 days.

10. Productivity : 18 t/ha

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Season : May - June; Seed rate : 7 kg/ha;

Spacing: 60 x 45 cm; Apply NPK - 50:8:25 kg/ha

13. Scientists responsible for : Suresh Babu K.V.,

developing the variety Gopalakrishnan T.R., Rajan S., Sally K. Mathew

1. Crop : Vegetable Cowpea (Yard long bean) Vigna unuiculata

var. sesquipedalis

2. Variety : Malika (Selection 7)

3. Method of breedinge : Single plant selection

4. Source / parent / pedigree : Thiruvananthapuram local

5. Year of release and authority : 1992 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details:

8. Specific advantages / features : High yield. Duration 3-4 months

9. Key characters for identification: Trailing growth habit, purple flowers, long light green

pods without purple tip. Average pod length 43.5 cm, no. of seeds/ pod 17.1 and 100 seed weight 16.1g. Seeds brown colored with a white speck having

irregular shape at one end.

10. Productivity : 9.8 t/ha

11. Area of adaptation : Southern districts of Kerala

12. Tips on cultivation : Season: Kharif, Rabi and Summer

Seed rate: 5 kg / ha; Pit to pit spacing (@ 3 plants per

pit): 2 x 2 m; Apply NPK - 20:30:10 kg/ha

13. Scientists responsible for

developing the variety

: Manju P.,

Sunny K. Oommen, Gopinathan Nair V., Mohanakumaran N.

1. Crop : Vegetable Cowpea (Yard long bean)

2. Variety : Sharika (S 108)

3. Method of breeding : Single Plant Selection

4. Source / parent / pedigree

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details:

8. Specific advantages / features : High yield, duration 3-4 months

9. Key characters for identification: Trailing growth habit, long white gods with purple tip,

black seeds, purple flowers; Pod length 49 cm, No.of

seeds/pod 19-20; 100 seed weight 15.9 g.

10. Productivity : 10.6 t/ha

11. Area of adaptation : Southern districts of Kerala

12. Tips on cultivation : Season: Kharif, Rabi and Summer; Seed rate : 5 kg / ha;

Pit to pit spacing (@ 3 plants per pit): 2 x 2 m;

Apply NPK - 20:30:10 kg/ha

13. Scientists responsible for

developing the variety

: Ramachandran Nair N.,

Sunny K. Dommen, Gopinathan Nair V., Mohanakumaran N.

1. Crop Cowpea (Vigna unquiculate subsp.)

2. Variety : Vellayani Jyothika

3. Method of breeding Selection

4. Source/parent/ pedigree Sreekarvam Local

5. Year of release and authority 2006- 23rd Kerala State Seed Sub committee meeting.

6. Evolved at Dept of Olericulture, College of Agriculture, Vellayani

7. Registration /Notifications IC 584162

8. Specific advantages/features High yield, long pods, medium duration, tolerant to

fusarium wilt

9. Key characters for identification: Trailing growth habit, Vigorous growing plants with

attractive long light green pods

10. Productivity 19.33 t/ha

11. Area of adaptation Southern districts of Kerala

12. Tips on cultivation Seed rate for 5 kg/ha. Take precaution against

Anthracnose disease during rainy season.

13. Scientists responsible for developing the variety

Celine V. A. Gokulapalan C, Shahul Hameed S. M.

Reghunath P, Ramachandran Nair S., Rajamony L.

1. Crop Vegetable Cowpea (Yard long bean)

2. Variety KMV - 1 (VS 4)

3. Method of breeding Pure line selection 4. Source / parent / pedigree Manieri Red Plain

5. Year of release and authority 1996 - Kerala State Seed Sub Committee meeting

6. Evolved at RARS, Kumarakom

7. Registration / notification details :

8. Specific advantages / features : High yield, tolerant to cowpea mosaic, cowpea rust

and foot rot disease.

9. Key characters for identification: Trailing growth habit, pale green stem and petiole,

long light green pods with brown tip, immature seeds light green, and dry seeds reddish brown. Average length of pod - 37.93 cm. No. of seeds/pod 19/

Duration: Kharif - 90 - 120days; summer - 75 - 110 days

10. Productivity 13.5 t / ha

11. Area of adaptation Intercrop in coconut gardens of Kuttanad

Tips on cultivation 12. Season: September-December and February-March;

Spacing: 1x1 m; Apply - NPK-20:30:10 kg/ha

13. Scientists responsible for developing the variety

Sreekumar K.

Inasi K.A., Alice Antony, Kavitha K., Maya Devi

Sosamma Cheriyan, Nair R.R.

Vegetable Cowpea (Yard long bean) 1. Crop Vvievanthi (VS 21-1) 2. Variety Pure line selection 3. Method of breeding Perumpadayam local Source / parent / pedigree 4. 1998 - 19th Kerala State Seed Sub Committee meeting Year of release and authority Department of Olericulture, College of Horticulture, Evolved at a Vellanikkara IC No. 415088, 2002 - 9th Central Sub Committee meeting Registration / notification details: 7. High yield, wine red colored extra long pods and specific 8. Specific advantages / features consumer acceptance. Crop duration 3.5 - 4 months. Trailing growth habit, vine green with violet tinge at Key characters for identification: 9. the nodes, wine red colored extra long pods (50.62) cm), brown seeds and purple flowers. No. of seeds/ pod 20-22, 100 seed weight 22.8a 12.6 t/ha 10. Productivity Central zone of Kerala 11. Area of adaptation Season: June-September and December-March 12. Tips on cultivation Seed rate: 3 kg / ha: Pit to pit spacing (@ 3 plants per pit): 2 x 2 m; Apply NPK - 20:30:10 kg/ha Gonalakrishnan T.R. 12: Scientists responsible for developing the variety Ramachandran Nair S., Devadas V.S. Vegetable Cowpea (Yard long bean) 1. Crop Lola (VS 13-2) 2. Variety Pure line selection 3. Method of breeding Kanakari local Source / parent / pedigree 2000 - 20th Kerala State Seed Sub Committee meeting Year of release and authority 5. Department of Olericulture, College of Horticulture, Evolved at Veilanikkara IC No.415089, 2002 9th Central Sub Committee meeting Registration / notification details: 7. High yield, smooth and glossy light green coloured, extra a. Specific advantages / features long pods (53.38 cm). Duration - 4 months Trailing growth habit, long light green pods with purple 9. Key characters for identification: tip, purple flowers and black seeds. No. of seeds/pod 20-22, 100 seed weight 26.2 g. 20 t/ha TO. Productivity Central zone of Kerala 11. Area of adaptation Season - June-September and December-March; 12. Tips on cultivation Seed rate: 4 kg / ha; Pit to pit spacing (@ 3 plants per pit) 2 x 2 m; Apply NPK - 20:30:10 kg/ha

Scientists responsible for

developing the variety

13.

Gopalakrishnan T.R.

(Responds to high dose of fertilizers)

Devadas V.S. Maicykutty P. Mathew,

Aravindakshan K., Ramachandran Nair S.

Crop : Vegetable Cowpea - Bush
 Variety : Bhagyalakshmi (VS 389)

3. Method of breeding : Selection

4. Source / parent / pedigree : A line introduced from IITA, Ibadan

5. Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details: 2002 - 9th Central Sub Committee meeting

8. Specific advantages / features : Early flowering and bushy variety. Days to first harvest-

48. Duration - 2.5 months. Suitable as fringe crop

in paddy fields.

9. Key characters for identification: Bushy growth habit, light green, medium sized pods,

mottled seeds, white flowers in clusters. Average pod

length - 27 cm

10. Productivity : 6.48 t/ha

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Season: Kharif, Rabi and Summem; Seed rate: 20-25

kg/ha; Spacing: 30 x 20 cm; Apply NPK - 20:30:10 kg/ha

13. Scientists responsible for : Salikkutty Joseph, developing the variety Peter K.V., Rajan S.

1. Crop : Vegetable Cowpea - Semi - trailing

Variety : Kairali (CWP 11-1)
 Method of breeding : Pure line selection

4. Source / parent / pedigree : NBPGR line IC- 45415

Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details: 2002 - 9th Central Sub Committee meeting

8. Specific advantages / features : Resistant to mosaic disease. Duration - 3 - 3.5 months

9. Key characters for identification: Semi trailing growth habit, green stem with pink streaks,

leaves green with pink streaks at the base of the petiole, pink coloured medium long pods, reddish brown seeds, purple flowers. Average pod length- 22.78

cm. Days to first harvest 50 days.

10. Productivity : 7.13 t/ha

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Season : Ideal time of sowing : Sept.- Oct; Seed rate :

5-20 kg/ha; Spacing: 45 x 20 cm; Apply NPK - 20:30:10 kg/ha

13. Scientists responsible for : Devadas V. S.

developing the variety Gopalakrishnan T. R., Saily K. Mathew, M. Sheela Paul

1. Crop : Vegetable Cowpea (Semi-trailing)

2. Variety : Anaswara (VS.15-3-1)3. Source / parent / pedigree : Pure line selection

4. Method of breeding : Local collection from 'Elenii'

5. Year of release and authority : 2002 - 21st Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

7. Registration / notification details: IC No.415090

8. Specific advantages / features : High yielding variety requiring 38 days for first harvest.

Less incidence of cowpea mosaic under field

conditions.

9. Key characters for identification: Semi-trailing type. Leaves dark green with green veins.

Light green medium long pods (28-32 cm) with cream coloured bold seeds, 100 seed weight 16 g. Duration

- 110-120 days.

10. Productivity : 12.5 t/ha

11. Area of adaptation : Central Zone of Kerala

12. Tips on cultivation : Season – Rabi & Summer. Suited for growing in basins

without pandals or trellis; Sow 5-6 seeds in basins of 50-60 cm diameter at 1.5-2m x 1.5m spacing; Seed

rate 12 kg/ha; Apply NPK - 20:30:10 kg/ha

13. Scientists responsible for developing the variety

Gopalakrishnan T. R.

Devadas V. S., Sadhan kumar P.G., George T.E.

1. Crop : Vegetable cowpea (Semi-trailing)

Variety : Varun (VS-96)
 Method of breeding : Pure line selection

4. Source / parent / pedigree : Local collection from Manjapra

5. Year of release and authority : 2002 - 21st Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details :

8. Specific advantages / features : Semi -trailing type tolerant to mosaic and pod borer.

Duration 110 – 120 days (38 days for first harvest)

9. Key characters for identification: Pink coloured long pods of 27-30 cm, purple brown

plumpy seeds, 100 seed weight 16 g

10. Productivity : 8.4 t/ha

11. Area of adaptation : Central Zone of Kerala

12. Tips on cultivation : Season: Suited for growing in furrows during summer

Devadas V. S.

season and on raised beds during rainy season; Seed

rate: 5-10 kg/ha; Apply NPK - 20:30:10 kg/ha

13. Scientists responsible for

developing the variety Gopalakrishnan

Gopalakrishnan T. R., George T.E.

1. Crop : Winged bean (Psophocarpus tetragonolobus)

2. Variety Revathy (PT 52) Method of breeding Mass selection

4. Source / parent / pedigree Sri Lankan introduction

5. Year of release and authority 1996 - 18th Kerala State Seed Sub Committee meeting

6. Evolved at Department of Olericulture, College of Horticulture,

Vellanikkara

Registration / notification details : 7.

8. Specific advantages / features : High yielding, pole type, photosensitive, short day

plant. Duration - 4 months

9. Key characters for identification: Green stemmed plants with violet flowers, medium

sized green pods and dark brown seeds. Average

fruit length 16 cm, fruit weight 13.5 a.

10. Productivity 10-12 t/ha

11. Area of adaptation Central zone of Kerala

12. Tips on cultivation Season: July - August, Spacing: 3x3 m;

Seed rate: 20 kg/ha

Apply NPK - 50:100:50 kg/ha

13. Scientists responsible for Prasanna K.P.,

developing the variety Suresh Babu K.V., Indira P., Verghese C.A., Rajan S.

1. Crop Hyacinth Bean (Lablab purpureus (L) sweet)

2. Variety Hima

3. Method of breeding Pure line selection

4. Source/parent/ pedigree Local collection from Viyyoor, Thrissur

Year of release and authority 2006- 23rd Kerala State Seed Subcommittee meeting.

6. Evolved at Dept of Olericulture, College of Horticulture,

Vellanikkara

7. Registration /Notifications

8. Specific advantages/features High yield, long duration, photosensitive variety with

large, succulent, nutritious pods

9. Key characters for identification: Pole type with white flowers, light green broad straight

pods and coffee brown seeds

10. Productivity 14.82 t/ha (Average) 11.

Area of adaptation Central Zones of Kerala.

12. Tips on cultivation Sow seeds during July at 3 x 3 cm and train the plants

to Panthals

13. Scientists responsible for

: Gopalakrishnan T. R.

developing the variety

Baby Lissy Markose, Prasanna K. P., Rajan S.

Hyacinth Bean 1. Crop

Grace 2. Variety

: Pure line selection 3. Method of breeding

Local collection from Viyyoor, Thrissur 4. Source/parent/ pedigree

2006- 23rd Kerala State Seed Sub Committee meeting. 5. Year of release and authority

Dept of Olericulture, College of Horticulture, 6. Evolved at

Vellanikkara

7. Registration /Notifications

High yield, early maturing, photosensitive Specific advantages/features 8.

Pole type with purple stem, purple leaf veins and 9. Key characters for identification:

lilac flowers, medium broad, greenish purple, slightly

curved pods and black seeds

15 t/ha (Average) 10. Productivity

Central Zones of Kerala. 11. Area of adaptation

Sow seeds during July at $3 \times 3 \text{ cm}$ and train the 12. Tips on cultivation

plants to Panthals

Baby Lissy Markose 13. Scientists responsible for developing the variety

Prasanna K. P, Gopalakrishnan T. R., Rajan S,

Biju M. G

Amaranthus (Amaranthus tricolor) 1. Crop

Arun (S - 8) 2. Variety

Mass Selection 3. Method of breeding Palappoor local 4. Source / parent / pedigree

1992 - Kerala State Seed Sub Committee meeting 5. Year of release and authority

Department of Plant Breeding and Genetics, 6. Evolved at

College of Agriculture, Vellayani

Registration / notification details : 7.

High yielding, purple coloured leaves and stem, Specific advantages / features

photoinsensitive, duration 54-140 days, suitable for

multi cut and once over harvest

Purple coloured stem, petiole and leaves, leaves Key characters for identification: 9.

in shape, eaf length 25 cm and width 11 cm.

20 t/ha 10. Productivity

Southern districts of Kerala 11. Area of adaptation

Season -Summer Kharif and Rabi; Seed rate: 1.5-2 kg 12. Tips on cultivation per ha; Spacing: 30 x 20 cm; Apply NPK 100:50:50 kg/ha

Ramachandran Nair N. 13. Scientists responsible for

Manikandan Nair P., Gopinathan Nair V., developing the variety

Mohanakumaran N.

1. Crop Amaranthus 2. Variety Mohini (Amt 105) 3. Method of breeding Selection 4. Source / parent / pedigree Accession 5. Year of release and authority 2002 - 21st Kerala State Seed Sub Committee meeting 6. Evolved at Department of Olericulture, College of Horticulture, Vellanikkara 7. Registration / notification details: Specific advantages / features : High yield with good cooking quality. Slight leaf spot incidence in rainy seasons. Duration - 120 days 9. Key characters for identification: Medium branching, erect growth habit with 80-90 cm height at flowering stage. Thick green stem with red colour at basal parts. Dark green elliptical leaves with acute leaf tip 10. Productivity 13.2 t/ha 11. Area of adaptation Central zone of Kerala 12. Tips on cultivation Ideal for cultivation in summer months. Plant in wider channels of 3-4 rows at a spacing of 30x20 cm. Seed rate-1.5- 2 kg/ha; Apply NPK - 100:50:50 kg/ha 13. Scientists responsible for Devadas V. S. developing the variety Gopalakrishnan T. R., Augustine A., Krishnakumari 1. Crop Amaranthus 2. Variety Krishnasree 3. Method of breeding Selection 4. Source/parent/ pedigree Collection from Kozhikode 5. Year of release and authority 2006 - 23rd Kerala State Seed Sub Committee meeting. 6. Evolved at Dept of Olericulture, College of Horticulture, Vellanikkara 7. Registration /Notifications IC 561286 Specific advantages/features High yielding, multicut type giving 6-8 harvests, rich in carotene and vitamin C and low in oxalates and nitrates 9. Key characters for identification: Highly branching, red fleshy stem and coppery red (reddish green) leaves, terminal and axillary red clustered inflorescence Productivity 10. 14.8 t /ha 11. Area of adaptation : Central Zone of Kerala

Krishna Kumari K.

Prasanna K. P.

Avoid sowing during rainy seasons.

Rajan S, Gopalakrishnan T. R., Devadas V. S,

12. Tips on cultivation

Scientists responsible for

developing the variety

Amaranth 1. Crop Renusree. 2. Variety 3. Method of breeding Selection Collection from Ernakulam 4. Source/parent/ pedigree 5. Year of release and authority 2006- 23rd Kerala State Seed Sub Committee meeting. Dept of Olericulture, College of Horti, Vellanikkara 6. Evolved at IC 651285 7. Registration /Notifications High yielding, multicut type giving 6-8 harvests, rich in Specific advantages/features carotene and vitamin C and low in oxalates and nitrates Highly branching, red fleshy stem and green leaves, 9. Key characters for identification: terminal and axillary green clustered inflorescence 15.5 t of greens/ha 10. Productivity Central Zone of Kerala 11. Area of adaptation Avoid sowing during rainy seasons. 12. Tips on cultivation Krishna Kumari K. 13. Scientists responsible for Rajan, S. Gopalakrishnan T. R developing the variety Mini. C, Meagle Joseph Bitter gourd (Momordica charantia L.) 1. Crop Priya (MC 23) 2. Variety Single plant selection 3. Method of breeding Kannur local 4. Source / parent / pedigree 1976 - Kerala State Seed Sub committee meeting 5. Year of release and authority Recommended for national release by Group meeting on Vegetable Research held at APAU. Hyderabad from 6-9, January, 1992. Department of Olericulture, College of Horticulture, 6. Evolved at Vellanikkara 7. Registration / notification details: High yield, extra long green spiny fruits with white Specific advantages / features : tinges at stylar end 9. Key characters for identification: Long green spiny fruits with white tinge at stylar end, fruit length 39 cm, average fruit weight 235g, duration 90-115 days 20-30 t/ha 10. Productivity Throughout Kerala and Zone VII and Zone VIII of the 11. Area of adaptation country Season: January-march & September-December; 12. Tips on cultivation Pit to pit spacing: 2 x 2 m(3 pl./pit); Apply NPK - 70:25:25 kg/ha Ramachandran C., 13. Scientists responsible for Gopalakrishnan P.K., Peter K.V., Salikkutty Joseph, developing the variety Rajan S., Abdul Wahab M.

1. Crop Bitter gourd 2. Variety Preethi (MC 84) 3. Method of breeding Selection 4. Source / parent / pedigree Local collection 5. Year of release and authority 1996 - Kerala State Seed Sub Committee meeting 1997 - Central Sub Committee meeting 6. Evolved at Department of Olericulture, College of Horticulture, Vellanikkara Notified as per Gazette notification No. 17-102/ 97 SD 7. Registration / notification details: IV, GOI, MOA, DAC, New Delhi dt. 21/09/1998 High yield and quality, duration 4 to 5 months, less 8. Specific advantages / features : incidence of fruit fly, good transport quality 9. Key characters for identification: White, spiny, medium long fruits, average fruit length 30cm, average fruit weight 310g, pre-bearing period 55 days. 10. Productivity 25 t/ha 11. Area of adaptation Throughout Kerala and VII & VIII Agroclimatic zones of the country 12. Tips on cultivation : Season: January - March & September - December; Spacing: 2x2 m; Density: 2500 pits/ha @ 3 plants/ pit; Apply NPK - 70:25:25 kg/ha 13. Scientists responsible for : Abdul Wahab M., developing the variety Gopalakrishnan P.K., Rajan S. 1. Crop Bitter gourd 2. Variety Privanka ((Selection 1010) 3. Method of breeding Selection 4. Source / parent / pedigree Kuravilangad Local 5. Year of release and authority 1996 - 18th Kerala State Seed Sub Committee meeting 6. Evolved at Sugarcane Research Station, Thiruvalla Registration / notification details: 7. 8. Specific advantages / features : High yield and quality, thick flesh and less seeded fruits, duration 4 to 5 months, tolerant to downy mildew under field conditions. Key characters for identification: Uniform, white, large spindle shaped fruits with smooth spines, thick flesh and less seeds. Average fruit weight 300 g, average fruit length 25 cm. 10. Productivity 28 t/ha 11. Area of adaptation : Acidic alluvial soils of Southern Kerala 12. Tips on cultivation Season: January-March & September-December; Spacing: 3 x 3 m; Density: 1100 plants/ha; Apply NPK - 70:25:25 kg/ha 13. Scientists responsible for Jessy M. Kuriakose, developing the variety Alexander D., Sreekumar K., Thomas Mathew, Santhakumari S.

1. Crop : Snakegourd (Trichosanthes anguina)

2. Variety : Kaumudi (Accession 2009)

3. Method of breeding : Selection

4. Source / parent / pedigree : Local collection

5. Year of release and authority : 1996 - 18th Kerala State Seed Sub Committee meeting

6. Evolved at : Sugarcane Research Station, Thiruvalla

7. Registration / notification details :

8. Specific advantages / features : High yield; white, long and stout fruits.

9. Key characters for identification: Duration 5 months, pre- bearing period 75 days, uniform

white, long (97 cm) fruits with white acute tip, fruit

weight 1.34 kg and girth 29.36 cm.

10. Productivity : 50 t/ha

11. Area of adaptation : Acidic alluvial soils of Southern Kerala

12. Tips on cultivation : Season: January - March & September - December;

Seed rate - 3-4 kg/ha; Spacing: 3x3 m

Apply NPK - 70:25:25 kg/ha

13. Scientists responsible for

: Jessy M Kuriakose,

developing the variety

Chandy K.C., Sureshkumar P., Leena Kumari S.

Ittyaverah P. J., Santhakumari S.

1. Crop : Snake gourd

2. Variety : Baby (TA 23)

3. Method of breeding : Selection

4. Source / parent / pedigree : Local collection from Peruva, Ernakulam

5. Year of release and authority : 2002 - 21st Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details: IC No. 415092

8. Specific advantages / features : High yield and small sized white fruits. Duration - 120-

140 days. Tolerant to mosaic disease under field

conditions.

9. Key characters for identification: Small elongated uniformly white fruits. Fruit length 36.5

cm, weight 474 g and girth 22cm.

10. Productivity : 50.7 t/ha

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Season: January - March & September - December;

Seed rate: 3-4 kg / ha; Pit to pit; spacing: 2 x 2 m(3 pl/pit)

Apply NPK - 70:25:25 kg/ha

13. Scientists responsible for : Gopalakrishnan T.R.

developing the variety Devadas V.S., Maicykutty P. Mathew,

Aravindakshan K., Ramachandran Nair S., Narayanankutty C., Krishnakumari K. Crop : Snake gourd
 Variety : Manusree
 Method of breeding : Mass selection

4. Source / parent / pedigree : Local collection from Kuruppanthara, Kottayam
 5. Year of release and authority : 2004 - 22nd Kerala State Seed Sub Committee meeting

6. Evolved at : Agricultural Research Station, Mannuthy

7. Registration / notification details : IC No. 319982

8. Specific advantages / feature : High yielding, early variety suited for summer rice

fallows. Duration- 5months

9. Key characters for identification: Medium long (65-70 cm) white fruits with green

markings at the pedicel end. Fruit weight- 750-800 g

10. Productivity : 60 t/ha

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Season: January-March; Spacing: 2x2 m;

Seed rate- 3-4 kg/ha Apply NPK - 70:25:25 kg/ha

13. Scientists responsible for : Narayanan Kutty C.,

developing the variety Rosamma C. A., Jaikumaran U., Kanakamani M.T.,

Radhakrishnan V.V.

1. Crop : Ash gourd (Benincasa hispida)

2. Variety : KAU Local (BH 21)3. Method of breeding : Single plant selection

4. Source / parent / pedigree : Local collection

Year of release and authority : 2000 - 20th Keraia State Seed Sub Committee meeting
 Evolved at : Department of Olericulture, College of Horticulture,

Vellanikkara

7. Registration / notification details: 2002 - 9th meeting of the Central Sub Committee

8. Specific advantages / features : High yield, medium sized oval to oblong fruits with

high flesh thickness. Duration: 3.5 - 4 months

9. Key characters for identification: Medium sized oval to oblong fruits which are green at

tender stage wax colour on maturity. Fruit length - 45 - 55 cm; fruit weight - 6-8 kg and flesh thickness -

5.1-6.2 cm.

10. Productivity : 28.2 t/ha

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Season: May-June, September-December, January-

March; Seed rate: 0.75-1.0 kg/ha

Pit to pit spacing: 4.5 x 2 m (3 plants/pit)

Apply NPK - 70:25:25 kg/ha

13. Scientists responsible for developing the variety

: George T.E.

Salikkutty Joseph, Sadhankumar P.G., Rajan S., Meagle Joseph, Peter K.V., Gopalakrishnan P.K.

1. Crop Ash gourd Indu (Cul. AG1) 2. Variety Mass selection 3. Method of breeding Local collection 4. Source / parent / pedigree 2000 - 20th Kerala State Seed Sub Committee meeting Year of release and authority 5. 6. Evolved at RARS, Pattambi 2002 - 9th Central Sub Committee meeting Registration / notification details: High yield, medium sized round fruits, tolerant to 8. Specific advantages / features : mosaic disease. Duration-3.5-4 months Medium sized, round fruits with flat stylar and pedicel 9. Key characters for identification: end, fruits green at tender stage, wax coloured on maturity. Average fruit length 24.3 cm, weight 4.82 kg and flesh thickness 5.27 cm. 24.5 t/ha 10. Productivity Central zone of Kerala 11. Area of adaptation Season: May - August, September - December. 12. Tips on cultivation January - March; Seed rate: 0.75-1.0 kg/ha; Pit to pit spacing: 4.5 x 2 m (3 plants/pit), Apply NPK - 70:25:25 kg/ha Jvothi M.L., 13. Scientists responsible for George T.E., Narayanankutty M.C., Balachandran P.V. developing the variety Rehumath Niza T.J., Salikkutty Joseph, Santha K.K., Rosamma C.A. Pumpkin (Cucurbita moschata Poir) 1. Crop Ambili (CM 14) 2. Variety 3. Method of breeding Mass selection Local collection 4. Source / parent / pedigree 1988 - Kerala State Seed Sub Committee meeting 5. Year of release and authority Department of Olericulture, College of Horticulture, 6. Evolved at Vellanikkara IC No - 415091,1988 - 11th Central Sub Committee meeting 7. Registration / notification details: High yield, medium sized, flat round fruits. Specific advantages / features : 8. **Duration 3-4 months** White spots at the intersect of veins. Fruits flat round Key characters for identification: 9. and green colored at tender stage, turning yellowish brown on maturity, yellow coloured flesh, flesh thickness 4.3 cm., L:B ratio 0.71 33 t/ha 10. Productivity Kerala, Tamil Nadu, Karnataka and Gangetic alluvial 11. Area of adaptation plains Season: January-March and September-December 12. Tips on cultivation Seed rate: 3-3.5 kg/ha, Pit to pit spacing (3 pl./pit): 4.5 x 2 m, Apply NPK - 70:25:25 kg/ha 13. Scientists responsible for : Gopalakrishnan T.R.,

developing the variety

Gopalakrishnan P.K., Peter K.V.

1. Crop Pumpkin Suvarna (CM 349) 2. Variety Single plant selection 3. Method of breeding 4. Source / parent / pedigree Local collection 1998 - 19th Kerala State Seed Sub Committee meeting Year of release and authority Department of Olericulture, College of Horticulture, Evolved at 6. Vellanikkara Index No. NGB.2000/91, 2002 - 9th Central Sub 7. Registration / notification details: Committee meeting High yield, medium sized, flat and orange fleshed Specific advantages / features : 8. fruits, duration 3-4 months Medium sized, flat, green fruits with white patches 9. Key characters for identification: and spots at immature stage. Flesh orange colored and thick (5 cm), fruit weight 3.5 kg. 10. Productivity 37 t/ha Central zone of Kerala 11. Area of adaptation 12. Tips on cultivation : Season January - March and September - December Seed rate: 3- 3.5 kg/ha; Pit to pit spacing (3 pl/pit): 4.5 X 2 m; Apply NPK - 70:25:25 kg/ha 13. Scientists responsible for Baby Lissy Markose, developing the variety Rajan S. 1. Crop Pumpkin Saras (CM-346) 2. Variety Method of breeding Single plant selection 4. Source / parent / pedigree Local collection 5. Year of release and authority 2002 - 21st Kerala State Seed Sub Committee meeting 6. Evolved at Department of Olericulture, College of Horticulture, Vellanikkara 7. Registration / notification details: 8. Specific advantages / features : High yield and high flesh thickness Key characters for identification: Elongated medium sized fruits (2.7 kg) with orange 9. coloured thick flesh (5 cm). Duration 120 days. 10. Productivity 39 t/ha 11. Area of adaptation Central zone of Kerala 12. Tips on cultivation Season: January - March and September - December Seed rate- 1- 1.5 kg/ha; Pit to pit spacing (2 pl./pit): 4.5 x 2 m; Apply NPK-70:25:25 kg/ha Scientists responsible for Baby Lissy Markose, Rajan S., Sadhankumar P.G, Meagle Joseph, developing the variety

Gopalakrishnan T.R.

Pumpkin 1. Crop 2. Variety Soorai 3. Method of breeding Selection Local collection from Pollachi (CM 350) Source / parent / pedigree Year of release and authority 2002 - Central Sub Committee meeting 5. Department of Olericulture, College of Horticulture, 6 Evolved at Vellanikkara Index No. NGB -2000/91 of NBPGR New Delhi Registration / notification details: 7. High yield, high flesh thickness, and high carotene Specific advantages / features : content Globular, medium sized fruits (3kg), green with white Key characters for identification : stripes at immature stage and tan fruit skin colour at maturity. Orange flesh colour and flesh thickness 4 cm. Crop duration 120 days. 47 t/ha 10. Productivity Zones VII & VIII of the country (Maharashtra, 11. Area of adaptation W. Madhya Pradesh, Karnataka, Tamii Nadu, Kerala and Lakshadweep islands) Season: January - March, September - December 12. Tips on cultivation Seed rate: 3-3.5 kg/ha; Pit to pit spacing (3 pl./pit): 4.5 X 2 m; Apply - NPK-70:25:25 kg/ha Raian S., 13. Scientists responsible for Baby Lissy Markose, Sadhan kumar P.G., Peter K.V. developing Oriental Pickling Melon (Cucumis melo var. conomon) 1. Crop Soubhagya (CM 8) 2. Variety Selection 3. Source / parent / pedigree Local collection from Valakkavu Source / parent / pedigree 4. 1998 - 19th Kerala State Seed Sub Committee meeting 5. Year of release and authority Department of Olericulture, College of Horticulture, 6. Evolved at Vellanikkara 2002 - 9th Central Sub Committee meeting Registration / notification details: 7. High yield, small to medium sized oblong fruits having Specific advantages / features : B. good market demand, early variety suitable for close planting, duration 70-75 days Less spreading, bears fruit in the lower nodes, fruits Key characters for identification: 9. are small to medium sized and oblong shaped, green with light green lines from stalk end to stylar end which turn golden yellow colour on ripening. Fruit length 18 - 23 cm, fruit diameter 11-13 cm and fruit weight 900 - 1400 g. 17.1 t/ha 10. Productivity Central zone of Kerala 11. Area of adaptation Season: Rabi and Summer; Seed rate: 750g/ha Tips on cultivation 12. Spacing: 100x30 cm; Apply NPK 70:25:25 kg/ha Devadas V.S., Scientists responsible for 13. Gopalakrishnan T.R., Ramachandran Nair S. developing the variety

Crop : Oriental Pickling Melon
 Variety : Mudicode (C. S. 26)
 Method of breeding : Single plant Selection

4. Source / parent / pedigree : Local collection from Mudicode, Thrissur

5. Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting 6. Evolved at : Dep. of Olericulture, College of Horti., Vellanikkara

7. Registration / notification details: 2002 - 9th Central Sub Committee meeting

8. Specific advantages / features : High yield and large fruits, crop duration 80 days,

days to first harvest 55-60 days

9. Key characters for identification: Long oval fruits which are green coloured at immature

stage turning attractive golden yellow on ripening.

Fruit length - 27-35 cm, fruit weight 1.8 - 2.5 kg

10. Productivity : 30 t/ha

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Season : Rabi and Summer; Seed rate: 500g/ha;

Pit to pit spacing: 2 x1.5m @ 3 plants/pit;

Apply NPK 70:25:25 kg/ha

13. Scientists responsible for

developing the variety

: Salikkutty Joseph,

Sadhankumar P. G., George T.E., Rajan S.,

Meagle Joseph, Peter K.V.

1. Crop : Oriental Pickling Melon

2. Variety : Arunima (C. S. 1)

3. Method of breeding : Selection

4. Source / parent / pedigree : Local collection

5. Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Pilicode

Registration / notification details : 2002 - 9th Central Sub Committee meeting
 Specific advantages / features : High yield, large fruit size and attractive

appearance. Crop duration 55-65 days

9. Key characters for identification: Trailing habit, bright green fruits with creamy spots at

tender stage and orange yellow at ripening. Uniform cylindrical shaped fruits having 33 cm length, 40 cm

girth and 2.3 kg weight

10. Productivity : 27 t/ha

11. Area of adaptation : North zone of Kerala

12. Tips on cultivation : Season : Rabi and Summer; Seed rate: 500g/ha

Pit to pit spacing: 2 x 2m @ 3 plants/pit;

Apply NPK 70:25:25 kg/ha

13. Scientists responsible for developing the variety

: Aravindakshan K.,

Jayaprakash Naik B., Giridharan M. P., Rajamony L.,

· Shyam S. Kurup, Neema V. P.

1. Crop : Ridge gourd (*Luffa acutangula*)

2. Variety : Haritham (L.A -1)

3. Method of breeding : Selection

4. Source / parent / pedigree : Local collection from Pilicode

5. Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Pilicode

7. Registration / notification details: 2002 - 9th Central Sub Committee meeting 8. Specific advantages / features : High yield, large fruit size, duration 95 days.

9. Key characters for identification: Broad light green leaves, light green cylindrical fruits

with typical ridges and tapering towards the base. Mean length - 46.5 cm and girth - 20 cm. Fruit weight

at vegetable harvest 650 g

10. Productivity : 13.2 t/ha

11. Area of adaptation : North zone of Kerala

12. Tips on cultivation : Season: September - February, Sow in pits of 60 cm

diameter at a spacing 2 x 2m @ 3 plants/pit;

Apply NPK 70:25:25 kg/ha

13. Scientists responsible for developing the variety

: Rajamony L,

Dr. K. Aravindakshan, Jayaprakash Naik B., Nirmala Devi S., Shyam S. Kurup, Radha T., Giridharan M. P., Neema V. P., Anitha Karun

Crop : flidge gourd
 Variety : Deepthi (LA 7)

3. Method of breeding : Single plant selection

4. Source / parent / pedigree : Local collection from Cherthala

Year of release and authority : 2004 - Kerala State Seed Sub Committee meeting
 Evolved at : Dep. of Olericulture, College of Horti., Vellanikkara

7. Registration / notification details:

B. Specific advantages / features : Medium maturity group, resistant to mosaic under field

conditions. 63 days to first harvest.

9. Key characters for identification: Green ovate leaves fruits are green medium sized with

finely wrinkled surface. Fruit length 23 cm and girth 14.9 cm. Pedicel end of fruit is tapered and fruit

weight is 164 g.

10. Productivity : 12.7 t/ha

11. Area of adaptation : Central Zone of Kerala

12. Tips on cultivation : Season : September - December and January - April.

Seed rate: 2.5-3 kg/ha, Sow in pits of 60 cm diameter at a spacing of $2m \times 2m$. Apply NPK -70:25:25

13. Scientists responsible for developing the variety

: Nirmala Devi S.,

Sadhan Kumar P.G., Sally K. Mathew, Abdul Vahab M.

Rajan S., Gopalakrishnan T.R.

1. Crop Ivy gourd (Coccinia indica) 2. Variety Sulabha (CG 23) 3. Method of breeding Clonal selection 4. Source / parent / pedigree Local collection from Kollam 5. Year of release and authority 2004 - Kerala State Seed Sub Committee meeting 6. Evolved at Department of Olericulture, College of Horticulture. Vellanikkara 7. Registration / notification details: No. 597CE, dt 25.4.2006 Specific advantages / features Gynoecious, perennial line which sets fruits parthenocarpically. Long fruits suitable for salads and pickling. 9. Key characters for identification: Three lobed leaves and long, pale green fruits with continuous striations. Fruit length 9.25 cm and fruit weight 18.48 g 10. Productivity 60 t/ha 11. Area of adaptation Central Zone of Kerala 12. Tips on cultivation Planting season: May - June & September - October; Plant 3 noded cuttings in pits at a spacing of 2 x 2 m. Apply organic manure - 25 t/ha 13. Scientists responsible for Sadhankumar P.G., developing the variety Raju V.K., Nirmala devi S., Rajan S., Suresh Babu K.V., Gopalakrishnan T.R. 1. Crop Drumstick (Muringa oleifera) 2. Variety Anupama 3. Method of breeding Clonal selection Source / parent / pedigree MO 44, a local collection from Mannarkkad 5. Year of release and authority 2010- 24th Kerala State Seed Sub Committee meeting. 6. Evolved at Dept of Olericulture, College of Horticulture, Vellanikkara 7. Registration / notification details: 8. Specific advantages / features : High yielding, medium long, green pods with excellent cooking quality 9. Key characters for identification: Flowers white with greenish tint, leaves green, stem with whitish tint, fruits green with medium length (56 cm) and girth (6.2 cm). 10. Productivity 32 kg/plant 11. Area of adaptation Warm humid tropics

Suresh Babu, K.V

Require good sun light for growth and productivity, propagated through limb cuttings during April-May, flowers during October- November and March-April

George.T.E, Rajan.S, Gopalakrishnan.T.R, Raju.V.K

12. Tips on cultivation

13. Scientists responsible for

developing the variety

Tuber Crops

1. Crop : Cassava (Manihot esculenta)

2. Variety : Nidhi

3. Method of breeding : Clonal Selection

4. Source / parent / pedigree : Local collection Koombuvella

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details:

8. Specific advantages / features : Short duration (6 months) variety with low HCN content

(20 ppm) and good cooking quality. Tolerant to

cassava mosaic and moisture stress.

Starch content - 26.8%

9. Key characters for identification: Tall (2.1 m) and non-branching with grey tuber skin

10. Productivity : 25.1 t / ha

11. Area of adaptation : Onattukara (coastal sandy tract)

12. Tips on cultivation : Spacing - 75 cm x 75 cm; Apply Organic manure - 12.5t/ha.

NPK - 75:75:75 kg/ha

13. Scientists responsible for : Shyam S. Kurup, developing the variety : Balakrishna Pillai

Balakrishna Pillai K., Sukumaran Nair S., Bhavani Devi S.

1. Crop : Cassava

2. Variety : Kalpaka (KMC 1)
3. Method of breeding : Clonal Selection

4. Source / parent / pedigree : Ramanthala

5. Year of release and authority : 1996 - Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Kumarakom

7. Registration / notification details :

8. Specific advantages / features : Tubers with high starch content (31.4%); protein

content 10.09 mg /100 g tuber. Cassava mosaic absent, tolerant to brown leaf spot and low spider mite

incidence.

9. Key characters for identification : Short duration (6 months), non-branching variety.

Tubers 35- 41 cm long.

10. Productivity : 42.55 to/ha under intercropped situation, 61.20 t/ ha in

the open

11. Area of adaptation : As intercrop in the coconut gardens in Kuttanad and

also as a pure crop

12. Tips on cultivation : Spacing: 75 x 75 cm; Apply Organic manure - 12.5t/ha.

NPK - 75:75:75 kg/ha

13. Scientists responsible for developing the variety

Inasi K.A., Alice Antony, Sreekumar K., Dr. U.Mohammed Kunju,

Sosamma Cherian, Nair R.R.

1. Crop : Cassava

2. Variety : Vellayani Hraswa

3. Method of breeding : Clonal selection
4. Source / parent / pedigree : Nedumangad local

5. Year of release and authority : 2002 - 21st Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details:

8. Specific advantages / features : Short duration (155-180 days) variety with creamy white

tuber flesh. Moderately susceptible to cassava mosaic

virus. Very good cooking quality

9. Key characters for identification: Dwarf plants with branching habit and retaining

maximum number of leaves till harvest

10. Productivity : 44 t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Spacing - 90x90 cm; Apply Organic manure -12.5 t/ha

NPK - 100:100:100 kg/ha

13. Scientists responsible for

developing the variety

Harikrishnan Nair K.,

Dommen M., Suharban M., Geetha D., Kamalam N., Rajamony L., Vijayaraghavakumar, Babu Mathew P.

1. Crop : Sweet potato (Ipomoea batatas)

2. Variety : Kanjangad (ACV 1)
3. Method of breeding : Clonal selection

4. Source / parent / pedigree : Kanjangad local

5. Year of release and authority : 1992 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details:

8. Specific advantages / features : Purple tubers with yellow flesh; low weevil incidence

and tolerant to partial shade

9. Key characters for identification: Spreading type, with duration of 115 days. Green vines,

dark brown young leaves, medium sized spindle shaped, and purple coloured tubers with yellow flesh.

10. Productivity : 12 t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Suited to Kharif season in uplands as rainfed crop.

Apply Organic manure - 10 t/ha, NPK - 75:50:75 kg/ha

13. Scientists responsible for developing the variety

·: Manju P.,

Sunny K. Oommen, Gopinathan Nair V.,

Mohanakumaran N.

1. Crop : Greater Yam (Dioscorea alata)

2. Variety : Indu (KM-DA 1)

3. Method of breeding : Selection

4. Method of breeding : TCR-5 (1C-44209)

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

2002 - 9th Central Sub Committee meeting

6. Evolved at : RARS, Kumarakom

7. Registration / notification details :

8. Specific advantages / features : Shade tolerant variety with 8 months duration

9. Key characters for identification: Trailing type plants with shallow tuberization. Digitate

tubers have brownish black skin and white flesh.

10. Productivity : 3.93 kg/plant (as intercrop of coconut)
11. Area of adaptation : Reclaimed alluvial soils of Kuttanad
12. Tips on cultivation : Apply NPK 80:60:80 kg/ha; Spacing 1mx 1m

12. Tips on cultivation : Apply NPK 80:60:80 kg
13. Scientists responsible for : Alice Antony,

developing the variety Inasi K.A., Sreekumar K., Mohammed Kunju U.,

Sosamma Cherian, Nair R.R.

1. Crop : Coleus (Salenostemon rotundifolius L.)

2. Variety : Nidhi (CP-79)
3. Method of breeding : Clonal selection

4. Source / parent / pedigree : NBPGR collection IC 85708

5. Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

6. Evolved at : RARS, Pattambi

7. Registration / notification details :

Specific advantages / features : High yield medium sized tubers, good cooking quality,

early maturity

9. Key characters for identification: Characteristic aroma, oblong shaped tubers and early

maturity (120-130 days)

10. Productivity : 27.9 t/ha

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Plant 3-4 node cuttings on raised beds. Spacing – 30 x

15 cm, Apply Organic manure - 10t/ha,

NPK - 30:60:50 kg/ha

13. Scientists responsible for

developing the variety

George T.E.,

Jyothi M. L., Narayanankutty M. C., Syamakumari S.S., Krishnan Nair N., Asha Shankar, Narayanankutty C.,

Salikkutty Joseph, santha K.K., Mareen Abraham

Radhakrishnan V.V., Balachandran P.V.

Crop : Coleus
 Variety : Suphala
 Method of breeding : In vitro mutagenesis followed by somaclonal selection
 Source/parent/ pedigree : Tissue culture mutant derived from a local cultivar
 Year of release and authority : 2006- 23rd Kerala State Seed Sub Committee meeting.

6. Evolved at : Dept of Plant Breeding & Genetics, College of

Horticulture, Vellanikkara

7. Registration / Notifications :

8. Specific advantages/features : High yield (Potential yield - 33.2t/ha) with medium

duration (120 - 140 days) and adaptable for year round

cultivation.

9. Key characters for identification: Robust plants with dark green thick leaves and short

internodes. Tubers bigger sized and emerge mostly

from basal nodes.

10. Productivity : 15.93 t/ha

11. Area of adaptation : Adaptable for year round cultivation in central zone

of Kerala

12. Tips on cultivation : Performs well during July - December.

13. Scientists responsible for : Mareen Abraham developing the variety Radhakrishnan V. V.

Fruit Crops

t. Crop : Banana (Musa spp.)

2. Variety : BRS - 13. Method of breeding : Hybridization

4. Source / parent / pedigree : Agniswar x Pisang Lilin

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

2002 - 9th Central Sub Committee meeting

6. Evolved at : Banana Research Station, Kannara

7. Registration / notification details :

8. Specific advantages / features : Highly resistant to Sigatoka leaf spot and Panama wilt.

Resistant to rhizome weevil and pseudostem borer.

9. Key characters for identification: Bunch held at an angle with straight, medium green

fruits. Triploid plants belonging to medium maturity

group. Plant height - 240 cm.

10. Productivity : 25 t / ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Spacing: 2.1 m x 2.1 m, Apply -Organic manure-10kg/pl.

NPK-100:200:400 g/plant

13. Scientists responsible for developing the variety

: Karmacharya J. K

Aravindakshan M., Valsalakumari P. K., Rajeevan P. K. Rema Menon, Baby Latha A. K., Prasannakumari Amma S., Pushkaran K., Rajamony L., Premalatha T., Estelitta S., Radhakrishnan T.C., Charles S.J. and Pillai J.S.K.

1. Crop : Banana : BRS-2

3. Method of breeding : Hybridization

4. Source / parent / pedigree : Vannan x Pisang Lilin

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : Banana Research Station, Kannara

7. Registration / notification details : 2002 - 9th Central Sub Committee meeting

8. Specific advantages / features : Moderately resistant to Sigatoka leaf spot and Panama

wilt.

9. Key characters for identification: Pink- purple pigmentation of midrib dorsal surface.

Medium sized bunches with short, plump, bottle

necked, medium green fruits at maturity.

10. Productivity : 29.4 t/ ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Spacing- 2.1m x 2.1m; Apply -Organic manure-

10kg/pl. NPK-100:200:400 g/plant

13. Scientists responsible for developing the variety

Karmacharya J. K

Aravindakshan M., Valsalakumari P. K., Rajeevan P. K. Rema Menon, Baby Latha A. K., Prasannakumari Amma S., Pushkaran K., Rajamony L., Premalatha T., Estelitta S., Radhakrishnan T.C., Charles S.J.and Pillai J.S.K. 1. Crop : Pineapple (Ananas comosus)

2. Variety : Amritha
3. Method of breeding : Hybridization

4. Source / parent / pedigree : Kew x Ripley Queen

5. Year of release and authority : 2004 - 22nd Kerala State Seed Sub Committee meeting

6. Evolved at : Pineapple Research Centre, Vellanikkara

7. Registration / notification details:

8. Specific advantages / features : Non-fibrous golden yellow flesh with rich aroma, high

TSS and low acidity. High yield with minimum pest and

disease incidence.

9. Key characters for identification: Medium sized plants with erect and spiny pale green

leaves having slight reddish tinge towards the tip. Fruits with golden yellow colour. Spirals left oriented.

10. Productivity : 80-85 tonnes/ha

11. Area of adaptation : Pineapple growing tracts of Kerala

12. Tips on cultivation : Spacing - In double rows 70 cm between rows and

30 cm between plants; Apply -Organic manure - 25t/ha

NPK - 320:160:320 kg/ha

13. Scientists responsible for : Sudha devi P. K.,

developing the variety Gopimony R., Alice Kurien, Radha T., Rajeevan P.K.,

Reghunath B. R., Varkey P.A., Pushkaran K., Darley Jose, Raju V. K., George T.E., Jacob John Prasanna K. P., Baby Lissy Markose & three others

Spice Crops

1. Crop Pepper (Piper nigrum)

2. Variety Pannivur 1

3. Method of breeding Hybridization and clonal selection Uthirankotta x Cheriyakaniakadan Source / parent / pedigree

Year of release and authority 5. 1967

6. Evolved at PRS, Panniyur 7. Registration / notification details : IC. No 360982

Prefers open conditions. Susceptible to major pests Specific advantages / features :

and diseases and sensitive to shaded conditions.

Vigorous vine with cordate leaves and non pigmented 9. Key characters for identification:

shoot tip. Long spike (17 cm) with closely set bold

berries.

: 1.24 t/ha of dry pepper 10. Productivity

11. Area of adaptation : All pepper growing areas of Kerala

12. Tips on cultivation Apply Organic manure 10 kg/plant/annum

NPK - 50:50:150 g/plant/annum

13. Scientists responsible for

developing the variety

: Venugopalan Nambiar P.K.

1. Crop Pepper

Krishna (Panniyur 2) 2. Variety

Selection 3. Method of breeding Source / parent / pedigree Balankotta

5. Year of release and authority 1991 - Kerala State Seed Sub Committee meeting

6. Evolved at PRS, Panniyur IC No. 360983 7. Registration / notification details:

8. Specific advantages / features : Tolerant to shade. High piperine content (6.6%).

9. Key characters for identification: Cordate leaves and non pigmented shoot tip, medium

sized berries with spike length of about 12.3 cm

10. 2.6 t/ha of dry pepper Productivity

11. Area of adaptation : All pepper growing areas of Kerala

: Apply - Organic manure 10kg/plant/year 12. Tips on cultivation

NPK - 50:50:150 g/plant/annum

Scientists responsible for 13.

developing the variety

Sasikumaran S., Ibrahim K.K., Mallika V.K.

: Sukumara Pillai V.,

1. Crop : Pepper

2. Variety : Syama (Panniyur 3)

3. Method of breeding : Hybridization

4. Source / parent / pedigree : Uthirankotta x Cheriyakanyakadan

5. Year of release and authority : 1991 - Kerala State Seed Sub Committee meeting

6. Evolved at : PRS, Panniyur

7. Registration / notification details: IC No. 360984

8. Specific advantages / features : Prefers open condition. High oleoresin content

9. Key characters for identification: Long spikes with bold berries

10. Productivity : 2 t/ha of dry pepper

11. Area of adaptation : All pepper growing areas of Kerala

12. Tips on cultivation : Apply - Organic manure 10kg/plant/year

NPK - 50:50:150 g/plant/annum

13. Scientists responsible for : Sukumara Pillai V.,

developing the variety Sasikumaran S., Ibrahim K.K., Mallika V.K.

1. Crop : Pepper

2. Variety : Anjana (Panniyur 4)

Method of breeding : Clonal selection
 Source / parent / pedigree : Kuthiravally II

5. Year of release and authority : 1991 - Kerala State Seed Sub Committee meeting

6. Evolved at : PRS, Panniyur

7. Registration / notification details: IC No.360985

8. Specific advantages / features : Tolerates shade and adverse climatic conditions

9. Key characters for identification: Cordate leaves, leaf length -13.6 cm, spike length

9.3 cm. berry medium sized.

10. Productivity : 1.3 t/ha of dry pepper

11. Area of adaptation : All pepper growing areas of Kerala

12. Tips on cultivation : Apply - Organic manure 10kg/plant/year

NPK - 50:50:150 g/plant/annum

13. Scientists responsible for : Sukumara Pillai V...

developing the variety Sasikumaran S., Ibrahim K.K., Mallika V.K.

1. Crop : Pepper

2, Variety : Panniyur 5

3. Method of breeding : Clonal selection

4. Source / parent / pedigree : Perumkodi

5. Year of release and authority : 1996 - Kerala State Seed Sub Committee meeting

6. Evolved at : PRS, Panniyur
7. Registration / notification detail : IC No. 360986

8. Specific advantages / features : High yield, medium maturity, come up well under mono-

cropping and companion cropping. (Not resistant to major pests and diseases.) Tolerates adverse climatic

conditions.

9. Key characters for identification: Purple pigmented shoot tip with oval leaves

10. Productivity : 2.4 t/ha of dry pepper

11. Area of adaptation : All pepper growing tracts of Kerala

12. Tips on cultivation : Apply - Organic manure 10kg/plant/year

NPK - 50:50:150 g/plant/annum

13. Scientists responsible for : Chandy K.C.,

developing the variety Venugopalan Nambiar P.K., Sukumara Pillai V.

1. Crop : Pepper

2. Variety : Panniyur 6

3. Method of breeding : Clonal selection

4. Source / parent / pedigree : Karimunda type III

5. Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

Evolved at : PRS, Panniyur
 Registration / notification details : IC No. 360987,

2002 - 9th Central Sub Committee meeting.

8. Specific advantages / features : Stable and regular yield, tolerates partial shade and

with stands adverse climatic conditions.

9. Key characters for identification: Bold attractive berries, faint pink shoot tip colour

10. Productivity : 2.1 t/ha of dry pepper

11. Area of adaptation : All pepper growing areas of Kerala

12. Tips on cultivation : Apply - Organic manure 10kg/plant/annum

NPK - 50:50:150 g/plant/annum

13. Scientists responsible for : Ibrahim K.K.

developing the variety

Arya K., Rajagopalan A., Satheesan K.N.,

Unnikrishnan Nair P.K., Mammootty K.P.,

Gregory Zacharia, Vanaja T.

1. Crop : Pepper

2. Variety : Panniyur 7

3. Method of breeding : Selection 4. Source / parent / pedigree : Kalluvally

5. Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

6. Evolved at : PRS, Panniyur

7. Registration / notification details: C No. 360988, 2002 - 9th Central Sub Committee meeting

8. Specific advantages / features : Hardy variety with stable and regular yield. Tolerates

adverse climatic conditions and partial shade. High

piperine content (5.57%)

9. Key characters for identification: Plant height - 3.5-6.5m. Shoot tip purple pigmented.

Long, straight spikes (19.4cm). Cordate leaves with

wavy margin

10. Productivity : 1.4 t/ha of dry pepper

11. Area of adaptation : All pepper growing regions of Kerala

12. Tips on cultivation : Apply - Organic manure 10 kg/plant

NPK - 50:50:150 g/plant

13. Scientists responsible for

developing the variety

: Ibrahim K.K.

Arya K., Rajagopalan A., Satheesan K.N., Unnikrishnan Nair P.K., Mammootty K.P.,

Gregory Zacharia, Vanaja T.

1. Crop : Cardamom (Elattarium cardamomum)

2. Variety : PV 1

3. Method of breeding : Selection
4. Source / parent / pedigree : Wayalar local

5. Year of release and authority : 1992 - Kerala State Seed Sub Committee meeting

6. Evolved at : CRS, Pampadumpara

7. Registration / notification details:

8. Specific advantages / features : Earliness in bearing

9. Key characters for identification: A Malabar variety with lean and lanky capsules having

less than 7 mm width.

10. Productivity : 380 kg/ha

11. Area of adaptation : All cardamom growing areas of Kerala, Karnataka and

Tamil Nadu

12. Tips on cultivation : Spacing - 1.5x1.5m to 2x2m. Apply - Organic manure-

5kg/pl. NPK - 75:75:150 kg/ha

13. Scientists responsible for

developing the variety

: Vijayan P.K.,

Wilson K.I., Balakrishnan S., Remadevi L.

1. Crop : Cardamom 2. Variety : PV 2

3. Method of breeding : Selection

4. Source / parent / pedigree : PV 1

5. Year of release and authority : 2002 - 21st Kerala State Seed Sub Committee meeting

6. Evolved at : CRS, Pampadumpara

7. Registration / notification details:

8. Specific advantages / features : Field tolerance to stem borer and relative tolerance to

thrips. Long bold capsules (more than 80% of capsules

over 7mm), high dry pod recovery (23.8%)

9. Key characters for identification: A vazhuka variety having long panicle with higher inter-

nodal length; dried capsules are ovoid to elliptical in

shape with parrot green colour.

10. Productivity : 982 kg/ha

11. Area of adaptation : High ranges of Idukki district

12. Tips on cultivation : Spacing- 2x2m to 3x2m; Apply Organic manure-5kg/pl.

NPK - 75:75:150 kg/ha

13. Scientists responsible for

developing the variety

Backiyarani S.,

Joseph Rajkumar A., Kuriakose K. P., Shajan V.R., Sunny K. Oommen, Sainamole Kurien P., Murugan M. Mini Raj N., Arthur Jacob, . Abraham C.T, Suma Paulose, Hebsy Bai, Kumaran K., Aipe K.C. and Vasanthakumar K.

1. Crop : Turmeric(Curcuma longa)

2. Variety : Kanthi

3. Method of breeding : Single plant selection
4. Source / parent / pedigree : Mydukur (Andhra Pradesh)

5. Year of release and authority : 1996 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plantation Crops, and Spices

College of Horticulture, Vellanikkara

7. Registration / notification details:

8. Specific advantages / features : Duration : 8-9 months, high yield, high curcumin (7.18

%), medium maturity group (240 – 270), not resistant to rhizome rot and leaf spot, not resistant to shoot borer

9. Key characters for identification: Fingers medium bold and closer internodes.

10. Productivity : 8.90 t/ha of dry rhizome.

11. Area of adaptation : Warm, humid, tropical climate of Kerala.

12. Tips on cultivation : Spacing : 25 X 25 cm, Apply : 30:30:60 kg NPK/ha

13. Scientists responsible for : Valsala P.A.,

developing the variety Alice Kurien, Nybe E.V., Sreekantan Nair G.,

Koshy Abhaham, Maicykutty P. Mathew,

Vilasini T.N., Mary C.A.

1. Crop : Turmeric
2. Variety : Sobha

3. Method of breeding : Single plant selection

4. Source / parent / pedigree : Methala local

5. Year of release and authority : 1996 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plantation Crops and Spices

College of Horticulture, Vellanikkara

7. Registration / notification details :

8. Specific advantages / features : High yield, high curcumin (7.39 %) and

oleoresin (19.95 %).

9. Key characters for identification: Mother rhizomes big, bold fingers, closer internodes

and more tertiary rhizomes

10. Productivity : 7.0 t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Spacing: 25 X 25 cm, Apply: 30:30:60 kg NPK/ha

13. Scientists responsible for : Valsata P.A.,

developing the variety Alice Kurien, Nybe E.V., Sreekantan Nair G.,

Koshy Abhaham, Maicykutty P. Mathew,

Vilasini T.N., Mary C.A. Mary

1. Crop : Turmeric

2. Variety : Sona

3. Method of breeding : Clonal selection

4. Source / parent / pedigree : Local from Chundakuzhy in Ernakulam district
 5. Year of release and authority : 2002 - 21st State Seed Sub Committee meeting

6. Evolved at : Department of Plantation Crops and Spices

College of Horticulture, Vellanikkara

7. Registration / notification details:

8. Specific advantages / features : Medium duration variety (240-270 days), high

curcumin content (7.11 %)

9. Key characters for identification : Orange yellow, medium bold rhizomes with no tertiary

fingers. Scales prominent and dark brown

10. Productivity : 4.2 t/ha

11. Area of adaptation : Central zone of Kerala.

12. Tips on cultivation : Spacing : 25 x 25 cm, Apply : 30:30:60 kg NPK/ ha

13. Scientists responsible for : Alice Kurien,

developing the variety Valsala P.A., Nybe E.V., Asha Sankar M.

Sreekantan Nair G.,

1. Crop ; Turmeric 2. Variety : Varna

3. Method of breeding : Clonal selection

4. Source / parent / pedigree : Collection from Mannarcad in Palakkad district
5. Year of release and authority : 2002 - 21st State Seed Sub Committee meeting

6. Evolved at : Department of Plantation Crops and Spices

College of Horticulture, Vellanikkara

7. Registration / notification details :

8. Specific advantages / features $\,$: Duration 240 - 270 days, curcumin content- 7.87 $\,$ %

9. Key characters for identification: Tall plant with long and broad leaves; bright orange

yellow rhizome with tertiary fingers

10. Productivity : 4.2 t/ha

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Spacing : 25 x 25 cm Apply : 30:30:60 kg NPK/ha

13. Scientists responsible for : Alice Kurien,

developing the variety Valsaia P.A., Nybe E.V., Asha Sankar M,

Sreekantan Nair G.,

1. Crop : Ginger (Zingiber officinale Rosc).

2. Variety : Athira (M VI)

3. Method of breeding : Induction of variation through tissue culture and

selection

4. Source / parent / pedigree : Local cultivar Maran

5. Year of release and authority : 2010- 24th Kerala State Seed Sub Committee meeting.

6. Evolved at : Dept of Plantation Crops and Spices,

College of Horticulture, Vellanikkara

7. Registration / notification details: IC 0584128

8. Specific advantages / features : High yield, suitable for fresh and dry purpose,

less fibre (3.4%). Low pungency, high zingiberine, tolerant to soft rot and bacterial wilt disease

9. Key characters for identification: Flat bold rhizomes suitable for fresh and dry ginger.

10. Productivity : Average fresh yield 21 t/ha. Potential fresh yield 30 t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Ideal for cultivation both as pure and inter crop

13. Scientists responsible for : Shylaja. M.R

developing the variety Resmi Paul, Nybe.E.V, Koshy Abraham, Nazeem.P.A,

Valsala.P.A, Krishnan.S

1. Crop : Ginger (Zingiber officinale Rosc).

2. Variety : Karthika (970 M)

3. Method of breeding : Induction of variation through tissue culture and

selection.

4. Source / parent / pedigree : Local cultivar Maran

5. Year of release and authority : 2010- 24th Kerala State Seed Sub Committee meeting.

6. Evolved at : Dept of Plantation Crops and Spices,

College of Horticulture, Vellanikkara

7. Registration / notification details: IC 0584129

8. Specific advantages / features : High yield, high pungency, high oil and oleoresin,

tolerant to soft rot and bacterial wilt disease

9. Key characters for identification: Medium bold flat rhizomes suitable for fresh and dry

ginger.

10. Productivity : Average fresh yield 19 t/ha. Potential fresh yield 27t/ha

11. Area of adaptation : Throughout Kerala

12. Tips on cultivation : Ideal for cultivation both as pure and inter crop

13. Scientists responsible for : Shylaja, M.R.

developing the variety Resmi Paul, Nybe.E.V, Koshy Abraham, Nazeem.P.A,

Valsala.P.A, Krishnan.S1.

1. Crop : Cinnamon (Cinnamomum zevlanicum)

2. Variety : Sugandhini (ODC 13)

3. Method of breeding : Selection

4. Source / parent / pedigree : Germplasm collection at AMPRS, Odakkali

5. Year of release and authority : 2000 - Kerala State Seed Sub Committee meeting

6. Evolved at : AMPRS, Odakkali

7. Registration / notification details: 2002 - 9th Central Sub Committee meeting

Specific advantages / features : Dil recovery 1.2-1.6%. Eugenol content of Jeaf oil-

93.67%. No serious pests and diseases

9. Key characters for identification: Semi-compact canopy, medium to large leaves with

purple coloured new flesh.

10. Productivity : 180-200 kg oil/ha

11. Area of adaptation : Mid lands and high ranges, both in open and as an

inter crop in coconut plantation

12. Tips on cultivation : Spacing-4x4 m as monocrop; Apply - Organic manure-

20kg/pl. NPK - 200:180:200 g/plant

13. Scientists responsible for

developing the variety

Joy P.P.,

Thomas J., Samuel Mathew, Jayasree Shankar

Pulse Crops

1. Crop Cowpea (pulse) (Vigna unguiculata.Var.unguiculata) 2. Variety Kanakamony (PTB 1) Pure line selection 3. Method of breeding 4. Source / parent / pedigree Kunnamkulam local 5. Year of release and authority 1977 - Kerala State Seed Sub Committee meeting RARS, Pattambi 6. Evolved at 7. Registration / notification details : Specific advantages / features : High yielding dual purpose variety, suitable for kharif 8. and summer seasons Duration: 75-80 days, semi-trailing growth habit, dark 9. Key characters for identification: greenpods. Bold, reddish brown seeds. Average pod length - 17.8 cm; seeds/pod- 17 7 t/ha 10. Productivity Throughout Kerala 11. Area of adaptation Season - Suited to Kharif season as a pure crop in 12. Tips on cultivation uplands and Rabi and Summer seasons: Seed rate: 20-25 kg/ha; Spacing: 30 x 20 cm; Apply NPK - 20:30:10 kg/ha Viswanathan T.V. Scientists responsible for 13. Chandrika P. developing the variety Cowpea (pulse)(Vigna unquiculata.Var.unguiculata) 1. Crop Krishnamony (PTB 2) 2. Variety 3. Method of breeding Hybridization and Selection Source / parent / pedigree P118 x Kolinjipayar 4. 1982 - Kerala State Seed Sub Committee meeting 5. Year of release and authority RARS, Pattambi 6. Evolved at Registration / notification details: 7. Synchronous pod maturity, bold black grains and Specific advantages / features : tolerant to yellow mosaic viruses Duration - 55-60 days. Bushy, non-trailing variety 9. Key characters for identification: moderate branching and synchronous pod maturity. with 10. Productivity 600 to 800 kg/ha 11. Area of adaptation Throughout Kerala 12. Tips on cultivation Summer rice fallows and other moisture stress situations; Apply -Organic manure - 20t/ha NPK - 20:30:10 kg/ha Viswanathan T.V., 13. Scientists responsible for developing the variety Chandrika P.

1. Crop : Cowpea (pulse)

2. Variety : Shubra

3. Method of breeding : Combination breeding

4. Source / parent / pedigree : IC 38956 x Chharodi

5. Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details:

8. Specific advantages / features : Suited to summer rice fallows

9. Key characters for identification : Duration - 67 days

10. Productivity : 810 kg / ha

11. Area of adaptation : Southern zone of Kerala

12. Tips on cultivation : Suitable for Summer rice fallows; Apply Organic

manure - 20t/ha and NPK - 20:30:10 kg/ha

13. Scientists responsible for : Abdul Khader K.M.,

developing the variety Ramachandran Nair N., Nalinakumari T.,

Manikantan Nair V, Vikraman Nair R.

1. Crop : Cowpea (pulse)

2. Variety : Pournami
3. Method of breeding : introduction

4. Source / parent / pedigree : Introduction from Tamil Nadu

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details :

8. Specific advantages / features : Pendant pods, susceptible to aphid, moderately

resistant to pod borer

9. Key characters for identification: Duration - 74 - 77 days, Erect growth habit, off-white

seeds and glabrous leaves and pods

10. Productivity : 1210 kg per ha

11. Area of adaptation : Onattukara region

12. Tips on cultivation : Summer rice fallows; Apply Organic manure-

20t/ha and NPK - 20:30:10 kg/ha

13. Scientists responsible for : Sivan Pillai K.

developing the variety

Crop : Cowpea (pulse)
 Variety : Sreya (Culture 5)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : Pournami x COVU-623

5. Year of release and authority : 2010- 24th Kerala State Seed Sub Committee meeting.

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details: IC 584688

8. Specific advantages / features : High yield, duration 80-85 days, tolerant to drought

and suitable for summer rice fallows

9. Key characters for identification: Purple pods and purple streaks at the base of the

petiole. Seeds biscuit coloured, Tolerant to leaf rust, aphids, pod borer and American serpentine leaf miner.

10. Productivity : Grain - 1072Kg/ha

11. Area of adaptation : Summer rice fallows of Onattukara

12. Tips on cultivation : Spacing of 20X10cm, Apply 20:30:10 kg N: P:K /ha

13. Scientists responsible for : Bindhu.M.R

developing the variety Sverup John, Alexander. D, Suja.G, Indira.M,

Sushamakumari.P, Susamma.P.George, Vilasini.T.N.

Nair.N.R, Sivan Pillai.K.

1. Crop : Cowpea (pulse)

2. Variety : Hridya, (Culture 9) (CDM-1)

3. Method of breeding : Mass selection

4. Source / parent / pedigree : Selection from local kuttippayar

5. Year of release and authority : 2010- 24th Kerala State Seed Sub Committee meeting.

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details: IC 584689

8. Specific advantages / features : Extra short duration (55 days), high yield,

synchronized maturity, tolerant to pests and

diseases

9. Key characters for identification: Green vegetative parts and pods. Seeds straw

coloured. Tolerant to leaf rust, aphids, pod borer

and American serpentine leaf miner.

10. Productivity : 1050 kg /ha

11. Area of adaptation : Summer rice fallows of Onattukara

12. Tips on cultivation : Spacing 25 x 15 cm. Apply 20:30:10kg N: P:K/ha

13. Scientists responsible for : Bindhu.M.R

developing the variety Sverup John, Alexander. D, Suja.G, Indira.M,

Sushamakumari.P, Susamma.P.George, Vilasini.T.N,

Nair.N.R, Sivan Pillai.K.

1. Crop : Black gram (Vigna mungo)

2. Variety : Syama (KYM-1)

3. Method of breeding : Introduction

4. Source / parent / pedigree : Introduction from Tamil Nadu

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayakulam

7. Registration / notification details :

8. Specific advantages / features : High yield

9. Key characters for identification: Duration - 65 to 67 days. Erect and non-trailing plants.

Sparsely hairy leaves and pods. Pods erect

10. Productivity : 1172 kg per ha

11. Area of adaptation : Onattukara

12. Tips on cultivation : Suited to Summer rice fallows; Apply Organic manure-

20t/ha and NPK - 20:30:30 kg/ha

13. Scientists responsible for : Sivan Pillai K.

developing the variety

1. Crop : Black gram

2. Variety : Sumanjana

3. Method of breeding : Pure line selection

4. Source / parent / pedigree : Co Bg 9

5. Year of release and authority : 2000 - 20th Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details:

8. Specific advantages / features : Suited to summer rice fallows

9. Key characters for identification: Duration 75 days

10. Productivity : 933 kg / ha

11. Area of adaptation : Southern districts of Kerala

12. Tips on cultivation : Suited to Summer rice fallows; Apply Organic manure-

20t/ha and NPK - 20:30:30 kg/ha

13. Scientists responsible for : Suma Bai D.I.,

developing the variety Manju P., Manikantan Nair P., Vikraman Nair R.

1. Crop : Groundnut (Arachis hypogaea)

2. Variety : TG. 33. Method of breeding : Mutation

4. Source / parent / pedigree : Spanish Improved

5. Year of release and authority : 1985 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellavani

7. Registration / notification details:

8. Specific advantages / features : Early, bunch type variety. Suitable as intercrop in

coconut and tapioca.

9. Key characters for identification : Semitall, green and pubescent stem and green pegs.

Kernel medium sized with flesh coloured testa

10. Productivity : Pods : Kharif - 2880 kg/ha; Summer - 2745kg/ha

11. Area of adaptation : Central and Southern districts of Kerala

12. Tips on cultivation : Seed rate for Pure crop – 100 kg/ha,

Intercrop in coconut - 80 kg/ha; Intercrop in tapioca -

50 kg/ha; Apply NPK:10:75:75 kg/ha

 Scientists responsible for developing the variety Gopinathan Nair V.,

Pushkaran K.

1. Crop : Groundnut
2. Variety : TG, 14

3. Method of breeding : Recombination Breeding

4. Source / parent / pedigree : Mutants from Spanish Improved

5. Year of release and authority : 1985 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details:

8. Specific advantages / features : Early, bunch type variety. Shallow pod burial. Suitable

also as intercrop with tapioca.

9. Key characters for identification: Semitall, bunch type variety having light green,

pubescent stem with purple tinge and light purple pegs. Kernel medium sized with rose coloured testa

10. Productivity : Pods Kharif - 3136 kg/ha Summer - 2472 kg/ha

11. Area of adaptation : Central and Southern districts of Kerala

12. Tips on cultivation : Seed rate for Pure crop – 100 kg/ha; Intercrop in coconut

- 80 kg/ha; Intercrop in tapioca - 50 kg/ha;

Apply NPK-10:75:75 kg/ha

13. Scientists responsible for

developing the variety

: Gopinathan Nair V.

Pushkaran K.

1. Crop : Groundnut

2. Variety : Spanish Improved

3. Method of breeding : Introduction4. Source / parent / pedigree : Exotic variety

5. Year of release and authority : 1985 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics.

College of Agriculture, Vellavani

7. Registration / notification details:

8. Specific advantages / features : Early bunch type. Suitable also as intercrop with

tapioca.

9. Key characters for identification : Semitali, bunch type variety having light green,

pubescent stem and green pegs. Kernel medium sized

with flesh coloured testa

10. Productivity : Pods - 2873 kg/ ha

11. Area of adaptation : Central and Southern districts of Kerala

12. Tips on cultivation : Seed rate for Pure crop – 100 kg/ha, Intercrop in coconut

80 kg/ha; Intercrop in tapioca - 50 kg/ha;

Apply NPK-10:75:75 kg/ha

 Scientists responsible for developing the variety

: Gopinathan Nair V.,

Pushkaran K.

1. Crop : Groundnut

2. Variety : Sneha

3. Method of breeding : Combination breeding

4. Source / parent / pedigree : IES 883 x JL 24

5. Year of release and authority : 1998 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Genetics and Plant Breeding,

College of Agriculture, Vellayani

7. Registration / notification details :

8. Specific advantages / features : High yield with early maturity

9. Key characters for identification : Medium sized pods with prominent beak

0. Productivity : 2400 kg/ha

1. Area of adaptation : Upland conditions of Thiruvananthapuram district

2. Tips on cultivation : Seed rate for Pure crop – 100 kg/ha, Intercrop in coconut

- 80 kg/ha; Intercrop in tapioca - 50 kg/ha;

Apply NPK-10:75:75 kg/ha

3. Scientists responsible for developing the variety

Suma Bai D.I..

Manju P., Mohanankumaran N., Sverup John, Wilson D., Gopimony R., Vijayagopal P.D. Crop : Groundnut
 Variety : Snigdha

3. Method of breeding : Combination breeding

4. Source / parent / pedigree : Dh (E) 32 x JL 24

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details:

8. Specific advantages / features : High yield with early maturity

9. Key characters for identification: Medium sized pods with prominent beak

10. Productivity : 2458 kg/ha

11. Area of adaptation : Upland conditions of Thiruvananthapuram district

12. Tips on cultivation : Seed rate for Pure crop - 100 kg/ha; Intercrop in coconut

- 80 kg/ha; Intercrop in tapioca - 50 kg/ha;

Apply NPK-10:75:75 kg/ha

13. Scientists responsible for

developing the variety

: Suma Bai D.I.,

Manju P., Mohanankumaran N., Sverup John,

Wilson D., Gopimony R., Vijayagopal P.D

Oil Seed Crops

1. Crop : Sesame (Sesamum indicum)

2. Variety : Kayamkulam - 1

3. Method of breeding : Pure line selection
4. Source / parent / pedigree : Kayamkulam local

5. Year of release and authority : 1972 - Kerala State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details: IC No.397786

8. Specific advantages / features : Duration 75-80 days, Oil with superior quality and

flavour, oil content 51.5 %

9. Key characters for identification: Moderate branching type, height 68 cm

10. Productivity : 300-350 kg per ha

11. Area of adaptation : Onattukara

12. Tips on cultivation : Season (January - April); Apply Organic

manure - 5 t/ha and NPK - 30:15:30 kg/ha

13. Scientists responsible for : Santhakumari S.

developing the variety

1. Crop : Sesame

2. Variety : Thilothama (KYM - 2)

3. Method of breeding : Hybridization and selection

4. Source / parent / pedigree : PT-58-35 X KI

5. Year of release and authority : 1981 - Kerala State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details :

8. Specific advantages / features : Multicapsuled (3 nos) axils, duration 80-85 days,

oil content 45.5 %

9. Key characters for identification : Shy branching plant (2-4), height - 69 cm

10. Productivity : 400 - 500 kg/ha

11. Area of adaptation : Onattukara region

12. Tips on cultivation : Summer planting; Apply Organic manure - 5 t/ha and

NPK - 30:15:30 kg/ha

13. Scientists responsible for developing the variety

: Santhakumari S.

1. Crop : Sesame

2. Variety : Thilathara

3. Method of breeding : Hybridization

4. Source / parent / pedigree : CST 785 x B 14 (HS)

5. Year of release and authority : 1998 - 19th Kerala State Seed Sub Committee meeting

6. Evolved at : ORARS, Kayamkulam

7. Registration / notification details: IC No.397788

8. Specific advantages / features : High yield

9. Key characters for identification: Plant height 93 cm.

10. Productivity : 572 kg/ha
11. Area of adaptation : Onattukar

11. Area of adaptation : Onattukara
12. Tips on cultivation : Apply Organic manure - 5tons/ha; NPK - 30:15:30 kg/ha

13. Scientists responsible for : Ramachandran Nair N.,

developing the variety Sukumaran Nair, Sivan Pillai N., Suja G., Indira M.I.

1. Ccrop : Sesame

2. Variety : Thilarani (Cul. No.4)

3. Method of breeding : Combination breeding

4. Source / parent / pedigree : Thilak x Kayamkulam -1

5. Year of release and authority : 2002 - 21st State Seed Sub Committee meeting

6. Evolved at ORARS, Kayamkulam

7. Registration / notification details: IC No.397789

8. Specific advantages / features : Early maturing (77 days), tolerant to major pests

and diseases.

9. Key characters for identification : Semi-tall (81 cm). Brown dry capsules with compact

packing. Dark brown seeds

10. Productivity : 580 kg / ha

11. Area of adaptation : Onattukara region

12. Tips on cultivation : Suited to Summer rice fallows; Apply organic manure-

5 t/ha and NPK - 30:15:30 kg/ha

13. Scientists responsible for : Sverup John,

developing the variety Alexander D., Sushama kumari P., M.R. Bindu

1. Crop Sesame 2. Variety Soma (ACV-1) Method of breeding Pureline selection 4. Source / parent / pedigree Punjab type No.38 5. Year of release and authority 1985 - Kerala State Seed Sub Committee meeting 6. Evolved at Department of Plant Breeding and Genetics. College of Agriculture, Vellayani 7. Registration / notification details: 8. Specific advantages / features : Multi-loculed capsules, white bold seeds, colourless oil, oil content - 50.1 %, tolerant to leaf spot and powdery mildew. 9. Key characters for identification: Shy branching, determinate growth, height 91 cm. Multiloculed capsules with white, bold seeds 10. Productivity 713 kg /ha 11. Area of adaptation Coastal sandy tracts of Kerala - Onattukara regions 12. Tips on cultivation Suited to Summer season; Apply Organic manure - 5 tons/ha and NPK - 30:15:30 kg/ha 13. Scientists responsible for Gopinathan Nair V., developing the variety Sverup John 1. Crop Sesame 2. Variety Surya (ACV 2) 3. Method of breeding Pureline selection Source / parent / pedigree West Bengal type No.42 5. Year of release and authority 1985 - Kerala State Seed Sub Committee meeting 6. Evolved at Department of Plant Breeding and Genetics, College of Agriculture, Vellayani 7. Registration / notification details: 8. Specific advantages / features : Tolerant to drought but susceptible to stem and leaf spot diseases 9. Key characters for identification : Shy branching (3-4), height 96 cm and with multiloculed capsules 10. Productivity 355 kg/ha 11. Area of adaptation Southern districts of Kerala. 12. Tips on cultivation Season - Rabi. Also suited to summer rice fallows. Apply Organic manure - 5 tons/ha NPK - 30:15:30 kg/ha

Sverup John

Gopinathan Nair V.,

13. Scientists responsible for

1. Crop : Sesame

2. Variety : Thilak (ACV-3)

3. Method of breedinge : Pureline selection

4. Source / parent / pedigree : Muthukulam local

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details: IC No.397787

8. Specific advantages / features : Tolerant to moisture stress

9. Key characters for identification: Profuse branching (5-8), height 101 cm.

Seed colour - Blackish brown

10. Productivity : 648 kg/ha

11. Area of adaptation : Coastal sandy tracts of Kerala – Onattukara regions

12. Tips on cultivation : Season - Summer season; Apply Organic manure-

5 t/ha NPK - 30:15:30 kg/ha

13. Scientists responsible for : Gopinathan Nair V.,

developing the variety Sverup John, Wilson D., Suma Bai D.I.

Medicinal and Aromatic Plants

1. Crop Long pepper (Thippali) (Piper, longum) 2. Variety : Viswam (KAU - LP-1) 3. Method of breeding Single plant selection 4. Source / parent / pedigree Collection 'Cheema Thippali' 5. Year of release and authority : 1996 - Kerala State Seed Sub Committee meeting 6. Evolved at College of Horticulture, Vellanikkara 7. Registration / notification details: 8. Specific advantages / features : High yield, suited for intercropping in coconut garden. Alkaloid content - 2.83 %. No major diseases noticed 9. Key characters for identification: Medium maturity group, prolonged flowering phase, stout, short and thick spike. 10. Productivity 433.3 kg of dry spike / ha as intercrop in coconut gardens 11: Area of adaptation Throughout Kerala 12. Tips on cultivation Spacing : 60 x 60 cm; Apply - FYM 20 tonnes / ha 13. Scientists responsible for Viswanathan T.V... developing the variety Radhakrishnan V.V., Prasannakumari K.T., Augustin A. 1. Crop Kacholam (Kaempferia galanga L.) 2. Variety Kasthuri 3. Method of breeding Clonal selection Source / parent / pedigree Collection from Koothattukulam in Ernakulam district

Year of release and authority 2002 - '21" Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plantation crops and spices,

College of Agriculture, Vellayani

Registration / notification details:

Specific advantages / features : Duration - 210-240 days. Tolerant to shade and can be grown as intercrop in coconut gardens

9. Key characters for identification: Robust plants with more number of leaves which are larger in size. Light brown rhizome

10. Productivity 2.27 t/ha of dry rhizome 11. Area of adaptation Central zone of Kerala

12. Tips on cultivation Spacing - 20 x 15 cm. Seed rate - 750 kg/ha

13. Scientists responsible for Alice Kurian. developing the variety Augustin A., Nybe E.V., Prasannakumari Amma;S.,

Sreekandan Nair G

Crop : Kacholam
 Variety : Rajani

3. Method of breeding : Clonal selection

4. Source / parent / pedigree : Collection from Chelavu in Thodupuzha of Idukki district
5. Year of release and authority : 2002 - 21st Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plantation crops and spices,

College of Horticulture, Vellanikkara

7. Registration / notification details:

8. Specific advantages / features : High oleoresin content (7.68 %), duration - 210-240

days

9. Key characters for identification: Leaves fewer and small. Rhizomes medium bold,

creamy white in colour and more in number,

particularly secondary rhizomes.

10. Productivity : 2.19 t of dry rhizomes per hectare

11. Area of adaptation : Central zone of Kerala

12. Tips on cultivation : Spacing - 20 x 15 cm. Seed rate - 750 kg/ha

13. Scientists responsible for : Alice Kurian.

developing the variety Augustin A., Nybe E.V., Prasannakumari Amma S.,

Sreekandan Nair G.

1. Crop : Lemongrass (Cymbopogan flexuosus)

2. Variety : Sugandhi (OD – 19)

3. Method of breeding : Selection

4. Source / parent / pedigree : Local collection from Nenmara

5. Year of release and authority : 1988 - Kerala State Seed Sub Committee meeting

6. Evolved at : AMPRS, Odakkali

7. Registration / notification details:

8. Specific advantages / features : High yield with good quality oil

9. Key characters for identification: Compact plants with reddish purple culm and straight,

thin, green leaves, slightly rolled or folded up.

10. Productivity : Oil yield - 100 kg/ha

11. Area of adaptation : Major lemongrass growing areas of Kerala

12. Tips on cultivation : Propagated by slips and seeds. Spacing - 15 - 20 cm

Apply Compost - 2500 kg/ha; and wood ash - 1875kg/ha

3. Scientists responsible for : Crop improvement Division of AMPRS, Odakkali

13. Scientists responsible for developing the variety

1. Crop : Atalodakam (Adhatoda spp.)

2. Variety : Ajagandhi

3. Method of breeding : Clonal selection

4. Source/parent/ pedigree : Local from Pilicode, Kannur district

5. Year of release and authority : 2006 - 23rd Kerala State Seed Sub Committee meeting.

6 Evolved at : Dept of Plantation Crops and Spices.

College of Horticulture, Veilanikkara

7. Registration /notifications :

8. Specific advantages/features : High root yield coupled with high vasacine content

(2.46%), suitable for extractives. Duration - 18 months

9. Key characters for identification : Medium tall plants with long and broad leaves. High

proportion of leaves and preferred for leaf crop

10. Productivity : 39.78 t whole plant/ha (Fresh) 12.37 t whole plant /ha

(Dry)

11. Area of adaptation : Suitable for Central Zone of Kerala.

12. Tips on cultivation :

13. Scientists responsible for : Alice Kurien

developing the variety Augustin A, Nybe E. V, Mini Raj N., Asha Sankar M.

1. Crop : Atalodakam

2. Variety : Vasika

3. Method of breeding : Clonal selection

4. Source/parent/ pedigree : Local from Kozhikode

5. Year of release and authority : 2006- 23rd Kerala State Seed Sub Committee meeting.

6. Evolved at : Dept of Plantation Crops and Spices

College of Horticulture, Veilanikkara

7. Registration /Notifications :

8. Specific advantages/features : High root yield coupled with high vasacine content

(2.55%), suitable for extractives. Duration - 18 months

9. Key characters for identification: Medium tall plants with long and narrow leaves. High

proportion of roots and preferred for root crop

10. Productivity : 34.72 t whole plant/ha (Fresh) 11.25 t whole plant /ha

(Dry)

11. Area of adaptation : Suitable for Central zone of Kerala.

12. Tips on cultivation

13. Scientists responsible for : Alice Kurien

developing the variety Augustin A, Nybe E. V, Mini Raj N., Asha Sankar M.

1. Crop : Adapathiyan (Holostemma ada-kodien Schult)

2. Variety : Jeeva

3. Method of breeding : Gional selection

4. Source/parent/ pedigree : Collection from Ernakulam

5. Year of release and authority : 2006- 23rd Kerala State Seed Sub Committee meeting.

6. Evolved at : Dept of Plantation Crops and Spices

College of Horticulture, Vellanikkara

7. Registration / Notifications :

8. Specific advantages/features : High root yield coupled with high soluble sugar

content (8.33%), highly suitable for indigenous

medicine. Duration-18 months

9. Key characters for identification: Purple cordate plant type with long internodes and

sweet thick roots

10. Productivity : 4. 51t fresh roots/ha; 5.40 t fresh roots/ha

11. Area of adaptation : Suitable Central zones of Kerala.

12. Tips on cultivation

13. Scientists responsible for : Alice Kurien

developing the variety Augustin:A, Nybe E. V, Mini Raj N.

Asha, Sankar M.

1. Crop : Chethikoduveli (*Plumbago rosea* L.)

2. Variety : Mridhula

3. Method of breeding : Clonal selection

4. Source/parent/ pedigree : Local from Mooppentheruvu, Thrissur district

Year of release and authority : 2006- 23rd Kerala State Seed Sub Committee meeting.

6. Evolved at : Dept of Plantation Crops and Spices

:

College of Horticulture, Vellanikkara

7 Registration /Notifications

8. Specific advantages/features : High root yield, can be used without curing in lime for

indigenous medicine preparation due to low content

of plumbagin (0.22%). Duration - 18 months

9. Key characters for identification: Medium tall plants with small leaves and more number

of lengthy narrow roots

10. Productivity 9:93 t raw/roots/ha (Average)

2t raw roots/ha (Potential)

11. Area of adaptation : Suitable Central zone of Kerala.

12. Tips on cultivation

13. Scientists responsible for : Alice Kurien

developing the variety Augustin A, Nybe E. V, Mini Raj N., Asha Sankar M.

1. Crop : Chethikoduveli

2. Variety : Agni

3. Method of breeding : Clonal selection

4. Source/parent/ pedigree : Local from Kachithodu, Malappuram district

5. Year of release and authority : 2006- 23rd Kerala State Seed Sub Committee meeting.

6. Evolved at : Dept of Plantation Crops and Spices

College of Horticulture, Vellanikkara

7. Registration /Notifications :

8. Specific advantages/features : High root yield coupled with high plumbagin content

(0.80%), suitable for extractives. Duration - 18 months

9. Key characters for identification: Robust tall plants with long broad leaves and thick

roots

10. Productivity : 8.60t raw roots/ha (Average)

10.47t raw roots/ha (Potential)

11. Area of adaptation : Suitable for Central Zone of Kerala.

12. Tips on cultivation

13. Scientists responsible for : Alice Kurien

developing the variety Augustin A, Nybe E. V., Mini Raj N, Asha Sankar M.

Ornamentals and Foliage Plants

Orchid (Dendrobium) 1. Crop 2. Variety Deep blush Inter specific hybridization followed by selection 3. Method of breeding D. Nagoya Pink x D. [Candy Stripe x Tomie Drake] Source/parent/ pedigree Year of release and authority 2006- 23rd Kerala State Seed Sub Committee meeting. Dept of Plant Breeding & Genetics. ß Evolved at College of Agriculture, Vellayani 7. Registration /Notifications Specific advantages/features Exhibits novelty and distinctiveness in floral characters and uniformity in inflorescence characters Long, arching inflorescence with 9-10 flowers. Key characters for identification: Flowers are large, thick and glossy, perfectly shaped with rounded sepals and petals, magenta coloured, double shaded and striped with full appearance. Labellum- deeper shade of magenta. Petals very broad. nearly overlapping sepals 9-10 flowers/inflorescence **Productivity** 10. Throughout Kerala in semi-controlled environment 11. Area of adaptation Provide good drainage, 50% shade with good Tips on cultivation 12. aeration, 50-75% humidity, water enough to keep the potting medium moist Lekha Rani C. 13. Scientists responsible for Mercy S. T, Rajmohan, Chandramony D. developing the variety Orchid (Dendrobium) Crop 1. Lemon glow Variety Inter specific hybridization followed by selection Method of breeding D. Chiangmai Pink X D. [Candy Stripe X Tomie Drake] Source/parent/ pedigree 4. 2006- 23rd Kerala State Seed Sub Committee meeting. 5. Year of release and authority Dept of Plant Breeding & Genetics, 6. Evolved at College of Agriculture, Vellavani Registration /Notifications 7. Variety exhibits novelty and distinctiveness in floral Specific advantages/features 8. characters and uniformity in inflorescence characters Long, arching inflorescence with 10-12 flowers. 9. Key characters for identification: Flowers medium large and flat with a squarish appearance, moderately thick and glossy, light pink towards the outer side and greenish white towards the center with dark pink stripes. 10-12 flowers/inflorescence Productivity 10. Throughout Kerala in semi-controlled environment. Area of adaptation 11. Provide good drainage, 50% shade with good aeration. 12. Tips on cultivation 50-75% humidity, water enough to keep the potting medium moist Scientists responsible for 13. Lekha Rani C. Mercy S. T. Raimohan, Chandramony D. developing the variety

Orchid (Dendrobium) 1. Crop

Velvet Soft 2. Variety

3. Method of breeding Inter specific hybridization followed by selection 4. Source/parent/ pedigree D. Rungnapa x D. [Candy Stripe xTomie Drake]

5. Year of release and authority 2006- 23rd Kerala State Seed Sub Committee meeting.

Evolved at Dept of Plant Breeding & Genetics, 6.

College of Agriculture, Vellayani

7. Registration /Notifications

8. Specific advantages/features Exhibits novelty and distinctiveness in floral

characters and uniformity in inflorescence

characters

9. Key characters for identification: Long, slightly arching inflorescence with 10-12 flowers.

> Flowers large, perfectly shaped with full, broad and rounded sepals and petals, very thick and glossy, deep purplish magenta with dark stripes. White operculum,

deep velvety magenta labellum

10. Productivity : 8-10 flowers/inflorescence

11. Area of adaptation Throughout Kerala in semi-controlled environment.

12. Tips on cultivation Provide good drainage, 50% shade with good aeration,

50-75% humidity, water enough to keep the potting

medium moist

13. Scientists responsible for

: Lekha Rani C.

developing the variety Mercy S. T, Rajmohan, Chandramony D. 1. Crop : Orchid (Dendrobium)

2. Variety : Velvet Soft

3. Method of breeding : Inter specific hybridization followed by selection
4. Source/parent/ pedigree : D. Rungnapa x D. [Candy Stripe xTomie Drake]

5. Year of release and authority : 2006- 23rd Kerala State Seed Sub Committee meeting.

6. Evolved at : Dept of Plant Breeding & Genetics,

College of Agriculture, Vellayani

7. Registration /Notifications

8. Specific advantages/features : Exhibits novelty and distinctiveness in floral

characters and uniformity in inflorescence

characters

9. Key characters for identification: Long, slightly arching inflorescence with 10-12 flowers.

Flowers large, perfectly shaped with full, broad and rounded sepals and petals, very thick and glossy, deep purplish magenta with dark stripes. White operculum,

deep velvety magenta labellum

10. Productivity : 8-10 flowers/inflorescence

11. Area of adaptation : Throughout Kerala in semi-controlled environment.

12. Tips on cultivation : Provide good drainage, 50% shade with good aeration,

50-75% humidity, water enough to keep the potting

medium moist

13. Scientists responsible for : Le

developing the variety

: Lekha Rani C.

Mercy S. T, Rajmohan, Chandramony D.

Forage Crops

1. Crop : Guinea grass (Panicum maximum)

2. Variety : Haritha
3. Method of breeding : Mutation
4. Source / parent / pedigree : FR 600

5. Year of release and authority : 1990 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details :

8. Specific advantages / features : Suitable for partial shade; tolerant to leaf spot and

sheath blight and tolerant to summer drought

9. Key characters for identification: Shy flowering, semi perennial variety with glabrous

leaves.

Height – 176 cm : 1.74 t / ha / cutting

10. Productivity : 1.74 t / ha / cutting

11. Area of adaptation : Coastal sandy tracts of Kerala

12. Tips on cultivation : Cultivated through out the year. Propagated by slips.

Apply FYM-10 t / ha; NPK-200:50:50 kg/ha

13. Scientists responsible for

developing the variety

Gopimony R.

Gopinathan Nair V.

1. Crop : Guinea grass

2. Variety : Marathakam

3. Method of breeding : Mutation 4. Source / parent / pedigree : FR 600

5. Year of release and authority : 1993 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Breeding and Genetics,

College of Agriculture, Vellayani

7. Registration / notification details :

8. Specific advantages / feature : High fodder yield and better fodder quality. Tolerant

to partial shade.

9. Key characters for identification: Semi-perennial type, height - 180 cm, leaves hairy and

green, freely flowering

10. Productivity : 9.05 tons / ha / cutting

11. Area of adaptation : Southern districts of Kerala

12. Tips on cultivation : Cultivated through out the year, Propagated by slips.

Apply FYM-10 t / ha NPK-200:50:50 kg/ha

13. Scientists responsible for developing the variety

for : Sreekumar S.G.,

Gopimony R., Dr. V. Gopinathan Nair,

Dr. N. Mohanakumaran

1. Crop Guinea grass 2. Variety Harithasree 3. Methöd of breeding Clonal selection 4. Source/parent/ pedigree JHGG-96-3 5. Year of release and authority 2006- 23rd Kerala State Seed Subcommittee meeting. 6. Evolved at Dept of Plant Breeding & Genetics, College of Agriculture, Vellayani 7. Registration /Notifications High fodder yield with 8% crude protein and 28% crude 8. Specific advantages/features fibre. 9. Key characters for identification: High tillering, dark green leaves with smooth lower and rough upper surface 10. Productivity 66 t of green fodder/ha 11. Area of adaptation Southern districts of Kerala 12. Tips on cultivation First cut can be taken at 70 days after planting/sowing and subsequent cuts at 45 days interval. 13. Scientists responsible for Suma Bai D. I. Sreekumar S. G, Chandramony D. developing the variety Lekha Rani C. Mareen Abraham Bajra-napier hybrid 1. Crop (Pennisetum glaucum x Pennisetum purpureum) 2. Variety Supriva 3. Method of breeding Inter specific hybridization and clonal selection TNSC-4 X FD-471 4. Source/parent/ pedigree 5. Year of release and authority 2006- 23rd Kerala State Seed Sub Committee meeting. 6. Evolved at Dept of Plant Breeding & Genetics. College of Agriculture, Vellayani 7. Registration /Notifications High fodder yield with 9% crude protein and 26% crude 8. Specific advantages/features fibre. High tillering, pale green leaf sheath, small hairs Key characters for identification: 9. on both dorsal and ventral surface of leaf lamina 10. Productivity 272.7 t of green fodder/ha Central zones of Kerala 11. Area of adaptation First cut can be taken at 70 days after planting and 12. Tips on cultivation

13.

Scientists responsible for developing the variety

Suma Bai D. I.

subsequent cuts at 45 days interval

Sreekumar S. G, Chandramony D.

1. Crop : Bajra-Napier Hybrid

2. Variety : Suguna

3. Method of breeding : Inter specific hybridization and clonal selection

4. Source/parent/ pedigree : Composite-9 x FD-431

5. Year of release and authority : 2006- 23rd Kerala State Seed Sub Committee meeting.

6. Evolved at : Dept of Plant Breeding & Genetics.

College of Agriculture, Vellayani

7. Registration / Notifications :

8. Specific advantages/features : High fodder yield with 9.4% crude protein and 24%

crude fibre

9. Key characters for identification: Profuse tillering, long and broad leaf lamina, pale green

leaf sheath with purplish pigmentation

10. Productivity : 283 t of green fodder/ha
11. Area of adaptation : Southern districts of Kerala

12. Tips on cultivation : First cut can be taken at 70 days after planting and

subsequent cuts at 45 days interval

13. Scientists responsible for : Suma Bai D. I.

developing the variety Sreekumar S. G, Chandramony D.

Mushroom

1. Crop : Oyster Mushroom (*Pleurotus* spp.)

2. Variety : Ananthan

3. Method of breeding : Interstock mating of monokaryon germlings between

the wild and mutant under in vitro conditions, and

selection

4. Source / parent / pedigree : Natural flora

5. Year of release and authority : 1996 - Kerala State Seed Sub Committee meeting

6. Evolved at : Department of Plant Plathology

College of Agriculture, Vellayani

7. Registration / notification details :
8. Specific advantages / features : High yielding, pest / disease resistant, short duration

hybrid tolerant to *Trichoderma* infection, stress tolerant, tolerant to phorids and beetles. Good cooking quality and consumer acceptability

9. Key characters for identification: Attractive variety with milky white sporocarp

10. Productivity : 806 g / kg bed (81 % BE)

11. Area of adaptation : Throughout Kerala12. Tips on cultivation : Can be grown with paddy, wheat or sorghum straw;

average days from spawning to harvest is 18 days

13. Scientists responsible for : Balakrishnan B.,

developing the variety Chandrasekharan Nair M.

Annexure Rice varieties released prior to 1972

1. Crop : Rice 2. Variety : PTB 1

3. Method of breeding : Pureline selection4. Source / parent / pedigree : Local variety, Aryan

5. Year of release and authority : 1934

6. Evolved at : RARS, Pattambi7. Registration / notification details : IC. No.263947

8. Specific advantages / features : Long duration (140-145 days), photoinsensitive variety

moderately resistant to blast. Hulling % - 76.7

9. Key characters for identification: Tall (165 cm), low tillering plants with long bold grains

and red kernel.

10. Productivity : 3 t/ha

11. Area of adaptation : First crop season for deep soils of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha; NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

developing the variety

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1. Crop : Rice
2. Variety : PTB 2

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Ponnaryan

5. Year of release and authority : 1934

6. Evolved at : RARS, Pattambi7. Registration / notification details : IC. No.263948

8. Specific advantages / features : Medium duration (130-135 days), photoinsensitive

variety moderately resistant to blast. Hulling % - 77.1

9. Key characters for identification: Tall (160 cm), low tillering plants with long bold grains

and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : First and second crop seasons of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha; NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

2. Variety : PTB 3

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Eravapandy

5. Year of release and authority : 1934

6. Evolved at : RARS, Pattambi

7. Registration / notification details: IC. No.264028

8. Specific advantages / features : Medium duration (125-130 days), photosensitive variety

moderately resistant to drought. Hulling % - 76.7

9. Key characters for identification: Tall (140 cm), medium tillering plants with short bold

grains and red kernel.

10. Productivity : 2 t/ha

11. Area of adaptation : Second crop season of Palakkad District.

12. Tips on cultivation : Apply Organic manure - 5t/ha; NPK - 40;20;20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

developing the variety

1. Crop : Rice

2. Variety : PTB 4

3. Method of breeding : Pureline selection
4. Source / parent / pedigree : Local variety, Vellari

5. Year of release and authority : 1934

6. Evolved at : RARS, Pattambi

Registration / notification details : IC. No.264029

8. Specific advantages / features : Medium duration (130-140 days), photosensitive variety

moderately resistant to waterlogging. Hulling % - 78.7

9. Key characters for identification: Semi-tall (110 cm), low tillering plants with long bold

grains and red kernel.

10. Productivity : 2.4 t/ha

11. Area of adaptation : Second crop season for deep soils of Kerala with

assured water supply.

12. Tips on cultivation : Apply Organic manure - 5t/ha; NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi developing the variety

2. Variety : PTB 17

3. Source / parent / pedigree : Pureline selection

4. Method of breeding : Local variety, Jedduhalliga

5. Year of release and authority : 1944

6. Evolved at : RARS, Pattambi
7. Registration / notification details : IC. No 263951

8. Specific advantages / features : Long duration (140-145 days), photoinsensitive

variety moderately resistant to blast. Hulling % - 72.5

9. Key characters for identification: Tall (157 cm), low tillering plants with short bold grains

and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : First crop season of South Karnataka

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

developing the variety

1. Crop : Rice

2. Variety : PTB 18

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Eravapandy

5. Year of release and authority : R1944

6. Evolved at : RARS, Pattambi

7. Registration / notification details: IC. No 264034

8. Specific advantages / features : Medium duration (125-130 days), photosensitive

variety moderately resistant to blast. Hulling % - 76.8

9. Key characters for identification: Semi tall (125 cm), low tillering plants with short bold

grains and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : Second crop regions of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

1. Crop : Rice 2. Variety : PTB 19

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Athikkiraya

5. Year of release and authority : 1944

6. Evolved at : FIARS, Pattambi7. Registration / notification details : IC. No 264035

8. Specific advantages / features : Long duration (140-145 days), photosensitive variety

resistant to BPH. Hulling % - 75.2

9. Key characters for identification: Tall (148 cm), low tillering plants with medium bold

grains and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : Second crop regions of Kerala.
12. Tips on cultivation : Apply - Organic manure - 5t/ha

NPK 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

developing the variety

1. Crop : Rice 2. Variety : PTB 20

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Vadakkan Chitteni

5. Year of release and authority : 1944

Evolved at : RARS, Pattambi
Registration / notification details : IC. No 264036

8. Specific advantages / features : Medium duration (125-130 days), photosensitive variety

moderately resistant to sheath blight and gallfly.

Hulling % - 79.3

9. Key characters for identification: Semi tall (120 cm), low tillering plants with medium bold

grains and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : Second crop regions of Kerala.12. Tips on cultivation : Apply Organic manure - 5t/ha,

NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

2. Variety : PTB 21

3. Source / parent / pedigree : Pureline selection

4. Method of breeding : Local variety, Thekkan

5. Year of release and authority : 1945

6. Evolved at : RARS, Pattambi

7. Registration / notification details: IC. No 264037

8. Specific advantages / features : Medium duration (125-130 days), photosensitive variety

resistant to three biotypes of BPH, green leaf hopper,

stem borer and gall midge. Hulling % - 78.5

9. Key characters for identification: Tall (135 cm), low tillering plants with long bold grains

and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : Second crop regions of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

developing the variety

1. Crop : Rice 2. Variety : PTB 22

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Velutha vattan

5. Year of release and authority : 1948

6. Evolved at : RARS, Pattambi7. Registration / notification details : IC. No 263756

8. Specific advantages / features : Medium duration (115-120 days), photoinsensitive

variety moderately resistant to blast. Hulling % - 78.9

9. Key characters for identification: Tall (134 cm), low tillering plants with long bold grains

and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : First crop season for dry sowing sandy areas of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

2. Variety : PTB 23

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Cheriya Aryan

5. Year of release and authority : 1948

6. Evolved at : RARS, Pattambi
7. Registration / notification details : IC. No 263599

8. Specific advantages / features : Short duration (105-110 days), photoinsensitive variety

moderately resistant to blast. Hulling % - 79.7

9. Key characters for identification: Tall (128 cm), low tillering plants with long bold grains

and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : First crop season for sandy soils of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

developing the variety

1. Crop : Rice

2. Variety : PTB 24

3. Source / parent / pedigree : Pureline selection

4. Method of breeding : Local variety, Chuvanna vattan

5. Year of release and authority : 1948

6. Evolved at : RARS, Pattambi

7. Registration / notification details : IC. No 263757

8. Specific advantages / features : Medium duration (115-120 days), photoinsensitive

variety moderately resistant to blast. Hulling % - 79.4

9. Key characters for identification: Tall (148 cm), low tillering plants with medium bold

grains and red kernel.

10. Productivity : 2.2 t/ha

developing the variety

11. Area of adaptation : Broadcasting in sandy soils of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

2. Variety : PTB 25

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Thonnuran

5. Year of release and authority : 1948

Registration / notification details:

6. Evolved at : RARS, Pattambi

8. Specific advantages / features : Medium duration (115-120 days), photoinsensitive

IC. No 263758

variety moderately resistant to blast. Hulling % - 80.9

9. Key characters for identification: Tall (148 cm), low tillering plants with medium bold

grains and red kernel.

10. Productivity : 2 t/ha

11. Area of adaptation : Broadcasting in sandy soils of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for

7.

developing the variety

Crop improvement division of RARS, Pattambi

1. Crop : Rice
2. Variety : PTB 26

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Chenkayama

5. Year of release and authority : 1948

6. Evolved at : RARS, Pattambi

7. Registration / notification details: 1C. No 263759

8. Specific advantages / features : Medium duration (120-125 days), photoinsensitive

variety moderately resistant to blast. Hulling % - 78.1

9. Key characters for identification: Tall (134 cm), low tillering plants with short bold

grains and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : Suited for first crop season in deep soils of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for ... Crop improvement division of RARS, Pattambi

1. Crop : Rice
2. Variety : PTB 27

3. Method of breeding : Pureline selection4. Source / parent / pedigree : Local variety, Kodiyan

5. Year of release and authority : 1948

6. Evolved at : RARS, Pattambi
7. Registration / notification details : IC. No 264038

8. Specific advantages / features : Medium duration (125-130 days), photosensitive variety

moderately resistant to blast and sheath blight.

Hulling % - 78.1

9. Key characters for identification: Tall (145 cm), low tillering plants with medium bold

grains and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : Suited for second crop regions of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

developing the variety

1. Crop : Rice 2. Variety : PTB 28

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Kattamodan

5. Year of release and authority : 1950

6. Evolved at : RARS, Pattambi7. Registration / notification details : IC. No 263760

8. Specific advantages / features : Medium duration (115-120 days), photoinsensitive

variety moderately resistant to blast and drought.

Hulling % - 77.5

9. Key characters for identification: Tall (128 cm), low tillering plants with short bold grains

and red kernel.

10. Productivity : 2.7 t/ha

11. Area of adaptation : Suited for first crop season in modan soils of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

3. Scientists responsible for . . . Grop improvement division of nans, ratialion

2. Variety : PTB 29

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Karutha modan

5. Year of release and authority : 1950

6. Evolved at : RARS, Pattambi

7. Registration / notification details: IC. No 263761

8. Specific advantages / features : Short duration (105-110 days), photoinsensitive variety

moderately resistant to blast and drought. Hulling % -

78.6

9. Key characters for identification: Tall (138 cm), low tillering plants with long bold grains

and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : Suited for first crop season in modan soils of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

developing the variety

1. Crop : Rice

2. Variety : PTB 30

3. Method of breeding : Pureiine selection

4. Source / parent / pedigree : Local variety, Chuvanna modan

5. Year of release and authority : 1950

6. Evolved at : RARS, Pattambi

7. Registration / notification details: IC. No 263600

8. Specific advantages / features : Short duration (105-110 days), photoinsensitive variety

moderately resistant to blast and drought.

Hulling % - 76.5

9. Key characters for identification: Semi tall (120 cm), low tillering plants with long bold

grains and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : Suited for first crop season in modan soils of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS. Pattambi

2. Variety : PTB 31

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Elappappoochampan

5. Year of release and authority : 1952

6. Evolved at : RARS, Pattambi 7. Registration / notification details : IC. No 263601

8. Specific advantages / features : Short duration (105-110 days), photoinsensitive variety.

Hulling % - 79.5

9. Key characters for identification: Tall (148 cm), low tillering plants with medium

bold grains and red kernel.

10. Productivity : 2.0 t/ha

11. Area of adaptation : Suited for first crop season in laterite soils of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

developing the variety

1. Crop : Rice

2. Variety : PTB 32

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Aruvakakri

5. Year of release and authority : 1952

6. Evolved at : RARS, Pattambi

7. Registration / notification details: IC. No 263688

8. Specific advantages / features : Medium duration (120-125 days), photoinsensitive

variety moderately resistant to sheath blight.

Hulling % - 75.7

9. Key characters for identification: Tall (143 cm), low tillering plants with short bold

grains and red kernel.

10. Productivity : 2.3 t/ha

11. Area of adaptation : Suited for first crop season of Kerala.

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

Rice 1. Crop

2. Variety **PTB 33**

Pureline selection 3. Method of breeding 4. Source / parent / pedigree Local variety, Arikkirai

5. Year of release and authority 1952

RARS, Pattambi 6. Evolved at

IC. No 263649 7. Registration / notification details :

8. Specific advantages / features : Medium duration (125-130 days), photosensitive variety

resistant to BPH, thrips, leaf roller and sheath blight.

Hulling % - 77.7

9. Key characters for identification: Semi tali (120 cm), low tillering plants with short bold

grains and red kernel.

3 t/ha 10. Productivity

11. Area of adaptation Suited for second crop regions of Kerala.

12. Tips on cultivation Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for Crop improvement division of RARS, Pattambi

developing the variety

4. Source / parent / pedigree

1. Crop Rice

2. Variety **PTB 34**

Pureline selection 3. Method of breeding

5. Year of release and authority 1960

6. Evolved at RARS, Pattambi

Registration / notification details :

8. Specific advantages / features : Short duration (105-110 days), photoinsensitive variety.

Hulling % - 79.3

Local variety, Valiya champan

9. Key characters for identification: Tall (156 cm), low tillering plants with short bold grains

and red kernel.

10. Productivity 2.8 t/ha

11. Area of adaptation Suited for direct seeding during first crop season of

Kerala.

12. Tips on cultivation Apply Organic manure - 5 t/ha, NPK - 40:20:20 kg/ha

13.

Scientists responsible for Crop improvement division of RARS, Pattambi developing the variety

1. Crop Rice

2. Variety Annapoorna (PTB 35)

3. Method of breeding Recombination breeding

4. Source / parent / pedigree T(N) 1 x PTB 10

5. Year of release and authority 1966

8. Evolved at RARS, Pattambi

7. Registration / notification details : Notified as per S.O.No. 5505 dt. 20-12-71 IC. No 263549

Specific advantages / features : Short duration (95-100 days), photoinsensitive variety with adaptability to all the seasons and a wide range

of cropping situations. Susceptible to BPH, blast and

sheath blight.

9. Key characters for identification: Dwarf (75-85 cm), non-lodging plants with compact

panicles, medium bold grains and red kernel.

10. Productivity 5 t/ha

11. Area of adaptation All well drained soils of Kerala except saline and acidic

12. Tips on cultivation Suited for all the three seasons. Apply Organic

manure - 5t/ha NPK - 70:35:35 kg/ha

Scientists responsible for 13.

developing the variety

Crop improvement division of RARS, Pattambi

Rice 1. Crop

2. Variety Rohini (PTB 36)

3. Method of breeding Recombination breeding

Source / parent / pedigree PTB 10 x IR 8

5. Year of release and authority 1971

6. Evolved at RARS. Pattambi

7. Registration / notification details: Notified as per S.O.No. 361(E) dt. 30-6-73

IC. No 263550

Short duration (85-110 days), photoinsensitive variety 8. Specific advantages / features :

> with adaptability to a wide range of cropping situations. Moderately resistant to blast and blight.

9. Key characters for identification: Dwarf (76-95 cm), non-lodging plants with compact

panicles, medium bold grains and white kernel.

10. Productivity 5 t/ha

11. Area of adaptation Throughout Kerala except saline and acidic soils

Suited to Virippu and Puncha seasons. Apply Organic 12. Tips on cultivation

manure - 5t/ha, NPK - 70:35:35 kg/ha

Scientists responsible for 13.

developing the variety

Crop improvement division of RARS, Pattambi

2. Variety : Aswathy (PTB 37)

3. Method of breeding : Recombination breeding

4. Source / parent / pedigree : PTB 10 x Dee-Geo-Woo-Gen

5. Year of release and authority : 1971

Evolved at : RARS, Pattambi
 Registration / notification details : IC. No 263708.

Notified as per S.O.No. 361(E) dt. 30-6-73

8. Specific advantages / features : Medium duration (120-125 days), photoinsensitive

variety suitable for dry sowing in the first crop season. Moderately resistant to blast and Helminthosporium

blight.

9. Key characters for identification: Dwarf (80-105 cm), non-lodging plants with compact

panicles, medium bold grains and white kernel.

10. Productivity : 5 t/ha

11. Area of adaptation : Throughout Kerala except saline and acidic soils

12. Tips on cultivation : Suited to Virippu and Mundakan seasons. Apply

Organic manure - 5t/ha, NPK - 90:45:45 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi developing the variety

1. Crop : Rice

2. Variety : Triveni (PTB 38)

3. Method of breeding : Recombination breeding

4. Source / parent / pedigree : Annapoorna x PTB 15

5. Year of release and authority : 1971

6. Evolved at : RARS, Pattambi

7. Registration / notification details : IC. No 263551 Notified as per S.O.No. 361(E) dt. 30-6-

73, 786(F) dt.2-2-76 & 19(E) dt.14-1-82

8. Specific advantages / features : Short duration (100-105 days), photoinsensitive variety

moderately resistant to BPH. Susceptible to blast and

sheath blight.

9. Key characters for identification : Dwarf (95-100 cm), non-lodging plants with compact

panicles, medium bold grains and white kernel.

10. Productivity : 5 - 5.5 t/ha

developing the variety

11. Area of adaptation : Through out Kerala except saline and acidic soils

12. Tips on cultivation : Suited for all the three seasons Apply Organic

manure - 5t/ha, NPK - 70:35:35 kg/ha

13. Scientists responsible for : Crop improvement division of RARS, Pattambi

Rice 1. Crop M0 1 2. Variety

Pureline selection 3. Method of breeding

Chettivirippu 4. Source / parent / pedigree

5. Year of release and authority 1945

RRS, Moncompu 6. Evolved at

7. Registration / notification details:

Photoinsensitive, short duration (85-110 days) variety Specific advantages / features :

resistant to acidity and salinity.

Tall (145 cm) and medium tillering plants with long bold 9. Key characters for identification:

grains and red kernel.

3 t/ha 10. Productivity

Acidic and saline soils of Kuttanad and saline soils of 11. Area of adaptation

Ernakulam district.

Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha 12. Tips on cultivation

Crop improvement division of RRS, Moncompu Scientists responsible for 13.

Rice 1. Crop M0 2

developing the variety

2.

Variety

Pureline selection 3. Method of breeding

4. Source / parent / pedigree Kalladachampavu

Year of release and authority 1945 5.

RRS, Moncompu Evolved at 6.

Registration / notification details: 7.

Photoinsensitive, short duration (85-110 days) variety 8. Specific advantages / features :

moderately resistant to major pests and diseases.

Semi tall (125 cm) and low tillering plants with long Key characters for identification: 9.

bold grains and red kernel.

2.5 t/ha **Productivity** 10.

Kuttanad and kole regions of Kerala 11. Area of adaptation

Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha Tips on cultivation 12.

Crop improvement division of RRS, Moncompu 13. Scientists responsible for developing the variety

Crop : Rice
 Variety : MO 3

3. Method of breeding : Pureline selection4. Source / parent / pedigree : Kunjathikkira

5. Year of release and authority : 1968

6. Evolved at : RRS, Moncompu

7. Registration / notification details:

8. Specific advantages / features : Photoinsensitive, short duration (85-110 days) variety

resistant to acidity and salinity.

9. Key characters for identification: Dwarf (75 cm) and medium tillering plants with long

bold grains and red kernel.

10. Productivity : 2.5 t/ha

11. Area of adaptation : Acidic and saline soils of Kerala

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop improvement division of RRS, Moncompu

developing the variety

1. Crop : Rice

2. Variety : Vyttila 1

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Choottupokkali

5. Year of release and authority : 1968

6. Evolved at : RRS, Vyttila

7. Registration / notification details : IC No 263762

8. Specific advantages / features : Photoinsensitive, medium duration (110 to 115 days)

variety tolerant to salinity and soil acidity. Escapes

flood and water stagnation.

9. Key characters for identification: Tall(145 cm) plants susceptible to lodging and with

medium bold grains. Kernel colour red

10. Productivity : 1.5 t/ha

11. Area of adaptation : Pokkali region

12. Tips on cultivation : Suited to Virippu season, Apply NPK - 20:40:0 kg/ha

13. Scientists responsible for : Crop Improvement Division of RRS, Vyttila

2. Variety : Vyttila 2

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local variety, Cheruvirippu

5. Year of release and authority : 1987

6. Evolved at : RRS, Vyttila

7. Registration / notification details: IC No - 263763, Notified as per S.O. No.19(E) dt.14-1-82

8. Specific advantages / features : Photoinsensitive, medium duration (125 to 130 days)

variety tolerant to salinity, soil acidity and to major pests and diseases. Withstands flood and fluctuating

water depths.

9. Key characters for identification: Tall(150 cm) plants susceptible to lodging and with

long hold grains. Kernel colour red

10. Productivity : 1.8 t/ha

11. Area of adaptation : Pokkali region

12. Tips on cultivation : Suited to Virippu season, Apply NPK - 20:40:0 kg/ha

13. Scientists responsible for : George T.U.

developing the variety Tomy P.J.

1. Crop : Rice 2. Variety : UR 19

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local collection, Champavu

5. Year of release and authority : 1951

6. Evolved at : Rice Research Station, Kayamkulam

7. Registration / notification details:

8. Specific advantages / features : Photosensitive, short duration (85-110 days) variety

moderately resistant to blast and blight. Hulling%-75.1

9. Key characters for identification: Dwarf (75 cm), medium tillering plants with medium bold

grains and red kernel.

10. Productivity : 5 t/ha

11. Area of adaptation : Throughout Kerala except acidic and saline soils

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop Improvement Division, ORARS, Kayamkulam

1. Crop : Rice 2. Variety : UR 110

3. Method of breeding : Pureline selection

4. Source / parent / pedigree : Local collection, Orumundakan Local

5. Year of release and authority : 1952

6. Evolved at : Rice Research Station, Kayamkulam

7. Registration / notification details :

8. Specific advantages / features : Photosensitive, long duration (165-180 days) variety

diseases. Hulling% - 75.1

9. Key characters for identification: Tall (180 cm), medium tillering plants with long bold

grains and red kernel.

10. Productivity : 2.5-3 t/ha

11. Area of adaptation : Suited for Rabi crop for the Orumundakan areas with

ill drained soils.

Pureline selection

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

3. Scientists responsible for : Crop Improvement Division of ORARS, Kayamkulam developing the variety

1. Crop : Rice

2. Variety : Kottarakkara !

4. Source / parent / pedigree : Local collection, Kutticheradi

5. Year of release and authority : 1970 Kerala State Seed Sub Committee meeting

6. Evolved at : Rice Research Sub Station, Kottarakkara

7. Registration / notification details:

3. Method of breeding

8. Specific advantages / features : Highly photosensitive, long duration (170-190 days)

variety with high straw yield. Tolerant to major pests

and diseases and also to waterlogging.

9. Key characters for identification: Tall (162 cm) plants susceptible to lodging. Open

panicles with medium bold grains and red kernel.

10. Productivity : 2-4 t/ha

11. Area of adaptation : Eastern lateritic regions of southern districts of Kerala

12. Tips on cultivation : Suited to mundakan season in double crop wetlands

characterized by waterlogged deep soils. Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for

developing the variety

Crop Improvement Division of Rice

Research Sub Station, Kottarakkara

908358

1. Crop : Rice
2. Variety : WND 1

3. Method of breeding : Selection

4. Source / parent / pedigree : Local variety, Palthondi

5. Year of release and authority : 1953

6. Evolved at : RARS, Ambalavayal

7. Registration / notification details :

8. Specific advantages / features : Photo sensitive, long duration (180-200 days) variety

tolerant to high altitude conditions. Grains have

dormancy.

9. Key characters for identification: Tall (130 cm) variety with dull white kernel colour

10. Productivity : 3.3 t/ha

11. Area of adaptation : High altitude areas like Wayanad

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20 kg/ha

13. Scientists responsible for : Crop Improvement Division of RARS, Ambalavayal

developing the variety

4. Source / parent / pedigree

1. Crop : Rice

2. Variety : WND 2

3. Method of breeding : Pedigree selection

5. Year of release and authority : 1953

6. Evolved at : RARS, Ambaiavayal

7. Registration / notification details :

8. Specific advantages / features : Photosensitive, long duration (180-200 days) variety

tolerant to high altitude conditions

Local variety, Marathondy

9. Key characters for identification: Tall (142 cm), lodging variety with semi compact

panicle, long bold grains and red kernel colour

10. Productivity : 4 t/ha

11. Area of adaptation : High altitude areas like Wayanad

12. Tips on cultivation : Apply Organic manure - 5t/ha, NPK - 40:20:20kg/ha

13. Scientists responsible for : Crop Improvement Division of RARS, Ambalavayal

Rice Varieties







Uma



Thulam



Vaisakh



VTL-6



VTL-8

Coconut Varieties



Anandhaganga



Keraganga



Kerasagara



Kerasree



Kerasowbhagya



Lakshaganga

Cashew Varieties



Raghav



Damodar



Dhana



Sree



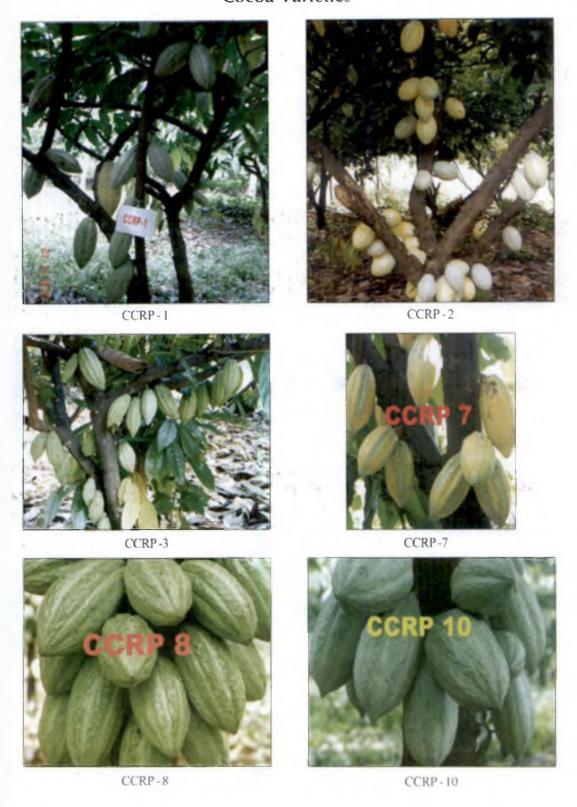


Madhurima

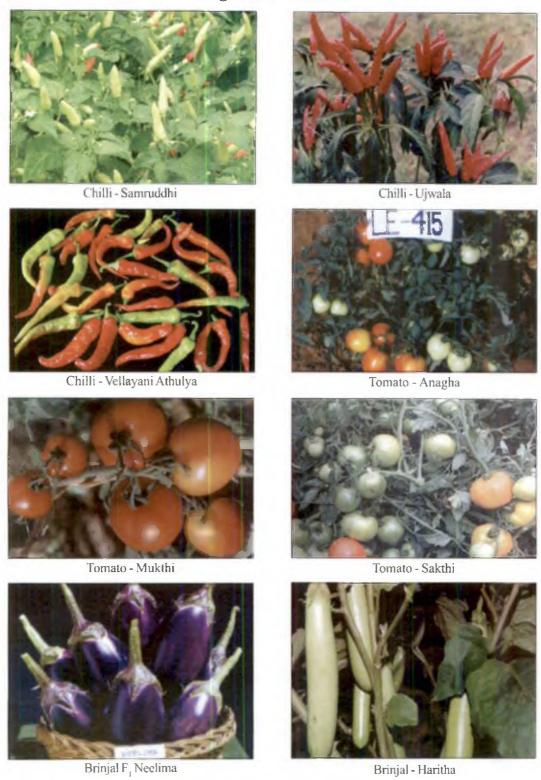


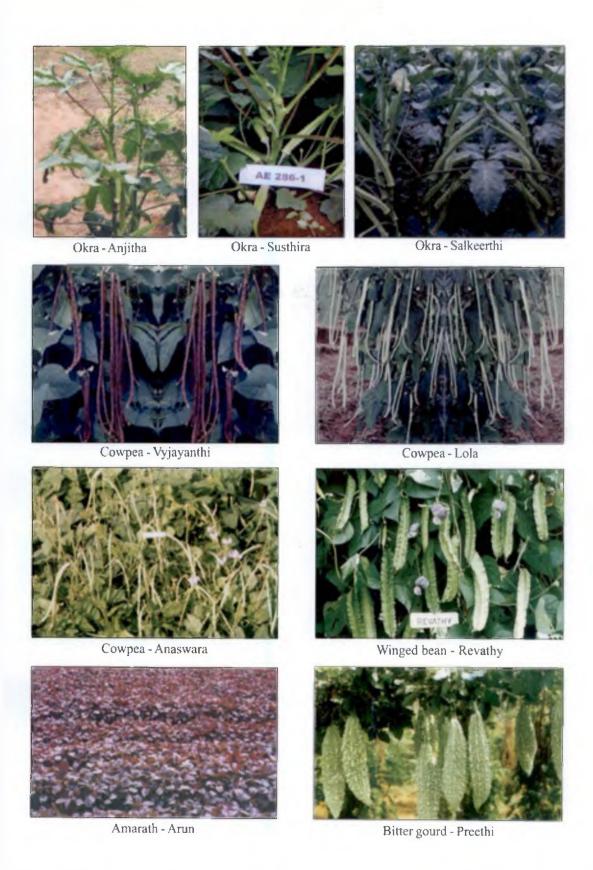
Madhuri

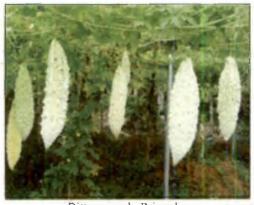
Cocoa Varieties



Vegetable Varieties







Bitter gourd - Priyanka



Snake gourd - Baby



Snake gourd - Kaumudi



Ash gourd - KAU Local



Pumpkin - Ambili



Pumpkin - saras

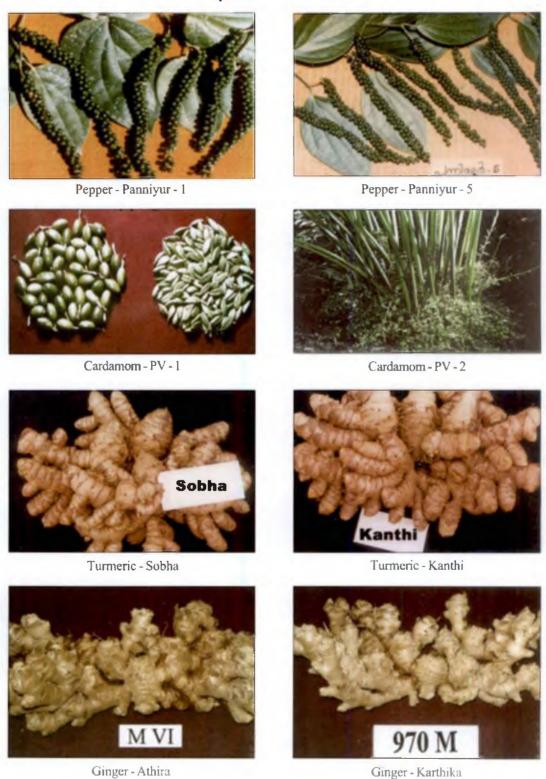


Oriental pickling melon - Mudicode



Ivy gourd - Sulabha

Spices Verieties



Ginger - Karthika



Cassava - Vellayani Hraswa



Coleus - Sulabha



Banana - BRS 1



Pineapple - Amritha



Pulse cowpea - Hridya



Dual purpose cowpea - Kanakamony



Pulse cowpea - Sreya



Adathoda spp - Ajagandhi

Piper longum - Viswam

818358



Orchid - Lemon glow



Orchid - Master delight



Orchid - Pink cascade



Guinea grass-Harithasree



Napier hybrid-Suguna



Napier hybrid-Supriya