




Farmers' Varieties in Spices

(Black pepper and Small cardamom)



ICAR - Indian Institute of Spices Research

Kozhikode, Kerala





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Kozhikode, Kerala

PREFACE

Black pepper (*Piper nigrum* L.), known as “King” of spices and small cardamom (*Elettaria cardamomum* Maton.), the “Queen” of spices, are the most important and widely sought after spice crops of the world.

Indian farmers have contributed immensely for the conservation and development of these spice crops. There have been good efforts by various agencies for recognition of their contributions and the Protection of Plant Varieties and Farmers’ Rights Authority (PPV&FRA) provide a platform for registration of their traditional or native varieties without any cost. A mobile application for assisting farmers in the registration of their varieties through PPV & FRA was also developed at ICAR- Indian Institute of Spices Research.

A mechanism for “Registration of Plant Germplasm” was also instituted at the ICAR- National Bureau of Plant Genetic Resources (NBPGR), New Delhi by the ICAR. This would facilitate access to the developed or identified potentially valuable germplasm for utilization in crop improvement programmes.

This is a small effort to recognize and popularize the “Farmers’ varieties” of black pepper and small cardamom for commercial cultivation and high income generation.

Authors

CONTENTS

1. Farmers' varieties registered under PPV & FRA	
a) Black pepper	02 - 03
b) Small cardamom	04 - 06
2. Other Farmer's varieties under process of registration	
a) Black pepper	08 - 09
b) Small cardamom	10 - 12
3. Germplasm registered with NBPGR	13

Farmers' varieties registered under PPV & FRA

Black Pepper (*Piper nigrum* L.)

Sl. No.	Name of the variety	Date of Issue of Certificate	Protection Period
1	Pepper Thekkan	17/November/2016	16/November/2031
2	Kumbuckal selection	17/November/2016	16/November/2031
3	Agali pepper	17/November/2016	16/November/2031

Small Cardamom (*Elettaria cardamomum* Maton.)

Sl. No.	Name of the variety	Date of Issue of Certificate	Protection Period
1	Panikulangara green bold no.1	17/November/2016	16/November/2031
2	Panikulangara green bold no.2	17/November/2016	16/November/2031
3	Ela (Elarajan)	17/November/2016	16/November/2031
4	Wonder cardamom	17/November/2016	16/November/2031
5	Thiruthali	17/November/2016	16/November/2031
6	Ela-white flower cardamom	12/December/2017	11/December/2032

Pepper Thekkan

Registered under PPV&FRA (Reg/2013/301)

Salient features

Spikes are fully branched, which gives more than 1000 pepper berries/spike.

Major morphological characteristics

Shoot tip colour	:	Light purple
Leaf length	:	Medium
Leaf lamina shape	:	Ovate-lanceolate
Spike length	:	Medium
Spike setting	:	Compact
Berry shape	:	Round

Recognitions

National Innovation Foundation Consolation Award-2012

Contact & Address:- Mr. T.T. Thomas
Thekkel, Kanchiyar, Idukki, Kerala
Mobile - 9961463035



Kumbuckal Selection

Registered under PPV&FRA (Reg/2013/979)

Salient features

The variety has a highly developed root system and tolerant to drought.

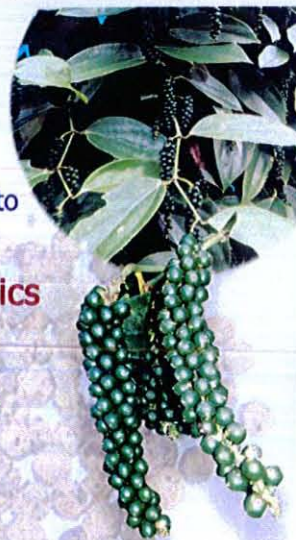
Major morphological characteristics

Shoot tip colour	:	Light purple
Leaf length	:	Long
Leaf lamina shape	:	Ovate-lanceolate
Spike length	:	Short
Spike setting	:	Compact
Berry shape	:	Round

Recognitions

National Innovation Foundation Consolation Award-2007

Contact & Address:- Mr. K T Varghese
Kumbuckal house, Cheruvallikulam
Murinjapuzha-Idukki, Kerala
Mob - 9961021273



Agali Pepper

Registered under PPV&FRA (Reg/2013/980)

Salient features

A unique black pepper cultivar with very high dry recovery and high bulk density coupled with round, firm, bold attractive black coloured berries.

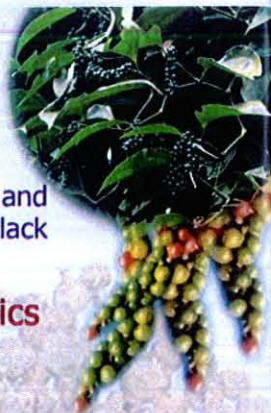
Major morphological characteristics

Shoot tip colour	: Light purple
Leaf length	: Long
Leaf lamina shape	: Ovate-lanceolate
Spike length	: Short
Spike setting	: Compact
Berry shape	: Round

Recognitions

Recognition from Plant Varieties Registry of the Union Government

Contact & Address:-Mr. K.V George
Kalluvellil house, Thachanpara, Palakkad
Kerala, Mob - 9961556318



Panikulangara Green Bold No.1 Registered under PPV&FRA (Reg/2014/3)

Salient features

A high yielding vazhukka type of cardamom developed through selection. The ripe capsules retain green colour and even size after drying.

Major morphological characteristics

Plant height	: Tall
Leaf lamina shape	: Oblong-lanceolate
Panicle growth habit	: Semi-erect
Panicle length	: Long
Capsule shape	: Ovoid
Matured capsule colour	: Parrot green

Recognitions

National Innovation Foundation
Award-2009



Contact & Address:-Mr. Joy Peter
Panikulangara, Kallar
Vattar, Idukki, Kerala
Mob - 9496064122

Panikulangara Green Bold No.2 Registered under PPV&FRA (Reg/2014/4)

Salient features

A high yielding cardamom variety developed by the farmer.

Major morphological characteristics

Plant height	: Tall
Leaf lamina shape	: Oblong-lanceolate
Panicle growth habit	: Semi-erect
Panicle length	: Long
Capsule shape	: Ovoid
Matured capsule colour	: Parrot green

Recognitions

National Innovation Foundation
Award-2009



Contact & Address:-Mr. Joy Peter
Panikulangara, Kallar
Vattar, Idukki, Kerala
Mob - 9496064122



Contact & Address:-Mr. K. J. Benny
Kalarickal House, Puliyanmala
Puliyanmala, Idukki, Kerala
Mob: 9447027663

Ela-Elarajan

Registered under PPV&FRA (Reg/2013/1010)

Salient features

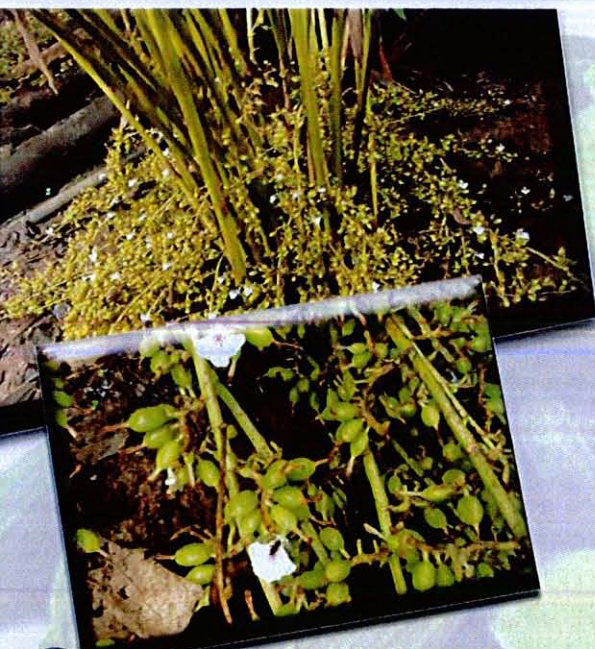
A high yielding vazhukka type of cardamom having uniform bold capsules and more number of capsules per panicle.

Major morphological characteristics

Plant height	: Tall
Leaf lamina shape	: Oblong-lanceolate
Panicle growth habit	: Semi-erect
Panicle length	: Long
Capsule shape	: Ovoid
Matured capsule colour	: Pale green

Recognitions

National Innovation Foundation
Award-2012



Contact & Address:-Mr. Sabu Varghese
Vanderkunnel House, Valiyathovala
Kattappana-Idukki, Kerala
Mob: 9744796963

Wonder Cardamom

Registered under PPV&FRA (Reg/2013/978)

Salient features

High yielding variety with high dry recovery percentage.
The variety has more tillers per clump.

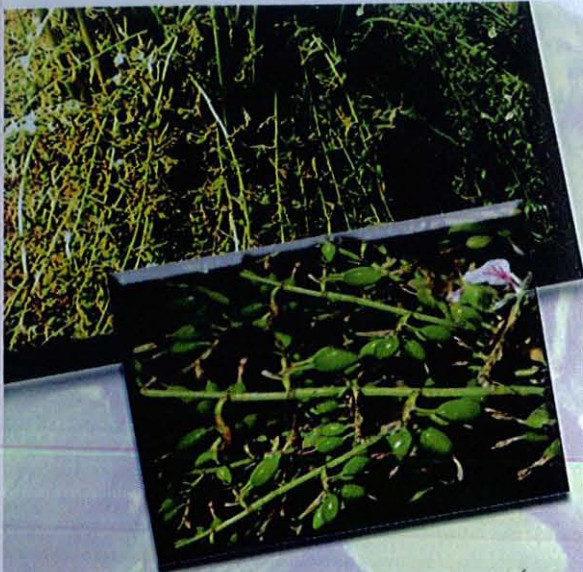
Major morphological characteristics

Plant height	: Tall
Leaf lamina shape	: Lanceolate
Panicle growth habit	: Semi-erect
Panicle length	: Long
Capsule shape	: Ovoid
Matured capsule colour	: Pale green

Recognitions

National Innovation Foundation,
Ahmadabad-2008





Thiruthali

Registered under PPV&FRA (Reg/2013/1188)

Salient features

Suitable for the misty and foggy conditions of high ranges. Resistant to root grub and is moderately tolerant to azhukal disease.

Major morphological characteristics

Plant height	: Medium
Leaf lamina shape	: Oblong-lanceolate
Panicle growth habit	: Semi-erect
Panicle length	: Long
Capsule shape	: Ovoid
Matured capsule colour	: Pale green

Recognitions

National Innovation Foundation Award-2012



Contact & Address:-Mr.T. P. Joseph
Thiruthali House, Pethotty
Santhanpara, Idukki-685619, Kerala
Mob: 9744678243



Ela-White Flower Cardamom

Registered under PPV&FRA (Reg/2013/1011)

Salient features

Vazhukka type of cardamom cultivar bearing purely white flowers and deep root system.

Major morphological characteristics

Plant height	: Medium
Leaf lamina shape	: Oblong-lanceolate
Panicle growth habit	: Semi-erect
Panicle length	: Medium
Capsule shape	: Globose
Matured capsule colour	: Pale green

Recognitions

National Innovation Foundation Award-2007



Contact & Address:-Mr. K.J. Baby
Kalarickal House, Puliyanmala
Idukki, Kerala, 685515
Mob: 9847009111



Other Farmer's varieties under process of registration through PPV & FRA

Black pepper (*Piper nigrum* L.)

Sl. No.	Name of the variety	Acknowledgement number
1	Zion mundi	Reg /2014/2488
2	Aswathi	Reg /2015/877
3	Suvarna	Reg /2015/1791

Small cardamom (*Elettaria cardamomum* Maton.)

Sl. No.	Name of the variety	Acknowledgement number
1	Njallani	Reg /2014/558
2	Pappalu	Reg /2014/2418
3	Arjun	Reg /2014/2487
4	Patchaikai	Reg /2015/1030
5	P.N.S-Vaigai	Reg /2015/1585
6	Thadathil gold	Reg /2017/2401

Zion mundi

Salient features

A variety of black pepper, which gives high yield even under shaded conditions and is tolerant to foot rot disease.

Major morphological characteristics

Shoot tip colour	: Light green
Leaf length	: Medium
Leaf lamina shape	: Ovate-elliptic
Spike length	: Medium
Spike setting	: Compact
Berry shape	: Round

Recognitions

National Innovation Foundation
Award-2015

Contact & Address:-Mr. PG George
Puliyankkall, Vattayakudy, Venmani
Kerala, Mobile No: 8111915160



Aswathi

Salient features

A hybrid between Karimunda and Cheruvally. Tolerant to foot rot disease.

Major morphological characteristics

Shoot tip colour	: Light green
Leaf length	: Medium
Leaf lamina shape	: Ovate-lanceolate
Spike length	: Medium
Spike setting	: Compact
Berry shape	: Round

Recognitions

National Innovation Foundation
Award-2009

Contact & Address:-Mr. A. Balakrishnan
Bathery, Wayanad, Kerala
Mobile No: 9497079823



Suvarna

Salient features

A hybrid between Uthirankotta and Cheruvally. Tolerant to foot rot disease.

Major morphological characteristics

Shoot tip colour	: Light purple
Leaf length	: Medium
Leaf lamina shape	: Ovate-elliptic
Spike length	: Short
Spike setting	: Compact
Berry shape	: Oval

Recognitions

National Innovation Foundation
Award-2009

Contact & Address:-Mr. A.Balakrishnan
Bathery, Wayanad, Kerala
Mobile No: 9497079823



Njallani

Salient features


Developed through selection. The variety has deep root system, high productivity and adaptability.

Major morphological characteristics

Plant height	: Tall
Leaf lamina shape	: Oblong-lanceolate
Panicle growth habit	: Semi-erect
Panicle length	: Long
Capsule shape	: Ovoid
Matured capsule colour	: Pale green

Recognitions

National Innovation Foundation
Award-2001



Contact & Address:-Mr. Rejimon Joseph
Njallani House, Parakadavu
Kattapana, Kerala
Mobile No - 9447105070

Pappalu

Salient features


A high yielding variety with tolerance to thrips, stem borer, root grub and capsule rot.

Major morphological characteristics

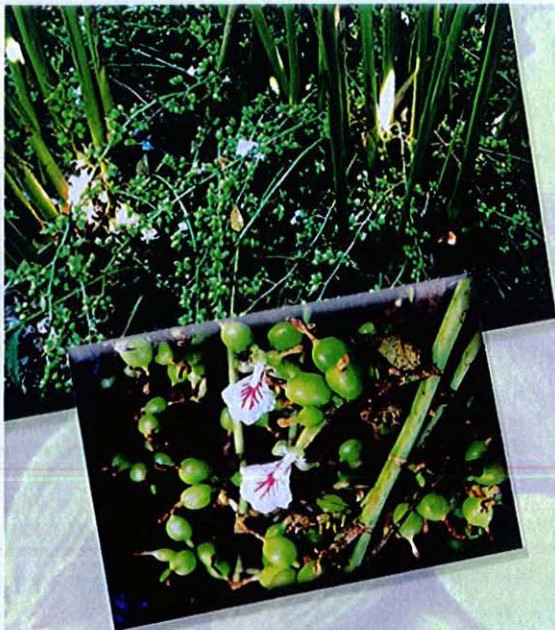
Plant height	: Tall
Leaf lamina shape	: Oblong-lanceolate
Panicle growth habit	: Semi-erect
Panicle length	: Long
Capsule shape	: Ovoid
Matured capsule colour	: Pale green

Recognitions

National Innovation Foundation
Award-2015



Contact & Address:-Mr. K.V. Paulose
Rajakumari, Gajanapara, Idukki
Mobile No - 9447786026



Arjun

Salient features

High yielding cardamom variety having resistance to thrips and stem borer.

Major morphological characteristics

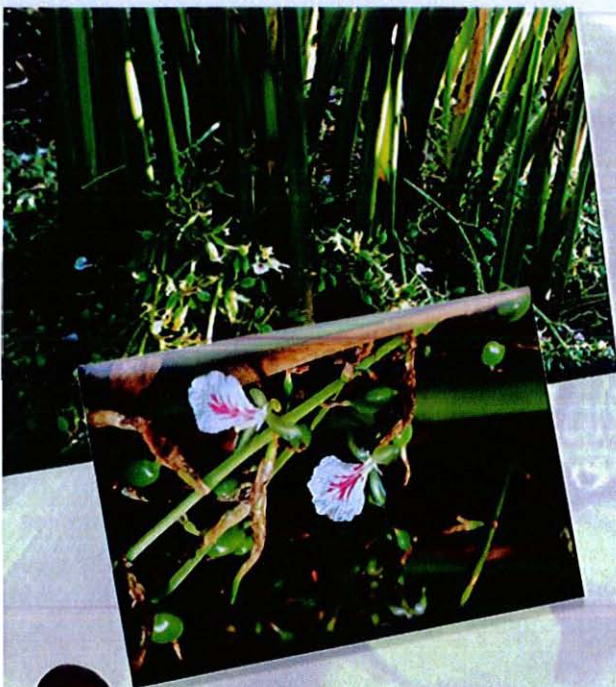
Plant height	: Tall
Leaf lamina shape	: Oblong-lanceolate
Panicle growth habit	: Semi-erect
Panicle length	: Long
Capsule shape	: Ovoid
Matured capsule colour	: Pale green

Recognitions

National Innovation Foundation
Award-2015



Contact & Address:-Mr. Menuvin Thomas
Mundaplakkal, Ayappankovil
Merikulam, Idukki, Kerala
Mobile No - 9847403750



Patchaikai

Salient features

A drought tolerant and high yielding cardamom variety with bold capsules. Most suitable for lower elevation areas of Tamil Nadu.

Major morphological characteristics

Plant height	: Medium
Leaf lamina shape	: Oblong-lanceolate
Panicle growth habit	: Semi-erect
Panicle length	: Long
Capsule shape	: Ovoid
Matured capsule colour	: Parrot green

Recognitions

National Innovation Foundation
Award-2013



Contact & Address:-Mr. R Murugan
Bommarajapuram, Megamalai
Kombaitozu, Theni (DT), Tamil Nadu
Mobile No: 7598119230, 9788399230



P.N.S Vaigai

Salient features


A high yielding variety having bold capsules.

Major morphological characteristics

Plant height	: Tall
Leaf lamina shape	: Oblong-lanceolate
Panicle growth habit	: Erect
Panicle length	: Long
Capsule shape	: Ovoid
Matured capsule colour	: Pale green

Recognitions

National Innovation Foundation
Award-2007



Contact & Address:- Late P.N. Surulivel
PNS estate, Shasthanodi, Anavilasam
Vandamedu panchayath, Tamil Nadu
Mobile No: 9656443672,8681898989

Thadathil gold

Salient features

A high yielding variety of cardamom developed by the farmer through selection.

Major morphological characteristics

Plant height	: Medium
Leaf lamina shape	: Lanceolate
Panicle growth habit	: Semi-erect
Panicle length	: Long
Capsule shape	: Ovoid
Matured capsule colour	: Pale green

Recognitions

Recipient of Productivity Award in Small
cardamom - 2018 (Spices Board)



Contact & Address:-Mr. C. M Mathew
Chengamthadathil (H), Adimali,
Idukki, Kerala, 68556
Mob: 9447294090

Germplasm registered with NBPGR

NBPGR Registration no.	Institute number	Characteristic features
Black pepper		
INGR No. 06026	IC 1019	High caryophyllene (33%).
INGR No. 03091	IC 1041	Field tolerance to foot rot disease.
INGR No. 8100	IC 563950	Noval spike variant with 100% proliferating spikes.
INGR No. 370011	IC 5455	High oleoresin (28.15%) and bold berries.
INGR No. 8099	IC 398868	Transexual species, male changed to bisexual. Bushy form.
Small cardamom		
INGR No.06027	IC 349541 (APG 248)	Produce branches throughout the panicle with maximum number of branches per panicle and high yield.
INGR No.06028	IC 349554 (APG 251)	Possess compound panicles with basal branching and bold capsules, which fetches premium price in the market besides high yield.
INGR No.06029	IC 349599 (APG 306)	Resistant to cardamom mosaic or 'Katte' disease with moderate yield.
INGR No. 06030	IC 349634 (APG 343)	Resistant to rhizome rot and leaf blotch (fungal diseases).

SpiceVarReg

A newly developed mobile application by ICAR - IISR for assisting farmers for registration of their varieties through Protection of Plant Varieties and Farmer's Right Authority (PPV & FRA). It can be downloaded from Google Play Store "SpiceVarReg".





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