

Application for Registration of White flower variety of Cardamom developed

by

Mr. K. J. Baby Idduki District, Kerela

- (A) **Name of the Farmer breeder:** **Mr. K. J. Baby**
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- (B) **Name of the Assignee :** **National innovation Foundation**
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- (C) **Plant variety Group :** Farmers variety
- (D) **Classification of variety :** **Farmers variety**
(Essentially Derived Variety)
- (E) **Denomination of Variety :** **Crop name : Cardamom**
Sci. name : *Elettaria cardamomum* Maton
Kingdom : Plantae
Division : Magnoliophyta
Class : Liliopsida
Order : Zingiberales
Family : Zingiberaceae
Genus : *Elettaria*
Species : *cardamomum*
- (F) **Passport data sheet :** Attached as Annexure 1
- (G) **Essential Characteristics making the farmer’s variety distinct:**
1. Variety bears white flowers
 2. Is highly adaptable to variable shading conditions/fluctuations

Annexure : 1PASSPORT FORM FOR PLANT VARIETY REGISTRATION

1. Crop Species (Botanical Name): *Elettaria cardamomum* Maton

Local name: *Bavula, Cittelam*

English name: Cardamom

2. Name /Designation of the genetic stock/germplasm: *Elettaria cardamomum*

3. Specific feature/characteristics for which registration is to be made.

- a) Variety bears white flowers.
- b) Adaptable to variable shading conditions/fluctuations
- c) Highly resistant to pest and disease attack.

4. Original source of the material and pedigree

a) Source: Selection from Vazhukka

b) Pedigree: Vazhukka

c) History of development:

Evolved by the farmer himself through selection from commercially cultivated *Vazhukka* variety in 1998

5. Parental characteristics: *Vazhukka* variety

'*Vazhukka*' is considered to be the natural hybrid of Malabar and Mysore types of cardamom. The plants belonging to this group are robust like Mysore type. Its leaves are deep green, oblong-lanceolate or ovate, panicles are semi-erect (pendent) in nature and capsules are bold globose or ovoid in shape. It is extensively cultivated in Kerala and Tamil Nadu at elevations ranging from 900 - 1200 meters above sea level.

'*Vazhukka*' type panicles may be branched or simple. The peak period of panicle emergence is from November to March. Flowering normally commences from February and extends upto October, May-August being the peak flowering period. After fruit set, about 90 - 120 days are required for the fruits to attain maturity. The capsules are globose or ovoid or narrowly ellipsoid to elongate in shape, trilocular, containing seeds. On maturity seeds turn dark brown to black in colour. Capsules are pale green to dark green in colour.

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6. Chief descriptive morphological/botanical characters (at 2yrs growth stage):

| Sr. | Characteristics | Farmers variety |
|------------|--|------------------------|
| 1. | Total tillers/plant | 45-50 |
| 2. | Effective capsule bearing tillers/plant | 30-35 |
| 3. | Number of panicles | 90-95 |
| 4. | Number of modified cyne/plant | 40-45 |
| 5. | Length of panicle | 150 – 160 cm |
| 6. | No. of cardamom capsules/cyne | 16-26 |
| 7. | Size of capsules | 6-8 mm |
| 8. | Economic yield (%) | 23-26 |
| 9. | Recovery ratio Kg dry cardamom from kg green cardamom | 25/100 kg |
| 10. | Oil content (%) | 7.5 - 8 |

7. **Name of the village:** Puliyanmala

8. **Variety is known to:** Few other farmers from neighbouring villages of Idukki and Wyanad District of Kerela.

9. **Source of variety:** Farmers field

10. **Status:** Cultivar

11. **Geographical and climatic details of the region**

12. **Topography of the region:** Undulating

13. **Slope:** Lower slope

14. **Stoniness:** Stony

15. **Soil texture:** Loamy

16. **Soil Colour:** Brown

17. **Soil pH:** 5-7

18. **Rainfall:** Approx. 200cm

19. **Elevation:** 700- 1300 m above Mean Sea Level

20. **Temperature:** 12- 32⁰ C

21. **Other features of the farmer bred variety:**

The new variety developed by the farmer is highly adaptable to wide range of topographical and climatic conditions. It can even perform well under less shady conditions as compared to other popular varieties which require dense shades to perform well. The quality and the yield from the variety is much higher than the other prevalent varieties in the region contributed primarily by higher number of effective

capsule bearing tillers/plant, number of panicles/plant and no. of cardamom capsules/cyne.

22. Dissemination:

Farmer started selling seeds of this variety from 2003 onwards and the variety is currently being cultivated in nearly 100 acres of land in Idukki and Wyanad districts of Kerela.