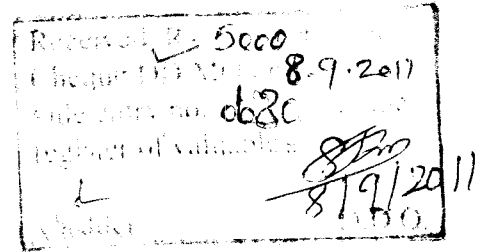


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Form GI - 1 (A)



Application for the Registration of a Geographical indication in Part A of the Register, Section II(1), Rule 23(2)

1. a) Name of the Applicant :

1. Malabar Kaipad Farmers' Society
2. Kerala Agricultural University

b) Address :

1. Malabar Kaipad Farmers' Society
Registration Number 249 /10
Ezhome Grama Panchayath
Ezhome P.O., Kannur - 670 334 ,
Kerala, India
2. Kerala Agricultural University,
Kerala Agricultural University(Post)
Thrissur-680 656, Kerala, India

**c) List of association of persons / : All rice farmers of Kaipad rice tract
Producers / organization / Authority**

d) Type of goods : Kaipad rice and related rice products falling
in **class 30**

e) Specification:

Kaipad rice is the naturally organic rice produced in the saline prone sea coastal rice tract of North Kerala, India falling in Kozhikode, Kannur, and Kasargod districts.

Kaipad rice comes under the species *Oryza sativa*. The most popular traditional cultivars of this tract are *Kuthiru*, and *Orkayama*, and improved cultivars are *Ezhome -1* and *Ezhome -2*. Rice varieties developed in future based on Kaipad traditional cultivars will also be considered as *Kaipad rice*. The average yield of *Ezhome -1* and *Ezhome -2* range from 3.2 -3.5 t/ ha and of *Kuthiru* and *Orkayama* from 1.0 - 1.5 t/ ha. The cultivars like *Orpandy*, *Kandorkutty*, *Mundon*, *Orissa*, *Odiyan*, and *Punchakayama* are being cultivated in a very minimal extent at some parts of Kaipad tracts.

The agronomic traits of traditional Kaipad rice cultivars along with improved cultivars are given in Table 1. Height of plant ranges from 100 -145cm, duration from 125- 140 days, and grains per panicle from 74 to 215.

Table 1. Agronomic traits of popular Kaipad rice cultivars

Agronomic traits	<i>Kuthiru</i>	<i>Orkayama</i>	<i>Ezhome-1</i>	<i>Ezhome-2</i>
Plant height (cm)	140-145	140- 141	100-110	131 - 132
Duration (days)	125-130	135-140	135-145	125-130
No. of tillers plant ⁻¹	7-10	13-15	18-20	15-18
No. of panicles plant ⁻¹	10 – 13	15-16	21 – 23.	19 – 22
Panicle length (cm)	27.1	28.6	25.5	29.4
Panicle type	Intermediate	Intermediate	Compact	Compact
Grains panicle ⁻¹	90	74	150	215

Grain characteristics and cooking qualities are given in Table 2. Grain length ranges from 8.1 to 8.9mm, and grain breadth from 3.0 to 3.3mm. All are medium sized grains with red kernel colour, and 1000 grain weight ranges from 25.6 to 32.6g. Range of milling percentage is from 74.8 to 76.9, and head rice recovery from 62.0 to 68.9%. Volume expansion ranges from 2.8 to 3.5 and kernel elongation from 1.40 to 1.52.

The cooking qualities of *Kaipad rice* is excellent, and the cooked rice is very tasty. There is a general say among farmers that the gruel of *Kaipad rice* can be eaten as such without salt and much curries. The practice of having gruel of *Kaipad rice* during illness for speedy recovery indicates its medicinal value. *Kaipadu chorum chemmeen curriyum*(Kaipad rice and prawn curry) is the usual combination of food at this tract.

Table 2. Grain characteristics and cooking qualities of popular Kaipad rice cultivars

Grain characteristics / Cooking qualities	<i>Kuthiru</i>	<i>Orkayama</i>	<i>Ezhome-1</i>	<i>Ezhome-2</i>
Length of grain (L)(mm)	8.7	8.9	8.3	8.1
Breadth of grain(B)(mm)	3.3	3.2	3.0	3.0
L/B ratio	2.63	2.78	2.76	2.70
Classification	Medium	Medium	Medium	Medium
Kernel colour	Red	Red	Red	Red
1000 grain weight(g)	31.3	32.6	28.3	25.6
Hulling %	81.1	80.1	79.1	77.5
Milling %	74.8	75.1	76.9	75.3
Hull colour	Straw	Straw	Straw	Straw
Head rice recovery %	68.9	65.3	62.0	63.0
Volume expansion	3.5	2.8	3.2	3.3
Kernel elongation ratio	1.52	1.40	1.45	1.5
Water uptake	1.69	1.65	1.60	1.9
Alkali spreading value	4.0	4.3	4.3	4.3
Amylose content (%)	24.99	23.64	26.4	29.0

Nutritive qualities of *Kaipad rice* are given in Table 3. Iron content ranges from 59.8 mg/kg to 303mg/kg, Calcium content (154 - 218 mg/kg), Crude fiber content (10.6 to 12.3%) , Zn content (12.0 to 21.1 mg/kg),Potassium content (8359 to 14075 mg/kg),Magnesium content (628 to 969 mg/kg), Phosphorus content(161 to 214 mg/kg).

Starch content (23.4 to 24.9 mg/kg), Total carbohydrate content (83.0 to 83.9 mg/kg) ,Total sugar content (0.5 to 0.6 mg/kg), and Fat content(1.5 to 1.8.%).

Table 3. Nutritive qualities of popular Kaipad rice cultivars

Nutritive qualities	<i>Kuthiru</i>	<i>Orkayama</i>	<i>Ezhome-1</i>	<i>Ezhome-2</i>
Total fat(% by wt)	1.5	1.5	1.5	1.8
Total sugar (% by wt)	0.6	0.5	0.6	0.5
Total carbohydrate(% by wt.)	83.9	83.0	83.2	83.0
Protein (% by wt.)	0.4	0.3	0.3	0.4
Starch (% by wt.)	24.7	24.9	23.4	24.9
Phosphorus as P(mg/100g)	161	214	214	194
Crude fiber (% by wt.)	10.7	12.3	10.6	11.3
Iron (mg /Kg)	121	303	59.8	87.6
Zinc (mg/Kg)	21.1	12.0	12.9	16.5
Potassium (mg/Kg)	8359	14075	10519	9558
Calcium(mg/Kg)	154	218	194	156
Magnesium(mg/Kg)	896	969	736	628

f) Name of the Geographical Indication and particulars : KAIPAD RICE



Kaipad ecosystem

Kaipad is a saline prone naturally organic rice production tract of North Kerala, India falling in Kozhikode, Kannur and Kasargod districts. The Kaipad system of rice

cultivation is an integrated organic farming system in which rice cultivation and aquaculture go together in coastal brackish water marshes which is rich in organic matter. The network of backwaters and estuaries serves as an inlet of sea water and causes salinity in the area. This ecosystem is rich in biodiversity with respect to flora and fauna. There is several species of phytoplanktons and marine fungi which play an important role in the degradation of organic matter. Mangroves which are seen on the fringes of back waters and estuaries are characteristic feature of Kaipad tracts. Mangroves provide breeding sites for fishes and prawn, and bind toxic chemicals and pollutants. Mangrove forests are valued for fish, shell fish, live stock fodder, fuel and building materials, local medicine, honey, and bees wax, chemicals or tanning leather, timber and wood. The prop roots of mangroves penetrate deep into anaerobic mud flats and activate mineral cycling and maintain productivity of Kaipad ecosystem. The crown of mangroves provide resting and nesting place for birds, and flowers are good source of honey. Diverse species of migratory birds are another specialty of this ecosystem.

As Kaipad tract is coastal to the river which merges into sea, there will be flood during monsoon and salinity during summer season. Kaipad ecosystem consists of marshes, swamps, ponds, and paddy fields which help in controlling sedimentation, flood and pollution. The tidal currents generated in the sea causes flow in of water to Kaipad fields through the river during high tide and flow out during the low tide. When water level rises in the river either due to monsoon or due to high tide, water flows in Kaipad fields. The river water is usually saline except during monsoon. Along with the river water, the Kaipad fields receives good deposit of highly fertile organic matter from forest wastes as well as marine wastes. This along with left over paddy stubbles in Kaipad, excretion of migratory birds, and remnants of aqua culture makes the Kaipad ecosystem highly fertile. Hence the rice produce from this particular ecosystem is purely organic.

Rice farming is carried out in a peculiar way in Kaipad, purely in a natural way relying on the monsoon and the sea tides. Single-crop of rice is cultivated, on mounds, in a low to medium saline phase of production cycle during June to October. Harvesting takes place by the end of October. Harvested products are brought in yachts from the interior parts of Kaipad rice tracts. This is followed by traditional fishing, during the high saline phase.

during November to April. Neither chemical fertilizers nor plant protection chemicals are used in rice, fish, or shrimp farming. The tidal flows make the fields highly fertile through a symbiotic relationship between rice crop and prawn, shrimp, fish etc. The fingerlings of fish, shrimp, prawn etc. which swim in from the sea and the backwaters after the rice harvest, feed on the leftovers of the harvested crop. The rice crop draws nutrients from the excrement and other remnants of these sea creatures. Also, there is no purposeful removal of weeds as practiced in modern rice farming system.

Climate:

Kaipad rice tract features tropical monsoon climate with high temperatures recorded from March to May. During the months of April and May, the mean daily maximum temperature ranges from 31.2°C to 35 °C. Temperature is low in December and January and the minimum temperature is about 20°C to 23.6°C. The weather is ideal towards the end of the year from December and January until March when the skies are clear and the air is crisp. Winters are seldom cold. A brief spell of pre-monsoon showers hits the tract sometime during April. This is followed by the South-West monsoon which continues till the end of September. The tract also receives significant precipitation from the North-East Monsoon that sets in from the second half of October through November. The annual average rainfall is 3438 mm and more than 80% of it occurs during the period of South-West monsoon. The rainfall during July is very heavy.

Aqua culture in Kaipad

After the harvest of paddy, the Kaipad field is left for aqua culture, especially for shrimp culture. Aqua culture in Kaipad is of traditional capture based. Immediately after the cessation of North East monsoon in November, the bunds, around the fields will be strengthened using sticky mud and weeds, and wooden sluice gate (*Mancha*) will be fixed. The bund owners are different from owners of Kaipad field. During high tide, through the opened sluice, water will be entered in the Kaipad with high force. Along with the tidal current, fingerlings of prawn, crab and other fishes enter into the field. The quantity of fingerlings depend upon the force and duration of tidal current. A conical shaped net with an opening will be fixed inside the *Mancha* during tidal in flow. The

fingerlings of the prawn and other aqua creatures go inside the field through this but can not come out. After the tide, the net is removed and a filter is fixed to prevent the escape of prawn, fish fingerlings from Kaipad. Maximum water will be allowed to enter into Kaipad during two tides. After that, water is kept in the field two to three months allowing the fingerlings of prawns, fishes etc to mature. The paddy stubbles, algae, and other debris in Kaipad form food material for the prawns, fishes and others. The debris of aqua culture later makes the Kaipad organically rich- a symbiotic relationship between rice and aqua creatures. Fish filtration at the sluice begins three to four days after the full moon day, and ends by three or four days after full moon day. During these days a net is placed at the outlet of *Mancha* in the early morning, and prawns and fishes will be filtered during tidal outflow. This process is locally known as *Kandi Koodal*. The prawn and fish filtration will be done intensively till April 14th which is beginning of the new agriculture year. It is commonly known as *Vishusankranthi* day in Hindu mythology. The bund owners and the leased in fish harvesters do fishing intensively till this day. To get maximum prawn/fish harvest, two to four days prior to *Vishusankranthi* day the bund owners allow anybody to do fishing with a guaranty that, half the harvest produce will be given to the bund owners. This practice is locally known as *Kandi kalakkal* means churning the field. After *Vishusankranthi* day, the resource is open to the public, anybody can fish from private paddy fields. During aqua culture season, people who are skilled in this work do prawn filtration and all related works on the bunds. As most of the works are done during night, small huts will be constructed on bunds and a watchman will be entrusted for security purpose and to prevent pouching. There is fish filtration during monsoon season when there is crop in Kaipad, which is known as *Varsha kettu* but the quantity of catch will be less.

g) Description of Goods:

Rice is the staple food of India. In the present era, organic rice which is more healthier and tasty, is the most demanded one compared to non organic rice. Hence, organic *Kaipad rice* are equally acceptable for low income consumers and high income consumers. *Kaipad rice* belongs to organic rice group whose kernel is red in colour.

The range of morphological traits of popular Kaipad cultivars is , height of plant 132 - 145cm, duration 125-145 days, grains panicle⁻¹ 74 to 215, length of grain 8.1 to 8.9mm, breadth of grain 3.0 to 3.3mm, and 1000 grain weight 25.6 to 32.6g. All are with medium sized grains and with red kernel colour. Regarding physico-chemical traits and cooking qualities, milling percentage ranges from 74.8 to 76.9, head rice recovery from 62.0 to 68.9%, volume expansion from 2.8 to 3.5, and kernel elongation 1.40 to 1.52 with very tasty cooked rice.

Regarding nutritive quality, the range of content of various nutritive factors is, iron 59.8 to 303mg/kg, Calcium 154 to 218 mg/kg, Crude fiber (% by wt.) 10.6 to 12.3, Zn 12.0 to 21.1 mg/kg, Potassium 8359 to 14075 mg/kg, Magnesium 628 to 969 mg/kg, Phosphorus 161 to 214 mg/kg, Starch 23.4 to 24.9 mg/kg, Total carbohydrate 83.0 to 83.9 mg/kg, Total sugar 0.5 to 0.6 mg/kg, Protein (% by wt.) 0.3 to 0.4, and Fat (% by wt.) 1.5 to 1.8.

h) Geographical area of Production and Map: Site map attached.

Kaipad rice tract is seen spread in the north Malabar districts, Kozhikode, Kannur, and Kasargod near to Arabian sea. These tracts are coastal wetlands at the bank of rivers flowing through these districts and joining to Arabian sea. The tract is located approximately 11.25°N 75.77°E / 12.5°N 75.0°E. The Kozhikode district has an elevation of one metre along the coast with the city's eastern edges rising to at least 15 metre, with a sandy coastal belt and a lateritic midland. A number of rivers originating from the Sahyadri run along the outer reaches of the city of Kozhikode. These include the Chaliyar puzha, Kallayi Puzha, Korapuzha, Poonoor puzha, and Iravanjhi puzha. Kaipad rice tract of Kozhikode district lie at the bank of these rivers in the Panchayaths, Koyilandi, Chengottukavu, Chemmencheri, Ulleri, Maniyur, Cheruvannur and Meppayyur. In Kozhikode district the approximate area of Kaipad tract is 500hectars.

Six rivers drain Kannur district, the longest being the Valapattanam river with a length of 110 km. Other rivers flowing through Kannur district are Kuppam, Mahe, Anjarakandi, Thalassery, Ramapuram and Perumba. Kaipad rice tracts of Kannur district mainly lie on the bank of Valapattanam and Kuppam rivers in the Panchayaths, Ezhome, Pattuvam,

Kannapuram, Cherukunnu, Puzhathi, Chelora, Narath, Kolacheri, Chirakkal, Munderi, Elayavoor, Kuttiyattoor, Mayyil, Pinarayi, Eranjoli, and Chokkli. In Kannur district, the approximate area of Kaipad tract is 3400 hectores. During British Dynasty, Ezhome Panchayath was known as "The Akyab" of Chirakkal Taluk, after Akyab in Burma which produced the highest yield of rice in the world (Panchayath vikasana rekha)

The Kasargod district is the northern most district of state of Kerala. It has an average elevation of 19 metres. Kasargod district lying in the northern tip of Kerala bounded by the Western ghats in the east and Arabian sea in the west, 12 rivers flowing across its terrain. Most of the Kaipad tracts in Kasargod lie at the bank of Chandragiri river in the Panchayaths, Mangalpady, Manjeswar, Kumbala, Mogral Puthur, Udma, Pallikkara, Pullur- Periya, Kanhangad, Ajanoor, Cheruvathur, Pilicode, Padanna, Valiyaparamba, and Thrikkariapur. There is about 200 hectores of Kaipad field in Kasargod district.

i) Proof of origin (Historical records): Copy attached

The name 'Kaipad' is not properly recorded as such in ancient literature, but mentioned as 'Kayal kandom' in the Malayalam book – 'Francis Bukkanante Keralam' (Keralam of Francis Bukkanan) in page number 182, second paragraph(Copy attached) The book is translation of the original book ' A journey from Madras, through the countries of Mysore, Canara and Malabar –Vol II' by Dr. Francis Bukkanan, Published by the state Institute of Languages, Kerala, Thiruvananthapuram, 1981.

Translation/ transliteration of the non- English text

Translation of the second paragraph of page number 182 of the malayalam book 'Francis Bukkanante Keralam' (Keralam of Francis Bukkanan):

This book gives the travel story of Dr. Francis Bukkanan who travelled through Madaras, Mysoor, Kanara and Malabar in 1800 -1801 to study in detail the situations of these places as per the direction of English East India company where he was employed. There are three sections for this book. In the third section which is 'Utharamalabariloodeyulla yathra', the travel note on 1801 January 8-10, under the sub head –'Nelkrishi', in the second paragraph of page number 182, the saline sea coastal

areas are mentioned as 'Kayalkandom' and local cultivars of this area as 'Kuttadan'. 'Kayal' is the Malayalam terminology of salt water area, and 'Kandom' is the Malayalam terminology of rice field. On enquiry from farmers of Kaipad rice tracts, it is realized that 'Kaipad' is the shortened form of 'Kayal padam' which means 'Kayal kandom'. 'Padam' is another terminology of rice field in Malayalam.

Corresponding transliteration of the lines is given below

Eviduthe uppulla nadheethadungalil krishi cheyyunna oru prathaikatharam nellanu kuttadan. Ee krishi cheyyan upakarikkunna nilangale kayalkandom ennanu vilikkunnathu. Nallavannam mazha kittukayanenkil ekkarinu 36 ½ bushel nellu vilayum, athayathu pathinanchu meni. Ennal mazha kuravanenkil uppinte katinyam moolam krishi nasichupokum. Vellam kayarathirikkanayi kettiyuyarthiyittulla chirakalkku attakutta panikal natathendathinalum elikalute malangal karanam chirakal nasichupokathe sookshikkentathukontum ee patangalkku varappanam orekkarinu 4 6/8 bushal mathramanu. Athayathu rantu meni vila mathram. Etharam nilangalil nelkrishi illathe payarvargangal krishi cheyyarilla. Athuthanne oruppoo krishiyanu.

j) Method of Production

Nearness to Arabian sea and the presence of large number of rivers, makes the tract saline prone adapted to specific cultivars and specific system of cultivation.

Soil

Soil properties of Kaipad rice tract is given in Table 4. The soil type of Kaipad is saline hydromorphic. The soil pH throughout the depth of soil profiles is slightly acidic. Even though Kaipad is saline, the submerged condition rectifies the ill effects. Similarly, rice-fish farming also remunerative for salinity. Due to flooding, availability of elements like N, P, K, Ca, Mg, Na, Fe, Si, and Mn were found to increase and causes decrease in availability of Zn and Cu.

Table 4. Soil properties of Kaipad rice tract

Items	Kaipad
Type of soil	Saline hydromorphic
Active acidity	5.27
Exchange acidity	0.69
Non exchange acidity	15.00
Potential acidity	15.69
Available Nitrogen (Kg/ha)	182 -500
Available Phosphorus (Kg/ha)	5.88 – 57.2
Available Pottasium (Kg/ha)	24- 592
Available Ca (Kg/ha)	403
Available Mg (Kg/ha)	78
Available S (Kg/ha)	420
Available Fe (Kg/ha)	163
Available Mn (Kg/ha)	5
Available Zn (Kg/ha)	1.3
Available Cu (Kg/ha)	2.7
Salinity	2- 8 ds/m
Organic carbon	1.49 – 4.31 %

(Source: State of the environment report.2007.vol.I & KAU. unpublished)

Cultivars

The most popular traditional cultivars of this tract are *Kuthiru*, and *Orkayama*, and improved cultivars are *Ezhome -1* and *Ezhome -2*. Rice varieties developed in future based on Kaipad traditional cultivars will also be considered as *Kaipad rice*. The average yield of *Ezhome -1* and *Ezhome -2* ranges from 3.2 -3.5 t/ ha and of *Kuthiru* and *Orkayama* from 1.0 - 1.5 t/ ha. The cultivars *Ezhome -2* and *Kuthiru* are medium duration cultivars, and *Ezhome -1* and *Orkayama* are long duration cultivars, and they are photo insensitive . The cultivars like *Orpandy*, *Kandorkutty*, *Mundon*, *Orissa*, *Odiyan*, and *Punchakayama* are being cultivated in a very minimal extent at some parts of Kaipad tracts and they are photo sensitive .

Planting and Land preparation

Rice farming is carried out in a peculiar way in Kaipad, purely in a natural way relying on the monsoon and the sea tides. Single-crop of rice is cultivated, on mounds, in a low to medium saline phase of production cycle during June to October.

Mound preparation

As there is always water in flow in Kaipad, during rice farming season, the field has to be dried before start of land preparation activities. To prevent entering of water in Kaipad, bunds are constructed at the edge of Kaipad where it meets with the river. The bunds are constructed using wild grasses and sticky muds taken from riverbanks. These bunds are locally known as *Kandi* or *Chira*. The flow of water is regulated by sluice made up of wood which is locally known as *Mancha*. Agricultural operation begins by beginning of April by draining out saline water completely from the Kaipad field, and left to dry for a period of one month. After that, small mounds of diameter about 45cm and height about 60 cm are taken by skilled male labourers. This land preparation work completes by middle of May. By early June, when South West monsoon starts and intensifies, the salinity from the top of the mound leaches away. Soils on the mounds formed for sowing seeds attain low levels of salinity on washing and leaching with rain water, while salts accumulate in the soils between the mounds. When there is enough fresh water flow in

the river, the sluices are opened fully. From this time onwards there won't be any control of tidal in flow and out flow from the river till the maturity stage of rice crop.

Sowing

In June, after the receipt of south west monsoon, paddy seeds of saline tolerant cultivars will be soaked in water for 24 hours. Soaked seeds will be tied in gunny bags or tied in bags of coconut fronds or covered with banana leaves for a period of 2-3 days till the seeds germinate and white radicle comes out. If there is no rain fall on the day of sowing, sowing has to be postponed till rain comes. At that time the germinated seeds have to be spread on the floor to prevent over germination of seeds which will cause deterioration of quality of seeds. When rain comes, the top of the mound is slightly raked by man labourers and woman labourers sow the germinated seeds on the raked mounds, and cover with mud. Mounds are usually taken at places where salinity is more. In places where salinity is less, sprouted seeds can be broadcasted in raked fields.

Transplanting

After 45 days, the mounds with grown up seedlings will be dismantled without damage to the roots of seedlings by man labourers, and the seedlings in clefts are dispersed around the flattened mounds. Woman labourers spread them apart uniformly.

Transplanting will be over by July end. Raising nursery on wetland and transplanting in Kaipad marshy land is also practiced. Afterwards, there is no need of any cultural operations till the harvest. Usually weed growth will be less, and if it is there weeding will be over by mid August. In Kaipad cultivation, there is no application of organic or chemical fertilizers, only lime application is done in some pockets. As there is no pest and disease occurrence in Kaipad, there is no pesticide and fungicide application.

Manuring

Neither chemical/organic fertilizers nor plant protection chemicals are used in rice, fish, or shrimp farming. The tidal flows make the fields highly fertile through a symbiotic relationship between rice crop and prawn, shrimp, fish etc. The fingerlings of fish, shrimp, prawn etc. which swim in from the sea and the backwaters after the rice harvest,

feed on the leftovers of the harvested crop. The rice crop draws nutrients from the excrement and other remnants of these sea creatures. Further, diversity of flora and fauna is rich when compared to modern rice farming system. The tidal currents generated in the sea causes flow in of water to Kaipad fields through the river during high tide and flow out during the low tide. When water level rises in the river either due to monsoon or due to high tide, water flows in Kaipad fields. The river water is usually saline except during monsoon. Along with the river water, the Kaipad fields receives good deposit of highly fertile organic matter from forest wastes as well as marine wastes. This along with post harvest vegetations including submerged macrophytes, left over paddy stubbles in Kaipad, excretion of migratory birds, and remnants of aqua culture make the Kaipad ecosystem highly fertile.

Weed control

The minimal weeds seen in Kaipad are not harmful to rice crop when there is cultivation in Kaipad tracts, and normally there is no purposeful removal of weeds as practiced in modern rice farming system. When there is excess weeds hand weeding is practiced.

Plant protection

The peculiarity of Kaipad ecosystem is that there is no pest and disease incidence in the natural field condition.

Harvest and Yield

The crop will be ready for harvest by the end of September to mid of October. During harvest, panicles along with small portion of the culm are harvested leaving larger part of the stubbles in the field. The harvest produce from interior of Kaipad are brought to the bank of Kaipad in yachts or country boats. Yield of Kaipad cultivars ranges from 1.0 - 3.5 t/ ha.

Processing

Parboiled rice is consumed by farmers and sold in the local market. Rice flakes is an important product produced at this tract. As rice flakes also contain bran of rice unlike

milled rice, the nutritive value of rice flakes available at Kaipad rice tract which is naturally an organic tract is imperative. This is evident from the local practice of giving Kaipad rice flakes to the people outside Kaipad rice tract by the people of Kaipad rice tract, when they visit their house for the first time. Rice flakes from Kaipad rice tracts fetches 40% more price than flakes from ordinary wetland field in the local market. As the farmers of this tract are small and marginal farmers, they could not do large scale processing and marketing by their own.

k) Uniqueness:

- *Kaipad rice* is produced from saline tolerant cultivars grown in naturally organic production system called Kaipad. The produce is purely organic with excellent cooking qualities. The rice is having volume expansion ranging from 3.2 -3.5, non-sticky nature, red kernel colour, and with delicious taste.
- Nutritive value of *Kaipad rice* is excellent with good content of iron (59.8 to 303mg/kg), calcium(154to 218 mg/kg), and potassium(8359 to 14075 mg/kg).
- Due to the unique and complex combination of agro-climatic conditions prevailing in the region of Kaipad rice tracts, rice produced in this region are having distinctive and naturally occurring characteristics, which have won the patronage and recognition of both low income consumers and high income consumers. If it is grown in some other regions, the characteristic qualities get diluted.
- As there is no pest and disease incidence in Kaipad rice tracts, no chemical plant protection is followed. Farmers are following the unique natural way of cultivation practices, as the tract is suited for natural organic rice production. This clearly indicates that *Kaipad rice* and related products are free from hazardous chemicals.

(I) Inspection body:

1. Director of Research, Kerala Agricultural University, Thrissur
2. Associate Dean College of Agriculture, Padannakkad
3. Associate Director of Research, RARS, Pilicode
4. Associate Director of Research, Paddy mission
5. Co-ordinator, WTO Centre, Kerala Agricultural University
6. Convener, IPR Cell, Kerala Agricultural University
7. Plant Breeder, College of Agriculture, Padannakkad
8. Principal Agricultural Officer, Kannur District
9. Principal Agricultural Officer, Kasaragode District
10. Principal Agricultural Officer, Kozhikode District
11. President, Malabar Kaipad Farmers' Society
12. Secretary, Malabar Kaipad Farmers' Society
13. Agricultural Officer, Krishibhavan, Ezhome, Kannur District
14. Agricultural Officer, Krishibhavan, Pattuvam, Kannur District
15. Agricultural Officer, Krishibhavan, Cherukunnu, Kannur District
16. Agricultural Officer, Krishibhavan, Kannapuram, Kannur District
17. Six farmer representatives cultivating Kaipad rice


Along with the Statement of Case in **Class 30** in respect of **Kaipad rice and related rice products** in the names of Kerala Agricultural University and Malabar Kaipad Farmers' Society, whose addresses are

1. Malabar Kaipad Farmers' Society
Registration Number 249 /10., Ezhome Grama Panchayath
Ezhome P.O., Kannur -670 334 ., Kerala, India
and
2. Kerala Agricultural University
Kerala Agricultural University(Post)
Thrissur-680 656., Kerala, India

Who claim to represent the interest of the producers of the said goods to which the geographical indications relates and which is in continuous use since time immemorial in respect of the said goods.

Other necessary particulars called for in rule 32(1) are given in the statement of use. All communications related to the application may be sent to the following address in India.

Director of Research
Kerala Agricultural University, Vellanikkara,
Kerala Agricultural University(Post)
Thrissur-680 656, Kerala, India

Signature 

(Name of the signatory in block letter) **KARUNAKARAN K.V**

Secretary

Malabar Kaipad Farmers' Society
Registration Number 249 /10
Ezhome Grama Panchayath
Ezhome P.O., Kannur -670 334 .
Kerala, India

Signature

(Name of the signatory in block letter)

Director of Research

Kerala Agricultural University
Vellanikkara,
Kerala Agricultural University(Post)
Thrissur-680 656, Kerala, India