

The Eathamozhy tall coconut with geographic indication

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Eathamozhy Tall coconut palm is known for its sturdy stem, reduced inter scar spaces and large crown with 32 - 36 leaves. The leaf length ranges from 4.8 to 5.2 m. There are 13 to 15 floral bunches at one time in the crown. The leaves with its strong petiole never droop, and the floral bunches with nuts of different stages of development also never buckle down.

The promising and traditional coconut type known as Eathamozhy Tall found in the southern most belt of the peninsular India with its superior Morpho-Genetic traits is registered under Geographic Indications in the year 2007 in G.I.110, with the necessary certificate No:72 dt 7.09.2007, class 3 coconut. The world intellectual property organization has granted protection to the G.I.registered Agricultural products through its orders in 1883, and 2005. The WTO (World Trade organization) has also granted protection to the G.I.registered Agricultural products from 2005. The Indian parliament has also passed the needed Act in 1993 and 2006.

This special type palm is located between 8° .03' north of latitude and 77° .05' east longitude and spread

over 6000-8000 acres, in 6 revenue blocks. This special zone is endowed with plenty of nature's wealth and fertile soil types. This special type of coconut is inherent to this strip of land for many centuries, and well adopted to the peculiar weather and climatic conditions. Therefore it is claimed to be a heritage of historical and commercial importance.

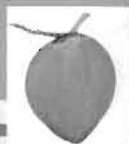
Annual rainfall in this area is 1443 mm. This is split into 551.71 mm during the south West monsoon and 523.30 mm in the North East monsoon. The temperature in summer may go upto 38.7 °C and 18.1 °C during the winter months. The relative humidity ranges from 72.9 to 77.2 with an annual average of 62.7.

Survey on the fungal diseases on coconut in this strip of land has indicated that this palm population is

Table 1. Relative humidity and temperature

Month	R.H		Year 2001	
	Morning	Evening	Temperature Max	Temperature Min
Jan	74.2	63.2	29.2	21.4
Feb	74.0	62.3	30.1	23.2
Mar	72.9	61.6	32.8	24.4
Apr	78.8	69.8	34.4	24.8
May	76.1	67.7	34.2	25.1
Jun	74.2	69.0	33.6	22.4
Jul	73.5	68.5	32.8	23.8
Aug	76.6	69.3	33.9	23.2
Sep	70.4	64.8	32.4	24.1
Oct	82.4	66.4	32.6	22.9
Nov	89.0	72.0	31.4	23.1
Dec	87.0	71.0	31.2	22.2

48/2 Gnana Multhangam, Ramanputhoor, Nagarcoil-2.



Malaysian Dwarf Yellow x Eathamozhy Tall

least affected by the leaf spot, leaf blight and leaf rot diseases. Scientists and elite coconut growers, in this region claim that this phenomenon is due to the resistant genes borne by the palms and the combination of the special weather, soil types relative humidity, and the soil moisture prevalent in this G.I. area.

Though cultivars like west coast and East coast Tall are found at random in this tract, Eathamozhy Tall is dominating the area with 90% population. Inbreeding in the large population therefore helps to maintain its original morphology and other desirable traits

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The matured nuts of this palm are round, or oblong in shape, and green to light green in colour. The kernel inside the matured nut measures 1.25 to 1.50 cm thick and the copra from each nut weighs between 165 to 175 grams with high oil content. It is interesting to note that from each 100 nuts of this palm the growers are able to obtain 16 to 18 kg of copra while the copra out-turn from the East and west coast Tall type is known to be 13 to 14kgs respectively.

The well distributed rainfall and the regular moisture present in the top soil in the gardens in the G.I.area enables the farmers to raise the palm as a rainfed crop. Most coconut growers in this tract practice organic method of cultivation.

During the summer months, the coconut growers in the G.I.area transport sediments from the nearby dried ponds and spread the same in the garden as a means of manure. During the rainy season farmers plough down the sediments as natural manure. As for green manure, the gardeners raise horse gram, Kolinchi, sunhemp, and wild sunhemp and plough them down.

These green manure crops decompose and serve as green manure. Coconut growers in the entire G.I.area seldom apply chemical manures, as they fear the harmful residual effects.

The coconut growers in the G.I.area also apply the loppings of the trees like Konnai, Vagai, Poovarasu, Pungu and various other forest trees, as green manure.

The long fibres are extracted, by fermenting the husks in the stagnating back water for six months. The shell charcoal made from the shell, the plaited leaves and the brooms made from the midrib are being regularly in the various districts in Tamil Nadu and else where.

Production and marketing of quality coconut seedlings is a routine programme among the farmers in the G.I.area. There is regular demand, and appreciation for the Eathamozhy tall seedlings. Based on the excellent performance of the varietal and hybrid seedlings of this type, department of Agriculture, Tamilnadu established

Table 2. Morphological characters of Eathamozhy Tall coconut

Characters	Measurement
No. of leaves in 1 year old seeding	9-10
Height of 3 year old juvenile palm	3.70-3.70
Girth of 3 year old juvenile palm.	75-80 cm
No. of leaves on the crown of an adult palm	32-36
No. of leaves produced per year by an adult palm	14-16
No. of leaflets in full leaf	210-225
Length of full leaf	4.8-5.2 m
Length of petiole of full leaf	1.2-1.4 m
Pre-flowering period in months	74-80
No. of bunches produced per year	13-15
No. of female flowers per year	300-330
Setting%	20-21
No. of nuts per year	80-100
Weight of kernel per nut	330-350 g
Weight of copra per nut	165-175 g
Oil content on dry wt basis in copra	65-72%



Eathamozhy Tall



Eathamozhy Tall x Malaysian Dwarf

two separate coconut nurseries, one for producing pure varietal seedlings and the other for hybrid coconut seedlings of Tall x Dwarf Hybrid combination. The hybrid seedlings produced with Malaysian Dwarf Yellow, and Malaysian Dwarf orange as male parents are known for their excellent performance. Coconut growers from the northern districts of Tamil Nadu, obtain these seedlings in large scales for establishing Hybrid coconut gardens. Growers of Eathamozhy Tall coconut have started large scale distribution of seedlings to Australia & Middle East countries.

However at present the coconut

cultivars from Indonesia, and Philippines with their large sized coconuts and higher copra content is able to out-beat the copra production in India, and in other Asian countries.

The progressive coconut farmers are however now recognized that coconut cultivars with high potential for copra and oil content, suited to specific geographical and agro climatical region once identified for multiplication and distribution would be able to raise the production and the profit, and can compete with the leading coconut producing countries like Philippines, and Indonesia. The registration of

Eathmozhy Tall coconut type with the Geographical Indication would help the farmers to take further steps in this direction.

The Chairman, CITT (Centre for Innovation and Transfer of Technology) and the president of the Federation of Coconut Growers Association in this special tract has prepared a logo for proper use. This would help to enhance the business of this special coconut in the world market.

The booklet recently published on Eathamozhy Tall coconut would provide a complete picture of this special and traditional coconut palm in the G.I.Area.

Coconut water to redefine sports drink market

New data from the Beverage Marketing Corporation (BMC) reveal that the sports drinks market in the US has gone through a difficult year with the recession causing a slice in volume by 12.3 per cent. However, one bright spark within the sports drink fold is coconut water. New Nutrition Business recently published a report hailing coconut water as "the fast-growing new category", with retail sales already above \$450 million worldwide. The report predicted that coconut water will redefine the sports drink market after soft drinks giants Coca-Cola and PepsiCo have invested in coconut water last year. Brand owners have shown interest in coconut water because of its many health benefits. It offers many of the same isotonic benefits as formulated sports drinks but in allnatural form. No additions are necessary, not even sweetener. The drink offers calcium, magnesium, and potassium to the sports enthusiast with the need for fortification. Coconut water is also described as being "hypo-allergenic" which means that it causes few or no allergic reactions. These benefits have been seized upon by start-up companies in Germany, the US and elsewhere, who are using new processing technologies and new brands to grow coconut water sales quickly and command premium prices.

Source: *The Cocommunity*

RECIPE

FRUIT CARAMELS

Ingredients:

Black dates	- 200 gms
Figs (dry)	- 100 gms
Cashewnuts	- 50 gms
Walnuts	- 50 gms
Raisins	- 150 gms
Black raisins	- 50 gms
Honey	- 1 tbsp
lime Squeezed	- to roll
Desiccated coconut	- to roll

Method : Chop the dates, figs, all nuts and raisins finely. Mix everything. Add honey and lime juice. Mix everything once again. Roll in desiccated coconut and serve.

CHITAPS

Ingredients:

Rice flour	- 1 cup
Coconut water	- ½ cup
Eggs	- 2
Maida	- 1 cup
Yiest	- 1 tsp
Salt and sugar	- to taste

Method: Mix all the above ingredients and keep in a vessel to ferment for 4 hours. It should have a pancake consistency. When risen, take a big spoon of batter and pour in a greased pan and spread like a chapatti.

Cover it and cook for few seconds till done. Flip it on to a plate.

GRAM DAL SWEET

Ingredients:

Coconut	- 1
Gram dal	- 250 gms
Sugar	- 500 gms
Ghee	- 4 tbsp
Cardamom powderd	- 8
Water	- 1 cup

Method: Grate and grind the coconut wash and boil the gram dal and grind it fine. Make a thick syrurp of the sugar and water. Add ground coconut and gram dal. Keep on stirring with a wooden spoon. Add cardamom powder and ghee. When the sweet leaves the sides of the pan, keep it down. Pour on greased plate. Mark diamonds or squares. Separate when cool.

COCONUT RAWA DIAMONDS

Ingredients:

Coconut, greated	- 1 large
Sugar	- 480 gm

Fine rawa	- 240 gms
Melted Ghee	- 4 tbsp
Salt	- ¼ tsp
Vanila Essence	-
Water	- 100 ml
Food colours	

Method: Grind the grated coconut as finely as possible. Make a syrup with the water, sugar and salt. Boil the rawa very lightly when sugar has dissolved, add the coconut, rawa, ghee and essence. Cook till thick, mix in colour. When it inclines to leave the sides of the pan, remove on a greased marble slab. Cut into diamonds. This filling can be filled in baskets.

FISH COCONUT CURRY

Ingredients:

Fish pieces (1 inch square pieces)	- 6-8
Fresh turmeric paste	- One tsp
Salt to taste	-
Oil to fry fish	-
For garnishing:	
Grated coconut	- 2 tsp
For the paste:	
Fresh turmeric	- one inch
Garlic	- 2 pods
Coconut piece	- one inch
Green chillies	- 2
Onion	- one

Method: Sprinkle salt and turmeric paste on the fish pieces and set aside for 10 minutes. In the meantime grind all the ingredients for the paste.

Heat enough oil for deep frying and fry 2 fish pieces at a time. Fry both the sides till crispy. Use 2-3 tsp of the left over oil from frying the fish. Heat this oil and lower the heat and mix in the paste. Fry the paste on low heat for 2 minutes. Add 2 cups of water and bring to a boil. Lower the heat and mix in the fried fish pieces and allow these to simmer in the gravy for 5-7 minutes. Serve with steamed rice.

MANGALOREAN CHUTNEY

Fresh coconut, grated	- Half
Red chillies	- 4
Garlic cloves	- 2
Tamarind pulp	- 3 tbsp
Salt	- one tsp
Urad dal and mustard dal seeds	- half tsp each
Ghee	- 2 tbsp

Grind together grated coconut, red chillies, garlic, tamarind pulp and salt to a paste. Heat ghee, fry red chillies, urad dal and mustard seeds for 1-2 minutes and pour over the chutney. Serve.

-Indu Narayan