



A NOTE ON THE NEW COCONUT VARIETY—AYIRAMKACHI

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Coconut is cultivated in an area of 1.04.600 ha. in Tamilnadu. The popular variety is the East Coast Tall which is widely cultivated in the State due to its long period of uniform productivity and capacity to give good yield continuously. Two other varieties viz., Semi tall of Kanyakumari District and Dwarf

variety of Thanjavur are rarely cultivated in some pockets of Tamilnadu. These two are not commercially important and they are being grown in house compounds for ornamental and tender coconut purpose.

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In the course of study of 29 varieties and three hybrids of coconut at Regional Coconut Research Station under the All-India Co-ordinated Coconut Improvement Project, it is interesting to observe that the variety Ayiramkachi possesses good economic traits that can be exploited beneficially for the breeding purpose. This variety was originally obtained from a private Nursery at Ramanathapuram. The vernacular name (Tamil) "Ayiramkachi" means "yielding thousand nuts". This variety was studied in detail and the observations made on this variety is reported hereunder.

Data on vegetative characters are given in Table 1.

The vegetative characters of Ayiramkachi was studied in comparison with East Coast Tall, Dwarf and Semi-tall Yellow. In its growth characters, this variety is more or less intermediate with tall and dwarf especially with regard to height of trunk, girth at collar, and length of leaf.

Data on vegetative characters:
(Mean of 5 palm and 3 years average)

Variety	Ht. of trunk (m)	Girth of collar (m)	No. of leaves produced	No. of leaves on crown	Length of leaf (m)	No. of leaflets on one side
Ayiramkachi	2.04	0.70	15.0	25	4.15	103
Semitall yellow	3.32	0.71	16.0	33	4.23	87
Dwarf Green	2.56	0.67	15.0	29	4.09	101
East Coast Tall	3.36	0.77	14.0	29	4.60	105

ayiramkachi which just started to bear.

Its reproductive phase was studied and the data on productive characters are given below.

TABLE II
Data on productive characters

	Ayiramkachi	Dwarf green	Semi tall yellow	East Coast Tall
Age at first bearing (months)	44	53	58	86
Flowers produced/palm	9.0	14.5	19.0	13.0
Flowers produced/spathe	810.7	669.0	285.0	426.0
Flowers/year	90.1	46.1	15.0	32.8
Flowers/year	75	78	98	115
Flowers/year	8.3	5.4	5.2	8.8
Flowers/year	9.3	11.7	34.4	30.0

the earliest to flower and it records an age of 44 months. With regard to flowers produced per spathe, it is not uniform all through the life span. The average of mean annual production of flowers is 9-11, and compared to other varieties, the production of spathe is least in the variety. Maximum number of female flowers recorded by Ayiramkachi and it goes even

to above 3000 in some of the years. On an average, it produces 800 to 1200 flowers per year. It also ranks first in female flower production per spathe. Though the setting percentage is low in this variety, it has recorded a mean annual yield of 75 nuts per tree. Evidently the high female flower production has compensated the low setting.

ut characters are given below in Table III.

TABLE III
(Mean of three years)

Variety	Shape of nut	Colour (tender)	Wt. of whole nut in gm	Wt. of husked nut in gm	Wt. of husk	Wt. of kernel or meat	Wt. of copra per nut	Wt. of shell	Copra yield
Kachi	Elliptical	Green	423.4	218.1	215.3	130.5	93.3	84.8	6.1
East Tall	„	Red or Green	645.0	296.0	349.0	167.0	91.8	176.9	10.0
Yellow	„	Yellow	601.1	342.2	258.9	171.5	..	170.7	..
Green	Spherical	Green	498.1	209.3	288.8	104.50	..	104.6	..

Nuts are very small, green in colour possessing low weight. But weight of kernel is higher than dwarf green. The kernel is hard and dense. Its weight per nut also compares favourably with dwarf green. However since it is an alternate bearer its average copra yield per tree is 31% lesser than that of East Tall.

Almost all the characters, it is interesting to note that this variety Ayiramkachi is intermediate between

East Tall and dwarf. The important economic character, namely high female flower production, can be exploited in breeding work. It has no bole formation as in dwarf variety. It is an alternate bearer. It gives an average yield of 75 nuts per tree per annum. Its copra weight per nut compares favourably with East coast tall. But due to its low setting total yield of copra per tree per annum is comparatively low. It possesses small sized nuts. Unless its size is improved it cannot gain commercial importance.

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