

Reprinted from *Coconut Bulletin*, Vol. XIII, No. 4.

July 1959, Pages 107—112.

RP-167

A Coconut Plantation at the Foot of the Western Ghats

by

R. Gopinathan Nair

Central Coconut Research Station, Kasaragod

JUST thirty miles north of Cape Comorin, the land's end of India, and at the foot of the Western Ghats, lies the industrious village of Kulasekharam, which attracts a number of tourists daily. Distributed around this village are some of the targets of attraction for tourists visiting that part of the country. Two irrigation schemes and their water reservoirs guarded by the two dams, the Pechippara and the Perunchani, the famous rock-carved temple of Lord Shiva at Thirunanthikara and the water siphon at Thadikkaramkonam are

some of these. On the outskirts of this town and bordered on the eastern side by Pechippara lake, the huge water reservoir for the Nanjinad, the granary of the erstwhile Travancore State, is New Ambadi Estate, a large plantation of two thousand and odd acres spreading across both banks of the Kothayar river flowing through Kalkulam and Vilavamkode Taluks, forming part of the present Kanyakumari District, which later emerges as the Thambravarni River of the West Coast to drain into the Arabian Sea. On the north and north-west are two

July, 1959

107

CATALOGUE



New plantings on a rocky hill slope

smaller sister plantations, Palazhi and Kanthimathy Estates, which are also good rubber producers.

Humble beginning

The origin of New Ambadi Estate during 1926, was in the form of about twenty acres of planted rubber owned by the late Captain T. P. M. Alexander. Gradually, that area grew and expanded by purchase of adjoining areas. This Ambadi Estate is the largest one in the Kanyakumari District with nearly 1,500 acres of rubber, some 500 acres of fine coconuts, about 45 acres of cashewnut trees, 50 acres of good arecanut and small area of pepper growing along the river banks.

It is a good size coconut plantation

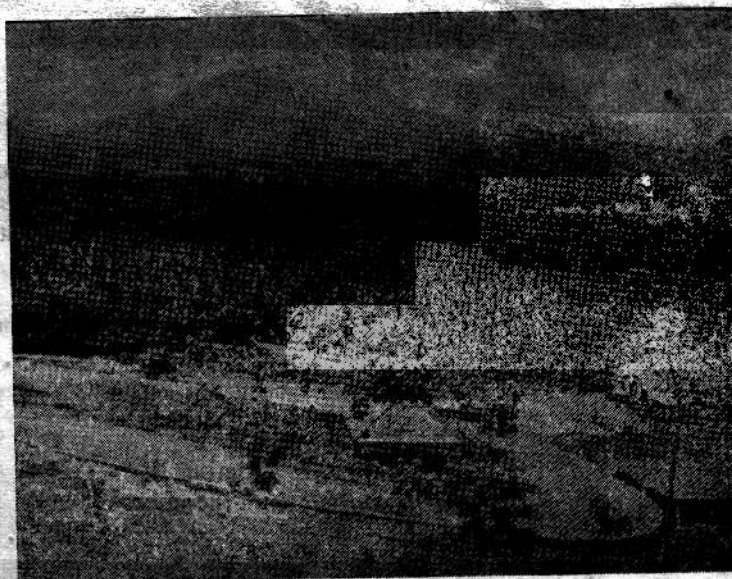
Five hundred and odd acres of coconut comprising five varieties yielding from 5 to 5½ lakhs of nuts annually is really a good size farm. It was Mr. N. S. Bostock, who purchased the estate later on, who planted the coconut areas during the years 1934-36. He introduced four varieties of dwarf coconuts from different well known Ceylon estates, and a tall variety known as the Java Giant from Java. Now coconut alone

covers about 500 acres of which nearly 240 acres are yielding tolerably well. The present owners of the estate are Messrs. A. M. M. Murugappa and Sons of Madras. The entire plantation is thriving well under the able management of a Shri J. W. Watts-Carter.

The estate is on a plain at the foot of the Western Ghats with a fairly deep good soil with subsoil moisture in summer. The clayey loam, rich in humus and plentiful of moisture is best suited for coconut cultivation. Rainfall is abundant both during South-West as well as North-East monsoons. The coconuts are planted along the banks of the Chittar, a small tributary of the Kothayar River.

The Java Giant variety, which is more or less similar to the ordinary West Coast Tall, covers an area of about 210 acres and forms the main coconut crop. The four forms of dwarf variety, Yellow, Red and the two forms of Green Dwarfs occupy nearly 33 acres. Large scale new plantings of seedlings are also well maintained. Trials are being made on the rocky slopes of the hills too.

*Coconuts surrounded by
rubber plantations*



The triangular pattern of planting has been adopted here. The principle of "well spaced trees perform well" has been strictly adhered to. Trees are neither planted haphazard, nor too close to each other. The Dwarfs are planted by 20 x 20 feet making 110 trees per acre, while the Talls by 30 x 30 feet making 55 trees per acre. A nursery also is well maintained, supplying thousands of seedlings to many cultivators. The raising and maintenance of a farm is a science, an art and a business enterprise. It is a long-time investment. Hence it deserves careful planning, especially with regard to selection of areas, soils, types and varieties of seedlings to be cultivated. In New Ambadi Estate you will find a well organised, systematically run farm which is well maintained.

The introduced varieties

Among the introduced varieties, one is Tall and the others are Dwarfs. The Tall, namely, the Java Giant, as the name itself indicates, is tall, sturdy and very healthy. This is high yielding with huge nuts. There are green, greenish yellow and slightly greenish brown forms of this variety. Nuts are of large size, with thick husk, hard shell

and thick kernel. Copra and oil contents are higher than the Dwarfs. They begin to bear in 7 to 8 years after planting if well maintained in infancy.

Among Ceylon Dwarfs, Red and Yellow are similar in most respects except for the colour. Both are of short stature with heavy and early bearing habits. Nuts are of medium size, bunches with a large number of nuts from 15 to 30, and sometimes even more forming a bunch. The nuts, petiole and mid ribs have the corresponding colours of red or yellow. The Red is known as Torkinton Red, being obtained from an estate known by the same name. The Yellow has been introduced from the Banjar Estate in Ceylon.

The Green variety though a Dwarf, is of a taller stature than the other two Dwarfs. The nuts, petiole and mid rib are green. They are also early bearing. Nuts are slightly larger than the yellow and red forms. One of the green is being brought from the Banjar Estates in Ceylon while the other from Antara Estate in Ceylon. The former produces oval nuts while the latter round nuts.

In all the Dwarfs, husk, shell and endosperm are rather thin, though in the Green Dwarfs they are slightly thicker than the others. The nuts in general are better than the dwarf coconuts found in India with regard to the size of the nuts, thickness of kernel, copra content per nut etc.

Dwarf coconuts on plantation scale

Introduction of varieties is a very important item of work in the improvement

of introduction of plants for the improvement of coconut stock have been made at the Coconut Research Stations at Pilicode and Kasaragod, where a limited number of nuts have been obtained, planted and tried. Varieties from countries like New Guinea, Cochin China, Java, Siam, Philippines, Fiji, Malaya and Ceylon are planted for experimental purposes. But, the introduction of varieties on a plantation scale is rarely found. It is a most beautiful sight to look



The crown of the yellow dwarf

of coconut crop. One of the well known and widely adopted methods of crop improvement is the introduction and studies of the particular crop and related species from different parts including that of foreign countries. Attempts to exploit the method

at the rows and rows of Dwarf coconut palms with heavy bunches of red, yellow and green nuts standing so evenly spaced. Only very rarely can one see a garden, or even a plot entirely of dwarf coconuts, so systematically and scientifically planted.

Bee-hives in coconut gardens

One of the most interesting features attracting the attention of a visitor to this estate, is the large number of bee-hives evenly distributed throughout the coconut plantation. More than two hundred and fifty hives are kept in the different areas where the trees are already yielding, making an average of more than one hive for every acre of yielding palms. In addition to the income derived from the honey secured from

duction of vegetables and fruit crops alike. Regular bee-keepers are employed in the estate to look after and maintain the large number of hives.

Plant protection

Protection of coconut trees is also attended to regularly. Labourers are deputed for killing rats and destroying beetles. Spraying of fungicides is also a regular feature of this property.



Bee-hives distributed throughout the coconut plantation

the hives, the apiculture helps to increase the yield of coconuts considerably. It is an accepted fact that the service rendered by the bees to the human race lies not so much in the production of honey, as in the pollination, whereby, they increase pro-

Factory There are two rubber factories working within the estate for the manufacture of extremely high grade sole crepe—thousands of sheets being despatched all over this country.

Conclusion

Though rubber is by far the major plantation and main source of income of this estate, coconut as a sister crop is playing its part with no less importance.

John and Narayana (1950) suggested that there was considerable areas of land eminently suitable for coconut cultivation on the west coast of this country—lying at the foot of the Western Ghats overgrown with weeds and scrub jungle, and such virgin land can be cleared up and coconuts planted in localities having reasonable deep soil with subsoil moisture in summer. This estate is an ideal example where coconut cultivation has been successfully carried out in the early thirties of this century, the experience of which substantiates the

positive possibilities of the suggestion forecast by the authors.

The main coconut area surrounded by large areas planted with rubber, which is equally tall, more or less satisfies the conditions required for an isolated coconut seed garden similar to the one that was opened recently by the Coconut Research Institute of Ceylon. Such isolated coconut gardens can be formed without difficulty in the larger rubber plantations situated along the foot of the Western Ghats, wherever soil conditions are suitable for coconut cultivation.

The author thanks Sri J. W. Watts—Carter, Manager of the Estate for help rendered in gathering the necessary information, and for permission granted in utilising photographs and other material belonging to the Estate.

Advisory and Information Service

Advice regarding various aspects of coconut cultivation and the coconut industry will be gladly furnished on request, free of charge by appropriate officers of the Indian Central Coconut Committee.

Enquiries regarding breeding, cultivation, manuring, etc., of coconut may be addressed to the *Joint Director, Central Coconut Research Station, Kasaragod*, those about pests and diseases and their control to the *Director, Central Coconut Research Station, Kayangulam, Ochira P. O.*, and requests for information on the coconut industry in general to the *Secretary, Indian Central Coconut Committee, Ernakulam*.