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BULLETIN

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Coconut Research In Madras Presidency - A Resume

By C. M. John, Oil Seeds Specialist, Government of Madras.

Introduction

RESEARCH work on coconuts in Madras can be said to have begun as early as 1916 with the opening of four coconut research stations in the West Coast in representative types of soil in which coconuts are generally planted. The work was intensified from 1930 with the organisation of a separate research section for the improvement of oilseeds and the appointment of the Oilseeds Specialist and research staff. Of the four research stations, the one at Kasaragod was acquired as a plantation in bearing condition and after proper thinning out of superfluous trees has been laid out into suitable blocks for experimental purposes. The other three sub-stations are located in Nileshwar village, about 25 miles south of Kasaragod and were acquired as vacant sites and planted up with coconuts for various investigations. The field experiments, the results of which are summarised hereunder, were conducted at these stations while the anatomical, cytological, chemical and other

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studies were done in the laboratory of the Oilseeds Specialist at the Agricultural Research Institute, Coimbatore. The resume furnished in this note is brief and relates only to the salient points. Detailed information is available in the various publications of the Madras Department of Agriculture listed in the Appendix to this note.

Agronomical Research

(a) **Inter-cultivation or tillage:** The importance of regular inter-cultivation (tillage) of the soil in coconut gardens under dry (unirrigated) conditions in enhancing yields has been established by field experiments. Regular intercultivation of the soil by working an iron plough or digging with *mammutty* followed up by working a cultivator to put down weeds increased the yield by 171 per cent even in the absence of manuring, whereas the yield of the uncultivated plot steadily declined. The mean yield of the trees in the uncultivated and unmanured plot for the last 15 years works out to only 12 nuts per tree per annum, while it is 53 nuts per tree per annum in the case of cultivated and unmanured plot. Other significant points revealed by the experiment are:-

i. At least three years must elapse before the effect of cultural treatments is seen in the yield of coconut palms.

ii. The vagaries of the seasons do not affect the yield of trees in a cultivated plot as much as they would those of an uncultivated garden, the co-efficient of variation in the former case for a 15-year period being 18.4 per cent as against 69 per cent recorded for the latter.

iii. A cultivated and manured garden when left uncultivated, shows perceptible fall in yield after a period of three years. To revive such a garden to normal bearing, systematic and regular cultivation for a period of three years is necessary.

iv. Soil moisture studies showed that the amount of moisture is considerably greater in the cultivated plot than in the uncultivated.

(b) **Manurial:** *Manurial Experiments* with all the common available manures such as ammonium sulphate, super phosphate, potassium sulphate, lime, ash, farm yard manure, fish guano, common salt, coconut oil cake, green leaf, etc., have been tried alone and in suitable coimbations for a number of years. The best manure for the coconut for the tract has been found to be ammonium sulphate (4½ lb.) and ash (20 lb.) per tree per year in addition to regular cultivation and growing and ploughing in of a green manure crop with an occasional dose of bone meal (3 lb. per tree). Cattle manure at 100 lb. per tree per annum and ash alone at 20 lb. per tree have also given significant increase in yield over the no-manure plot. Application of common salt at 5 lb. per tree and lime at 10 lb. per tree did not show any beneficial effect on yields.

ii. **Method of application of manures:** The relative advantages of applying manures

in trenches round the trees and applying them broadcast were studied. Broadcast application was found to be better and more economical than applying in trenches.

iii. **Burial of husks:** Coconut husk is rich in potash and also possesses moisture retaining capacity. Burying coconut husks at the rate of 1000 husks per tree in trenches 6 feet wide and $1\frac{1}{4}$ feet deep dug in between rows of trees was found to increase the yield of coconut under dry system of cultivation in sandy loam and gravelly soils of the West Coast. The beneficial effect of a single operation has been found to last for a period of about seven years.

iv. **Green manure crops:** The soils of the West Coast are generally deficient in organic matter. A number of crops like cow gram (*vigna unguiculata*) groundnut (*Arachis Mypogaea*) *kolinji* (*Tephrosia purpuria*) sunnhemp, (*Crotalaria juncea*) and leguminous weeds like *Cassia tora* *Cassia occidentalis*, and *Crotalaria striata* were tried in sandy, red sandy loam and laterite gravelly soils to find out the best suited green manure crop which can be grown under the shade of coconuts for ploughing in into the soil. Of all the crops tried, *Crotalaria striata* the leguminous weed, was found to be the best, yielding from 15,000 to 20,000 lb. of green stuff per acre though cow gram, kolinji, sunnhemp and groundnut are also found to come up well in certain seasons. Besides high yield *Crotalaria striata* has also the following desirable features:

1. The crop is not grazed by cattle.

2. The crop comes up well in a variety of soils including saline soils, and is capable of withstanding extremes of rainfall and drought.

3. The crop is not found attacked by any serious pests or diseases.

4. It is not necessary to raise the crop year after year when once it gets established as satisfactory crops are obtained from self-sown seeds.

5. There is no necessity to raise crops separately for seed production as sufficient quantity can be gathered from the early formed pods before the crop is incorporated into the soil.

(c) **Spacing:** The spacing usually adopted in good gardens ranges from 25 feet to 30 feet between trees, although much closer spacing is adopted in deltaic and low lying areas. The triangular method of planting trees has been found to economise space and some 15 per cent of trees more could be put in by the triangular method than by the square method adopting the same spacing.

(d) **Depth of Planting:** Deep planting (about 3 feet) in sandy loams, laterite and sandy soils has been found to be better than surface planting. Surface planted trees exhibited poor growth and were more affected by droughty conditions in the summer months than the deep planted ones.

Lowering surface planted trees when they were six years old did not benefit the trees.

Growth and Developmental Studies

The various aspects of growth and development of root, stem, leaf, spadix and nut have been studied in detail and the following are some of the important findings:-

(a) **Root:** The root system of the coconut has been studied in detail from a germinating nut to a full grown tree in respect of the number of roots, their spread disposition and functions in the loamy soils. A well developed root system is associated with a good crown.

(b) **Stem:** The development of the stem from the seedling stage to an adult tree has been studied in detail in relation to depth of planting, soil and munuring. The trunk of the coconut is seen to form when the seedling has produced about 12 to 18 leaves. In the first few years of growth the stem gradually increases in thickness, then there is some reduction and more or less uniform girth is maintained thereafter. The rate of growth and girth of the stem is to some extent affected by rainfall, cultivation, manuring, soil types and depth of planting.

(c) **Leaf:** i) The number of leaves varies according to the age of the palm and the rate of production of leaves. In one-year-old seedlings generally seven to nine leaves are formed. The number increases gradually to 30 or 35 in middle aged trees.

ii) The rate of production of leaves varies from month to month and to less extent from year to year. It is slow during summer (February to May) and rapid during September to October.

(d) **Floral Biology:** The age of the trees at first flowering, production of spadices or inflorescences and its relation to season, abortion of spadices, the duration of the male and female phase, the chances for cross and inter-spadix pollination, pollinating agents, nectar secretion in the male and female flowers, germination of pollen etc., were studied, as also the effect of cultivation and manuring on flowering. The important findings are summarised below.

i) The age at which the tree flowers varies according to the type of palm, soil and climatic conditions. The typical West Coast variety takes about 7 to 10 years for first flowering in uplands while it flowers in about 5 years in coastal tracts.

ii) The rate of production of spadices depends upon the rate of production of leaves.

iii) The abortion of spadices often met with in the coconut has been traced to the prevalence of droughty conditions 16 months prior to its opening i. e., at the time of the formation of the branches of the spadix.

iv) On an average, the male phase lasts for about 18 days. In the typical West Coast variety cross pollination is the rule though inter-spadix pollination

is possible to a limited extent in the summer months.

v) Production of female flowers is low from September to January and is high during June and July.

(e) **Button shedding:** The shedding of female flowers or 'buttons' is of comon occurrence in the coconut and is of great economic importance as it has a direct bearing on the yield of nuts. The shedding percentage is usually high and goes up to even 90 per cent in some cases. The causes for ths shedding of buttons are not still understood, but studies on certain aspects have already been undertaken and valuable data gathered. Observations in regard to shedding of buttons in relation to the bearing nature of trees, varieties, seasons, cultural and manurial operations etc., have shown as follows:

i) Shedding of buttons is spread over a period of six to seven weeks after the opening of female flowers with the maximum shedding during the third and fourth week.

ii) Shedding practically ceases two months after the opening of female flowers.

iii) In low yileders, shedding is very rapid and is almost over during the first fortnight of opening of female flowers.

iv) About a third of the buttons shed in the ordinary tall variety of the West Coast were with all the three or two cells distinct while the remaining two thirds were with one cell developed. It is just the reverse in the case of the World Variety trees.

v) Among the foreign varieties, the percentage of shedding ranged from 77 to 98. Maximum shedding occurs in Fiji and Cochin China varieties and minimum in Ceylon and Laccadives.

vi The shedding of buttons is high during August, September and November.

vii) Regular cultivation appears to reduce shedding of buttons to some extent.

viii) Manuring decreased shedding only to a limited extent.

The belief that button-shedding is due to defective pollination and fertilisation was not found to be correct. Artificial pollination did not increase the setting percentage. Shedding could not also be definitely attributed to any causative fungus or micro organisam.

(To be continued.)

From "The Indian Coconut Journal"

Prospects for the Soap Industry

THE coconut grower cannot but take a keen interest in the fortunes of the soap industry, for it is one of the main consumers of coconut oil. It may not be incorrect to say that the interests of the coconut grower and of the soap-maker are intertwined. We, therefore, make no excuse for publishing below extracts from the presidential address delivered by Rao Sahib A. K. Menon at the first annual conference of the South India Soap Makers, Association held at Calicut on the 2nd and 3rd May, 1948:-

The quantity of soap produced in India during 1912-1918 was about 22,000 tons and there was during this period an annual import of about 18,500 tons. The demand for soap after the first World War began to go up and as Indian factories were not able to cope with this, soap was imported from foreign countries. There was a steady increase in the imports which reached the peak in 1920-21, when the value stood at over two crores of rupees, the bulk of the imports being from the United Kingdom. Japan had a good share in the business accounting for over 10 percent of the imports in 1933 as against almost nil 20 years previous to it. The Panel on "Oils and Soap Industries" of which I was a member estimated the total output of soaps in Indian factories in 1944 at about 140,000 tons, although the productive capacity was over 160,000 tons. There has been a steady fall in the imports consequent on the establishment of large soap factories in India. During the late war, imports were greatly restricted and after the termination of the war, the imports are negligible due to curtailment of production because of the deterioration of the raw materials position and to very rigid export control. The production in the United Kingdom which was about 80 per cent of the prewar output has declined to 63 per cent of the prewar figure. The competition from synthetic detergents the production of which is on the increase is another factor which has contributed to the lower output of soap.

Increased Production

The Panel on "Oils and Soap Industries" has recommended that the production of soap should reach a target of 300,000 tons within 5 years. This figure is within easy reach, provided the raw materials and other essentials are made available. Soon after the war, there has been an acute shortage in the world supply of caustic soda which has affected our country very badly. Soap factories have not been able to work to capacity with the result that there is a great fall in the supply of soap, particularly the laundry variety which is in large demand

The per capita consumption of soap has been steadily increasing. It was about ¼ lb. thirty years back and during the war it was about ¾ lb. When the target of 300,000 tons is reached, India would be consuming about one and half lbs. to 2 lbs. of soap per head, a figure much below that of America and European countries.

Raw Materials

Coconut Oil: Coming to the subject of raw materials, difficulties in getting adequate supplies at reasonable rates have stood in the way of increased production of soaps. Coconut Oil which is the oil *par excellence* for soaps was freely available before 1941 at a price ranging from Rs. 75 to Rs. 100 per candy of 656 lbs. equivalent to Rs. 235-340 per ton. Since 1941, there has been a sharp rise in the price of this oil after the Japanese invasion of the coconut areas in the far East. The price shot up to Rs. 534 per candy (Rs. 1835 per ton) in 1946. The Government of India had to step in at this stage and fixed the floor and ceiling prices in December 1946 at Rs. 1230- and Rs. 1390- per ton respectively in Cochin. Since the position was getting easier, the Government of India considered it advisable to remove the controls from the 20th June 1947. The immediate reaction was a shooting up of the price in Cochin to over Rs. 2000- per ton. But soon after, with the arrival of a few shipments of copra and coconut oil from the Philippines and prospect of import from Ceylon the price of oil began to tumble down and reached the lowest figure of about Rs. 950- per ton in February 1948.

One of the principal causes for this slump was the poor demand from soap-makers who could not get adequate supplies of caustic soda. Transport difficulties by rail and steamer unsettled conditions in the consuming markets in India and Pakistan were other contributing factors. Towards the beginning of March, price of oil recovered due to intensive purchases by soap factories and other consumers all over India. Permits for the import of caustic soda were issued by the Chemical Directorate to genuine parties. This had the effect of easing the situation and caustic soda was released by the black marketers at considerably lower rates. This also reacted favourably on the price of coconut oil which is now about Rs. 1380- per ton and showing an upward tendency. As the season for the arrival of copra is about to close with the approach of the monsoon, the price of the oil is sure to keep at a high level unless supplies are augmented by imports from Ceylon and the Philippines.

Alarmed by the rapid fall in the price of coconuts and coconut products, the Indian Central Coconut Committee of which I have the honour to be the Vice-President has realised the need for considering the question of the stabilisation of the prices of coconuts and coconut products with a view to protecting the interest primarily of the

cultivators who are entirely dependent upon the coconut for their livelihood. The interests of soap factories and other consumers have also to be safe-guarded so as to avoid a repetition of the conditions prevailing in the latter part of 1946. We have with us today, Mr. Gopalan, Secretary of the Indian Central Coconut Committee, who will be able to place before us the relevant features of the scheme. At the momet, coconut oil is in short supply and unless there are imports to make up the deficit, soap factories will be hard hit which is a pity since the supply position of caustic soda is getting easier.

Caustic Soda

The position of this is improving in so far as permits are now being issued to bona fide merchants, factories and associations to import it from America and elsewhere at a rate not exceeding Rs. 56- per cwt. Shipments have been received and some are on the way. Unless adequate supplies are available, soap factories cannot take advantage of the raw materials available in the country and there is bound to be a reduction in the volume of business. Further, we should start an export drive so that our products are sold in larger quantities in adjacent overseas markets which are already importing soaps from India. We should also explore other markets through the aid of our Trade Commissioners. Unless we take prompt action, we will be left in the lurch, and our competitors will have the upper hand. For the production of 300,000 tons of soap within the next five years we should have about 42, 000 tons of caustic soda. The existing factories which have a productive capacity of over 12,000 tons per annum are not producing even a fourth of it. Permits have been issued for importing new plants. Let us hope that these will start production within a reasonable time and India will be self-sufficient in the supply of this basic material required by the soap and other industries.

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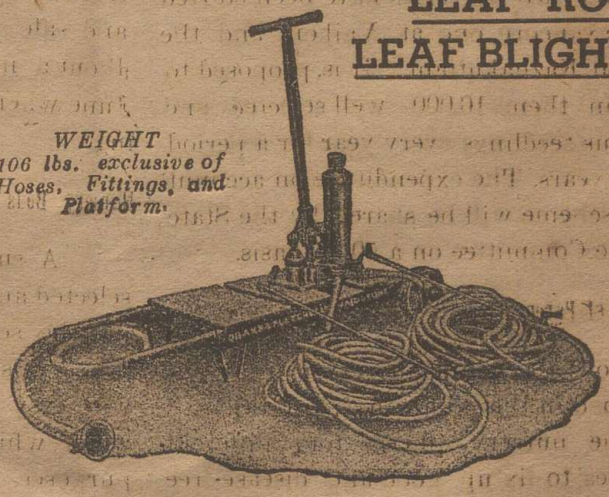

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Raising a Coconut Nursery

(By M. Kesava Das, Coconut Nursery Officer, Vaikom)

A COCONUT seedling normally takes 5 to 8 years to commence bearing. It is, therefore, absolutely necessary to plant only properly selected seedlings. But such seedlings are not always available in the market to meet the increasing demand of the growers. It is with the object of supplying this want that the Indian Central Coconut Committee has, in collaboration with Provincial/State Governments, launched schemes for the establishment of coconut nurseries in various parts of the country. Under such a scheme two nurseries have been started in Travancore, one at Vaikom and the other at Kazhakuttam. It is proposed to raise in them 10,000 well selected and vigorous seedlings every year for a period of five years. The expenditure on account of the scheme will be shared by the State and the Committee on a 50: 50 basis.

Selection of Parent Trees

How a coconut nursery is raised is described in the following paragraphs.

The nursery officers tour different localities to fix up good and disease-free seed centres with ideal parent coconut trees. They select healthy, vigorous and high yielding trees of an age ranging between 30 and 45 years. Trees with nuts of medium size and spherical shape are alone selected. They are serially numbered and marked with tar. The harvesting of seednuts is done during the summer months, that is, from February to June. When the nuts become fully mature, they are lowered in bunches from the tops of the trees by means of a rope; they are not allowed to drop down from the trees The seednuts so collected are dipped in 1 per cent Bordeaux mixture, packed in gunny bags with tree-war labels thereon, and removed to a place near the nursery. On each nut is marked the serial number of the respective parent tree and the seeds are preserved in a cool and safe place in an erect position for about a month or more till the middle of June when they are taken out for planting.

Nursery Beds

A suitable place for the nursery is selected and prepared properly for planting the seednuts. The best place for a nursery is a plot consisting of sandy soil with easy access to some source of fresh water which can be used for irrigation purposes. Sandy soil is preferred because it allows free drinage of water and is free from white ants which are a menace to coconut nurseries. The nursery area is so selected as to be situated on an elevated place; this helps to avoid stagnation of water. Such an area is open and free

from the shade caused by the overhanging boughs of trees.

Sowing Seednuts

The planting is done during June so that the seednuts may get the full benefit of the monsoon. The seednuts are planted erect with the stalk-end up. The nursery is not manured because manuring makes selection impossible. They are planted in the beds in such a way that about 2 inches of the tops of the nuts are seen above the ground level and the nuts are fixed firmly in the soil. The spacing given depends upon the length of the period during which the seedlings are to remain in the nursery. When it is intended to distribute only sprouts, the nuts are planted close at distances of 8 to 10 inches between them. A distance of one foot is maintained between the rows. If the seedlings have to remain in the nursery for nine months or one year a spacing of 12 inches between the nuts is provided. A convenient size for the seed bed is 40 feet length and 5 feet breadth. Between beds a space of about 2 feet is left to facilitate the watering of the seedlings. To avoid overheating of the soil in summer, the beds are mulched. During the hot months the seedlings are shaded by means of coconut leaves. It is preferable to lay out the beds in a north to south direction. During the hot and rainless months, watering is done everyday or on alternate days according to the moisture content of the soil.

Germination and Selection of Seedlings

The seednuts begin to germinate from the third month after sowing. Those which germinate six months after planting are rejected. Early germination, that is, within three or four months after sowing indicates vigour of seedlings. The percentage of germination in the case of seednuts from well-selected parent trees is generally found to be about 95. In other cases it is somewhere about 70 to 80. The vigour of the seedlings when they are six to nine months old is judged by the number of green leaves they have and by their girth at the base near the collar. The early splitting of leaves into leaflets is another indication of good vigour. Those seednuts which do not germinate even after six months are removed from the beds.

The nursery is always kept free from weeds. If any pest or disease is found to affect the nursery, immediate control measures are adopted. The seedlings become ready for distribution when they attain the age of nine to twelve months. Care is taken to see that every seedling supplied is a well-selected one. Even early germinated seedlings are subject to proper selection. For such selection, the seedlings should be sufficiently grown up. Selection cannot be made if sprouts are distributed. That is why sprouts are never distributed from departmental nurseries. Vigour is the criterion for selection. Seedlings which come out very late and which are thin, lanky, poor and diseased are removed and destroyed.

Before the selected seedlings are removed for distribution, they are sprayed with 1 percent Bordeaux mixture. The seedlings are taken out by removing the soil round about the nuts and then cutting the anchoring roots clean with a knife. After lifting the seedlings, they are kept in shade and packed properly for despatch. They are sold at concessional rates to bona fide coconut growers.

You Ask, We Answer

Raising of Green Manure Crops

Q. Which variety of green manure seed has been found to yield maximum and best quantities of green manure?

(a) per acre of land,

(b) per pound of seed.

A. The yield of green manure varies according to seasonal and soil conditions Among the various green manure crops tried on the Coconut Research Station, Kasaragod in South Kanara District *Crotalaria striata* has given the highest yield of about 20,000 lbs. of green stuff per acre. Sunnhemp, Cow gram, Dhaincha and Kolinji did well only in particular seasons.

Q. What is the amount of seed required per acre for the various varieties and what are their prices?

A. The following are the seed rate per acre for different green manure crops

(a)	Crotalaria Striata	25 lbs.
(b)	Sunnhemp	50 lbs.
(c)	Kolinji	25 lbs.
(d)	Dhaincha	35 lbs.
(e)	Cowgram	30 lbs.

The prices of these seeds vary from place to place and season to season.

Q. What is the time required for flowering?

A. Most of the above green manure plants flower in about three to three and half months after sowing.

Q. Which is the season best suited for sowing?

A. The green manure seeds are best sown in the West Coast with the pre-monsoon showers in April-May. They can be incorporated into the soil towards the end of the South-West monsoon rains or during the North-east monsoon in the case of late crops.

Q. What is the method of raising fresh seed for next year's use and area of crop that should be preserved for obtaining, say, 100 lbs. of seed?

A. A portion of the crop may be left for seed purposes To get good yields the plants in this field should not be over-crowded. The yield from an acre depends upon a number of factors. An acre will yield about 100 lbs. of seeds.

Q. When is manuring with Ammonium Sulphate, Ash, Bonemeal etc. best done--before or after such green manure cultivation, whether in March-

NEWS & NOTES

SEEDLINGS FOR PLANTING

THE planting season for coconut (July November) is fast approaching and growers are naturally on the lookout for seedlings of guaranteed quality. As readers of the "Bulletin" are aware the Indian Central Coconut Committee is financing jointly with some Provincial and State Governments, coconut nurseries in the predominantly coconut-growing regions. These nurseries are located at the following places:-

Vaikom and Kazhakuttam	Travancore State
Pattukottai, Samalkot & Pattambi	Madras Province
Arsikere	Mysore State.
Puri	Orissa Province.
Irinjalakuda	Cochin State.

Quality seedlings for planting during the coming season will be available for sale at all the above nurseries except the one at Pattambi which was started only in September, 1947. Intending purchasers are requested to register their demands with the officers in charge of the above nurseries and not address their enquiries to the office of the Indian Central Coconut Committee. The addresses of the officers concerned are given below:-

Travancore State

1. The Graduate Assistant, Government Coconut Nursery, Vaikom.

2. The Graduate Assistant, Government Coconut Nursery, Kazhakuttam.

April before sowing green manure seeds or after ploughing them in, in July?

A. Ash and bonemeal may be applied before the sowing of the green manure crop. Ammonium sulphate may be applied at the time of incorporating the green manure crop.

Q. Will land get debilitated by cutting away the green manure when it flowers and using the same elsewhere the sowing being done without the addition of any fertiliser?

A. Green manure crops are generally grown in the land which it is proposed to improve. Most of the green manure crops recommended being leguminous are known to enrich the soil by fixing atmospheric nitrogen through the bacterial nodules present in their root system and also by the shedding of the leaves and the plant residues (root etc.) left after cropping.

(More detailed information on specific points is better obtained from the Agricultural Officers of the localities concerned.)

Madras Province.

1. The Assistant in charge, Government Coconut Nursery, Agricultural Research Station, Pattukottai (Tanjore District).

2. The Assistant in charge, Government Coconut Nursery, Agricultural Research Station, Samalkot (E. Godavari District).

3. The Assistant in charge Government Coconut Nursery, Agricultural Research Station, Pattambi (Malabar).

Mysore State.

1. The Assistant Botanist, Government Coconut Nursery, Arsikere.

Orissa Province.

1. The Overseer, Government Coconut Nursery, Agricultural Research Station, Cuttack.

Cochin State.

1. The Agricultural Assistant, Coconut Nursery Scheme, Irinjalakuda.

As the number of seedlings available for the present season is limited, growers are requested to ask only for the absolute minimum of plants required by them. The sale price per seedling has fixed at 8 annas.

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GREEN MANURE FOR COCONUTS

Readers' attention is invited to the popular feature "You Ask, We Answer" in this issue. We have answered there a number of questions regarding the application of green manure to coconut trees.

Travancore growers will be interested to learn that the State Department of Agriculture has made arrangements for the sale of Sunnhemp seeds at the Manure Depot, Shencottah and the Central Seed Store in Trivandrum City at 4 (four) annas per pound. Arrangements, it is understood, have also been made for stocking them for sale at the offices of the Agricultural Inspectors, Kottayam, Perumbavoor, Moovattupuzha, Thiruvella, Punalur, Alleppey and Quilon, the offices of the Agricultural Demonstrators at Thodupuzha, Vaikom, Haripad, and Kayamkulam and the office of the Lift Irrigation Special Officer, Alwaye.

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DEMONSTRATION WORK IN COCHIN

The Administration Report of the Cochin Department of Agriculture for the year 1122 M. E. (1946-47), just received, contains an interesting statement of the results obtained from demonstrations on cultivators' plots regarding the cultivation of coconuts. We are reproducing below the statement and earnestly hope that growers round about the demonstration plots will visit them and by copying the cultivation methods adopted there, get better yields from their own trees.

Results of Coconut Demonstration 1122- Number of trees under Experiment in each centre-15.

Serial No.	Name of Centre	Name of owner	Net Yields in 1121	Net Yields in 1122	Remarks
	CHITTUR TALUK				
1	Chittur	Mr A. Ponnu Menon	467	525	
2	Manchira	„ N. A. Krishna Ayyar	774	1071	
3	Kulukkapara	„ A. Kandaswami Gounder	883	1109	
4	Pudur	„ Palaniswami Gounder	792	848	
	TRICHUR TALUK				
5	Thaniam	„ K. K. Muhamed	825	984	
6	Vallachira	„ K. Raman	835	802	
7	Trichur	Deacon M. O. Verghese	650	846	
8	Kanimangalam	Sry. M. K. Thressia	550	774	
	MUKUNDAPURAM TALUK				
9	Thekkumkara	Sry. P. Parukutty Amma	522	679	
10	Kuzhikkacherry	Mr. A. Kunhuvareed	797	550	
11	Kodakara	Sry. V. V. Rosa	888	992	
12	Chalakkudy	Mr. P. Divakara Menon	577	570	
	CRANGANUR TALUK				
13	Lokamaleswaram	„ P. G. Ranga Shenoy	581	652	
14	Edavilangu	„ V. A. Mammali	613	906	
15	Eriyad	„ N. C. Chathukutty	590	564	
16	Azhikode	„ V. M. Abdur Rahiman	770	835	
17	Methala	„ T. K. Manuswami	809	938	
18	Pullut	„ P. Rama Menon	691	1049	
	COCHIN-KANAYANNUR TALUK				
19	Narakkal	Village Court Compound	3349	3538	60 trees are under experiment.
20	Mulanthuruthy	Mr. M. K. Daniel	517	916	
21	Thiruvankulam	„ C. K. Varkey	1156	1404	
22	Eroor	Sry. A. Lakshmikutty Amma	1510	1602	

MARKET REPORT

(MAY 1948)

Cochin, Alleppey and Calicut

ALTHOUGH the month opened somewhat shakily, almost belying the expectations created by the previous month-end, prices began to look up from the 2nd week and then may be said to have described a parabola by the time the month closed. The highlights of the month were witnessed when oil was quoted at Cochin on the 15th and 17th at Rs. 1423-10-0 and Rs. 1413-6-0 per ton respectively. On the 17th, 18th and 19th copra in the same market was quoted at Rs. 954-12-0 per ton. Coconuts were quoted throughout the month except on two or three days at Rs. 130 or above, the highest price of Rs. 135- being quoted thrice, on the 1st, 4th and 19th of the month.

In the Alleppey market the highest price for oil was obtained on the 14th and 15th when it was quoted at Rs. 1368.

A downward trend was noticed from the middle of the month and this has been explained by the fact that consignments to North India could not be booked freely on account of unsettled conditions in Hyderabad.

The end of the month, however, showed a tendency for prices to rally round.

The following were reported to be the prices for the three markets on the 3rd May:-

Prices on 3-5-1948.

	Cochin	Alleppey	Calicut
	Rs. as. ps.	Rs. as. ps.	Rs. as. ps
Coconuts per 1000	132- 0-0	„	112- 8- 0
Copra per ton.	920-11-0	880-10- 0	872- 0- 0
Coconut oil per ton.	1308- 9-0	1248- 4- 0	1296- 0- 0
Coconut oil cake per ton.	289-13-0	247-15- 0	288- 0- 0

After a decline registered on the following two days prices picked up, and on the 8th May were said to be as given below:-

Prices on 8-5-1948.

	Cochin	Alleppey	Calicut
	Rs. as. ps.	Rs. as. ps.	Rs. as. ps
Coconuts per 1000	128- 0- 0	„	104- 8- 0
Copra per ton	930-14- 0	„	872- 0- 0
Coconut oil per ton	1321- 5- 0	1256-13- 0	1328- 5- 0
Coconut oil cake per ton	264- 4- 0	247-15- 0	288- 0- 0

Except for a slight drop on the 10th the 2nd week was on the whole good. On the 15th the price position was reported as follows:-

Prices on 15-5-1948.

	Cochin	Alleppey	Calicut
	Rs. as. ps.	Rs. as. ps.	Rs. as. ps.
Coconuts per 1000	133- 0- 0	„	115- 8- 0
Copra per ton	947-15-0	949- 0-0	960- 0- 0
Coconut oil per ton	1423-10- 0	1368- 0- 0	1408- 0- 0
Coconut oil cake per ton	285- 9- 0	256- 8- 0	288- 0- 0

The third week saw good and steady prices although there was an unmistakable bearish under current for reasons already stated.

The prices were reported to be as under on the 22nd May.-

Prices on 22-5-1948.

	Cochin	Alleppey	Calicut
	Rs. as. ps.	Rs. as. ps.	Rs. as. ps
Coconuts per 1000	130- 0- 0	„	107- 0- 0
Copra per ton	920-11- 0	906- 4- 0	936-0-0
Coconut oil per ton	1372- 8- 0	1325- 4- 0	1408- 0- 0
Coconut oil cake per ton	272-12- 0	230-13- 0	288- 0- 0

* prices as on 21-5-1948.

The bearishness became more pronounced during the last week and the price position on the 28th May was reported as under:-

Prices on 28-5-1948.

	Cochin	Alleppey	Calicut
	Rs. as. ps.	Rs. as. ps.	Rs. as ps.
Coconuts per 1000	132- 0- 0	„	99- 0 0
Copra per ton	920-11- 0	863- 8- 0	912- 0- 0
Coconut oil per ton	1321- 4- 0	1265- 6- 0	1360- 0- 0
Coconut oil cake per ton	245- 8- 0	218- 0- 0	304- 0- 0

Prospects of an early settlement of the Indo-Hyderabad issues have, however, helped prices to rally round again and there was a marked feeling of optimism abroad when the month closed.

ARSIKERE & TIPTUR

(MYSORE STATE)

THE following report on the conditions of the Coconut market in Arsikere and Tiptur during the latter half of April and the 1st half of May '48 has been received from the Chief Marketing Officer in Mysore:-

The wholesale prices of coconuts remained more or less the same throughout April and the first fortnight of May 1948, while the prices of copra has fallen down by Rs. 10 to 12 per satta of 10 maunds. But the prices of coconut oil have gone up from the 4th week of April.

The fall in the price of copra at both the places is attributed to stoppage of booking facilities to Northern India, via Harihar.

The price position during the period under report was as follows:-

III Week of April 1943.

	Tiptur.	Arsikere.
	Rs. as. ps.	Rs. as ps
a) Coconuts per 1,100 „	120 to 130	115- 0- 0
b) Copra, one satta of 10 mds. (315 lbs. „	170 to 180	155- 0- 0
c) Coconut Oil per maund of 24 lbs.		
I variety	15-0-0	12-0-0
II „	12-0-0	
III „	11-0-0	

IV Week of April 1943.

	Tiptur	Arsiklre
a) Coconuts per 1,100	120 to 130	115 to 120
b) Copra, one satta of 10 mds. (315 lbs.)	170 to 175	150 to 155
c) Coconut Oil per maund of 24 lbs.		
I variety	16-4-0	15-0-0
II „	15- 0-0	
III ,	13-12-0	

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I Week of May 1948.			II Week of May 1948.		
a) Coconuts per 1,100	120 to 130	120- 0- 0	a) Coconuts per 1,100	120 to 130	115- 0- 0
b) Copra, one satta of 10 mds. (315 lbs.)	158 to 165	150 to 155	b) Copra, one satta of 10 mds. (315 lbs.)	158 to 165	145- 0- 0
c) Coconut Oil per maund of 24 lbs,			c) Coconut oil per maund of 24 lbs.		
I variety	16-0-0	15-0-0	I variety	16- 4-0	15-0-0
II „	15-0-0		II „	15- 0-0	
III „	13-8-8		III „	13-12-0	

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