BULLETIN

Issued by the INDIAN CENTRAL COCONUT COMMITTEE

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BULLETIN

Issued by

THE

Indian Central Coconut Committee

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In this Issue

COVER PICTURE: On the way to the market to sell home-spun coir yarn

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Secretary,
Indian Central Coconut Committee,
Ernakulam.

Group photo taken on the occasion of the 17th meeting of the Indian Central Coconut Committee held at Ernakulam on the 8th April, 1953. At the centre is Hon'ble Dr. Panjabrao Deshmukh, Union Minister for Agriculture who inaugurated the meeting. To his left is Sri. K. R Damle, I. C. S., President of the Committee and to his right Sri K. P. Madhavan Nair, Vice-President. Seated in the extreme right is Sri. K. Gopalan, Secretary of the Committee.

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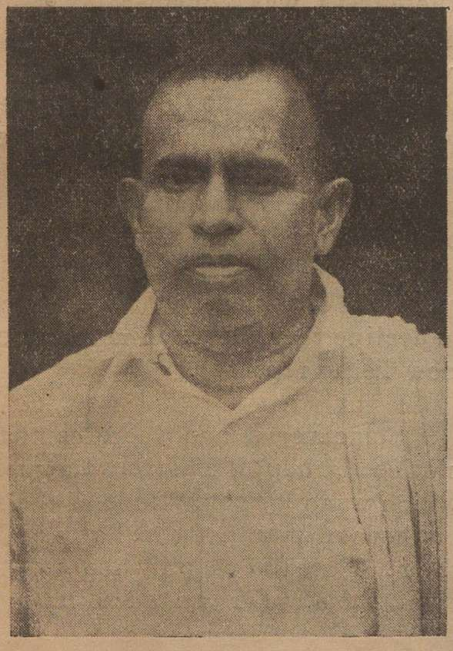
My Experiences As A Coconut Cultivator

BY B. M. PETER, MEMBER, INDIAN CENTRAL COCONUT COMMITTEE

I have often heard it said that, compared to other forms of cultivation, coconut cultivation is not so profitable. This is advanced as a reason by some for not bestowing sufficient attention on their coconut gardens. But my own experience is different. The economic depression of the period 1930 to 1940 affected the entire world of agriculture; and it affected coconut growers too. Extremes of seasons like excessive rain or inadequate rain also have affected coconut cultivation adversely.



THE AUTHOR

Today, India is a deficit country in the matter of coconuts and it is the duty of every coconut cultivator to endeavour to make her self-sufficient in the matter of the commodity. That would be the greatest service he could do to his country and to himself. We spend to-day a substantial amount of money for purchasing coconuts and coconut products from abroad. It should be remembered that we, coconut cultivators

are responsible for this drain of national wealth. I can boldly assert, from my long experience, that, if coconut cultivation is conducted in an intelligent manner, it would certainly be profitable. I have, therefore, pleasure to share with the readers of the 'Bulletin' my experiences as a coconut cultivator.

About twelve years ago, I decided properly to cultivate certain coconut gardens having in all about 2,083 coconut palms which had not been well cared for. The gardens had sandy soil. The first thing I did was to number the palms. The yield from them then was 41 nuts per tree per annum. As this yield was very poor, I arranged for the gardens to be dug and the palms to be manured. The entire area was divided into two, and the two halves were dug up in alternate years. Basins were dug round the palms and in each was put about 50 cft. of river sand and 12 cft. of backwater silt. The basins were then covered up and the garden levelled. The results of these operations began gradually to show themselves. During the next three years the yield from the trees went up to 53 nuts per tree per annum and for the three years following the avarege yield per tree per annum was 57. In the 10th year, the yield increased to 64.4 nuts per tree per annum. I had not omitted to clean the intervening channels and earth up the bunds. The cost of cultivation was Rs. 2-8- per tree. It may thus be seen that in ten years the yield of the trees went up by 50 per cent. It should be noted that to bring about this 50per cent increase it was not necessary for me to make any undue effort or incur any heavy expenditure. Calculating at the prevailing rate of Rs. 150 per 1000 coconuts, the income from each tree amounted to Rs 9-10-7, and deducting the cost of cultivation and manuring the net income was of the order of Rs. 7. Why then should coconut cultivators be indifferent? If the production of coconuts in India is stepped up by 50 per cent there is no doubt that we could achieve self-sufficiency.

But, in my gardens a group of 273, trees did not show any increase in yield as did the others. Their yield remained more or less at 41 nuts per tree per annum. I, therefore, applied to them, immediately after the rains, 15 lb. of prawn dust and 60 lb. of ash As a result, button-shedding in respect of these trees was considerably reduced. The yield at the end of the first year went up to 12,000 nuts from 11,193 in the beginning. At the end of the 2nd year it was 14,143 nuts and of the 3rd year 15,358. In the fourth and fifth years, the yield was only of the order of 13,765 and 12,805 nuts. Thus it was in the third year that the maximum yield was obtained. The yield began to decline thereafter. The manures are now being repeated.

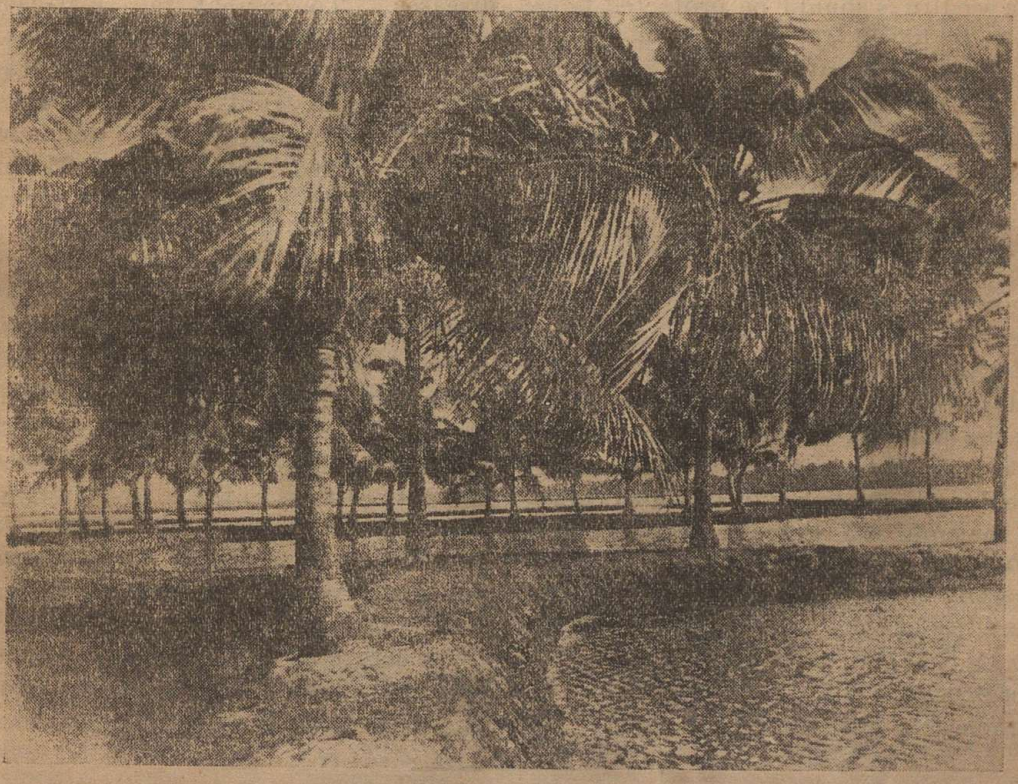
Some years ago there came to my notice a group of 27 trees the yield of which was very poor. None of the above methods of manuring had any effect on them. I used to get only about 456 nuts from them. On an examination of the plot, I observed that one particular tree was yielding well. I noticed, too,

that a cow used to be tethered to it. I resolved to try tethering a cow to the other trees as well, and began tethering two cows to two trees in turn. In three years, I could get 1,463 nuts from those 27 trees.

All this goes to prove that manuring should be done intelligently according to the requirements of the soil in which cultivation is conducted.

It has been my experience that cow's urine is very effective in checking button-shedding. I had a coconut palm which shed its buttons completely. I tried the application of all kinds of chemicals but with no effect. I then tried applying to its base 3 pots of cow's urine on alternate days for one whole month. I tried spraying its crown also with cow's urine. The results were astonishing. I got about 60 nuts from that tree this year.

I have found cultivating coconuts on bunds in low-lying lands, not used for paddy cultivation, a profitable affair. Investment on such cultivation resembles contribution to a "Chit fund". Some money is spent every year and at the end of 10 years we get something which goes on to yield for about 80 years. Every coconut grower who undertakes this form of cultivation can not only feel satisfaction at having discharged a duty, but can go on enjoying every year the fruits of his labours. Even if a coconnt grower dies, the



COCONUT CULTIVATION ON BUNDS.

palms he has planted help to perpetuate his name.

Coconut cultivation on bunds is done as follows:—

Having selected a suitable site, 3 ft. mounds are formed 30 ft. apart, each mound being made up of 135 cft. of sand. To prevent the sand from being washed away the mound should be given a surface dressing of clay. Plant in April-May one-year seedlings in pits formed on the mounds. It will be useful to add to the planting pits 3 tins of coir dust and one tin of ash. The selection of the seedlings should be done carefully. Seedlings sold by the Government coconut nurseries are best. After planting the seedlings, they should be held in position by tying them to stakes fixed for the purpose. The seedlings should be protected from cattle by fixing tree-guards round them. For three years after planting, 50 cft. of sand should be added to each mound and their sides earthed up before the commencement of the south-west monsoon or given a dressing of silt. In the third year dump into the spaces between the mounds 500 to 600 cft. of sand and connect them up to form a bund. Earth up the sides of the bund. The year after planting apply to each seedling 5 tins of silt and in the 3rd year 7 tins. In the 4th and 5th years apply 5 tins of ash and 7 tins of silt. If these things are done the palms will begin to flower at the end of 5 years, start to yield from the 8th year and come into full bearing in the 10th year. Every year the sides of the bunds should be earthed up so that the roots of the palms are not exposed. Thus, the width of the bunds gets increased and that of the intervening channels reduced. My experience is that it is inadvisable to fill up the inter-channels. There should be channels at least 3 ft. wide between the bunds. The yield of palms standing on bunds with channels in between them has been found to be higher than that from palms on bunds with the channels filled up. The bund method of cultivation permits of 70 trees being planted to an acre and the yield is of the order of about 8,000 coconuts per acre. The money spent on filling up the channels could more profitably be utilised to put up additional bunds.

Now I shall say a few words about the diseases of the coconut. We are now facing a situation in which coconut palms almost in the whole of Travancore-Cochin are affected by pests or diseases. To combat the leaf-eating caterpillar, the leaves of the palms should be sprayed with 5 per cent water-dispersible D. D. T. The leaf disease is controlled by spraying the palms with perenox mixed with water. I have found that the application of lime and ash and prawn dust could cure the yellowing disease to some extent.

As a coconut grower, I am only too well aware that the unexpected fluctuations in coconut prices, often upset our calculations. But it is impossible to have a steady price always. We have to take the bad with the good. It is, however, the duty of the Central Government to stop imports from abroad and our responsibility to work for it. I earnestly appeal to every Indian grower of coconuts to grow two coconuts where one grew before so as to make the country self-sufficient in the matter of coconuts in the near future.

Thaengapatanam

By P. M. Kochappa Menon, Coconut Propaganda Officer.

THAENGAPATANAM is a locality in the coastal area of Kuzhithura taluk in South Travancore situated 8 miles south west of the Kuzhithura town. Kuzhithura town lies on the 22nd mile along the Trivandrum-Cape concrete road.

It is predominantly Tamil speaking area and the name "Patanam" in tamil appears to singnify the existence once of a harbour here. But there is none at present, not even a landing place. In all probability, this might have been one of the innumerable small ports which existed all along the Indian coast in ancient times. This idea is strengthened by the existence of a canal running north to south through this locality and extending up to the cape. This water-way is almost out of use now but it must have been in olden days the only means of communication and water borne trade in the southern Travancore. The name of the place would seem to signify that this locality might once have been the chief importing centre for coconuts in southern Travancore, or the place where coconut cultivation was started for the first time in the area. As far as my enquiries go, Thaengapatanam was both a centre of coconut import and later on a centre of coconut cultivation in the south.

The name "Thaengapatanam" may easily lead one to believe that this is the most important and famous centre of coconut cultivation in the Travancore-Cochin State. But Thaengapatanam is almost a misnomer for the locality; there are far greater strongholds and better centres of coconut cultivation in the State.

I visited the locality on 12th March 1953 and acquainted myself with the methods of cultivation and level of production. I also addressed a large gathering of cultivators of the locality on the beach side and apprised them of the defects in cultivation and of the lines of improvement.

The salient features of coconut cultivation in the locality are as follows:

Soil

The soil is mainly sandy. It varies from sandy loam on the eastern side to pure sand at sea approaches. The soil on the eastern side of the backwater channel is comparatively better and the coconut trees there are better bearers. The area lying west of the canal is sandy promoting only a poor growth for coconut.

Coconut trees stand very close to each other. Two trees for every cent is the rule adopted. The thick planting forms a sort of canopy with crowded leaves at the top struggling for sun light. The natural consequence of this over-crowding is poor yield. Many trees do not bear at all. The average yield per tree is less than 10 nuts per annum.

Cultural and Manurial Practices

These consist of opening of beds round about the trees at the break of monsoon, applying small quantities of ash and 'Kuppamannu' (admixture of

soil and farm-yard manure) in the beds and finally giving one ploughing for the land at the close of the monsoon. The beds are kept open throughout the rainy season with the small quantity of manure lying exposed.

Pest and Diseases

There is no disease incidence but there is extensive damage from the Rhinoceros beetle. There used to be also occasional visitations of *Nephantis serinopa* in the coastal areas.

Improvements Suggested

The crowded planting practised is the most out-standing and foundamental defect. For proper bearing, the number of trees per acre has to be reduced atleast to half, *i. e.* 100 trees per acre. While observing this rule in fresh plantations thinning may be attempted in the existing plantations by careful removal of unhealthy and unproductive trees from here and there. This will assure greater exposure of the remaining trees to sun-light and induce better production.

The manuring practised is also very poor and inadequate. Even the application of small quantities of ash and "Kuppamannu" is not widely practised. The exposure of the manure in beds throughout the rainy weather causes great depletion of it. The soil is very deficient in organic matter and there is no means of assuring this in a coastal area. The soil is also likely to be deficient in nitrogen and potash. The only practical solution to make up the deficiencies is to grow some green manure crop like *crotalaria striata* or *crotalaria Juncea* at the break of the monsoon and turn it into the soil at the time of flowering along with muriate of potash at the rate of 2 lb. per tree. The green manure crop, if it happens to be a leguminous one, will be rich in nitrogen and it will be able to meet most of the requirements of nitrogen of the coconut tree.

Conservation of soil during summer should be the ultimate aim of the cultural practices adopted. The existing method is not very useful for the purpose. The serious affliction from drought during summer in such light soils can be mitigated considerably if either repeated summer ploughings (once every month from the end of November onwards) are practised, or if green manure crop grown during monsoon is used as an organic mulch in the beds round about the tree during the summer season and turned into soil finally at the outbreak of the succeeding monsoon.

The Rhinoceros beetle can be controlled by systematic cleaning of the area of all decaying rubbish, collecting all such rubbish in the farmyard manure pits and spraying once in every 3 months the farmyard manure pits with O. 1% B. H. C. (50% wettable gammaxene). If these steps are pursued vigorously and thoroughly in the locality, the Rhinoceros beetle trouble can be successfully controlled. This requires an organisation for the work. I have impressed on the local "Gramaseva Sanghom" the necessity of concerted action in manuring (including growing of green manure crops) and cultural practices for achievement of tangible results by the community of cultivators and the Sanghom authorities have appreciated this point.

The occational visitations of "*Nephantis Serinopa*" can be successfully controlled if organised attempt is made to spray the affected leaves immediately on outbreak with 1% D. D. T.

THE "JAPANESE METHOD" OF RICE CULTIVATION

IN the Japanese method of growing paddy you must:-

A. Grow stronger seedlings for transplanting.

B. Grow a better main crop.

The frist part must be done right or the second part will suffer.

The second part must be done right or grain yields will be no more than you now produce.

If both are done right your yields can be doubled or tripled!

GROWING SEEDLINGS BY THE "JAPANESE METHOD"

1. *Plan for fewer seedlings per acre:* Most farmers in India sow too many seeds. The amount sown depends in part on custom. A farmer today will plant his seed as his father did before him. But by this new method he can save seed which means, he can save money. Many good farmers plant only 20 pounds of seed for each acre to be put in paddy. Amount of seed sown will be different for different parts of India. Ask your local agricultural officer how much seed to sow on your land

2. *Make a Raised Seedbed:* You should plough paddy land right after the harvest. If ploughing is not done after harvest, the land should be dug up and clods broken.

Your nursery seedbed should be four feet wide and three inches above the level of the ground. A space one foot wide should be left between the beds. This allows you to work and weed the seedbed without injuring the plants.

For each acre you plant in paddy, 1/20th of an acre must be sown for seedlings.

You sow 20 pounds of paddy seed for each acre planted to the crop. This many pounds of seed should be sown in a seedbed of 1/20th of an acre. The seedlings grown in this area will be enough to plant 1 acre of land in paddy.

Stir into the soil one basket (30 pounds) of compost or cowdung manure for each eight feet of bed.

For each eight feet of bed sprinkle a double handful (1/2 pound) manure mixture. This mixture is made of equal parts of superphosphate and ammonium sulphate.

Smooth the soil, and then cover it with fine compost manure about 1/8th inch thick. Then cover the bed with a thin layer of ashes.

The bed is ready for the seed.

3. *Selecting good seed:* Get the best seed. Ask your Agricultural officer what seed you should use. Put these seeds into a Bucket of salt water. The poor seeds will come to the top. Skim these off and save only the heavy seeds in the bottom of the bucket for planting.

After the seeds have been selected place them into perenox mixed with water. Leave them in this mixture for 20 minutes.

4. *Planting the seed in the Nursery:* Two or three days before the rains, plant the seed.

Cover the seed with $\frac{1}{8}$th inch of the fine earth.

If rains do not come in time, water the bed by water cans.

Where there is canal and tank irrigation, this is not done and planting may be earlier.

5. *Caring for Seedlings:* Seven or eight days after your seedlings come up, go through the beds and carefully remove all weeds. This is important and must be done. If proper amount of water is given, and weeding done, strong seedlings will be ready early. Your seedlings will be ready to transplant when the sixth leaf has formed. The plant will be 6 to 8 inches high at this time. In no case should your seedlings be left in the bed after they are ready. Late transplanting lowers yields. It is better to transplant early than late.

Growing the paddy Crop By the "Japanese Method"

1. *Preparing the field:* You should plough your paddy fields right after the harvest. Following the first monsoon rains the field should be ploughed again. Your yields will be higher if a green manure crop is grown for turning under before transplanting.

Be sure to fill all cracks in the bunds. Pack these well to stop rats and crabs.

To get more out of the land, you have to put more in. Manure must be used to get larger yields. Fifteen to twenty cartloads of compost or cowdung manure is needed for each acre. This manure should be ploughed into the land before puddling. One hundred pounds of ammonium sulphate mixed with 100 pounds of superphosphate (or bonemeal) may be used on each acre, but local officers should be asked about this.

Transplanting Seedlings: The Japanese treat each seedling as a baby. They pull them out one at a time and are careful not to bruise the stem or break the roots. If the soil they are pulled from is hard, it must be broken with some tool so that the roots can be saved. You should not jerk or hammer plants to remove soil.

When pulling up the seedlings, weeds must be removed. Weeds

transplanted in the fields grow faster than rice and lower the yields of grain.

The Japanese have shown that planting 15 to 20 seedlings to a hill is a waste. Four is the most that should be planted. In Bombay where the method is yielding twice as much as the local method, farmers using the Japanese method never plant more than four seedlings to the hole.

By this method the seedlings are planted straight up rather than at an angle. You hold your fingers along the side of the plants and push them into the soil ahead of the seedlings. This way your fingers make away for the tender roots. The more roots you save the stronger your plants will be.

Your plants should be set in 10 inches squares. This is done by planting them in straight lines 10 inches apart in the line. There is 10 inches between each line.

To speed up planting have two workers hold a long string in a straight line, and on this string put markers 10 inches apart. The seedlings are placed in the soil at markers. Then the string is moved over 10 inches and the planting at the markers is done again.

3. *Caring for the Crop:* No weed should be allowed to grow in the crop. After the crop has grown for two weeks the farmer must go through and remove all foreign growth. To get the highest yield, you may use 100 pounds of ammonium sulphate mixed with 100 pounds of superphosphate one month after transplanting (get local recommendations). You should work this manure into the soil around the roots of the plant. Working around the roots increases yields.

From time to time you should move a soil scratching tool between the plants. About two weeks before flowering, field work should stop. Any more cultivation will lower yields.

—*Indian Farming.*

Always select the best seed. Manure the land and cultivate systematically You are sure to get the best results.

NIGHT FIRES ON COCONUT ESTATES

By M. L. M. Salgado.

Acting Director and Soil Chemist, Coconut Research Institute, Ceylon.

On many a coconut estate, it is a common sight to see bonfires blazing a trail of destruction of valuable organic matter that should be returned to the soil either to add to the supplies of humus or used as mulch for the conservation of soil moisture.

In spite of all the propaganda carried out on the value of organic matter, in the course of our advisory work, this practice of starting night fires appears to continue. It may be the result of a desire of some planters to keep their estates like parks and of some who hope to collect ash to be used as supplementary potash manures.

There is also a belief that such bonfires attract the coconut black beetle, the red weevil and the moths of the coconut caterpiller which are thereby destroyed. Needless to say these pests can be controlled by other more effective methods of plant sanitation.

Out of the debris of a coconut estate the only material that should be disposed of by burning are coconut stumps. These should never be left to decay openly, and under no circumstances should be buried, or used as fence posts or as reinforcements on drains, or for check dams. As should be known by all coconut planters, coconut stumps form one of the most prolific breeding grounds for the coconut black beetle.

In fact this reprehensible practice of using coconut stumps for these illegitimate practices seem to be widespread in view of the shortage and high cost of fence posts.

Butt ends do not serve as a breeding place for the black beetle unless buried and covered with soil. None the less when left in heaps and desiccated they decay very slowly and may therefore be burnt in small heaps, the ash collected and used as manure.

The rest of the coconut frond (the so-called coconut branch) consisting of the midrib and the leaflets should under no circumstances be burnt, but utilised in the following ways:

(a) At the time of manuring, may be cut into short pieces, and added to the manure circles before covering with soil.

(b) Mulching round the palms. When done after manuring this prevents the appearance of the usual heavy weed-growth on the manure circles, and at the same time helps to conserve soil moisture during dry periods. These mulches decay in due course and can be renewed.

—*Ceylon Coconut Quarterly.*

Malayan Copra and Coconut Oil Industry, 1952.

IN 1952 Malaya exported 61,978 tons of copra, a decrease of 27,893 tons from the 1951 figure of 89,871 tons. Of the 1952 total, Singapore re-exports accounted for 46,235 tons against 70,764 tons in 1951.

Malayan exports of coconut oil in 1952 amounted to 68,802 tons against 68,335 tons in 1951. Singapore accounted for 23,998 tons, an increase of 6,328 tons over 1951.

The United Kingdom was the main buyer of Malayan copra with a total tonnage of approximately 16,653. France bought 8,080 tons, Sweden 8,000 the Netherlands 6,650, Spain 5,074 tons and Germany 4,650 tons.

Malayan imports of copra in 1952 amounted to 90,209 tons (100,905 tons in 1951) of which Indonesia sent 79,519 tons and North Borneo 6,793 tons.

Towards the latter part of the year increasing difficulty was experienced by oil millers in Singapore in obtaining sufficient copra supplies. Quite apart from the fact that coconut oil manufacturers were, to a certain extent, in competition with the FOB dealers handling copra for re-export, coconut oil millers were not working in most cases at full capacity as they needed more supplies.

According to the Chairman of the Singapore Coconut Oil Millers' Association Malayan coconut oil manufacturers had experienced a difficult year, with the milling industry hampered by the Indonesian Government's regulation which requires copra imports from Idonesia to be paid for in advance, in cash. He points out that the tying up of importers' capital for weeks has had the effect of limiting imports of copra into Malaya at a time when the coconut oil industry could use all the copra supply available. At the same time upcountry estates producing copra have still not fully recovered from the damage sustained during the Japanese occupation. If this regulation is with drawn or modified, he forecasts that an increase of copra imports up to 50 per cent will be possible in 1953.

Referring to the future prospects for Singapore coconut oil exports the Chairman said that there was now a certain amount of competition in the Burmese market from Ceylon and seasonally from locally produced oils.

India's licensing system for coconut oil had a certain effect on the market there, but Hongkong and Middle East Markets remained a free field.

Reuters Commercial & Financial News.

July Operations In Coconut Gardens

IT will be good to repeat in July certain items of work done in June, namely cleaning thecrowns of coconut palms, extracting RHINOCEROS BEETLE from their holes and filling the holes with a mixture of BHC and sand. As this is a rainy month newly planted seedlings could be manured during it, as in June. Only fully mature coconuts should be harvested in July and they should, as far as possible, be sold only after the rains.

It is in July that weeding takes place in coconut nurseries and newly planted coconut gardens. The weeds should be uprooted by using a fork for the purpose. If any soil has been washed off the nursery beds it should be put back and the beds repaired. If the pits in which seedlings have been planted are filled with water, it should be baled out.

It is during July that trenches are prepared for growing vegetables which bear fruit in September-October. The trenches are dug early in July, filled with rubbish and cattle manure and covered up. At the end of the month the seeds are dibbled. Vegetables usually grown now are cucumber, ash gourd, gourd etc. One line of vegetables can be grown between every two rows of palms. They will cease to yield with the end of the north-east monsoon.

It is in July too that the cutting of sweet potatoes and Chinese potatoes are transplanted.

The tubers of these are to be sown in May. They send out shoots which are cut and transplanted as follows:-

Low raised beds, 3ft. wide and of convenient length are prepared, The shoots of the sweet potato are cut so that each is a foot long and planted on the beds one foot apart. Three rows of shoots can be planted on a 3- feet wide bed. The shoots of the Chinese potato are cut so that each is 6" long and planted 1 foot apart. Three rows of this also can be planted on a 3- feet wide bed. If the days following the transplantation are hot the shoots should be shaded and watered with a watering can.

After the transplanted shoots have begun to put forth fresh leaves, a mixture of ash and paddy husk should be applied to the beds and earth added to them, twice at an interval of one week. Ash improves the quality of the tubers and husk the texture of the soil.

You Ask, We Answer

Variation in yield of Coconut trees receiving same cultural and manurial treatment

Question: My coconut garden has red loamy soil, which cakes up in the sun but gets loose when it comes into contact with water. In certain portions of the garden where the soil is clayey the trees do not yield well.

I apply two tins of cattle manure and eight tins of river silt to each tree every year besides cultivating the garden twice annually. Although I give uniform cultural and manurial treatments to the trees, some of them yield well, while the others do not. Some bear in alternate years and in a few cases all except three or four buttons fall off. Cowpea and plantains are raised as inter-crops in the garden.

Could you please enlighten me as to why the palms react in the manner described above and tell me what I should do to ensure better yield from them?

Answer: The soil in your garden appears to have a large percentage of clay fractions and, therefore, it would be advisable to apply some coarse river sand so as to improve the texture. The sand may be applied throughout the entire garden and worked in by deep digging. The trees should also receive superhosphate or bone meal at 2 lb. per tree and also good ash at about 40 lb. in addition to cattle manure and river silt. There should also be proper drainage facilities. If facilities exist trees may be irrigated in summer every year.

The variation in yeild from tree to tree is probably due to the fact that no proper attention was paid in the matter of selection of seedlings at the time of planting. Only selected seedlings from high and regular yielding palms will give high yield.

Control of Rhinoceros Beetle

Question: The central shoots of a few coconut trees in my garden are being cut by some pest, which it has not been possible to locate and identify. I am applying salt to the crown of the trees as a remedial measure. What further steps should I take to prevent attack by the pest?

Answer: The insect causing damage to the coconut trees is evidently the Rhinoceros or black beetle. The usual methods of control of this insect are removing the beetle from the crowns with a beetle hook, applying sand mixed with B. H. C. powder at 5% strength to beetle holes and axils of tender leaves and spraying B .H. C. 0.01 per cent to manure heaps and compost pits where the beetle generally breeds. B.H C.is sold under the proprietory names as Agrocide. Hexyclan, Hexidole etc., and can be had from dealers of insecticides. You may also contact the local Agricultural Demonstrator of your taluk in this matter.

News and Notes

THREE British entomologists, Messrs. E. S. Brown, F. J. Simmonds and L. D. E. P. Vesy-Fitz gerald have discovered a method of controlling the Melittomma beetle which has caused great devastation to coconut plantations in the Seychelles by the use of an insecticide. The larve of the beetle bores through the soft wood of the palm, set up fermentation which causes the easy and ultimate destruction of the tree. To destroy the larvae a hole is cut in the bark of the infected trees and a fumigant poison (paradichloro benzene has been found to be the most efficient) put into the hollow which is sealed off. After two months the fumigant, invading tissues of the wood, kills the larvae. Search for biological control of the beetle, continues.

The Melittomma beetle is not known to be a pest of the coconut palm in India.

* * * *

As already mentioned in the issue of the "Bulletin" for April 1953, the Indian Central Coconut Committee participated in the Health, Education and Industrial Exhibition, Kozhikode, which was held from the 11th to the 26th April 1953. On all the days of the Exhibition, the Agricultural Assistant of the Committee's Office gave talks on various aspects of coconut cultivation and invited visitors to go over to the Committee's stall and clear what ever doubts they might have regarding Coconut Cultivation. A large number of persons availed themselves of the opportunity.

* * * *

The members of the teaching staff of St. Agnes College, Mangalore, visited the Central Coconut Research Station, Kasaragod on the 28th April, 1953. They were shown round the farm and the various experiments in progress were explained to them.

* * * *

The work connected with the elctrification of the Central Coconut Research Station, Kasaragod started on the 28th April, 1953.

Remedy against white ant attack of Coconut Seedlings

Question: I have recently purchased 100 Coconut seedlings from the Nursery at Nileshwar. After planting them I find that they are being attacked by white ants and that a lot of havoc is being done by them. Please let me know what effective insecticide should be used, specifying the quantity to be applied to each seedling.

Answer: The soil round about the seedlings affected by white ant attack may be soaked thoroughly with a suspension of 0.01% B. H. C. which may be obtained from firms dealing in insecticides or from the agricultural departmental depot of your place.

x x x x

The Director of Agriculture, Madras, has reported that during the months of January, February and March, 1953, 5070 Coconut Seedlings were distributed among 85 growers form the different nurseries in the State functioning under the Joint auspices of the State Government and the Indian Central Coconut Committee.

The number of seedlings supplied from the nine nurseries in the State during the calendar year 1952, as furnished by the Oilseeds Specialist, Coimbatore was of the order of 1,51,875.

x x x x

According to reports received from the Director of Agriculture, Bombay State, 8,590 quality coconut seedlings were sold to the public from the Coconut Nursery at Kumta, during the 1952 planting season. Out of these 3,390 seedlings were utilised for underplanting in existing gardens and the rest for raising entirely new gardens in the Districts of North Kanara, Dharwar, Belgaum, Bijapur, Thana, Surat, Poona, Kaira and Hyderabad (Deccan).

x x x x

The Horticultural Assistant, in charge of the Coconut Nursery at Kahikuchi, Assam has reported that during the month of March 1953, 113 coconut seedlings were supplied among 10 growers from the Nursery. During 5 months from November, 1952 to March 1953, a total number of 674 seedlings were distributed from this Nursery, jointly financed by the Committee and the Assam Government.

x x x x

According to a scheme under the 5—year Plan in Travancore-Cochin the Coir industry in all its three stages, namely, collection and distribution of husks, production of coir goods and trade in coir goods, is to be organised on a co-operative basis. Green husks will be collected by co-operative societies set up for the purpose and sold to primary societies which will arrange for their retting and for the distribution of the retted husks among their members. The primary societies will also buy from their members the coir yarn produced by them. Central societies will arrange for the collection of the yarn from primary societies and for its storage and sale.

The husk collection societies and primary societies will be represented on the central societies.

* * * *

The Indian Central Arecanut Committee had announced a prize of Rs.2,000-for the successful invention of a simple and cheap time-saving machinery for the husking and slicing of arecanuts. That Committee has now notified that the last date for submitting entries to the Competition has been fixed as the 30th September, 1953, that a panel of judges will scrutinise the machinery at such time and place as the committee may dicide and that intending competitors should send in their entries to the Secretary, Indian Central Arecanut Committee, Kozhikode, before the 30th September, 1953

MARKET REPORTS

I. COCHIN, ALLEPPEY & CALICUT.

The daily prices of coconuts, copra, coconut oil and coconut oil cake at Cochin, Alleppey, and Calicut from the 11th April to 10th May 1953 are given below:—

Date	Coconuts per 1000			Copra per ton			Coconut oil per ton			Coconut oil cake per ton		
	Cochin	Alleppey	Calicut	Cochin	Alleppey	Calicut	Cochin	ppey	Calicut	Cochin	Alleppey	Calicut
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
11-4-53	170	160	152-8	1248-1	1222-10	1224	1858-7	1851-1	1872	353-13	337-12	336
12-4-53					Sunday							
13-4-53	*	*	*	*	*	*	*	*		*	*	*
14-4-53	*	*	*	*	*	*	*	*		*	*	*
15-4-53	170	160	*	1237-13	1205-9	*	1841-6	1855-6	*	353-13	337-12	*
16-4-53	170	*	155	1224-3	1205-9	1219-3	1815-13	1846-13	1856	353-13	337-12	336
17-4-53	170	*	152-8	1216-8	1197	1216	1807-5	1804-1	1856	353-13	337-12	336
18-4-53	165	160	149-8	1215-15	1179-14	1200	1803-1	1785-4	1840	353-13	336-14	336
19-4-53					Sunday							
20-4-53	165	*	145	1212-4	1179-14	1216	1824-6	1812-10	1856	349-8	333-7	336
21-4-53	160	*	145	1227-10	1197	1224	1828-10	1812-10	1856	349-8	329-3	336
22-4-53	160	160	145	1224-3	1197	1224	1824-6	1829-11	1856	345-4	329-3	336
23-4-53	160	*	142-8	1219-15	1205-9	1216	1820-1	1821-2	1856	341	329-3	336
24-4-53	160	*	142-8	1222-8	1222-10	1216	1824-6	1825-7	1856	341	329-3	336
25-4-53	160	460	142-8	1232-11	1239-12	1216	1841-6	1829-8	1856	341	324-14	336
26-4-53					Sunday							
27-4-53	160	*	145	1235-4	1248-5	1224	1849-15	1863-14	1856	332-8	324-14	336
28-4-53	160	*	142-8	1225-1	1222-11	1224	1832-14	1829-11	1856	332-8	331-12	336
29-4-53	162-8	160	142-8	1225-1	*	1224	1832-14	*	1856	332-8	*	336
30-4-53	160	*	142-8	1206-4	1205 9	1224	1803-1	1812-10	1856	332-8	312-1	336
1-5-53	*	*	142-8	*	1205-9	1201-10	*	1778-6	1840	*	316-6	336
2-5-53	160	150	145	1206-5	1205-9	1188	1794-8	1812-10	1824	323-15	316-6	316
3-5-53					Sunday							
4-5-53	162-8	*	145	1202	1231-3	1192	1798-12	1812-10	1824	323-15	316-6	312
5-5-53	160	*	145	1197-12	1214-2	1200	1794-8	1795-8	1824	323-15	316-6	320
6-5-53	160	160	148-8	1208-13	1231-3	1204	1811-9	1804-1	1840	323-15	307-13	320
7-5-53	160	*	148-8	1211-6	1239-12	1224	1815-13	1812-10	1848	323-15	307-13	320
8-5-53	160	*	147-8	1200-5	1219-1	1224	1798-12	1803-1	1832	323-15	311-3	320
9-5-53	160	*	147-8	1200-5	*	1224	1798-12	*	1832	323-15	*	320
10-5-53					Sunday							

* No Report

Trend of Coconut Oil Price in Cochin

(From Our Correspondent)

Cochin, 7th May, 1953.

SINCE my last report on the 11th April there was a fall in the price of Coconut Oil which lasted up to the 18th of the month, when it stood at Rs. 1803—1—0 per ton. This was the outcome of the easy conditions in the foreign markets, especially Colombo, and the uncertainly that prevailed in the commodity markets following the Korean Peace Negotiations. After the 18th April the price looked up to a certain extent at Cochin as a result of some favourable foreign demand and an improvement in the price at the Singapore market; and the price of Coconut Oil on the 27th ruled at Rs. 1,849—15—0 per ton. Thereafter there was, however, a further decline in the prices following a fall in prices at the Colombo market, and the price on the 5th May was Rs. 1,794—8—4.

An upward trend is noticeable from the 6th, on which date the closing quotation was Rs. 1,811—9—0. The market opened to-day with a quotation of Rs. 1,824—9—0 per ton of Coconut Oil This is the result of an improvement in prices at the Colombo and the London markets and an upward trend in the price of ground nut oil at Madras, consequent on large exports to Burma and shortage of ready oil stock in the market following the cut in electricity by the Madras Government.

As the demand for Coconut Oil from Bombay and North Indian Markets has gathered momentum the prices are expected to look up an appreciable extent, provided the conditions in the Colombo markets remain unaltered.

II. BOMBAY

The weekly wholesale prices of coconuts, copra, coconut oil and coconut oil-cake at Bombay during the month of April 1953 are given below:-

Date	Coconuts per 1000						Copra per candy of 22½qrs			Coconut oil price naked per quart.	Oil Cake per bag of 168 lbs.
	New			Old			Milling	Edible			
	Small Rs.	Medium Rs.	Large Rs.	Small Rs.	Medium Rs.	Large Rs.	Rs.	Rajapur Rs.	Alleppey Rs.	Rs.	Rs.
2—4—53	235	265	*	240	280	310	382	380	365	25- 4	28
9—4—53	235	265	*	240	280	300	380	390	365	25- 0	28
16 4—53	220	255	*	235	271	291	380	390	365	24-10	27
23—4—53	210	245	*	230	271	285	377	385	355	24-10	27
30—4—53	180	240	*	215	271	285	374	390	360	24-10	29

* Not available.

III COLOMBO

The weekly prices of Coconuts and Coconut products at Colombo during the month of April 1953 are given below:-

COMMODITY	UNIT	6-4-53 Rs. Cts	13-4-53 Rs. Cts.	20-4 53 Rs. Cts.	27-4-53 Rs. Cts
Fresh Coconuts (Husked) used for Copra making and local consumption.	Per 1000 nuts	170.00 to 175.00	170.00 to 175.00	170.00 to 175.00	170.00 to 175 00
Copra—Estate No 1 Quality at Buyer's Stores.	PerCandy of 560 lbs.	207.50	210.00	210,00	217.50
Desiccated Coconut—Wharf delivery or Buyer's stores—Medium and fine 50%.	Per lb.	0.50	0.51	0.55	0.56
Coconut oil—white, naked, wharf delivery	Per ton	1400.00	1,425.00	1400.00	1,450.00

Commodity	Unit	4-4-53 Rs. Cts.	11-4-53 Rs. Cts.	18-4-53 Rs. Cts.
Coconut (Husked) for export at Buyer's stores	Per 1000 nuts	345.00	320.00	320.00

Copra Trade Talks of A 'Slump'

Colombo, May 1.

THE decline in the production of coconuts and the consequent increase in the prices of coconut oil and desiccated coconut have combined to confine most of the export trade in coconuts to the processed form.

The higher prices have resulted in a slump in the coconut produce trade with India and Pakistan, which has now been diverted to the U. K. and Europe as these countries pay very much higher prices for these commodities.

A trade spokesman told the "Daily News" yesterday that this new trend had led to a decrease in the export of copra and shippers of copra were out of the market as a result.

He said that the present high prices were likely to prevail till the end of the year as there was no prospect of increased production of coconuts until then.

Oil millers had now no cause for complaint, he continued, and there was no necessity to press for a ban on the export of copra. In addition, the poonac market in India and Pakistan had also registered a drop so that large quantities of oil seed cakes were available.

He added that in any event, a change in official policy at this stage was unwarranted as the protective tariff, which the oil millers enjoyed, was sufficient to offset the competition from shippers of copra.

"Ceylon News" dated 7th May 1953.

IV. Malabar Markets

Arrivals and sales of coconuts and copra in the different markets in Malabar during April, 1953.

Commodity and Market	Carry-over	Arrivals	Sales	Balance
Coconuts (in thousands)				
Kozhikode	543	3,872	3,732	683
Badagara	481	2,197	1,328	1,350
Ponani	413	581	511	483
Tellicherry & Dharmadam	21	604	590	35
Copra (in candies of 700 lb)				
Kozhikode	1,277	5,930	5,480	1,727
Badagara	1,712	5,793	5,765	1,740

Weekly prices of coconuts and copra in some of the Malabar markets during April, 1953.

Commodity and Market	1st week Rs.	2nd week Rs.	3rd week Rs.	4th week Rs.
Coconuts Husked (for 1000)				
Badagara	135-140			
Ponani	155-160	160-162½	145-160	145-165
Tellicherry & Dharmadam	170-172	170-175	160-170	160-170
Copra at Badagara Market per candy of 700 lbs.				
Office	374	374	374	374
Edible Copra				
Dilpas	380	380	380	380
Madras	385	385	385	385
Rajapur	400	400	400	400

Imports of coconuts, copra and coconut oil into India during the months of February and March and 1953.

COMMODITY AND SOURCE	STATE INTO WHICH IMPORTED								TOTAL FOR ALL STATES FOR THE MONTH		TOTAL FROM THE BEGINNING OF APRIL, 1952	
	TRAV-COCHIN		MADRAS		BOMBAY		WEST BENGAL		QTY.	VALUE	QTY.	VALUE
	QTY.	VALUE Rs.	QTY.	VALUE Rs.	QTY.	VALUE Rs.	QTY.	VALUE Rs.		RS.		Rs.
						February 1953						
Copra (in cwts.)												
Ceylon	....	....	....	....	14,820	833,899	....	....	14 820	8,33,899	284,460	1,47,80,2 41
Maldives	....	....	220	7200	....	.....	....	....	220	7,200	920	36,085
St. Settlements	....	....	....	....	....	....	80	4244	80	4,244	18,180	851,724
Seychelles	....	...	...	...	20	800	...	...	20	800	52,020	28,01,879
F. M. S.	...	....	...	...	...	...	....	...	...	...	8,500	560,700
TOTAL	...	..	220	7,200	14,840	8,34,699	80	4,244	15,140	8,46,143	3,64,080	190,30,629
Coconut Oil (in cwts)												
Ceylon	...	...	...	...	1,060	99,600	7,300	6,29,908	8,360	7.29,508	1,59,020	1,20,61,850
St. Settlements	...	...	...	...	...	...	23,840	20,19,321	23,840	20,19,321	1,58,420	120,53,976
F. M. S.	...	...	...	...	6,040	4,11,750	1,000	82,333	7,040	4,94,083	24,540	20,68,483
Philippines	...	...	...	...	...	...	...	..	...	...	31,580	19,95,778
TOTAL	...	...	...	...	7,100	5,11,350	32,140	27,31,562	39,240	32,42,912	3,73,560	2 81,80,087

COMMODITY AND SOURCE	STATE INTO WHICH IMPORTED								TOTAL FOR ALL STATES FOR THE MONTH		TOTAL FROM THE BEGINNING OF APRIL, 1952.	
	TRAV-COCHIN		MADRAS		BOMBAY		WEST BENGAL					
	QTY.	VALUE RS.	QTY.	VALUE RS.	QTY.	VALUE RS.	QTY.	VALUE RS.	QTY.	VALUE RS.	QTY.	VALUE RS.
March 1953												
Copra (in cwts.)												
Ceylon	...	...	100	5,618	23,300	14,30,054	...	...	23,400	14,35,672	3,07,860	1,62,15 913
Maldives	...	...	20	541	...	...	...	...	20	541	940	36,626
St. Settlements	...	...	...	...	...	...	...	...	...	...	18,180	8,51,724
Seyehelles	...	...	...	...	40	2,360	...	...	40	2,360	52,060	28,04,239
F. M. S.	...	...	...	...	...	...	...	...	...	...	8,50	5,60,700
Total	...	...	120	6,159	23,340	14,32,414	...	...	23,460	14,38,573	3,87,540	2,04,69,202
Coconut Oil (in cwts)												
Ceylon	...	...	500	41,364	5,080	4,28,399	4,440	3,80,909	10,020	850,672	169,040	1.29,12,522
St. Settlements	...	...	...	...	3,560	3,12,180	4,740	3,93,310	8 300	710 490	166,720	1.27,64,466
F. M. S.	...	...	500	41,582	4,420	3,84,425	6,280	5,95,059	11,200	10,21,066	35,740	30,89,549
Philippines	...	...	...	...	...	...	...	...	...	...	31,580	19,95,778
Total	...	...	1,000	82,946	13,060	11,25,004	15,460	13,74,278	29,520	25,82,228	4,03,080	3,07,62,315

N. B. There were no imports of coconuts during the month

Prize for Arecanut Husking and Slicing Machine.

The Indian Central Arecanut Committee has decided to award a prize of Rs. 2000 to any person or body who designs the best model of a time-saving and economic machinery for husking arecanut in all stages of maturity and capable of slicing the kernels and demonstrates its working to the satisfaction of the Fommittee or a competent body appointed by it.

Further details regarding the prize can be obtained from

The Secretary, Indian Central Arecanut Committee,
Post Box No. 14, Kozhikode.

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BY C. M. JOHN,

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—The Malabar Herald (*Cochin*).

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