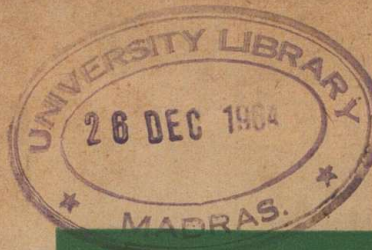


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Editor
DR. P. J. GREGORY

Coconut bulletin

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Issued by

THE INDIAN CENTRAL COCONUT COMMITTEE

(MINISTRY OF FOOD & AGRICULTURE, GOVT. OF INDIA)

ERNAKULAM, S. INDIA.

Editorial

Thirsty Palms

IN ANOTHER TWO MONTHS SUMMER WILL BE UPON US. AND SUMMER means thirst. Not only men and animals but plants too grow thirsty in summer days. And the coconut palm is one of the thirstiest plants in creation.

THE COCONUT PALM STORES LITTLE MOISTURE AND HAS NO TAP ROOTS. Adequate soil moisture has, therefore, to be assured through irrigation, during the summer months. Lack of moisture in the soil adversely affects the yield of the palms. Coconut growers, therefore, must see to it that during the ensuing summer months their coconut gardens are irrigated properly. Experience has proved beyond doubt that the yield of the palms can be increased very considerably by irrigation. If the garden is small pot watering may be sufficient. If of considerable size, filter point tube wells worked by oil or electric pumpsets can be used. If the garden is on the sea coast, no harm will be done if sea water is used for irrigation.

BUT WHATEVER MAY BE THE METHOD OF IRRIGATION THE THING TO remember is that summer irrigation is a *Must* in coconut cultivation.

Potentialities for increased production of Coconuts in Thanjavur District

By
R. SRINIVASA IYER
Pattukkottai

THE principal oilseeds produced in Thanjavur District, Madras State are coconut, groundnut and castor. Of these, coconut cultivation is of considerable commercial importance. The coconut palm has a unique quality. Every part of it is useful and is used by man. It has a wide variety of uses; the nuts yield copra for oil and oil cakes and fibre for coir and coir products, mats and mattings; mature trunks are used in construction of houses etc., and the plaited leaves used for thatching houses to

mention only the important uses. A well managed coconut plantation yields nuts regularly and remains economic for about 80 years giving the grower a steady income every two months when he can gather ripe coconuts.

India's population is growing. Demand for coconut products is increasing. The shortfall in supply of coconuts is of the order of one fourth of its requirements. Coconut oil is an indispensable article of diet and is also

very largely used in industries. We are actually importing about 15 crores of Rupees worth of copra and oil. This should provoke us into new lines of thinking as to how best self-sufficiency can be achieved. It can be achieved in a very short time if an intensive drive is launched to improve the yield of existing plantations by adopting improved and scientific methods of management, cultural practices, manuring, plant protection and irrigation. In about ten years time we can increase the area under coconut by raising new planta-

tions. There is a very large scope for both in Tanjore District.

The statistics available indicate that the average yield of nuts per tree and the average yield of nuts per acre in India is the largest in the world and also in Madras State figures for Tanjore District indicate that in the average yield per tree and per acre this District stands first. Though India is the second largest producer of coconuts in the world, Philippines coming first, in average yield it stands first as can be seen from the following Table.

Country	Area in million acres	Percentage of total area in the world	Production of nuts in millions	Percentage of total world production
Philippines	2.45	29	4916	29
India	1.59	19	4151	25
Indonesia	1.50	18	3200	19
Ceylon	1.07	12	2147	13
Others	1.90	22	2500	14
		100		100

It is known that Philippines has been adopting all scientific methods of cultivation, plant protection and manuring for a long time while Indian growers have not been so doing and have started only now. Yet the average yield in India is greater than in Philippines.

Within India, though Kerala State has the largest area under coconuts, Mysore coming second and Madras third, it can be seen from the latest statistics available upto the end of 1961, that Madras State stands first in average yield of coconuts per tree and per acre.

Figures for the main coconut growing States are as follows:-

Name of State	Area under coconuts in acres	Total number of trees in lakhs	Total yield of nuts per year in lakhs	Average yield per tree per year	Average yield of nuts per acre	Percentage of yielding trees above 10 years
Kerala	14,04,357	1283.7	18281	49	2490	65
Madras	2,26,200	188.5	11860	78	4480	80
Mysore	2,66,333	127.84	4546	59	2832	71

These are the results of sampling surveys undertaken by States with contribution from the Indian Central Coconut Committee on a 50 : 50 basis. The figures are up to the end of 1961.

Within Madras State Tanjore District

tops the list among the Districts in the matter of average yield of nuts per tree and per acre. One has only to visit the coconut gardens in the several districts and compare. Let me give the figures so far available.

Area and yield of coconuts in Madras State (1954-55)

District	Area in acres	Percentage of total	Production of nuts in 1000	Percentage of total	Average yield of nuts per acre (calculated)
Tanjore	35,779	28	1,43,116	34	4000
Kanyakumari	25,579	21	77,221	19	2800
Coimbatore	11,715	9	35,145	9	3000
N. Arcot	11,158	9	33,474	8	3000
Salem	9,858	8	29,574	7	3000
Madurai	8,500	7	25,500	6	3000
Tiruchi	7,233	5	21,699	5	3000
Ramnad	5,950	5	17,940	4	3000
Other Districts	11,617	8	34,545	8	3000
		100		100	

Among the districts in Madras State, as it is now, Tanjore District has the largest area under coconuts with 35,779 acres (1954-55 figures) and produces 34 per cent of the nuts produced in this State. The State Government has undertaken and is carrying on a survey of the correct estimate of the area under coconuts, yield, etc., and with the fillip and help given by the Government for coconut plantations and taking into account new plantations made on a large scale I am sure the present area under this crop in this District will exceed 50,000 acres.

According to the latest figures available as a result of the survey of correct estimate of area and yield of coconuts in the State the average yield per acre for Madras has gone up to 4480 and the area has also gone up. Certainly the average yield in this District must be higher and I feel it is higher.

This is in spite of the Tanjore coconut growers leaving the trees to care for themselves. They are just beginning to take to improved practices and manuring. Therefore the State Government have included coconut

plantations also in the Intensive Agricultural Development Programme - Package Programme - and selected an area of 1000 acres in Adirampattinam Firka and the scheme is in full swing. Details of the scheme can be found at pages 197 to 201 of Vol. 17 (September 1963) of the 'Coconut Bulletin' issued by the Indian Central Coconut Committee. The coconut growers of this District must be grateful to Shri V. Karthikeyan, I.A.S., Director of Agriculture, Madras for his efforts in including coconuts in the Package Programme and selecting the above area. There is no doubt with better care and attention we can still further increase the yield considerably.

The climatic conditions and nature of the soil of Tanjore District with also a sea coast line over 140 miles long are essentially suitable for the coconut palm. The best soil for the coconut is a rich alluvium or loam having proper soil moisture and drainage as also sandy soils especially of the littoral type with an assured supply of good underground water within easy reach of the root. It prefers a deep and well drained soil possessing good retentive capacity for moisture and free from any toxic conditions. Needless to say that the Cauvery delta and the east coast abound in such soils and we do find that coconut trees in the delta and the sea-coast belt are thriving very well and can compare very favourably with the best trees in the world. Dr. M. S. Randhawa D. Sc., F. N. I., I. C. S., former Vice President of the Indian Council of Agricultural Research who toured this District about two years back remarked that the coconut trees in this District are the best he has seen.

Within the District the coastal taluks of Pattukkottai, Tiruthuraiipoondi and Arantangi have the largest area under coconut plantations. It is here we find extension of area by new plantations on a large scale. Though the District was very badly affected by the severe cyclones of 1952 and 1955, the growers have not only replanted the devastated plantations but they have raised new plantations on a large scale and also taken to scientific, cultural and manurial operations and have demonstrated consequent increase in yield of nuts.

Results from field experiments recorded in the past show that regular ploughing, cultivation, covercropping with leguminous crops and manuring of coconut gardens give an additional net income of over Rs. 200 per year per acre.

While manuring the trees it is better the following dosage per tree is observed for getting maximum benefits. 1. Green manure 25 kg. 2. Farmyard manure 25 kg. 3. Ammonium sulphate 1.5 kg. 4. Superphosphate 1 kg. 5. Muriate of potash 1 kg. Standard mixtures 6:6:12 can also be applied at 5 kg. per tree. Green manure crops like sunnhemp can be grown and ploughed in during winter. Gliricidia grown on the fences will be a good source of green manure. Occasional irrigation during summer is highly beneficial.

The State Government have established a Regional Coconut Research Station at Veppankulam in Pattukkottai Taluk. There is also a coconut nursery in the Agricultural Seed Farm at Pattukkottai from which about 40,000 quality seedlings are supplied at subsidised rate of 60

nP. per seedling to the farmers. As the quality is good and percentage of stabilisation after planting is very high there is a great demand for these seedlings and the target must be increased.

The coconut tolerates the growth of shallow rooted annual plants in its shade. This also helps intercropping and cultivation. Annual crops like ginger, coriander, turmeric and pineapple can be grown in between rows of coconut trees without in any way adversely affecting the general condition or yield of the trees. In the Philippines it has been found that paddy can also be grown profitably in a coconut garden and also that citrus and lime plants are grown in coconut groves to increase the income of the farmers. Incidentally irrigating and manuring these crops also increase the yield of coconuts.

Apparently the climatic and soil conditions of Tanjore are such that some of the pests attacking the trees of Kerala are not prevalent here. At the same time the farmers must also be vigilant to protect their palms from the common pests like rhinoceros beetle and Nephantis.

There is considerable scope for still increasing the area under coconut plantations and underplanting in old gardens in Tanjore District. The entire east coast to a depth of about 10 miles where large areas well fitted for coconut plantations are lying waste can be covered with new plantations. Coconuts are found to come up well on river and canal banks, road margins and bunds of wet fields. Such planting should be increased on a large scale. Quality seedlings should be cared for well after

planting and guarded against damage by cattle.

With the abolition of Estates and even minor Inams by the State large areas of waste lands are vested in Government. These could also be used for planting coconuts and tree pattas granted after they come to bearing. An intensive drive and scheme for increasing area and production of coconuts will surely enrich the District, benefit the grower and help him with a steady income every one or two months and at the same time strive to make the country self-sufficient.

Though coconut palm has received considerable attention, development of subsequent industrial process for the economic utilisation of its products has not received adequate attention or encouragement. The coconut industry has a great wealth of raw material which provides unique opportunity for exploration in directions hitherto untried. The criminal waste in this District of the coconut husks, a very valuable part of the nut, by discarding it or using it as fuel should be avoided at all costs. The neighbouring State of Kerala is making very good and profitable use by rotting, extracting fibre, and manufacturing coir ropes, coir products, mats and mattings and exporting the same to foreign countries. Such export is of the order of 13 crores of Rupees worth every year.

Now is the best and most opportune time for initiating a short range crash programme for increasing production as early as possible by large scale adoption of improved methods of coconut plantation management by the generality of the coconut growers of the District.

The prevailing prices of coconuts and coconut products should be considered as quite favourable from the producers' point of view. Every effort should be made to capitalise the favourable conditions to put the coconut industry on a sound and permanent footing. The only way to ensure the continuance of satisfactory economic conditions is for the growers to pool all their resources, take advantage of all the help that is

given by the State by way of loans, supply of fertilisers, quality seedlings at subsidised rates, even subsidy for small growers and so on, make a supreme effort to increase the production to the maximum possible extent, reduce the cost of production and make coconuts and coconut products available to all those who require them in sufficient quantities and at a reasonable price.

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 Director, Central Coconut Research Station, Kasaragod, those about pests and diseases and their control to the Director, Central Coconut Research Station, Kayangulam, Oachira P. O., and requests for information on the coconut industry in general to the Secretary, Indian Central Coconut Committee, Ernakulam - 1.

Organisation of the methods for controlling pests of coconut

By

S. B. LAL, CHANDY KURIAN and K. MATHEN
Central Coconut Research Station, Kayangulam

Introduction

OF the several insect pests attacking coconut in India, the rhinoceros beetle is ubiquitous in its distribution and attacks palms of all ages. The tissue boring red weevil usually attacks only palms below the age of 20 years and rarely older palms and is present as a pest mainly in certain pockets of infestation. The leaf-eating caterpillar infests coconut groves of the coastal and backwater belts of the west and east of India as well as those facing

open spaces and rivers. The root eating cockchafer confines its activity mainly to palms of sandy loam soil. The less serious enemies like the slug caterpillars and the leaf rollers break out sporadically in epidemic form under favourable conditions in certain localities. Information about these pest infestations is received at the Central Coconut Research Station directly from ryots either in person or through post, through N. E. S. Blocks, through Gramsevaks and Agricultural

Extension Officers and through the Government Agricultural Department. It would be useful that the readers know how they can go about saving their crops from the attack of these pests.

Postal Advice

Remedial measures for pest infestation are suggested through letters to those who seek advice.

Visit of Staff of the Research Station to Cultivators' Gardens

Members of the staff visit pest infested gardens and impart advice on plant protection practices to individual growers according to a definite programme or on specific requests.

Demonstration of Control Measures

Effective control measures are demonstrated to coconut growers by the staff of the Research Station free of cost.

Pyrocon Injection

Pyrocon—E 2/20 at one per cent concentration (about 1000 to 1500 c.c. per infested palm) is found to successfully control red palm weevil infestation, provided the cabbage portion has not been affected. Injection method with the aid of an auger and funnel working by gravitational force is demonstrated to several hundreds of coconut growers. During 1960-61, 260 young palms belonging to 116 different growers were thus treated and cured. During the subsequent year demonstration of the treatment was carried out on 469 palms in 185 gardens. For 1962-63, the figures were 411 and 234 respectively.

Farmers' Visits

The laboratories of the Research Station are open to public who seek advice or are interested in research work. They are shown around and the work in progress is explained to them. They leave the Research Station with clear ideas of plant protection practices with reference to coconut.

Discussion on Pest Control Practice

This is conducted by members of the staff at agricultural seminars organised by the National Extension Service Blocks.

Coconut Day

This is celebrated once a year. It coincides with the 'Vana Mahotsava' (grow more trees campaign) week being observed all over the country. Growers are invited to take part in the celebrations and the various plant protection practices of the pest and disease control are explained to them.

Exhibitions

The Indian Central Coconut Committee actively takes part in many agricultural exhibitions. The elaborately instructive charts, models and other exhibits in the World Agricultural Fair at New Delhi, National Agricultural Fair at Calcutta and Madras have contributed a lot in educating the masses on protection of the crop against pests and diseases.

Distribution of Pamphlets, Posters, Films etc.

Pamphlets and posters explaining the different pest and disease control aspects are distributed free of cost

through the State Agricultural Department and N. E. S. Blocks. The Indian Central Coconut Committee has brought out four films on coconut cultivation and control of pests and diseases.

Parasite Breeding Stations

Biological control of the coconut leaf eating caterpillar is effectively carried out by a large number of indigenous parasites which are mass-multiplied in the various parasite breeding stations in the different states and liberated in *Nephantis* infested gardens. Farmers receive the parasites free of cost. A central unit of nucleus culture material of the parasites is maintained at the Central Coconut Research Station, Kayangulam, which serves as a source of supply of materials to Regional Parasite Breeding Stations besides catering to the needs of the local growers.

Field Experiments in Cultivators' Gardens

Promising results of laboratory and small scale field experiments of pest control are organised on a large scale basis in cultivators' gardens in the different parts of the State to impress upon the coconut growers in and around such experimental centres the advantageous role of pest control practices in coconut gardens and to educate them on the different methods of pest control.

Rhinoceros Beetle Control Campaign at Sasthamcotta

Here, 11 sq. k. m. coconut plantations receive insecticidal spraying of manure heaps and other breeding sources of the black beetle. Observation on 1000 palms of the treated

area on the incidence of beetle attack is compared with that of 1000 palms in untreated area. It has been possible to convince the growers in that locality that damage to coconut palms due to rhinoceros beetle can be considerably reduced by treatment of breeding places with suitable insecticides like Benzene Hexachloride and Aldrin.

Prophylactic Leaf Axil Filling Experiment for Red Weevil

Preliminary experiments at the Central Coconut Research Station, Kayangulam have shown that filling the leaf axils of young palms between the ages of 5-20 years which are usually the victims of weevil attack, with a mixture of 5 per cent chlordane or BHC and sand thrice a year, corresponding to pre-and post-monsoon periods, goes a long way in preventing or reducing weevil incidence. This is now being tried on a large scale in cultivators' gardens around the Research Station and the incidence of weevil in treated and control plots is compared with each other.

Recommendations to State Governments

Positive results of experiments conducted for the control of pests at the Research Station are conveyed to the State Governments through its administrative body, the Indian Central Coconut Committee, in the form of recommendations which the Governments are requested to implement in the respective states.

i) Liberation of parasites or spraying of 0.2 per cent DDT against infestations of the leaf eating caterpillar.

ii) Hooking out the rhinoceros beetle from crowns of palms at periodic intervals.

iii) Spraying of manure pits, compost heaps, decaying vegetable debris and other possible breeding places of the rhinoceros beetle with BHC suspension and providing traps for adults.

iv) Injection of Pyrocon-E 2/20 against red palm weevil.

Training of Personnel

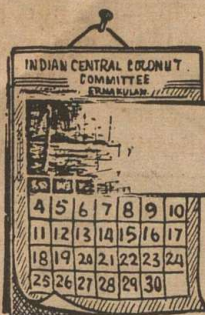
Personnel deputed by State Governments are trained in plant protection practices including pest and disease control, manurial and cultural practices etc. at the Central Coconut Research Stations, Kayangulam and Kasaragod.

We seek growers' co-operation for the services rendered by us in order to make the findings of research work effective. As a rule, only economical remedial measures are suggested. For example, the filling up of the leaf axils of palms with 5 per cent BHC as a

preventive step to protect them from the black beetle and red weevil attack will cost only the value of 2 nuts per year; and the result is about 10 per cent increase in yield due to control of black beetle and saving the palm from death due to red weevil attack. Certain recommendations are to be carried out on a collective basis, e. g. the chemical treatment of breeding places of the rhinoceros beetle. No useful purpose will be served if one or only a few individuals practise it. In a heavily infested area, it may have to be taken up on a regional basis. It is no use to wait till an act of the Government forces you to take to crop protection practices. More than this, we need material for carrying out our various experiments. Our thanks are due, to quote only an instance, to growers who have unconditionally placed their cockchafer infested plots at our disposal for our trials of insecticidal control of the root pest. Any information of pest infestation or pest control will be of special value to us.

TO SUBSCRIBERS

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in
JANUARY & FEBRUARY

Coconut Gardens



KERALA

January-February

Continue irrigation in loamy and sandy soils. Continue vegetable cultivation in loamy soils. Spray the palms to control the fungal diseases. Spraying controls the disease in the affected palms and helps the healthy palms to resist infection. For spraying, use Bordeaux mixture or a solution in water of any one of the several copper fungicides available in the market. Before spraying, clean the crowns of the palms. Remove all the old spathes, stipules and other matter which come off easily when pulled by hand. If the palm is diseased, cut away the affected portions. Collect and burn them before spraying. Repeat the spraying in April-May and September-October.

MYSORE

January-February

Cart in jungle earth and heap it up in different parts of the garden. You can also fold sheep and incorporate into the soil sheep manure.

MADRAS

January-February

Work the cultivator again to remove weeds and create soil mulch.

ORISSA

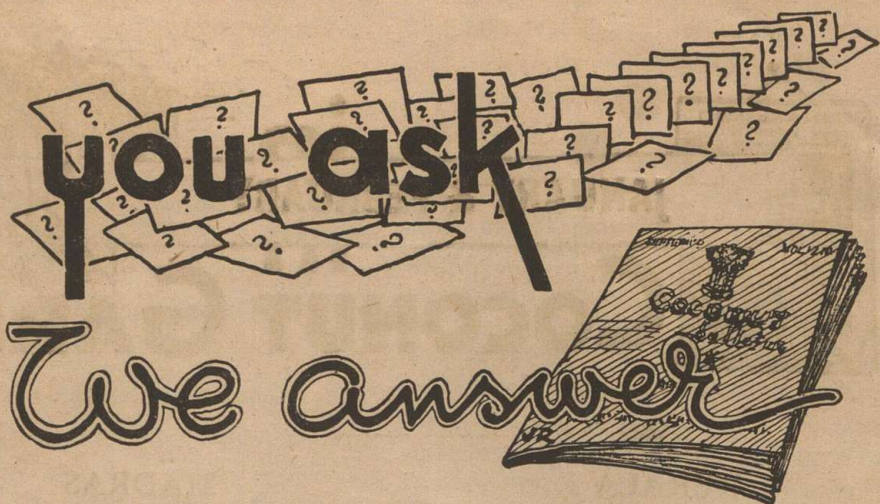
January

Weed the garden. Water old palms in laterite and sandy soils once a week in shallow basins dug around the tree. Where palms are planted on bunds, strengthen the sides of bunds. Spray with 0.2 per cent DDT after cleaning the crowns of palms if there is attack from leaf-eating caterpillar.

February

Remove stray shrubs and grasses and burn them. This month and next the black-headed caterpillar does the worst damage. Hence spray the affected and adjoining palms with 0.2 per cent DDT twice, at an interval of 15 days. Clean all water channels to strengthen the bunds on which coconuts are grown.

(Continued on page 297)



Question: What is the remedy for bud-rot?

Answer: If the entire shoot-producing portion of the crown is rotten no further shoots may emerge. An experienced climber should be asked to inspect the crown and report on its condition. If the shoot-producing area has been affected only partially, cut and remove the affected portion and sprinkle on the crown a mixture of powdered copper sulphate and quick lime. Cover the crown with an inversed mud-pot so that water may not fall on it and stagnate in any portion. If the entire shoot-producing area is rotten, the palm should be cut and its crown completely burnt.

Question: I have a coconut garden. The soil in it consists of loose

porous sand which is lacking in fertility. The coconut palms in the garden have pale unhealthy leaves. Please let me know what manures are suitable for this type of soil.

Answer: As the soil is loose porous sand, steps should be taken to increase its organic matter content. If this is done, the excessive porosity of the soil would be reduced and its water holding capacity enhanced. Any one of the following manures may be applied in the quality mentioned against it to increase organic matter in the soil.

Manure	Quantity per tree
1. Farmyard manure and green manure	100 lb. of each

2. Compost 200 lb.
3. Backwater silt 10 baskets

Dig basins round the palms and apply any one of the above three items of manure and cover with a thin layer of soil. In August-September add to each basin the following manures also and fill in the basins completely with earth.

1. Ash or muriate of potash 1 - 2 tins
(capacity of a tin being 4 gallons)
2. Superphosphate or bonemeal 2 lb.

The treatment mentioned above is sure to bring about a marked improvement in the trees.

January & February in Coconut..... (Continued from page 295)

MAHARASHTRA

January

Clean the crowns of palms of all dying and decaying matter. Spray trees with one per cent Bordeaux mixture to prevent leaf disease. It is better to add 0.2 per cent DDT to the Bordeaux mixture to help keep off insect pests too.

February

Hoe or cultivate the garden. Remove all grasses or shrubs and burn the same along with other rubbish.

In low-lying areas where coconut is planted on bunds, clean the channels between bunds and strengthen and level up bunds by adding to the sides and tops, soil dug up from the channels.

GLEANINGS from Other Journals



Sesbania

To grow it, you need only a little amount. But look at the quantity of green manure it gives — over a ton an acre.

This is Sesbania. It is fast becoming popular in the paddy region of Palghat District of Kerala.

Like to try it? Then here is how you should begin. Where paddy is transplanted, raise seedlings of sesbania at the time the paddy nursery is sown. Just four ounces of seed sown in a ten-cent area will give enough seedlings to plant out field-bunds around an acre.

Prepare seed-beds 20 feet long and 10 feet broad. Give a sprinkling of compost mixed with ash. Sow seeds evenly, and cover with soil. Give an occasional watering and weeding.

In six weeks, when the monsoon breaks out, start transplanting paddy. Pull out sesbania seedlings also and plant them a foot apart in the inner side of the field bunds.

Standing water in the field does not affect sesbania. In places where the first crop of paddy is broadcast dry, grow sesbania a little differently. Before the last ploughing dibble the seeds on the borders of the field. The last ploughing covers the seeds. The pre-monsoon showers wet the soil and help the seeds sprout. The growth of seedlings in summer will be slow, but as rain starts they grow with double vigour.

Pure crop

If irrigation is possible, it will pay you more to grow sesbania as pure crop during summer in harvested paddy fields. For that, plough the field twice in January-February. Sow sesbania seeds 25 kilos to an acre. Cover them by giving another ploughing. Let in water immediately after sowing. Go on giving irrigations every fortnight till summer is over.

A pure crop of sesbania gives per acre about 30,000 pounds of green manure — enough for five acres.

Seed collection

Plants left to grow for themselves will easily set seeds. When the pods are ripe, collect them and dry in the sun.

This is all there is to it.

No wonder, this green manure so easy to grow and so rewarding in returns, is getting so popular.

— *Intensive Agriculture*

For and By Women

It wouldn't do in the early days of modern medicine in our country to break the strict social rules, and so came into being the 'lady doctor'; probably one of our contributions to the English language.

But how many know that the credit of having the first hospital in the world staffed entirely by women belongs to India? This was the Cama Hospital, Bombay, and the fact was mentioned

recently in a letter to 'The Observer', London, by a person wanting more information for a biography of Dr. Edith Pechey. She headed the hospital in the last years of the nineteenth century.

— *Yojana*

New Process of Milk Preservation

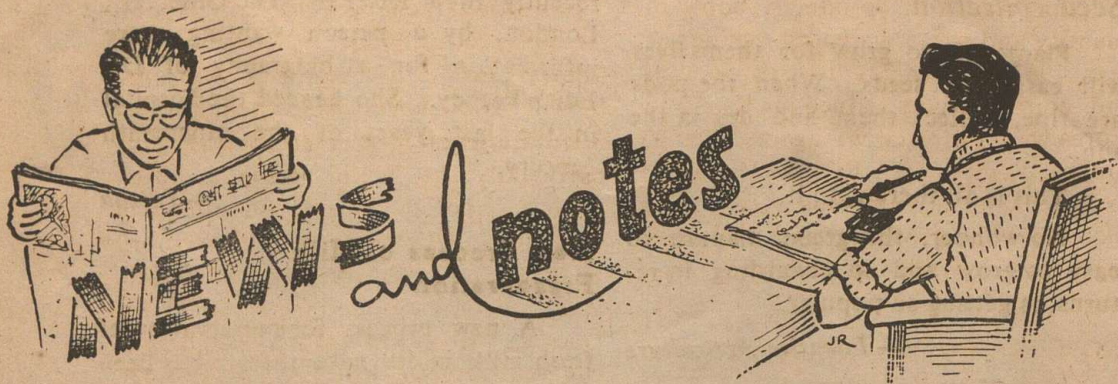
A new process for preservation of fresh milk in its natural state has been invented by a young Indian scientist, Mir Amjad Kazmi. The process has been patented in India and many foreign countries. Under this process, called hygiopack, milk can be preserved for a fairly long period without refrigeration or the use of only preservative or chemical. Milk so preserved retains its freshness, taste, flavour, aroma and nutritional value. The inventor claims that the process can also be used for preservation of other perishable liquids.

— *Indian Farming*

WEATHER REVIEW

NOVEMBER 1963

	TEMPERATURE				RAINFALL			Sunshine
	Maximum		Minimum		Quantity in m. m.	Departure from normal	No. of rainy days	Total hrs. of bright sunshine
	Highest	Average	Lowest	Average				
Central Coconut Research Station, Kayangulam	33.6°C	31.7°C	20.2°C	23.3°C	104.2	—97.1	6	204.2
Central Coconut Research Station, Kasaragod	35.2°C	33.0°C	20.1°C	23.0°C	39.4	—36.5	3	250.4



Meeting of the Indian Central Coconut Committee

The annual meetings of the Indian Central Coconut, Arecanut and Spices & Cashewnut Committees are to be held at Ernakulam from the 13th to 18th instant. The various Technical Sub-Committees of the three Committees will meet on the first three days and the full Committees on the last three. The Special Secretary, Ministry of Food and Agriculture, Government of India, Shri A. D. Pandit, who is the Chairman of these Committees, will preside. Besides other senior officers of the Government of India like the Agricultural Commissioner with the Government of India and the Director, Indian Agricultural Research Institute, the Committees include official representatives from various State Governments and the representatives of the growers, consumers and the trade.

The Committees will consider the progress reports on the various research, developmental and other activities during the previous year and programmes for the next year. In

particular, it is expected that a critical assessment will be made of the progress of developmental measures on these commodities in relation to the targets for the III Plan. In view of the fact that coconut, arecanut, cashewnut and some of the important spices are grown in the same regions and sometimes even as mixed crops, the question of co-ordination of some of the activities of these Committees, which may lead to more satisfactory implementation of the development plans in those regions and at the same time ensure avoidance of duplication and waste of effort, is also expected to be discussed.

Director of Economic Research and Statistics for Coconuts

The Government of India have appointed Shri S. Suryanarayana Pillai as Director of Economic Research and Statistics for Coconut, Arecanut, Spices and Cashewnut. He assumed charge on the 5th November, 1963 and is attached to the Indian Central Spices and Cashewnut Committee, Ernakulam.

Export of Coir Products

According to a report in 'The Journal of Industry and Trade', export

of coir and coir products both in quantity and value increased during the year 1962-63. 78,221 tonnes of coir and coir products valued at Rs. 12.18 crores were exported as against 76,077 tonnes valued at Rs. 11.35 crores exported in the previous year. The increase over 1961-62 was 2.8 per cent in terms of quantity and 7.3 in terms of value.

Organisation of Agricultural Research

The Government of India have appointed a seven-man Agricultural Research Review Team to enquire into the research set-up in India and suggest changes in its organisation, says a report in 'Indian Farming'. The Team, which will be headed by Dr. Marion Wesley Parker, Director of the Crops Research Division of the U.S. Department of Agriculture, will prepare detailed proposals for effectively improving the organisation, administration and conduct of agricultural research programmes in the context of the need for achieving substantial and sustained progress and improvement in agriculture.

The Agricultural Research Review Team, whose appointment has now been announced, will appraise at first-hand the factors limiting the attainment of maximum efficiency and effectiveness in the utilization of funds and talents. It will also assess the merits of the changes in the organisation and administration of Central and State research programmes proposed by the joint Indo-American Teams and problems connected with implementing the proposals. The Team will suggest

organisational changes to bring about greater coordination between the Central and State Research Institutions. It will also suggest steps required to orientate research problems in the field, particularly in State Research Institutions, and to ensure an adequate contact with the agricultural extensions workers so as to bring about a two-way traffic between the farmer and the research institution. Other members of the Team are Dr. Roy Lee Lovvorn, Dr. Oscar Burr Ross, Dr. E. E. Cheosman, Shri L. Sahai, Dr. K. Ramiah and Prof. P. Maheshwari.

New Pest of Sugarcane

'Indian Farming' says in another report that a new pest of sugarcane belonging to a genus of beetles has appeared in certain parts of India. The grubs of this beetle damage roots of the cane crop below the soil, and where the attack is severe, the crop starts drying up in August-September. A pest of this category appeared in Shahabad district in Bihar in 1956-57. Research conducted at the Indian Institute of Sugarcane Research, Lucknow on its life-history and control led to the finding that it can be controlled by the application of Gamma BHC to the soil at 4 kg. per hectare in May. The pest which is now appearing in certain other pockets is similar to the Shahabad district beetle in many ways. Collaborative work with the Commonwealth Institute of Biological Control at Bangalore is in progress at the Lucknow Institute for finding a natural predator or parasite of the grub, which can control the pest by itself when released in affected areas.

Market Surveys

Foreign Markets

General Trend

A major set-back in the prices for soyabean oil, soyabeans, cotton seed oil and lard was observed at the end of November 1963 due to two important events. The first was the assassination of President Kennedy and the second the bankruptcy of a big U. S. export firm.

The production of copra in Malaya during the months of May and June, 1963 was considerably lower than the corresponding level of production reported in the preceding year. The decline was of the order of 5000 tons. As per the report of "Oil World", Hamburg dated 14th December 1963 coconut oil export from Ceylon during the period January-December 1963 declined considerably. However, export of copra from Indonesia improved in the first half of the calendar year 1963.

In October 1963 the Philippines exported 105,200 long tons of copra and 20,300 long tons of coconut oil as against 97,100 and 18,100 long tons respectively in October 1962. Exports during the first ten months totalled 744,300 tons copra and 167,300 tons of coconut oil in the year 1963 as against 726,200 tons copra and 102,100 tons coconut oil in the year 1962.

SINGAPORE

November, 1963

COPRA

A weak market of local copra continued mainly due to lack of buying

support from the mills. By the end of second week stocks as well as newly imported goods were liquidated at discounts of \$1 or more per picul. The condition prevailed all through the month with negligible turn over. F.O.B. prices were not quoted.

COCONUT OIL

Drum oil was quoted at \$53.75 per picul during the first week and it slightly improved to \$54.75 in the second week. But this improvement was short-lived since by the end of the month the price again slumped to \$53.25 per picul.

CEYLON

November, 1963

COPRA

On the 2nd November 1963, copra Estate No. 1 quality was quoted at Rs. 164.50 per candy which steadily increased to Rs. 168.50 by the 9th. The price slid down to Rs. 166.75 by the 16th November but rose to Rs. 170.00 by 23rd. The market closed on the 30th at Rs. 166.00. A mixed trend was thus visible all through the month.

COCONUT OIL

The coconut oil market at Colombo during the month of November 1963 presented a declining trend. The price of Rs. 1070.00 quoted per ton on 2nd went up to Rs. 1075.00 by 9th, but declined to Rs. 1060.00 by the 16th. It further declined to Rs. 1020.00 by 23rd and the market closed on 30th at Rs. 1030.00 per ton.

Indian Markets

ALLEPPEY

November 16th to
December 15th, 1963

In Alleppey market a quintal of coconut oil was quoted on 16-11-1962 at Rs. 288.00. The market opened on 18-11-1963 at the same rate. During the week the market remained more or less steady as the stock with millers and demand were balanced. The market remained closed on 23-11-1963 as a mark of respect to the memory of the late President John F. Kennedy of U.S.A., after closing for the week on 22-11-1963 at Rs. 288.00.

The Alleppey oil market opened on 25-11-1963 at Rs. 285.00 per quintal. The rates were pulled down during the week due to selling pressure from the milling section and the market closed on 30-11-1963 at Rs. 281.00 per quintal. A quintal of ready oil was quoted at Rs. 280.00 on the 2nd December 1963. The selling pressure from the millers continued during the 1st week of December also and the prices went down further and the market closed on 7-12-1963 at Rs. 278.00.

The market opened on 9-12-1963 at Rs. 278.00 per quintal of oil. During the week the price slightly improved as the arrivals of copra were thin in the market and the market closed for the week end at Rs. 281.00 per quintal.

COCHIN

November 16th to
December 15th, 1963

A quintal of oil was quoted at Cochin at Rs. 285.50 per quintal on the 16th November 1963. The market opened on 18-11-1963 at Rs. 284.00. During the week ending 22nd November 1963 the coconut oil market at Cochin remained more or less steady and a quintal of oil was quoted on 22-11-1963 at Rs. 286.50. Even though there was demand for spot oil from Bengal during the week there was sufficient supply to meet the demand. The market remained closed on 23-11-1963 as a mark of respect to the late President Kennedy of U.S.A. The market rate for a quintal of oil on 25-11-1963 was Rs. 284.50. The rates were pulled down during the week due to selling pressure from the milling section and a quintal of ready oil was quoted at Rs. 281.50 in the week end.

When the Cochin coconut oil market opened on 2nd December 1963 a quintal of ready oil was quoted at Rs. 280.25. The selling pressure from millers continued during the week under review also and hence the prices went down further and the market closed for the week at Rs. 278.50 per quintal. The Cochin coconut oil market opened on 9-12-1963 at Rs. 280.00 per quintal. During the week ending 14-12-1963, the prices slightly improved as the arrivals of local copra were thin and the market closed for the week at Rs. 280.00 per quintal.

MARKET REPORTS

I. Cochin, Alleppey & Calicut

The daily prices of coconuts, copra, coconut oil and coconut oil cake at Cochin, Alleppey and Calicut from 16th November, 1963 to 15th December, 1963 are given below :

Date	Coconuts per thousand without husk			Copra per quintal*			Coconut oil per quintal			Coconut oil cake per quintal		
	Cochin	Alleppey	Calicut	Cochin	Alleppey	Calicut	Cochin	Alleppey	Calicut	Cochin	Alleppey	Calicut
	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.
16 - 11 - 63	235 00	280 00	217 50	195 35	203 00	192 50	285 50	288 00	293 00	58 00	57 00	57 00
17 - 11 - 63	S	U	N	D	A	Y	S	U	N	D	A	Y
18 - 11 - 63	235 00	N.R.	217 50	194 44	203 00	193 50	284 00	288 00	292 00	58 00	57 50	57 00
19 - 11 - 63	235 00	N.R.	212 50	195 00	203 00	193 00	285 50	288 00	293 00	57 00	57 00	57 00
20 - 11 - 63	235 00	280 00	217 50	195 00	203 00	193 00	285 50	287 00	292 00	57 00	57 00	57 00
21 - 11 - 63	235 00	N.R.	217 50	196 31	203 00	193 00	287 00	287 00	292 00	58 00	57 00	57 00
22 - 11 - 63	235 00	N.R.	217 50	196 00	203 00	197 00	286 50	288 00	292 00	58 00	57 00	57 00
23 - 11 - 63		No	Report			No	Report			No	Report	
24 - 11 - 63	S	U	N	D	A	Y	S	U	N	D	A	Y
25 - 11 - 63	235 00	N.R.	217 50	195 00	202 00	197 00	284 50	285 00	292 00	58 00	55 00	57 00
26 - 11 - 63	235 00	N.R.	217 50	195 00	200 00	194 50	284 00	283 00	292 50	58 00	55 00	56 50
27 - 11 - 63	225 00	280 00	217 50	192 21	198 00	194 50	280 00	281 00	292 50	57 00	55 00	56 50

28 - 11 - 63	225 00	N.R.	217 50	192 21	197 00	194 00	281 00	281 00	292 00	N.R.	57 00	54 00
29 - 11 - 63	235 00	N.R.	N.R.	192 21	197 00	N.R.	291 50	281 00	N.R.	57 00	55 00	N.R.
30 - 11 - 63	235 00	280 00	217 50	192 50	198 00	194 00	281 50	281 00	292 00	57 00	55 00	56 00
1 - 12 - 63	S	U	N	D	A	Y	S	U	N	D	A	Y
2 - 12 - 63	235 00	N.R.	217 50	191 75	197 00	194 00	280 25	280 00	292 00	57 00	55 50	57 00
3 - 12 - 63	235 00	N.R.	217 50	192 52	197 00	193 00	281 50	279 00	291 50	57 00	55 00	57 00
4 - 12 - 63	230 00	270 00	217 50	187 50	196 00	189 00	274 00	278 00	289 00	56 00	55 00	57 00
5 - 12 - 63	230 00	N.R.	217 50	189 36	196 00	189 00	277 00	278 00	288 00	56 00	56 00	57 00
6 - 12 - 63	232 50	N.R.	217 50	190 34	195 00	185 00	278 00	278 00	286 00	57 00	56 00	57 00
7 - 12 - 63	232 50	270 00	N.R.	190 64	N.R.	N.R.	278 50	N.R.	N.R.	57 00	N.R.	N.R.
8 - 12 - 63	S	U	N	D	A	Y	S	U	N	D	A	Y
9 - 12 - 63	235 00	N.R.	217 50	191 60	198 00	192 00	280 00	278 00	290 00	57 00	56 00	57 00
10 - 12 - 63	235 00	N.R.	217 50	191 60	198 00	192 00	280 00	279 00	290 00	57 00	56 00	57 00
11 - 12 - 63	230 00	280 00	217 50	191 90	197 00	192 00	280 50	278 00	294 00	57 00	56 50	57 00
12 - 12 - 63	230 00	N.R.	217 50	192 21	196 00	192 00	281 00	281 00	294 00	57 00	57 00	57 00
13 - 12 - 63	230 00	N.R.	217 50	192 53	196 00	192 00	281 50	282 00	294 00	57 00	57 00	57 00
14 - 12 - 63	230 00	N.R.	217 50	191 25	197 00	192 00	280 00	281 00	294 00	58 00	57 25	57 00
15 - 12 - 63	S	U	N	D	A	Y	S	U	N	D	A	Y

Source: (1) **Cochin**: Indian Chamber of Commerce, Cochin. (2) **Alleppey**: The Malayala Manorama. (3) **Calicut**: The Mathrubhumi.
 N. R. = No report. * Prices quoted for office pass copra at Cochin and Calicut and for Thelivu copra at Alleppey. 1 Quintal = 220.462 lb.

II. Malabar

Arrivals and sales of coconuts and copra in the different markets in Malabar during the month of November, 1963

Commodity - Markets	Carry over	Arrivals	Sales	Balance
<i>Coconuts (in thousands)</i>				
Kozhikode	460	2,100	2,030	530
Badagara	345	460	410	395
Ponnani	4	95	76	23
Tellicherry and Dharmadam	118	800	850	68
Tirur	78	209	204	83
Cannanore	14	90	91	13
<i>Copra (in quintals)</i>				
Kozhikode	60	9,900	8,795	1,165
Badagara	1,740	12,500	11,750	2,490
Cannanore	30	550	560	20

Weekly prices of coconut and copra in some of the Malabar markets during the month of November, 1963

Commodity - Markets	1st week	2nd week	3rd week	4th week
	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.
<i>Coconuts (hasked for 1000)</i>				
Badagara	215.00	215.00	225.00	223.00
Ponnani	220.00	220.00	215.00	205.00
Tellicherry and Dharmadam	185.00	185.00	190.00	190.00
Tirur	190.00	190.00	201.00	200.00
Cannanore	213.00	218.00	230.00	238.00
<i>Copra at Badagara market (per quintal)</i>				
Office pass	178.00	180.00	173.00	178.00
<i>Edible Copra</i>				
Madras	N O	R E	P O	R T
Dilpas	195.00	198.00	195.00	195.00
Rajpur	235.00	228.00	233.00	228.00

General 1. Coconut: Arrivals declined due to off season and poor harvest.

2. Copra: Arrivals and despatches were on the increase due to favourable weather for copra drying. Prices remained more or less steady.

III. Colombo

The weekly average prices of coconuts and coconut products at Colombo during the month of November, 1963 are given below :-

Commodity	Unit	Week ending 2-11-63 Rs. cts.	Week ending 9-11-63 Rs. cts.	Week ending 16-11-63 Rs. cts.	Week ending 23-11-63 Rs. cts.	Week ending 30-11-63 Rs. cts.
Coconuts (Husked) for export at Buyers' Stores	per 1000 nuts	152.50 to 155.00	152.50 to 155.00	153.50 to 155.00	152.50 to 155.00	152.50 to 155.00
Fresh Coconuts - (Husked) used for copra making and local consumption	„	164.50	168.50	166.75	170.00	166.00
Copra - Estate No. 1 quality at Buyers' Stores	per candy of 560 lb.	162.00	166.00	164.25	167.50	163.50
Desiccated Coconut - Wharf delivery or Buyers Stores' Medium and fine 50%	per lb.	0.42	0.415	0.41	0.40	0.405
Coconut oil - White, naked wharf delivery	per ton	1070.00	1075.00	1060.00	1020.00	1030.00

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"There's a word for service," said Tata

"Impeccable...smooth...prompt,"
suggested Fison.

"No, no," said Tata.

"Quiet...personal...careful," offered Ralli.

"Got it!" said Tata, a gleam in his eye.
"Integrated!"

Fison and Ralli agreed. Tata had a way with words.

Together they said, "We offer the
farmer an integrated service. The finest range
of fertilizers and pesticides in India.
And what's more, we advise him on their use."

"A comprehensive service," said Ralli.

"A complete service," said Fison.

"An integrated service," said Tata.

Tata-Fison and Rallis have combined their
separate marketing organisations into a single,
unified service. For the future, all Tata-Fison
products will be marketed by Rallis' Fertilizer
and Pesticides Division. The merger will prove
of immense benefit to the Indian farmer. For
the first time, one integrated service will provide
advice and products covering both crop growth
and crop protection throughout the country...
a notable contribution to the cause of agri-
cultural progress.

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