614

Ceylon Coconut Planters' Review, Vol. V No. 3, December, 1968.

by M. J. C. PERERA

It is proposed to publish in future issues of this jorunal a feature entitled "Library Corner". The purpose of this feature is to keep our readers informed of work done in other parts of the coconut growing areas of the world. Every issue will carry selected indicative abstracts of work published in other journals. Every effort will be made to make available all literature pertaining to coconut in this Institute's Library. Those interested are welcome to the Library for detailed information.

The abstracts apart from pinpointing the major findings will give the addresses of Authors, so as to enable interested persons to obtain further particulars.

1. **Coconut Caterpillar** (*Nephantis serinopa*) — *How to control ?*

Sathiamma, B. & Others — Lethal dose and fiducial of basic lead arsenates for controlling the coconut caterpillar (Nephantis serinopa, Meyrick). *Indian Journal of Agricultural Science,* 1967; 37(4) 221-5, Tabls. graphs. bibl. 9.

The effect of spraying coconut leaves with basic lead arsenate at concentrations of 0.1, 0.2, 0.5, 0.75, 1 or 2% for the control of coconut caterpillar (*Nephantis serinopa*) was studied in laboratory trials in India. Statistical evaluation of the results indicated that, in order to obtain 50% mortality of 4th-instar caterpillars, a concentration of 0.215% is required with fiducial limits ranging from 0.152 to 0.306%, whereas to obtain 90% mortality the corresponding concentration would be 1.537%, with fiducial limits ranging from 0.956 to 2.471% (Trop. Abst. 23 (2) r. 309).

2. **Rats** — *How to control them ?*

Marian, D—Chemical control of the black rat in Coconut groves of the Ivory Coast. (Appears in French) *Oleagineux,* 1967; **22,** 160.

The use of rat blocks containing rodenticides, sugar and cornflour incorporated in paraffin wax has reduced losses by rat damage 15-20% to a negligible level. One block weighing about 170g. is placed at the foot of every 6 palm, and one in the crown of the worst attacked palms. (*Hort. Abst.* 37 No. 7841).

3. Smith, R. W.

A new method of rat control in coconuts, *Tropical Agriculture*, 1967 ; 44(4) 315-324. Tabls. illus. bibl. 18, (Research Dept. Coconut Industry Board, Jamaica.).

Author outlines the traditional methods of control in different countries and also biological control. Experiments carried out in Jamaica with chemicals 'endrin pellets' have shown that it is ineffective; while use of Warfarin on small plots have shown satisfactory results. Experiments have shown the use of poison baited rat blocks is an economic and practical operation.

4. **Planting** — *What should be the depth of planting ?*

Venugopalan, S. & Others — Influence of depth of planting on the initial growth and vigour of coconut. *Madras Agricultural Journal*, 1967; 54(2) 74-77. Tabls. bibl. 2 (Regional Coconut Research Station, Veppankulam, Madras State).

An experiment laid out to determine the optimum depth at which seedlings should be planted has revealed after three years that greatest collar girth, number of leaves were associated with a planting depth of 2 ft. and the surface planting was associated with the smallest girth and number of leaves. Two feet deep planting has produced the most vigorous palms and the values for the measurable characters were highest for this treatment during the 3 years. Three feet deep planting was the next best and surface planted seedlings were inferior.

5. **Nutrients** — *At what rate do they deplete from the soil?*

Ramadasan, A. — Exhaust of nutrients from coconut gardens, factor affecting production. *Coconut Bulletin* 1966. 20(8) 173-175 (Central Coconut Research Station, Kayangulam).

Studies at Kayangulam have revealed that a bearing coconut palm removes about 556.56 g. N, 275.00g P, 883.53g K, 501.66g Ca, and 209.86g Mg. from the soil annually.

6. **Copra** — *What makes copra rubbery ?*

Southern, P. J. — Sulphur deficiency in coconuts; a widespread field condition in Papua and New Guinea. ii. The effect of Sulphur deficiency in copra quality. *Papua & New Guinea Agricultural Journal* 1967; 19(1) 38-44. Plates, Tabls. bibl. 8. (Senior Chemist, Dept. of Agriculture, Stock and Fisheries, Port Moresby).

Author's Abstract — Sulphur deficiency, causes coconut palms to produce defective 'rubbery' copra which has poor physical and chemical qualities. The copra has a low oil content, high moisture absorbing properties, high

sugar, ash and nitrogen contents. The oil extracted contains high amounts of unsaturated fatty acids causing high iodine values and low saponification values. It is shown that this is probably due to the high proportion of testa to kernel.

Rubbery copra contains lower amounts of sulphate than normal copra and can be improved in quality by ameliorating the sulphur deficiency. At present it froms a significant proportion of the copra production of Papua and New Guinea.

7. **Fibre** — *Husk Fermentation—a quick method*

Caraan, P.A. — Fermentation of coconut husk by molds. *Chem. Quart.* 1966. June. bibl. 15. Also reprinted in Sugar News; 1966; 43, 683-686.

A description of a laboratory experiment in which coconut husk was fermented for 4 days at 37°C with the aid of *Aspergillus* spp. previously isolated from partially rotted husk. A yield of 37% fibre was obtained (Hort. Abst. 47(4) No. 7847).

8. **Machinery** — *What Machines are available for the Industrialist*

Fresh coconut oil Expelling Unit. This machine has the following profitable features as per manufacturers — copra producing eliminated. Low acid value oil produced. Clean sweet cake makes good products. Drastic saving in oil production and labour costs. More employment and income for local people. CeCoCO Circular No. 757. P. O. Box 8, Ibaraki, Osaka, Japan.

Several other machines for various purposes of coconut industry are described in the CeCoCO — Guide Book for Rural Cottage and Small & Medium Scale Industries Paddy Rice Cultivation. 7 edt

The "Ceylon Coconut Planters' Review" is issued as and when material for publication accumulates. One volume consists of four numbers.