By M. J. C. PERERA

1. **Seedling Growth Pattern**—*What is the influence of the nut size ?*

Foale, M.A.—The growth of the young coconut palm (Cocos nucifera L.)

II. The influence of nut size on seedling growth in three cultivars. *Aust. J. Agric. Res.* 1968, *Vol.* 19(6) *pp.* 927-937 Tabls. graphs. bibl. 12. (Joint Coconut Research Scheme, Yandina, British Solomon Islands).

The growth of three coconut cultivars of the tall type from germination up to 17 months of age was compared by growth analysis. These cultivars differ considerably in mean nut size. Within each cultivar a comparison was also made between the growth of seedlings from small, medium, and large nuts.

There were considerable differences between cultivars in seedlings growth up to 2 months but these differences did not persist. Similarly differences due to nut size within cultivars were recorded at early harvests but had disappeared by 6 months. Thus neither genotype nor nut size had any sustained effect on the plant side.

Consumption of endosperm depended on seed size: evidently a lower, compensating net assimilation rate occurred in plants with large nuts to give a similar total supply of assimilate. This suggests that the potential supply of assimilate was not limiting the growth rate.

Large nuts transfer dry matter from the endosperm more rapidly than do smaller nuts; hence under unfavourable conditions few photosynthesis, larger nuts may produce larger seedlings. It is suggested that any seedling selection should be done in a favourable nursery environment so that emphasis is placed on differences in seedling vigour due to genetic variation. (Author's summary).

2. **Seedling Growth**—*What should be the time of transplanting in the field?*

Sumbak, J. H.—Coconut seedling establishment as affected by seedling development at transplanting as well as agronomic practices. Progress Report (I). *Oleagineux*, 1968, vol. 23(10) pp. 579-582. Tabls. bibl. 3(Dept. of Agriculture, Stock & Fisheries, Territory of Papua & New Guinea).

An experiment comparing different physiological stages at transplanting, maintenance system, depth of planting and use of fertilizer, with three replications in time, is in progress. It is located on pumice ash soil, which has been subjected to a period of previous cropping, on the Gazelle Peninsula, New Britain.

Preliminary findings are presented, based on height measurements after certain periods, chemical analysis of leaves, and fresh weights of whole plants from a limited section of the trial.

The (crow's beak) transplanting stage has given greatest height increase in the 12 months from planting in the nursery, but the advantage may well be offset by lack of effective nursery selection in transplanting at this stage. An excellent response of clean weeding was obtained. Visual observations and the limited fresh weight data indicate that regular slashing is superior to infrequent slashing, although seedling height measurements up to nine months from transplanting gave contrary indications. Fertilizing proved markedly beneficial. Confirmation of other apparent effects is necessary before any additional conclusions can be drawn. (Author's summary).

3. **Black Beetle** (Oryctes rhinoceros)—*What possibilities in its biological control?*

Bedford, G. O.—Observations on the ecology of Oryctes (Coleoptera : Scarabaeddae: Dynastinae) in Madagascar. *Bull. ent. Res.*, 1968, vol. 58 (1) pp. 83-105, (U.N/S.P.C. Rhinoceros Beetle Project. C/o Lowlands Agricultural Experiment Station, Keravat, New Guinea).

In a study carried out in Madagascar and the Comores Archipelago incidence of damage to coconut plantations following parasites and predators have been found. Scoliid parasites of the larvae of *Oryctes* are widely distributed but not commonly found. Gregarines in Larvae widespread but of rare occurrence. Oxyurid nematodes were often found in the fermentation chamber at the gut of *Oryctes* and Cetonid larvae. The fungus *Cordyceps* sp. was found at only one locality where it was attacking 56 % of the larvae of *Oryctes*. Examples of infection by the fungus *Metarrhizum* were rarely encountered. Nematodes often occurred in the aedeagus of adult males of *O. gigas* and in the bursa copulatrix and collateral glands of adult females, as well as under the elytra. They were less common in the other species of *Oryctes* examined. Mermithid nematodes were found in adults of *Oryctes* on rare occasions. No insect parasites of the adult stages of *Oryctes* were found. Elaterid larvae, possibly predacious on those of *Oryctes* were occasionally found but did not appear to be of much importance.

4. **Toddy**—*How to preserve ?*

Unson, Corazon G.—The effect of some food preservatives on coconut-toddy. *Centre Escolar University Graduate and Faculty Studies.* 1966, vol. 17 pp. 241-253 bibl. 15.

Experiments showed that the methyl, propyl and butyl esters of p-hydroxy benzoic acid are promising food preservatives for coconut toddy. A combination of these preservatives may give better results. (Philip Abst. Vol. 8 (412).

5. **Coir dust**—*Will that be a waste any more ?*

"Kohutex"—A new material. *State Engineer,* Vol. 2(1) pp. 37 (State Engineering Corp. Ceylon).

Manufacture of 'Kohutex' with the use of coir dust and cement is outlined. Its uses as Thermal Insulator for carrying hot vessels for refrigeration purposes, air conditioning purposes, building board for partitions and ceilings. Thermal and other properties are mentioned.

6. Tropical Products Institute—Attempts to use coir dust in the preparation of building slabs or hardboard. *Trop. Products Inst. report* G. 35, 2968. Tabls. (Gray's Inn Rd., London, W.C. 1).

This report presents the research carried out at the Tropical Products Institute, on the request of the Department of Agriculture, Seychelles, in the utilisation of coir dust in the making of building slabs and hardboard. The report concludes that it seems unlikely that coir dust can be used satisfactorily in the manufacture of hardboard, for any application involving the use of water, unless extreme compressive pressures and greater proportions of resin is used.

NEW USE FOR COCONUT OIL

Coconut oil has found a new use as a gasoline additive which resists rust and keeps ice from forming in a carburettor in winter. The conclusion of successful tests has just been announced by a well known oil company after 2.5 million barrels of special fuel were distributed and used without complaints.

Times of India (10.5.69)