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Seedlings Transplanting—*What are the effects of transplanting and agronomic practices on the seedling performances ?*

1. Sumbak, J. H.—Coconut seedling establishment as affected by seedling development at transplanting as well as agronomic practices. *Papua New. Guin. agric. J.* 1970, *Vol.* 22, 6-25, Illus. graph. tabl. ref. 6. (Lowlands Agricultural Experiment Station, keravat).

Different physiological ages at transplanting maintenance systems, depth of planting and fertilizer use were studied in an experiment with three replications in time. The location was a pumice ash soil which had previously, been subjected to a period of cropping, on the Gazelle Peninsula of New Britain.

Results were assessed through regular height and frond production measurements and fresh weight of the top growth of the seedlings, determined at various stages. Frond samples for chemical analyses were also collected.

At an equal time from nursery planting, transplants with up to four leaves had made better growth than "crow's beak" transplants with older transplants suffering considerable transplanting shock. Cost factors tend to make growth at an equal time from transplanting more important than that of growth at an equal time from nursery planting and indications were that older seedlings retained their advantage at least partially. A method which appears to combine minimum transplanting shock with relatively low maintenance costs is mentioned.

The importance of controlling weed growth is clearly demonstrated. Indications are that moisture stress and light availability as well as soil nutrients are of utmost importance in seedling establishment and development. Weed competition for sulphur and probably nitrogen is indicated with complete weed control acting as a substitute for fertilizer.

There was a suggestion that shallow planting was preferable under clean weeding and regular slashing, while deeper holes were favoured where infrequent slashing was used; and that "crow's beak" transplants performed better under conditions of deep planting while the older stages preferred shallow planting. These indications were not taken as confirmed.

Rainfall and sunlight subsequent to field planting were shown to be of considerable importance in successful establishment. (Author's summary).

Cassava—*What is the optimum level of potash fertilizer for cassava ?*

2. Kumar, B. Mohan, et al—Influence of potash on cassava. *Indian J. Agron.*, 1971, *Vol.* 16, 82-84. Table. ref. 6. (Central Tuber Crops Research Institute, Trivandrum 10, India).

The tuber yield of cassava increased progressively with the application of potash upto 100 kg/ha, beyond which it decreased and the optimum level was found to be 103 kg/ha. As regards the optimum time of potash application for maximum yield and starch content of tubers, 1/2 dose as basal + 1/2 dose applied one month after planting was found beneficial as compared to other split applications studied. The maximum starch content of cassava tubers (33.5 per cent) was obtained at the same split application. The uptake of potash by plant parts i.e. tuber, leaf and stem portions was also increased with increase in potash application. (Author's summary).

Pangola Grass—*How effective this grass as a feed for ruminants ?*

3. Thomas, O. A. and McLaren, L. E.—Some studies on the digestibility of pangola grass (Digitaria decumbens Stent.) in Jamaica. *Trop. agric. Trin.*, 1971, *Vol.* 48, pp. 225-235. Tabls. ref. 37. (Ministry of Agriculture and Fisheries, Bodles, Old Harbour, Jamaica, W. I.).

Pangola grass grown under a uniform pattern of management and cut at intervals ranging from 33 to 67 days was fed to penned sheep in 12 digestibility trials. The proximate composition of each sample harvested and the digestibility characteristics of each component therein were determined. The crude protein (CP) fraction was the most variable feature, both in content and digestibility, and appeared to offer the most important index for assessing the nutritive value of the grass. CP content was significantly correlated with CO digestibility ($r=0.91$) and with crude fibre (CF) digestibility ($r=0.71$). There was some tendency also, although not significant, for CP content to be associated with dry matter (DM) digestibility ($r=0.46$). CF content, however, was neither related to DM digestibility ($r=0.16$) nor significantly correlated with CF digestibility ($r=0.41$). Regression equations are given where significant relationships were observed.

It was deduced that the CP content of Pangola grass should not be less than 8 per cent of the DM for the maintenance and growth of ruminant animals. (Author's summary).

Pineapple—*What are the cultural practices for successful cultivation ?*

4. Waithaka, J. H. G. and Puri, D. K.—Recent research on pineapple in Kenya. *World Crops*, 1971, *Vol.* 23, *pp.* 190-192. Graph. tabls. ref. 6. (National Horticultural Research Station, Thika, Kenya).

Trials to determine the effects and uses of fumigation, mulching, fertilizers, irrigation, planting material, plant populations, herbicides, disease and pest control in pineapple growing in Kenya are described.

Preplant fumigation with DD, Nemagon and EDB on replant land gives a significant increase in grade 1 fruit. Plastic mulching also gives rapid fruit development, better fruiting percentages and increased yields.

Fertilizer applications of 420 lbs. of nitrogen per acre during the first year followed by 105 lb/acre on the ratoon have proved economic in Kenya.

Investigations into plant spacings suggest that populations of around 23,000 plants per acre may be optimal for Kenya condition.

What are the effects of spraying on the fruit ?

5. Wee, Y. C.—The effects of planofix on the pineapple fruit. *Malays. Pineapple*, 1971, *Vol.* 1, *pp.* 35-38. Graph. tabl. ref. 5.

Spraying the developing Singapore Spanish fruit with a solution of Planofix (an ANA based product) increased fruit weight, diameter and acidity. The best time for treatment was six weeks after the appearance of the inflorescence. Fruit maturity was also delayed with treatment. (Author).