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VARIETAL STUDIES OF THE 'RED' AND 'BLACK'-SKIN FRUIT AND FRUIT PRODUCTS OF *BORASSUS FLABELLIFER* (PALMYRAH PALM)

S. Kandiah *and* **Rathithevi Shanmuganathan,**
(*Department of Botany, University of Jaffna*)

Fruit colour was found to be a convenient morphological feature to identify varieties in palmyrah which had so far not been characterised.

Carbohydrates, proteins, fats, alkaloids, free amino acids and mineral matter content of the fruit and fruit products of the 'red' and 'black'-skin varieties of palmyrah palm were analysed and compared.

Fruit, and hence nut number, per tree is significantly greater in the red-skin variety. But pulp weight per nut is less in this variety ; thus yield per tree is not much different is the two varieties, though pulp extraction was found easier in the black-skin fruit. Sugars, starch and protein constitute 77%, 10% and 2.5% of the pulp respectively in both varieties. The alkaloids, mineral matter and free amino acids including four essential amino acids, are greater in red-skin variety.

Decrease in nut reserves during germination was more in black-skin variety. The seedling (" Kilangu ") weight however, did not reflect this excess utilisation of seed reserves during germination. The black variety yielded lesser but marginally superior seedling containing more starch and less fibre. The essential amino acids, lysine, threonine and methionine were found in both varieties.

The balance of favourable fruit features, along with the sap yielding characteristics of these varieties, favour the selection of red-skin fruit variety for commercial exploitation, and for seed for propagation of the palm in the anticipated palmyrah plantation expansion programmes in Sri Lanka.