

## WHAT IS DIKIRI COCONUT?

The coconut population in Sri Lanka exhibits a considerable variability and is classified into three main varieties named, Tall, Dwarf and King coconut. The commonly grown variety Tall, includes a form known as dikiri which is mainly found in the Southern Province of the island especially in Denipitiya and Weligama areas.

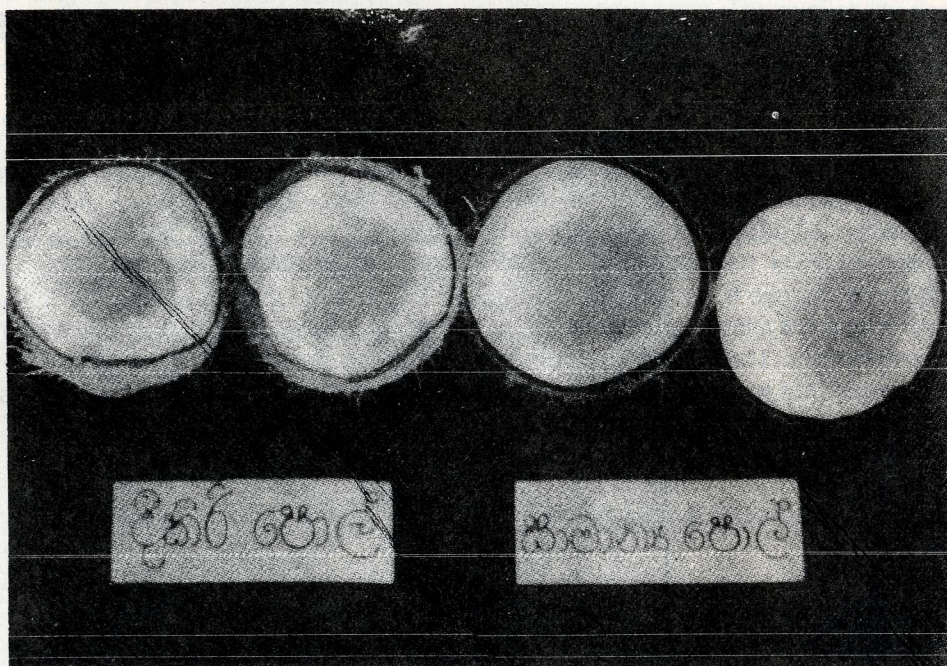
A dikiri nut costs about Rs. 50-70 and the kernel is used in preparation of sweets. The kernel of a dikiri nut is soft and is a jelly like mass, filling almost the whole interior of the nut. The nut water is thick and is an oily substance different from the nut water found in the ordinary coconut. Dikiri nut is generally heavy and its kernel is thicker than the kernel of a normal nut. When tapped, dikiri gives a low dull thud, while the normal nut gives a clear sound. When shaken, the dikiri nut gives a characteristic sound while a normal nut gives a clear sound. Dikiri is similar to "Makapuno" coconut in Philippines.

In all the existing dikiri bearing palms production is limited to only 1 or 2 dikiri nuts per bunch per palm as these coconut palms are het-

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erozygous for the character. Dikiri nuts are produced in such palms by self pollination or pollination by dikiri pollen from another dikiri palm in close proximity. However, self pollination does not bring 100% of dikiri production as the palm is not true to type. The true dikiri nuts do not germinate, due to the incompatibility between the endosperm and the embryo. After harvesting, dikiri nuts could be kept only for about two to three weeks. Therefore the character "dikiri" is inherited as a carrier in a heterozygous genotype and are propagated naturally by non dikiri nuts.

Using embryo culture techniques the Tissue Culture Division of the Coconut Research Institute has developed a method to culture the isolated true dikiri embryos in an artificial nutrient medium under aseptic conditions. Their *in-vitro*



Dikiri.

Ordinary  
Coconut

germination and growth are similar to that of other coconut embryos. Although the *in vitro* germination percentage of dikiri embryos is approximately 70, only about 40% out of the germinated embryos develop into complete seedlings. Sometimes rooting hormones had to be incorporated into the media in order to initiate roots. By this method it has been possible to obtain true dikiri seedlings.

The Tissue Culture Division has now initiated a programme to mass propagate dikiri seedlings, and the work is in progress to collect putative dikiri nuts from Weligama at bimonthly intervals for culturing the embryos to obtain seedlings.

Some such seedlings have been established successfully at Bandirippuwa Estate.

A true to type dikiri palm germinated *in-vitro* and established in 1988 is now bearing 100% dikiri nuts by controlled self pollination. It is important to produce more true to type dikiri which would in turn increase the yield of true dikiri nuts.

As dikiri can be used to prepare a wide variety of sweets like ice-cream, if popularized, the farmers can gain a higher income compared to income from ordinary coconut.

## KERAFED PROMOTES COCONUT WATER AS DRINK

The Kerala State Coconut Farmers Cooperative Federation (KERAFED) is planning to launch a national programme for promoting the use of tender coconut water. KERAFED with the support of the Coconut Development Board will be setting up stalls in all the major towns and cities and also along the national highways. To begin with, the stalls will be located in all the districts of Kerala where tender coconut water and special coconut drink will be made available at rates comparable with that of synthetic soft drinks. Depending on public response, more of such stalls will be opened.

The special coconut drink is known by the name of 'Coconut Lassi'. It is prepared by mixing the soft kernel of 7 to 8 month old young coconut, coconut water and sugar thoroughly in a mixer with a blend of cardamon powder. This drink has already been market tested and the consumer response was very encouraging.

According to the Coconut Development Board, selling tender coconut is more remunerative to farmers than the traditional system of marketing fully mature nuts. Tender nuts fetch the same price of mature nuts. Another advantage is that harvesting at young stage stimulates production of more nuts. The farmers also are not to worry about the price fluctuations in coconut oil markets as the pricing of tender coconut is independent of oil or copra prices.

Already tender coconut enjoys a growing market in India. In the major metropolis of Bombay and Calcutta, the daily demand exceeds one million tender coconuts each. KERAFED and the Coconut Development Board are convinced that the health conscious consumers will be more attracted towards tender coconut as the natural source of nourishing food and drink. A special publicity programme with tourists as the target group is also being planned to present tender coconut water and coconut lassi as healthy alternatives to synthetic soft drinks in all the tourist centres. (Contributed by the APCC Correspondent In India)

Source : Cocomunity, Vol. XXV No. 5 (1995)