

## A Study of Variation in Tender Nut Characters in Eight Coconut Varieties

About 4% of the total production of coconuts in India is utilised as tender nut (Muliar and Mathew, 1976). Tender coconuts are being sold in increasingly large quantities in urban areas as a refreshing and satisfying beverage. In West Bengal, as much as 70% of the production of nuts is used as tender nuts (Directorate of Agriculture, West Bengal, 1976).

At present, no particular care is taken about the choice of palms for collecting tender nuts, though variations are known to be present for both quality and quantity of water. For instance, varieties with high kernel or copra out-turn may well be spared from use for tender coconuts, while those

with poor copra out-turn, and having sweet water may only be used for this purpose.

Eight varieties of palms available in our Station were analysed for tender nut characters. For this, ten nuts of six months age (two nuts  $\times$  five palms) were analysed from each variety. The kernel out-turn was evaluated using ripe nuts (Table I).

In the present study the non-reducing sugar content varied considerably in the varieties (from 0.04 to 1.68%), but the variation for total sugar content was only nominal. The volume of tender nut water showed almost four fold variation. A desired volume of water combined with high sugar content was observed in the varieties Semi-tall Red

and Semi-tall Green. The present results show the possibilities for selecting for this character.

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The authors thank the Crop Specialist, Regional Research Station, Aduthurai, for the assistance given in chemical analyses.

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#### REFERENCES

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- MULIAR, M. K. AND MATHEW, J. 1976. Problems of coconut industry. *Indian Farming* 37(9): 17-20.

Table I

*Variation in water, carbohydrate, and meat content in eight varieties*

Sl. No.	Variety	Reducing sugar	Non-reducing sugar	Total sugar	Volume of water	Weight of meat	Weight of kernel in mature nut
		%	%	%	ml	gm	gm
1.	Cochin China	5.46	0.08	5.54	280	73	287.0
2.	East Coast Tall	5.03	0.04	5.07	180	60	232.6
3.	Tall×Dwarf Green	4.36	1.68	6.04	330	73	213.5
4.	Semi-tall Yellow	2.25	0.72	5.97	305	78	165.5
5.	Semi-tall Green	5.55	0.97	6.53	180	53	154.0
6.	Semi-tall Red	5.85	0.24	6.09	305	61	134.0
7.	Ayiramachi	6.10	0.09	6.19	178	46	112.6
8.	Local Dwarf Green	5.55	0.52	6.02	95	40	86.3