Study of inter and associated crops in areca gardens of the 'Malnad' tract of Karnataka

K. DEVADAS BHANDARY

Assistant Director of Horticulture

Areca Research Station, Thirthahalli (Karnataka)

Arecanut is one of the important commercial crops of India. It plays a prominent role in religious, social and cultural life of the people. Though the cultivation of arecanut is restricted to a few states, the commercial product is widely distributed all over the country. It is consumed by all classes of people. The crop is chiefly cultivated in homestead gardens, very often as mixed crop with coconut, jack, mango, banana and spices like pepper and cardamom. The country used to import large quantities of arecanut to meet the local demand since the indigenous production was not sufficient to meet the local demand. Due to various measures adopted by the Government the production of arecanut has increased and the country has almost reached self-sufficiency.

Due to the increased production the price of arecanut has come down to less than 50 per cent of the prices prevailed in earlier years when the commodity was in short supply. It is at this period that the farmers are to think of intensifying the practice of intercropping on scientific lines so as to get a support to their income from the main crop, arecanut.

In the 'Malnad' region of Karnataka State intercrops like banana, cardamom, pepper, betelvine and pineapple are commonly grown. The yield obtained from these crops is poor because in most of the cases the intercrops are not given the proper manurial and cultural operations. As a result, the intercrops are to depend on the manure and water given to the main crop of arecanut. The position can be improved by giving them the same treatment as is given if they are pure crops.

Considering all the above aspects and to study if raising intercrops has any adverse effect on the main crop, arecanut, experiments were conducted at the Arecanut Research Station, Thirthahalli from 1961 to 1965 using five intercrops namely, banana, pineapple, cardamom, pepper and betelvine. The data on yield obtained from the areca palms in the plots raised with the various intercrops are pooled and presented in table below.

Cumulative yield of arecanuts in the intercropping experiment (1961-62 to 1964 -65)

Table : Mean yield of arecanut grown under different treatments at Thirthahalli during 1981-85

Table of means

	Treatment	Mean green weight of nuts/palm/year Kg.	Mean dry weight of nuts/palm/year Kg.
1.	Banana	6.51	0.77
2.	Pineapple	7.42	0.79
3	Cardamom	8.33	0.91
4.	Pepper	6.08	0.63
5.	Betelvine	9.65	1.11
6.	Control (no intercrop)	13.34	1.03
	S. E. of treatment mean	2.23	0.114
	Overall mean	8.55	0.875
	C. V. (%)	52.16	25.46

It can be seen from the above table that the overall treatment differences do not reach the significance level, thereby indicating that growing intercrops does not pull down the yield of arecanuts to any appreciable extent.

Based on the general performance of the intercrops, betelvine and pepper are found to be the most suitable for the 'Malnad' area.