

### LIMITATIONS:

1. This technology is not recommended on closely-spaced full bearing palms (<8 m triangular or square planting distance).
2. It is limited only to tall bearing palms but not applicable on dwarf varieties.
3. This technology is not recommended in typhoon belt areas as fallen trees due to typhoon may damage young underplants.
4. It can pose a problem on rhinoceros beetle infestation if waste materials from "ubod" harvesting are not properly disposed.

### SOCIO-ECONOMIC ANALYSIS

Table 2. Socio-Economic Analysis of different planting schemes of coconut and "ubod" production

Year	Yield/ha/yr		Gross Income	
	(kg)		(Php)	
	Ubod	Copra	Ubod	Copra
A. Single planting				
1	0.00	3,775.20	0.00	107,215.68
2	0.00	3,231.80	0.00	91,783.12
3	5,045.60	3,939.50	353,192.00	111,881.80
Tot.	5,045.60	10,939.50	353,192.00	310,681.80
Ave.	1,681.90	3,646.50	117,733.00	103,560.60
B. Double planting				
1	0.00	3,775.20	0.00	107,215.68
2	0.00	3,231.80	0.00	91,783.12
3	8,755.60	3,989.70	612,892.00	113,307.48
Tot.	8,755.60	3,989.70	612,892.00	113,307.48
Ave	2,918.50	3,665.60	204,295.00	104,103.04

### References

- Padrones, G.D., M.I. Secretaria and S.S. Magat. 1999. Underplanting of young coconuts under adult stands of coconut palms for production of edible vegetative pith or 'ubod'. Coconut Research and Development. Journal. XV(2): 31-45. Publication of Asian and Pacific Coconut Community (APCC). Also in Proceedings of the 12th Regional Symposium on R & D Highlights 9p. August 4, 1999. Royal Mandaya Hotel, Davao City. Sponsored by the SMARRDEC.
- Padrones, G.D., M.I. Secretaria and S.S. Magat. 1998. A Feasibility study on coconut pith 'ubod' production under bearing palms. Occasional S & T Paper Series No. 2. 19p. Agricultural Research and Development Branch, Philippine Coconut Authority, Diliman, Quezon City.

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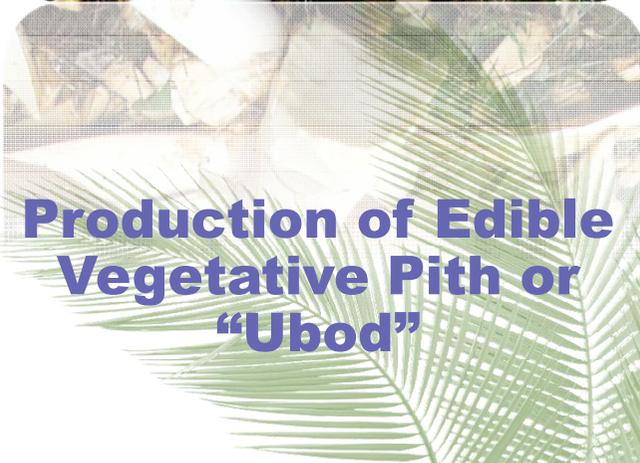


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## Production of Edible Vegetative Pith or "Ubod"

## TECHNOLOGY DESCRIPTION

The coconut palm is known as the 'tree of life' because of its diversified products and by-products that support human life. Aside from the copra and oil which support 1/3 of the country's population, the coconut tree provides many other useful food and non-food by-products. One new food item is the edible coconut vegetative pith or 'ubod'. This food item commands a considerable price in the market today because of its many uses in the preparation of food.

With the need for R & D on sustainable coconut farming, a system or strategy of underplanting young coconuts on adult stand of palms was developed to provide an alternative source of coconut pith or 'ubod' thus, preventing the indiscriminate cutting of existing productive coconut palms for such food purpose.

## ADVANTAGES

- Increases coconut farm productivity.
- Offers an alternative source of coconut pith or 'ubod' without cutting indiscriminately our existing productive palms;
- Contributes to the conservation of bearing coconut trees, thereby maintaining the natural balance of our ecosystem

## PROCEDURE

1. Set the seednuts in raised bed (15-20 cm above ground level) to prevent them from being washed away during heavy rains.

2. Set seednuts in horizontal position and cover 2/3 of the seednuts with soil.
3. Water the seednuts 2-3 times each week especially during dry season.
4. After 2-3 months, set the germinated seednuts in the ordinary nursery. Lay-out the rows in a North-South orientation and arrange them preferably in a triangular pattern measuring 60cm x 60cm.
5. About two meters away from the rows of bearing palms, prepare holes in two rows in the interspaces of full bearing palms in a 3m x 3m triangular planting distance.
6. Plant the coconut seedlings in prepared holes in either two ways:
  - One palm per hill (742 plants/ha)
  - Two palms/hill at 2 ft apart (1,484 palms/ha)
7. Apply proper cultural management to both young and old palms (i.e. ring weeding, fertilization, etc.)
8. Harvest nuts every 45 days.
9. Harvest "ubod" three years after field planting using the following steps:
  - Trim and cut few older leaves of young



coconuts using a bolo.

- To prevent spoilage, cut the bole of harvestable palms at 6-10 inches below the "ubod" base and about 10-18 inches above the "ubod" end.
- Remove the covering of the "ubod" by stripping the base of the petiole to extract the soft portion of the "ubod".
- Weigh and classify the "ubod" (Table 1).

Table 1. Average fresh weight, girth & length of "ubod" per palm at 3 years old.

- Dispose properly the farm wastes after extracting the "ubod".
- If applicable, cover the stump with a

Classification	Weight (kg)	Girth (cm)	Length (cm)
Large	9.9	96.0	28.1
Medium	5.7	88.5	25.1
Small	2.1	84.4	22.3

mixture of soil and sand to enhance decomposition.