



National Agricultural Research Institute

Best Practice Note for Taro Farmers



NARI TOKTOK

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INTRODUCTION

Taro is cultivated in many parts of Papua New Guinea as an essential food staple among the other root and tuber crops like sweetpotato, banana, cassava and yam.

Cultivation practices vary from place to place up in the highlands and down in the coastal areas. Some people use spades while others use sharpened wooden poles and iron bars to dig holes to plant taro. The soil tillage depends on the types of soils in which taro are grown.

Apart from the techniques of planting and tillage, selection of cultivars under different environment, the type of planting material used, maintenance of the newly planted garden (in terms of soiling, weeding, pest/disease control) and harvesting are important considerations for good production. Best management must therefore be practiced



The following steps below describe best practices in preparing, planting and managing the taro crop until harvest.

Step 1. Select a site and clear up the field for planting taro. It is advisable to remove old stumps of banana as they could harbour beetles which would attack taro corms.

Step 2. Select and harvest right sized suckers for planting. Although head setts from the mother/main corms can be used, yield may be lower than the use of suckers. Cut off the leaves at about 25-30 cm length.



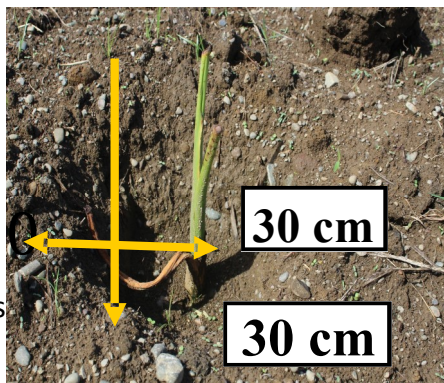
Step 3. Clean the suckers and further surface sterilize them in a bucket or drum with 10 % bleach (i.e. 1L bleach into 10L water container which is the same capacity as most laundry buckets) for at least 30 minutes. 44-gallon drums can be used with Increased capacity. This is a simple step to minimize carryover of pests and diseases on the plant surface.

Step 4. Remove. Rinse in water and cover under dry grass or leaves for 2-3 days and plant when the holes are dug. This is to encourage roots to form before planting.



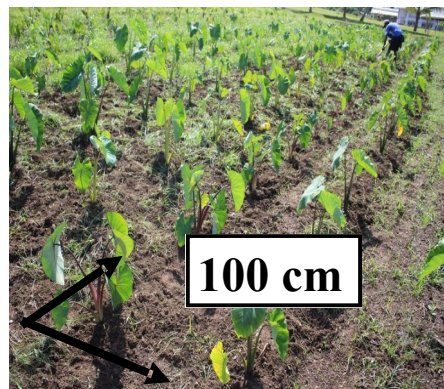
Step 5. Dig a hole 30 cm deep with a spade or iron bar which is about 20-30cm in diameter and plant.

Plant spacing must be 100cm (1mtr) apart between row and plant. Lightly cover the suckers with top soil at the base.



Through weeding and weath-
ering process the hole will
naturally fill up.

Step 6. First weeding can be
done 3-4 weeks after planting.
Any excessive soil build up in
the hole maybe removed to
allow air circulation and sun-
light for the taro plant.



Note that hilling up too much soil when the taro is at one month will restrict its tuber formation. Sunlight and heat from the soil encourages the corms to develop and expand in size.

Step 7. Second weeding and gradual hilling up can be Done at 3 months after planting. More hilling maybe done From 4 months onwards.



Step 8. Taro is ready to be harvested at 6-7 months for medium/dwarf varieties and up to 8 months for the tall varieties, in the lowlands. In the highlands areas, taro can be harvested at 12-15. months. Really, maturity period depend



Extra notes on pest and disease management:

During the period of maintaining the taro plants, watch out for diseases and insect pests:

1. Taro Leaf blight (TLB): This is a fungal disease which causes the leaf surfaces to burn, turn brown and rot. They are transported by rain splashes, wind and humans/animals. While fungicide chemical can be used, they are quite expensive, hence it is advisable to introduce tolerant varieties bred by NARI.
2. Taro Beetle: The beetle bores hole into the taro corms. If more than 50% of the corms are damaged upon harvesting then in the next planting taro beetle control chemicals (Bifenthrin and Mustang) must be used.
3. Taro viruses: Plants showing stunted growth, leaf curling, vein colouring and all other abnormal growth should be removed completely from the garden and buried in holes dug at the edge of gardens. They are signs of virus infections. Very small flies (insects) sucking off taro leaves are mostly responsible for transfer of viruses. Viruses are very destructive and there are no proper control measure.

This booklet is produced based on facts from hands on experience in the field by Philip Lali, a dedicated field staff attached to Taro Breeding at MRC, written by Jenny Batau-Anima and technically revised by Jeffrey Waki.

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