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## Best varieties for export

- Tausala-ni-Samoa export variety
- Wararasa Hybrid yellow flesh
- Tarova loa Taro Leaf Blight tolerant
- Dalo Via Loa slight yellow flesh
- Uro ni Vonu Light purple flesh
- Vula Ono Hybrid light yellow flesh
- Maleka dina Hybrid yellow flesh
- Dalo-ni-Toga white flesh
- Vavai Dina
- Tausala ni mumu-light yellow flesh
- Dalo via hybrid yellow flesh

#### Seed rate

- Traditional farming system 10,000 plants/ha with spacing of 1m x 1m
- Mechanised farming system 12,500 plants/ha with spacing of 1m x 0.8m

## **Planting time**

- Main season crop July to January.
- Off-season crop March to June.
- Wet Zone throughout the year.
- Intermediate zone September March.
- Regular monthly planting phase planting will maintain consistent supply.
- Tausala-ni-Samoa is susceptible to prolong dry spell while Uro ni vonu variety can withstand dry conditions.

#### Where to grow

- Avoid steep slopes of more than 150 provide hedgerows or boarders in case of steep slopes
- Flat to gentle slopes are best for dalo.
- Soil must be fairly deep about 15 -20cm, fertile and rich in organic matter and must be well drained.
- Alluvial soils of the river valleys in the wet and intermediate zones are most fertile and rich in organic matter that is best suitable for dalo produc-

#### Land preparation

- Loosen the soil by digging with fork on slopes or by ploughing and harrowing on the flats and gentle slopes, where soil is ridged at 1 – 1.2m apart
- On the flat land, use bullocks or tractor and allow excess water to drain away.
- Dalo will not grow well in stagnant water as this can contribute to dalo corm rot.

#### **How to plant**

- Plant spacing: 1.0m x 1.0m on hill slopes in traditional system and 1.2 x 0.8m on flat lands to produce large corms and higher yields. This spacing on flats allows inter - row cultivation for weed management by small machines or by horse driven machine.
- In wet areas spacing may be closer to 0.9 x 0.9m on slopes and 1m x 0.6m on flatland
- Make a hole 9 inches deep (25cm) with a stick, fork or posthole spade.
- Plant the sucker by placing it in the bottom of the hole and press firmly with loose soil.
- Planting in rows makes it easier to weed, fertilize and hoe.

# **Planting material**

- In areas where Taro Beetle (Papuana uninodis) is prevalent
  - Use clean planting materials from clean
  - Dip planting material in Diazinon(2ml/l of water) mixture for 20 minutes or Bifenthrin (2.5ml/l of water) for 10 minutes to kill the eggs when materials came from known beetle

infested areas.

- Use large and healthy suckers (5cm in diameter) or about 20cm length. Planting materials must be well selected before planting, size must be uniform.
- Suckers of about 15 25cm in length established faster and grow vigorously to form canopy. This reduces weed growth.

#### **Fertilizing**

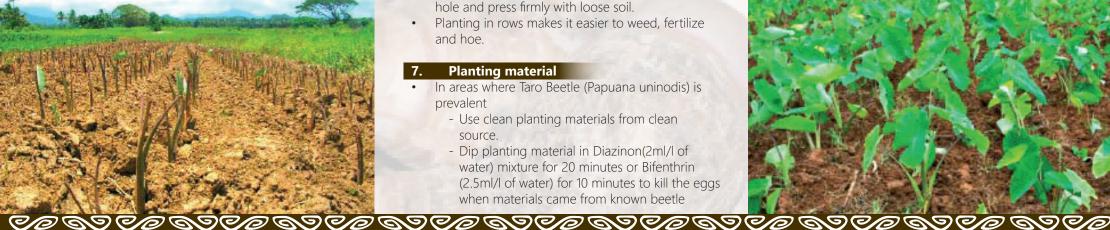
- Poultry manure 8 tonnes/ha or compost materials. Apply 1 – 2 weeks before planting to condition
- NPK (13:13:21) 200kg/ha at first leaf stage or
- Apply single fertilisers Super Phosphate at 25kg/ha.
  - Muriate of Potash at 100kg/ha at planting
- Top dress with Urea (46%N) 100kg/ha apply per plant in 2 split applications after planting and 15g per plant after 5 and 10 weeks.

Highly recommended to carry out soil analysis before planting.

#### **Weed Control and Management**

- It is very important for the dalo crop to be kept weed free in the first 4 months.
- Apply Glyphosate at 120ml/16L knapsack 1-2 weeks after the final land preparation. This is to control the weeds before planting. This is recommended for acreage farming due to weed control issues.





- Apply Samurai at 75ml/15L knapsack or Glufosine Ammonium 90-150ml/15L knapsack or Target at 10ml/15L knapsack or Za herbicide 20-40ml/16L knapsack after planting.
- Hand weeding is highly recommended based on visual observation. Best to control weeds at 2 – 3 leaf stage.
- Good land preparation will effectively reduce weed emergence, do not rush land preparation.

## 10. Disease control and Management

- Corm rot causes wilting of plants due to severe water logged soils. Provide good drainage to remove excess and stagnant water.
- Brown leaf spot are of minor economic importance. It is a seasonal disease and will disappear when the weather changes so no need for chemical control.
- Good husbandry, regular weeding and proper fertilisation help to minimize the disease.
- Fiji is still free of Taro Leaf Blight (TLB) disease, a serious dalo disease in the Pacific and is a major quarantine dalo pest.

#### 11. Pest control and management

- Dalo plant hoppers, Cutworms, White fly and Cluster Caterpillar often attack dalo leaves and stems in humid areas. These are common during the dry seasons.
  - Spray Malathion 50% EC at 30ml/15L of water.
  - Or Acephate (sold as Attack) 75% a.i at 20g/15L of water.
  - Or Diazinon at 60ml/15L of water.
- Taro beetle feed on dalo corms making large holes which reduce their value and can result in corm rot and the complete loss of the corm.
  - Apply Bifenthrin at 2.5ml/L of water at planting and 3 months after planting on infested areas.
  - Dip planting materials or suckers in Bifenthrin at 2.5ml/L of water for 10 minutes when transferring planting materials from infested to non-infested areas.

 Use of clean planting materials from clean source and avoid transferring host plants (dalo, dalo-ni-tana, via, ornamental dalo plants or potted plants) and poultry manure from infested sites to non-infested sites.

#### 12. Harvesting

- Improved varieties and hybrids mature in 6 to 8 months after planting.
- Traditional varieties mature in 9 to 10 months after planting.
- Shelf life for dalo corm is around 2 to 3 weeks for certain varieties, if harvested at optimum maturity stage.
- Avoid damaging corms by digging properly with stick, post hole spade and gentle pulling.
- Optimum yield ranges from 18 to 25 tonnes/ha.

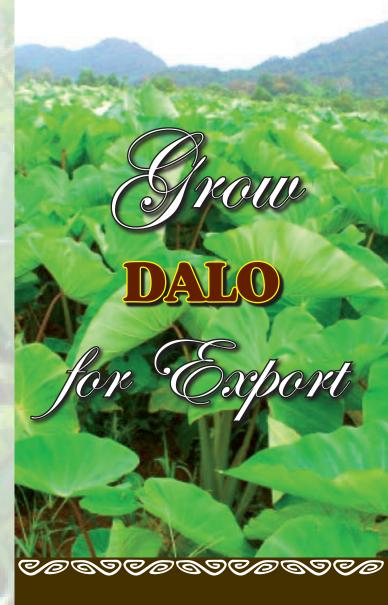
#### 13. Food value

 Contains large amount of Vitamin A, Vitamin B1, Vitamin B2 and Vitamin C.

## 14. Disaster Risk and climate Change tips

- Floods and Cyclone Plant giant swamp taro (Via) and wetland taro varieties, as they will sustain high moisture and will be a good source of food during and after disaster. Taro can grow in moving water and light shade.
- Salt intrusion on lowland areas Some dalo varieties have tolerance to saline condition e.g. uro ni vonu, but Fiji don't have saline tolerant dalo varieties. "Tuatua Concept" works on lowland areas, which a raised cumber beds systems of about 3 4ft with 5 6m width.
- To mitigate risk of disasters, dalo farmers must have a diversity of dalo varieties in their farms.
  Varieties for food security and disasters and varieties suitable for markets. It is also important for farmers to keep track of weather information and climatic patterns in Fiji and plan their planting program according to this.











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