

Training Series on Agrometeorology and Climate Change Adaptation

Yam Minisett Technique



Yam (*Dioscorea spp.*) is one of the main traditional crops cultivated in Vanuatu. It is a root crop which is propagated using tubers as planting materials. The minisett technique uses a small part of a non-dormant tuber to be sown and grown until the resulting seed tubers are large enough to be used to grow as food tubers.

YAM SPECIES

- Soft yam (*Dioscorea alata*)
- Wael yam (*Dioscorea nummularia*)
- Sweet yam (*Dioscorea esculenta*)
- Wailu (*Dioscorea rotundata*)
- Africa (*Dioscorea trifida*)
- Puevu (*Dioscorea bulbifera*)
- Hibo (*Dioscorea pentaphila*)
- Strong yam (*Dioscorea transversa*)



With the minisett technique, farmers use a small part a non-dormant tuber containing periderm and some cortex parenchyma.

The minisett technique is best applied with the following yam varieties:



Soft yam
(*Dioscorea alata*)



Strong yam
(*Dioscorea transversa*)



Wailu
(*Dioscorea rotundata*)



Wael yam
(*Dioscorea nummularia*)

Advantages of minisett technique

- Helps farmers producing a large number of healthy, good-sized tubers for replanting.
- Farmers can multiply new varieties in a short period of time.
- Allows easy selection of healthy tubers.

Materials for preparing the minisett

- A small sharp knife
- Fire ashes
- Sawdust
- Watering can
- Water

Preparing the yam for the minisett



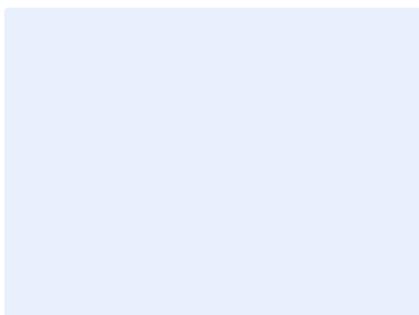
1. Remove the head and the bottom part of the yam. These parts will not be used.
2. Cut the yam into squares or triangles about 20-60 grams per piece. Make sure that each small piece has some skin and flesh.
3. Apply fire ashes on the cut pieces to prevent growth of any fungus.
4. Store the prepared pieces in a safe and shaded place to dry for one to two days.

Setting up your nursery



1. Build a shade using screen net or coconut leaves.
2. Cover the soil surface with sawdust about five to ten centimeters thick.
3. Plant the prepared pieces of yam (minisett) into the sawdust.
4. Water the minisett daily for three to five weeks until ready for harvest.

Transplanting



1. After 3-5 weeks, collect the minisett sprouts while the two true leaves have not yet opened.
2. Transplant into the field placing the minisett sprouts 30 x 30 cm apart.
3. The staking should be 1.5 meters maximum.

Harvesting



Seed tubers can be harvested four to seven months after transplanting the minisetts into the field. Each tuber will weigh about 0.3 to 0.8 kg and can readily be used for the next planting season.

Important considerations

One of the main concerns of farmers is the damage caused by the following pests and diseases to the planting materials.



Papuana beetle damage



Nematode damage



Fungus damage

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Where can I get advice?

- For more information on Climate Change & Disaster policy, projects and activities, contact:
National Advisory Board on Climate Change & Disaster Risk Reduction (NAB)
Private Mail Bag 9054, Port Vila
Tel: (678) 2231; Fax: (678) 22310
Web: www.nab.vu; Email: commp@meteo.gov.vu
- For more information on Climate Change Science, contact:
Climate Section of the **Vanuatu Meteorological and Geohazards Department (VMGD)**
Tel: (678) 24686
- For more information on Yam Vine Cuttings, contact:
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