

- checking the mounds for yam, sweet potato and taro, and adding more soil if necessary;
- providing stakes for yams.



## When and how can I harvest my crops?

- Harvesting times will be different depending on the crop.
  - **Cassava/ Tapioca:** one to three years
  - **Taro:** nine to twelve months
  - **Yams:** six to ten months
  - **Sweet Potato:** four to six months
- Once the plants are ready, pull them gently from the soil, ensuring that all corms and tubers are pulled out.
- Sort the harvested crop according to variety (use labels for reference).

- Weigh the fruits, corms and tubers, checking the skin and flesh colour, and properly record these observations.

Harvested root crops can be stored and used for a long time as a secure food source. Traditional methods such as underground storage, part-boiling, sun drying and baking can be used to keep harvested crops for up to three months.



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Resilient nations.



SPC  
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# Enhancing Food Security for Resilient Communities

A tool for climate-resilient crop cultivation

### Climate-resilient crops – what are these?

Climate-resilient crops have demonstrated their ability to grow well in a poor environment, being able to tolerate drought, waterlogging and salty conditions. The Secretariat of the Pacific Community (SPC), Centre for Pacific Crops and Trees (CePaCT) based in Suva, Fiji, conserves and makes these crops available to countries for food security. Its climate-resilient crop collection includes the major staple crops of the Pacific, such as bananas, cassava, sweet potatoes, taro, swamp taro and yams. The collection consists of many bottles, each containing a small piece of tissue from the crop in a jelly-like substance, the growth medium. This is called the tissue culture technique. The bottles are kept in sterile laboratory conditions until they are needed. Before they are sent to their destinations, the plantlets are transferred to small bags.



# Preparation for planting of tissue culture plants

## Potting tissue culture plantlets

1. Prepare the soil and/or compost mix in a pot.
2. (a) Gently take out the plants from the bags and (b) wash away the medium (jelly) from the roots. Take care not to damage roots.
3. Prepare a hole in the soil mix with your thumb or stick, place the plant in with care and gently cover the roots with soil.
4. Make holes in a plastic bag and cover the plant with it to allow the plant to adapt to the new environment. Remove the plastic bag after a week for fast growing plants, and after two to three weeks for others.
5. Label the plant correctly with its plant code, variety name and date of planting. (The plant code and variety will be provided with the plant.) This is important for future referencing. Label example: Code: BL/SM/10: Date of Planting (DOB);17/03/2014



## How do I look after the plants?

### Nursery care

- The plants should be watered three or four times a week; water over the leaves into the soil.
- Check the plants every day to ensure that the leaves are healthy and green, with no holes, bruises, or black or brown spots.
- Transplant the plants into the field when they are ready:
  - Sweet potato, taro and banana plants after two to three months;
  - Cassava, yams and kava after four to five months.

### Field care

Transplanting the young plants from the nursery into the field

- Fill the pot with water, then gently ease out the plant and soil together by squeezing the sides of the pot. Try to keep the soil around the plant and take care not to damage the roots.
- Put the plants in the prepared land and make mounds around the yam, taro and sweet potato plants. Cover the plants with fronds for a few months until they have fully recovered.
- You can plant in a shaded area (such as between larger coconut and banana trees) for a short adjustment period. Traditional agroforestry methods can be applied.
- Label your field plants correctly for future reference.
- Maintain and care for the plants in the field by:
  - watering them regularly in the early stages, depending on weather conditions;
  - regularly removing weeds and checking the plants for pests and diseases;

