Session 6: LEAF AND MANURE TEAS

Objectives
1. To understand the value of liquid fertilisers as a source of nitrogen and other nutrients.
2. To know how to prepare leaf and manure teas.

What is leaf and manure tea?

Teas made of leaves or animal manure are called liquid fertiliser. There are several advantages of using liquid fertilisers. Plants drink their food rather than eat it, so the nutrients in liquid fertilisers are taken in rapidly by the plants. Teas are especially valuable during the rainy season due to constant leaching from the soil by the rain. Leaf and manure teas are also easy and quicker to prepare than compost.

Leaf and manure teas are more suited to farmers involved in vegetable production but they can also be used on crops like maize.

How to prepare leaf or manure teas

Teas are very easy to make. Collect manure or fresh leaves from plants like comfrey, leucaena or sesban trees. Put about 30 kg in a sack and tie it securely. Hang the sack on a stick in a large drum of water (around 200 litres). Cover the drum either with its metal lid or with an empty grain bag.

Move the stick up and down every second or third day to stir the mixture and speed up the release of nutrients into the water. The soaking of the leaves will continue for about two weeks. Be sure the sack of leaves or manure is kept under water all the time.
How to make liquid fertilizers

Which material can be used?

A variety of materials can be put into the sack when making liquid fertilisers apart from the ones mentioned above. At Kasisi Agricultural Training Centre in Zambia, farmers are experimenting with leaves of different trees and plants. They have also prepared teas from cow dung and other types of animal manure. Even a mixture of different materials can be put in a sack, for example weeds and cow dung. We encourage you to test different materials for yourself.
How to use leaf or manure teas

The use of teas is very simple. After removing the sack of leaves from the drum, mix the solution of nutrients with water until the colour is similar to that of weak tea. Usually this means mixing about four parts of water with one part of the concentrated nutrient solution. Then the tea is ready for your field.

How to prepare tea

Tea can be applied on your field in two ways. Either pour the tea on the soil around the plant or sprinkle the tea over the leaves of the plants. Avoid sprinkling strong and concentrated tea on crop leaves.

Tea should be used with care as they can cause crops to grow very quickly with large soft leaves. This makes them susceptible to pests.
How to spread teas

Do not throw away the residues of the leaves, but put them into your compost pile or apply them as mulch around the vegetable plants.

Resuse residues

When to use teas

One excellent time to apply teas to vegetables is when you transplant them. This will help the young plants to recover from the transplanting shock. Continue to apply the liquid fertiliser once a week for about a month.
1. What local materials are available to make leaf and manure teas?

2. How would the use of leaf or manure teas benefit the different types of crops you grow?

3. What problems can you encounter when using leaf or manure teas?

**Make teas!**

Divide the group in two. One group may prepare and demonstrate how to make leaf tea, while the other group may make manure tea.

List the materials needed for making the tea. Share responsibilities so that everyone has a direct role in making the teas.

Prepare and demonstrate how to make, and use teas.