Good microbes for plants and soil

Farmers often spend a a lot of money on chemical fertilizers and pesticides. Although this may give a bigger harvest in the short term, applying these chemicals for long may harm the soil, environment and people since it kills living organisms in the soil.

Healthy soil is important for plants to be healthy and microbes are an important part of this because they nourish the plants as well as enrich the soil hence protecting plants from diseases.

Various kinds of solutions can be prepared to help beneficial microbes to grow in the soil. These solutions are organic and are made from locally available ingredients at low costs.

These microbes do not only enrich the soil but also increase the yield.

Preparation of organic solution

The ingredients needed are: 1 kg of flour rich in proteins such as chicken pea flour, a handful of sugar, 1 kg of fresh cow dung, 1 kg of neem leaves, 1 litre of cow urine and 10 litres of water.

Mix all these ingredients in a bucket one after the other. Mix fresh cow dung with water and add to the bucket with other ingredients to make a mixture. Add water and stir the mixture with a wooden stick twice a day for five minutes then cover the bucket with a lid.

The organic solution gets ready after 10 days since microbes have grown and multiplied and can be used. One can tell it‘s ready by the smell of the mix.

Ingredients and usage

The neem leaves used help manage pests like aphids and leaf hoppers in plants, flour is rich in proteins and feed the good microbes, cow urine provides nitrogen to nourish good microbes, water gives a place for microbes to live and multiply and cow dung contains many good microbes.

For usage, apply the mixture to seeds to treat them and dry in a shade. Mixture can be applied to roots of seedlings to encourage growth.

For spraying plants, dilute 1 litre of solution with 1oo litres of water once a week or once a fortnight when plants are growing, flowering and fruiting. The mixture can be used to enrich soil.