How bio-fertilizer is made

To form biofertilizer, the bio-digester system is filled with cow manure and water. The cow manure has bacteria that anaerobically break down the mixture to produce biogas and a liquid that is filled up with essential nutrients such as Nitrogen, phosphorous, potassium, and micronutrients.

Biofertilizer utilization

To use the biofertilizer, place a drum near the field and collect the biofertilizer from the pit using a bucket into the drum.

Pour the biofertilizer into a watering can and fertilize the crops. As you wait for the next season, ensure that you plow your land immediately after harvest as this exposes the weeds and pests which eventually die. This also helps in preventing soil compaction and crop rotation is also encouraged to enhance productivity.

Biofertilizer application

Pre-planting treatment; this is done 2 weeks before planting and prepares the land to receive crops. All you need to do is prepare the land, remove debris and apply two liters of biofertilizer per square meter, and gently incorporate it into the soil.

Planting treatment; this kind of fertilization takes place at planting and is a source of nutrients for the seed or the seedling. The fertilizer is applied on different plants in different ways

but the fertilizer
has to be diluted to avoid scorching the plants. Dilute in a ratio of 1:2
before applying to the crops.

For short-term cycled plants that take at most 3 months to complete
their cycle like cabbage, apply 3 liters of diluted biofertilizer per hole
and plant the seedling, for midterm plants like maize that take between 3 to 6
months to complete their cycle, apply 6 liters of diluted biofertilizer per hole while for perennial crops, mix 10 liters of diluted biofertilizer with topsoil, put the mixture back in the soil, and plant the seedling in the middle.

Top dressing; this takes place 2 weeks after transplanting
or 6 weeks after germination. Apply your biofertilizer around the base of every
crop once every week. For mid-term plants, apply 6 weeks after planting or 2
weeks after transplanting 1.5 liters per crop, for mid-term cycle plants apply
three liters while for perennial crops, apply 5 liters of diluted fertilizer
every week until flowering either 6 weeks after planting or immediately after
fruit harvesting.

Tips for better production

Ensure you plow your land so that you can expose the pests
and weeds to the sun and these will eventually die.

The choice of fertilizers should not only be on nutrients
but should be helpful in organic structure, organic matter, and soil structure.

Fertilization is a continuous process since crops require nutrients throughout the growth cycle.