

# **Symbiotic Microbes for Flowers & Fruit (SMFF)**

## **Fermented Fruit and Algae**

### **What are Symbiotic Microbes?**

**Symbiotic Microbes (SM)** are a diverse blend of naturally occurring beneficial bacteria, fungi and yeasts that work together to improve soil quality and encourage healthy plant growth. They add more life to soil and help with the decomposition of organic matter, producing nutrient-rich soil for plants, strengthening plants, and eliminating pests.

### **What are Symbiotic Microbes for Flowers & Fruit and its Function:**

**Symbiotic Microbes for Flowers & Fruit (SMFF)** improve soil quality and encourage healthy plant growth, especially from first flowers to mature fruit. It consists of a diverse blend of symbiotic microbes, fermented fruit, and algae to sweeten fruit, speed up harvest time and increase crop yield.

### **Detailed Benefits and Functions:**

- It is a nutrient-rich probiotic and bio-fertilizer for plants and soil.
- Use it from the first flower to visible fruit. It supports growth during the changeover period. During this period, crops require ample amounts of phosphoric acid.
- For the maturing of fruit, it enhances reproductive growth. Symbiotic Microbes for Flowers & Fruit (SMFF) helps supply the calcium demand of crops at this stage.
- Improves nutrition and potassium uptake through leaves and roots.
- It sweetens the fruit, speeds up the time to harvesting and increases yields of more robust and healthier plants.
- It assists in building resistance to diseases and protects plants from pests.
- It contains natural enzymes that support the production of chlorophyll by plants that support the photosynthesis process in plants.
- It assists in enzyme activation. Enzymes “break down” and “build” molecules such as nutrients, speeding up all vital biological processes for rhizobacteria and plants.
- It is excellent for re-energizing crops.
- Symbiotic Microbes for Flowers & Fruit (SMFF) is an excellent growth medium for probiotics.

### **Fermentation Process:**

We ferment the fruit and algae to increase the diversity of beneficial bacteria and fungi. During fermentation, apple cider vinegar and natural ethanol are added to extract more nutrients and beneficial phytochemicals. The resulting serum is rich in nutrients and phytochemicals. Nutrients include nitrogen and higher amounts of phosphorus and potassium to support the growth of flowers and fruit.

### **Benefits of Using Liquid Ferments:**

- Prevents diseases.
- Prevents bacterial attacks.
- Prevents insect invaders.
- Provides a boost in nutrient needs.
- Supports the vigorous growth of plants stems, leaves and roots.

## Ingredients:

Symbiotic microbes, fruit, algae, sulphur-free blackstrap molasses, raw apple cider vinegar, natural ethanol, and fountain water.

## How to Use Symbiotic Microbes for Flowers & Fruit (SMFF):

- Foliar spray/soil drench/compost tea
  - **Foliar spray:** 2-5ml per litre of water (*spray upper and lower surfaces of leaves*)
  - **Soil drench:** 5ml-10ml per litre of water
  - **Compost tea:** 5-10ml per litre of water

- Prevention

- 2-5ml per 10 litres of water for daily use
- 2-5ml per litre of water once a week

### Plant strength and soil health

- You may alternate weekly with Symbiotic Microbes with Fulvic Acid (SMFA) or Symbiotic Microbes with Fermented Nutrients (SMFN)

### Pest and disease

- You may alternate weekly with Symbiotic Microbes Pesticide (SMP)

- Outbreak

- 2-5ml per litre of water daily for at least 12 days

### Plant strength and soil health

- You may alternate daily with Symbiotic Microbes with Fulvic Acid (SMFA) or Symbiotic Microbes with Fermented Nutrients (SMFN)

### Pest and disease

- You may alternate daily with Symbiotic Microbes Pesticide (SMP). Start the first day with 10ml per litre of water. From the second day, use 2-5ml per litre of water.

## When to apply:

DO NOT apply in direct sunlight. Apply late afternoon or early morning before soil and leaves are exposed to direct sunlight. The microbes will attach to the leaf surface or enter the soil, feeding the plant and providing excellent organic fertilisation and resistance to pests and diseases.

## Storage and Shelf Life:

Store in a cool, dark place out of direct sunlight. **Symbiotic Microbes for Flowers & Fruit (SMFF)** contains living organisms and pressure may build up. Unscrew the cap without removing it to release pressure and secure it tightly. Shelf life is six (6) months when stored correctly.

**Recipe to Extend SMFF:**

- 250ml SMFF
- 250ml Molasses
- 250g Ripe or overripe fruit
- 4500ml 40 degrees Celsius water (*rain, borehole, or fountain water. If you use chlorinated water, let it stand for a day to allow the chlorine to evaporate.*)
- Let it ferment in a dark, warm place for five to seven days. Due to the growth of living organisms, pressure builds up. Use an airlock to prevent pressure from building up. Alternatively, unscrew the cap without removing it to release the pressure and secure it tightly.
- Use a pH meter or paper check to ensure the pH is around 3.6. Let it ferment for another seven days.
- It will be ready to use in about two weeks from the initial start. It should have a sweet, fermented smell like the initial SMFF. Strain the liquid and store it in an airtight container at room temperature out of sunlight. Shelf life is up to six (6) months.