

Training Module on Preparation and use of Jeevamrutham

Background Information

Jeevamrutham is a natural bio-fertilizer used extensively in organic and natural farming systems. It is a fermented mixture of cow-based products and other natural ingredients, rich in beneficial microorganisms, enzymes, and growth-promoting substances. It enhances soil microbial activity, improves nutrient availability, and stimulates plant growth. Jeevamrutham is particularly important in zero-budget natural farming (ZBNF) and is known for being an affordable, eco-friendly alternative to chemical fertilizers.

Materials Needed

Cow Dung- 10 kg (from indigenous cow breeds), Cow Urine- 10 liters, Jaggery- 2 kg (unrefined sugar), Pulse Flour (Bengal gram flour) - 2 kg, Soil- 1 handful (from the farm), Water- 200 liters

Method of Preparation

1. **Day 1:** In a large drum or container, add 200 liters of water.
2. Mix the cow dung, cow urine, jaggery, pulse flour, and a handful of soil into the water.
3. Stir the mixture thoroughly and let it ferment for 2–3 days.
4. Stir the solution twice daily to facilitate the fermentation process and promote microbial growth.
5. **Day 3–5:** Jeevamrutham is ready for application. Use it within 5–7 days to ensure maximum microbial activity.

Application Method

- **Soil Drenching:** Apply Jeevamrutham directly to the soil. Use 200 liters per acre, ideally during irrigation or by pouring it around the base of the plants.
- **Seed Treatment:** Soak seeds in a diluted Jeevamrutham solution (1:10 ratio with water) for 30 minutes before sowing to enhance germination and initial growth.
- **Foliar Spray:** Dilute Jeevamrutham in water at a 1:10 ratio and spray on the crop foliage to promote leaf and stem growth.

Application in Crop Cultivation

- **Soil Fertility:** Regular application of Jeevamrutham enhances microbial activity in the soil, making essential nutrients more available to cotton plants.
- **Growth Stimulation:** Jeevamrutham stimulates the growth of cotton plants, resulting in stronger roots, better plant structure, and increased resilience to environmental stresses.
- **Pest and Disease Resistance:** By boosting the overall health of plants, Jeevamrutham helps reduce pest and disease outbreaks, decreasing the need for chemical pesticides.
- **Yield Improvement:** The use of Jeevamrutham in farming has shown to increase quality and yield.

