

## Jeevamrut: A Low Cost Organic Liquid Manure in Organic Farming for Sustainable Crop Production

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Jeevamrut is a completely organic fertilizer and a great replacement of chemical fertilizers. It is made up of two words 'Jeevan' and 'Amrit'. The first word Jeevan means 'Life' and the second word Amrit means 'Medicinal potion'. According to agricultural view, Jeevamrut is for crop life. It is best culture for increasing the microorganisms which are present in the soil are responsible for increasing the fertility of the soil and the productivity of crops. Jeevamrut is very good source of biomass, natural carbon, nitrogen, phosphorous, calcium and other micronutrients which are essential for plant growth and development. Jeevamrut is an efficient plant growth stimulant that enhances the biological efficiency of crops, activate soil and to protect the plants from disease and also increase the nutritional quality of crops. It is a cost effective and eco-friendly bio-inoculant having great potential to enhance agriculture production in a sustainable way.



Various components of Jeevamrut

### **Application Method of Jeevamrut**

In liquid form – Spray 5-10% of jeevamrut in water at the time of irrigation. For one acre, 100-200 litre of jeevamrut is needed. Moreover, it is beneficial when used once in 7-10 days.

### **Preparation of Jeevamrut**

- Take 200 litre water in barrel.
- Take 10 kg local cow dung (Indian breed) and 5-10 litre cow urine (Gomutra) and add it in water.
- Add 2 kg jaggery (Gud), 2 kg pulses flour and handful soil from virgin soil of the farm in barrel.
- Then stir the solution well and need to keep it for 48 hours in the shadow. The mixture needs to be stirred couple of times for minimum 10 minutes. It gets fermented. After 48 hours Jeevamrut is ready to use. It can be used for 2-3 days.

### **Beneficial Effects of Jeevamrut on Crops**

- Increased plant growth
- Increased palatability
- Increased sustainable crop productivity and profitability
- Increases nutrient content and uptake by crop
- Increased quality of produce
- Increased nutrient use efficiency, energy use efficiency, water productivity and resource use efficiency

### **Advantages**

- It is completely organic and provide all the essential nutrients required for plant growth.
- It increases the microbial count and useful bacteria in the soil.
- It helps to maintain the pH of soil, improves aeration, nutrient use efficiency, energy use efficiency, water use efficiency, productivity and resource use efficiency.
- It increases sustainable crop productivity and profitability.
- It is suitable organic fertilizer for all crops and increase the yield and quality of produce.
- Jeevamrut preparation material available easily, it can be made within 4-5 days so it can be used effectively and frequently.
- It is helpful in reduce the cost of chemical fertilizers.

### **Conclusion**

Jeevamrut is a low cost liquid organic manure which is an excellent source of natural carbon, beneficial micro-organism such as nitrogen fixing and phosphate solubilizing bacteria, macro and micro nutrients which is efficiently used between 8th and 12th days of preparation.

Thus, the use of Jeevamrut is the best alternative organic source of nutrients instead of chemical fertilizer and better bio enhancer to improve the fertility status of soil and increase the sustainable crop productivity, quality, profitability, nutrient use efficiency and resources use efficiency. Jeevamrut is beneficial for soil, plant as well as eco friendly.