

JEEVAMRUT: THE NATURAL WONDER FOR SUSTAINABLE FARMING

Puspa Parameswari*

Division of Agronomy, ICAR-Indian Agriculture Research Institute, New Delhi-110012

*Corresponding author email: pushpaagro95@gmail.com



ABSTRACT

Jeevamrut, a traditional Indian biofertilizer, is increasingly recognized for its potential in sustainable agriculture and soil health enhancement. Comprising cow dung, cow urine, jaggery, and gram flour, it is easy to prepare, cost-effective, and accessible to small and marginal farmers. Rich in beneficial microbes and essential nutrients such as nitrogen, phosphorus, and potassium, Jeevamrut enhances soil fertility, microbial activity, and crop productivity. Its natural pesticidal properties also reduce the need for chemical inputs, lowering production costs and environmental harm. By promoting biodiversity and improving plant health, Jeevamrut offers a viable, eco-friendly alternative for sustainable and resilient farming systems..

KEYWORDS: Eco-friendly, Jeevamrut, Soil health, Sustainability

INTRODUCTION

Jeevamrut is a traditional, natural farming solution originating from India, gaining recognition worldwide for its role in promoting organic farming and improving soil health. This organic mixture is widely used in agriculture to enhance soil fertility, promote plant growth, and maintain the ecological balance. The term "Jeevamrut" translates to "life nectar," highlighting its importance in rejuvenating the soil and supporting the entire ecosystem.

WHAT IS JEEVAMRUT?

Jeevamrut is a liquid organic fertilizer made from locally available, natural ingredients. It is a concoction of cow dung, cow urine, jaggery, and other organic materials, fermented to create a nutrient-rich solution for crops. This natural fertilizer acts as a vital source of nutrients for plants and enhances soil microbiology, leading to improved crop yields and healthier soil over time.

KEY INGREDIENTS OF JEEVAMRUT

The core ingredients of Jeevamrut are carefully chosen to create a balanced, nutrient-rich mixture:

1. *Cow Dung*: Cow dung is rich in beneficial microbes that promote healthy soil. It helps in improving soil structure, enhancing microbial activity, and providing essential nutrients to plants.
2. *Cow Urine*: Cow urine is considered a potent natural pesticide and is rich in nitrogen, phosphorus, and potassium, the primary nutrients plants need for growth. It also contains trace minerals that enhance soil health.
3. *Jaggery*: Jaggery acts as a food source for the microbes in the mixture. It accelerates the fermentation process and adds essential trace elements and sugars that the microbes feed on, helping them thrive.
4. *Water*: Clean, non-chlorinated water is used as a base to dissolve and mix the ingredients.
5. *Gram Flour or Pulses (Optional)*: Sometimes, gram flour or pulses are added to further enhance microbial activity and provide additional nutrients.

BENEFITS OF JEEVAMRUT IN FARMING

Jeevamrut offers numerous benefits for organic farming practices, making it a valuable tool for sustainable agriculture:

1. **Improves Soil Health**: The mixture promotes microbial activity in the soil, which is essential for breaking down organic matter and releasing nutrients to plants. The rich microbial life improves soil texture, increases water retention, and reduces soil erosion.
2. **Enhances Crop Yield**: By supplying essential nutrients like nitrogen, phosphorus, and potassium in a natural form, Jeevamrut boosts plant growth and increases crop yields. The nutrients in Jeevamrut are easily absorbed by the plants, leading to healthier, more robust crops.
3. **Natural Pest Control**: The cow urine in Jeevamrut has pesticidal properties that help in controlling pests naturally, reducing the need for harmful chemical pesticides. It also strengthens plants' immune systems, making them more resistant to diseases.
4. **Cost-Effective**: Since Jeevamrut is made from locally available ingredients, it is a cost-effective alternative to chemical fertilizers. It reduces dependency on external chemical inputs and supports farmers in maintaining an economically viable farming practice.
5. **Promotes Sustainability**: By using organic methods, Jeevamrut promotes environmentally friendly farming practices. It supports biodiversity and reduces the ecological footprint of agriculture by avoiding chemical inputs that can degrade soil and water quality.
6. **Supports Soil Fertility**: Unlike synthetic fertilizers that can degrade soil health over time, Jeevamrut rejuvenates the soil by enhancing microbial activity and nutrient cycling. It helps in restoring and maintaining long-term soil fertility.

HOW TO PREPARE JEEVAMRUT?

Making Jeevamrut is relatively simple and requires minimal effort. Here's a step-by-step guide:

Ingredients:

- 10 kg fresh cow dung
- 2 liters cow urine
- 1 kg jaggery (or sugar)
- 1 kg flour (optional, to improve microbial activity)
- 200 liters of water



Fig 1: Preparation of Jeevamrut

METHOD OF PREPARATION OF JEEVAMRUT:

1. **Mix Cow Dung and Cow Urine:** In a large container, mix the fresh cow dung with the cow urine. Stir thoroughly to create a homogeneous mixture.
2. **Add Jaggery:** Dissolve the jaggery (or sugar) in a small amount of water and add it to the cow dung and urine mixture. This helps in providing food for the microbes.

3. **Add Flour (Optional):** If you're using flour or pulses, add them to the mixture. This step is optional but can enhance microbial activity.
4. **Dilute with Water:** Add the 200 liters of water to the mixture, ensuring that it is well-diluted but still maintains the essential nutrients.
5. **Ferment the Mixture:** Allow the mixture to ferment for 48 hours. Keep it in a shaded, warm area to facilitate the fermentation process. Stir it twice a day to ensure proper fermentation.
6. **Apply to Crops:** Once the fermentation is complete, Jeevamrut is ready for use. It can be applied directly to the soil or sprayed on crops using a watering can or sprayer.

APPLICATION OF JEEVAMRUT

Jeevamrut can be applied in various ways depending on the needs of the crops and the specific farming practices:

1. **Soil Application:** Jeevamrut can be directly applied to the soil, enhancing soil health and boosting nutrient availability. It can be applied before or after planting.
2. **Foliar Spray:** Jeevamrut can be diluted further and sprayed on plant leaves, where it is absorbed through the stomata to provide nutrients.
3. **Compost:** Jeevamrut can be added to compost piles to speed up decomposition and enrich the compost with beneficial microorganisms.

CONCLUSION

Jeevamrut is a powerful tool in sustainable farming practices. It promotes soil health, enhances crop growth, reduces the need for synthetic fertilizers and pesticides, and helps in maintaining ecological balance. As organic and eco-friendly farming methods continue to gain popularity, Jeevamrut stands out as an accessible and effective solution for farmers worldwide, especially in regions looking to transition to more natural, sustainable agricultural practices. By utilizing Jeevamrut, farmers can foster healthier crops, better soil, and a more sustainable future for agriculture.

REFERENCES

- National Centre for Organic Farming. (2025). *Jeevamrut: Natural farming for soil health and fertility*. Ministry of Agriculture and Farmers Welfare, Government of India. Retrieved from <https://ncof.dac.gov.in/>
- Indian Council of Agricultural Research. (2024). *Promoting organic farming: Techniques and practices for sustainable agriculture*. ICAR. Retrieved from <https://www.icar.org.in/>



Gopal, B. (2018). *Organic farming for sustainable agriculture*. Springer. <https://doi.org/10.1007/978-3-319-97674-4>

Organic Farming Research Foundation. (2023). *Introduction to natural farming: Jeevamrut and its benefits*. Retrieved from <https://ofrf.org/>

Singh, M., and Sharma, R. (2020). Jeevamrut: The organic solution to modern agricultural challenges. *Journal of Organic Agriculture*, 5(2), 123-130. Retrieved from <https://www.journaloforganicagriculture.com>.

How to cite:

Puspa Parameswari (2025). Jeevamrut: The Natural Wonder for Sustainable Farming. Leaves and Dew Publication, New Delhi 110059. *Agri Journal World* 5 (2): 16-20.

*****XXXXX*****