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Jeeva amrut - An organic fertilizer

P.O. Vaghela, K.G. Kugashiya, Y.A. Viradiya, T.A. Desai and P.R. Chaudhary Seed Technology Department, Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar (Gujarat) India (Email : vaghelaprakash68@gmail.com)

Introduction : Oranic fertilizers are fertilizers that are naturally produced and contain carbon. Fertilizer are materially that can be added to soil or plants, in order to provide nutrients and sustain growth. Jeeva amrutham is made of two words – Jeeva and Amrutham. Both are derived from Sanskrit. The word "Jeeva" means a living

being and "Amrutham" means the elixir (medicine) upto extending life. According to agricultural view, Jeeva amrutham is for crop life. It is the best culture to increase the count of microorganisms. Jeeva amrut, is a microbial culture, mainly prepared from cow dung and cow urine generally used in organic farming to meet the nutritional requirement of crops. It has been proved

that the use of jeeva amrut in such varieties of rice (*Oryza sativa* L.) is better for the yield and its quality. Jeeva amrut can be used in many crops like wheat (*Triticum aestivum*), maize (*Zea mays* L.) etc. The freshly prepared jeeva amrutham was acidic in nature.

Jeeva amrutham is an organic fertilizer and a great replacement of chemical fertilizers. It is a very good source of biomass, natural carbon, nitrogen, phosphorous, calcium and other nutrients which are essential for plant growth and development. The microorganisms which are present in the soil are responsible for increasing the fertility of the soil and the productivity of the crops. In order to increase the microorganisms in the soil Jeeva amrutham is used. Jeeva amrut enhances microbial activity in soil and helps in improvement of soil fertility.

Material required for preparation of liquid jeeva amrut :

- Water- 200 litres
- Cowdung- 10 kg
- Cow urine- 5 litre
- Jaggery- 2 kg

– Flour of any pulse- 2 kg and around 10 kg of fertile soil from the plant shade.

Preparation : The dung and urine of cow, hybrid cow, were prepared by using 10 kg dung, 5 litre urine, 2 kg



jaggery, 2 kg any pulse flour and 10 kg soil from the same field mix them in a big tank properly and keep the tank in shade and cover it with jute bag and it should be breathable and leave it. The mixtures were kept for incubation under shade for 7 days and stirred vigorously for 10–15 minutes three times a day with a wooden stick. The final volumes

> of the mixtures were made to approximately 210 litres with water in plastic containers.

> Advantages : It helps the soil to activate their available nutrients, microorganisms to make them available for the crop sown in that particular area. It increases the count of earthworms in soil which is beneficial for soil fertility. Jeeva amrutham is one of those organic

fertilizer which have large number of nutrients like nitrogen, phosphorus, calcium and other micronutrients. This will ensure higher yield by enhancing the availability of nutrients through faster decomposition of bulky organic manures by boosting the microbial activity in the soil. Many of these formulations are rich in beneficial micro flora and can act as efficient plant growth promoters. Jeeva amrutham helps to maintain the soil health and fertility. It provides varieties of benefits to user like less cost, easily adoptable to poor farmers, increase the crop productivity, environmental safety and successful crop production. Generally, only the fresh preparations of liquid organic formulations are used by the farmers as they do not have information about the shelf-life of liquid organic formulations.

Understanding the nutrient variability and release pattern of organic fertilizer is crucial to supply plants with sufficient nutrients to achieve optimum productivity, while also rebuilding soil fertility and ensuring protection of environmental and natural resources.

Precaution to be taken : Do not use chemical fertilizers, pesticides or weedicides for 20 days before and after application of jeeva amrut for better result.

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