



Vidya Prasarak Mandal's

DR. GHALI COLLEGE GADHINGLAJ

Affiliated to Shivaji University

Department of Microbiology

Academic Year 2018-2019



MANUFACTURING OF "ECO-NPK"

Date: 1st July 2018 to 30st April 2019

OBJECTIVE:

1. To study the role of organic fertilizers in sustainable Agriculture.
2. To create awareness among the farmers about the use of organic fertilizers
3. To reduce Water and Soil Pollution.
4. To conserve the ecosystem using natural processes.

What is ECO-NPK:

Culture of Decomposers, Nitrogen fixing Organisms, Phosphate solubilizing Organisms and Potash mobilizing Organisms.

A. STATEMENT OF PROBLEM:

After the Green Revolution, farmers in India are using large amounts of chemical fertilizers, which are reducing organic matter in the soil, making the soil saline, and thus soil becoming infertile.

B. CONTENT OF ECO-NPK:

1. **Decomposers:** Bacteria play an important role in decomposition of organic materials, especially in the early stages of decomposition when moisture levels are high.
2. **Nitrogen Fixing Organisms:** They Fix nitrogen & convert it into ammonia, a compound necessary for plant growth and development.



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3. **Phosphate Solubilizing Organisms:** They are main contributors of plant nutrition in agriculture and could play a pivotal role in making soluble phosphorus available to plants.
4. **Potassium solubilizing Organisms:** They improve the growth and productivity of plants grown under salt affected conditions.

C. ACTIVITY DONE FOR FARMERS:

1. Made available the 'ECO-NPK' for farmers.
2. Farmers were given free guidance on how to use ECO-NPK.
3. Explained the benefits of organic fertilizers.
4. Awareness was created among the farmers about the use of organic fertilizers.

D. BENEFITS OF "ECO-NPK" TO FARMERS:

1. It Increases soil organic matter.
2. It makes the soil fertile from Saline.
3. It Provides nitrogen, phosphorus and potash naturally.
4. It Reduces production costs.

E. BENEFITS OF "ECO-NPK" TO SOCIETY:

1. People will get fruits, grains and vegetables produced using organic fertilizers.
2. Use of organic fertilizers will reduce soil and water pollution.
3. A crop grown without the use of chemical fertilizers is beneficial for health.
4. Eco-NPK is beneficial for ecosystem.

F. ORAL FEEDBACK OF FARMERS

1. Eco-NPK reduced the production cost.
2. Vegetables produced using Eco-NPK has better test rather than chemical fertilizers.
3. Decomposers from Eco-NPK are very much beneficial for decomposition of agriculture waste especially Sugarcane trash.
4. Increased the water holding capacity of soil

HIGHLIGHTS:




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A. Eco-NPK Pack:



B. Farmer awareness using Models:



C. Distribution of Eco-NPK:



D. News:



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PROGRAM OUTCOME:

1. Students got detailed idea about the production of Biofertilizers
2. Awareness was created among the farmers about the use of organic fertilizers.
3. Society will get fruits, grains and vegetables produced using organic fertilizers.
4. Conserved the ecosystem by using natural processes
5. Reduced the soil and water pollution.

Signature and Name: Mr M.S. Kadam.
Head /Co-ordinator.




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