

Bio-Boost: Natural Seed & Soil Growth Enhancing Technique

Profile of Innovator

Name : Dolly Kumari
Age : 27 Years
Education : Graduate
Experience : 2 Years
Contact Details : Village: Amawa, Dist.: Nawada, Bihar
Mobile No. : 9334658560



Brief description of Innovation

Ms. Dolly Kumari has developed an eco-friendly plant growth promoter, which is prepared from mixing Fresh Water: 20 lit, Besan (Chickpea flour) : 100 gm, Jaggery (unrefined sugar): 100 gm, Cow urine : 1.0 Lit., Cow dung : 1.0 Kg . This mixture is fermented for 48 to 72 hours. The bio-solution (@ 100 ml/ 1 kg seed) is mixed properly with the seed and then covered with the gunny bags. This mixture is fermented for 48-72 hours before use. The solution is applied to seeds and crops, especially paddy and vegetables, to enhance seed germination, promote plant growth, and offer natural protection against pests and diseases. The prepared solution applied @ 20 lit mixing in 2 q Vermicompost and broadcast in the field.

Innovation's Highlights

Made from easily available bio-materials; No chemical input; Can be prepared on-farm; Low-cost and safe for handlers; Suitable for organic and natural farming. Improve soil health and less mortality of plants. Nursery almost free from damping off disease and very less seedling mortality in cauliflower, cabbage, tomato and brinjal, etc.



Materials for making eco-friendly plant growth promoter



Application of eco-friendly plant growth promoter by Mrs. Dolly Kumari



Preparation of bio-boost

Benefits/Advantages

Environmentally safe, ecologically sound, economically viable, socially acceptable & restores soil health. Applied in Natural Farming for control of wilt and other disease. Easy in preparation and application. Reduced the cost of cultivation by Rs. 3000/ per acre and increase income by 7-8 thousand in each season. The preparation cost of solution is Rs. 11- 15 per liter.

Scope & Potential of Innovation for Wider Reach/Out Scaling

Can be promoted across organic and natural farming communities; Can be scaled up through training and demonstration by KVKs, NGOs, and agricultural departments; and can be packaged and sold as a ready-to-use bio-product after validation. The prepared solution can be kept 10-12days. It can be applied even in pulse crop like Lentil and Chickpea where fusarium is very common.

Scientific Validation required

Microbial population, nutrient profile of soil, Pest/disease resistance and Soil health impact needs validation. Domain: Organic/Natural Farming, Plant Protection, Soil Health Management, suitable for small holders who practice natural farming.