

## **Effect of Four Biofilm Formulations on Rice Seed Germination and Seedling Growth**

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Biofilms are consortia formed by different microbes of which the members are physically and metabolically interdependent and the consortia harbor properties distinct from those of their single components and thus have various applications including improved agricultural productivity. Beneficial biofilms can be developed in vitro and be used as biofertilizers called biofilmedbiofertilizers (BFBFs). Objective of this study was to formulate an effective BFBF formulation for rice. Seven bacterial species isolated from two different paddy soils (coastal and inland) were grown separately in association with a fungus. Four of these two-membered cultures selected as potential biofilm formulations based on forming intimate association, plant growth substance production and N<sub>2</sub>-fixing ability were tested for the impact on rice seed germination and seedling growth. The percentage seed germination and seedling vigour index of seeds treated with the above four biofilm formulations were significantly higher than the control indicating the potential of these formulations to be used as biofertilisers for rice and thus will be further tested.

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