

Low-dose pest control Seed dressing of Seed with Fungicide and Insecticide

Pest control for optimum yields

The "Seed Dressing with Fungicide and Insecticide" technology applies chemical agents to common bean seeds to combat fungal diseases and pests, boosting yields. This cost-effective and environmentally friendly method enhances crop protection making it widely applicable in agriculture.



Fungal writing of seedling (left) and damage to bean sprout by stem maggots (right)

Alliance

The Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT)
Justin Mabeya Machini

This technology is **TAAT1 validated**.

 Scaling readiness: idea maturity 7/9; level of use 8/9

Gender assessment

Climate impact

Problem

- Common beans affected by fungal diseases (anthracnose, root rots) and insect pests (stem maggots), causing significant yield losses.
- Risk to profitability of improved crop varieties and farmers' investments in fertilizers.
- Diseases and pests harbored by seeds endanger the integrity of planting material stocks, jeopardizing future crops.
- Soil-borne diseases and insect pests pose severe risks, potentially leading to sparse plant density and crop failure, exacerbating food insecurity and economic instability.

Solution

- Dressing common bean seeds with chemical control agents presents an economical and eco-friendly method to prevent losses and boost production.
- This seed treatment approach leads to superior seedling emergence, reinforcing crop resilience throughout the growing season.
- Seed dressing ensures highly effective crop protection by uniformly applying control agents.
- Seed dressing offers a simple and adaptable solution that doesn't necessitate specialized equipment, making it easily implementable at farms and factories.

0.5—1 USD
Fungicides and pesticides for 1-2 kg seed dressing

50 USD Equipment for manual application	500 USD Equipment for mechanized application for a small unit	2,000 USD Equipment for mechanized application for a large unit	IP Open source / open access
---	---	---	---------------------------------

Technology originally documented by

ProPAS

Commodities

Common bean

Sustainable Development Goals

Categories

Production, Inputs, Pesticide

Tested/adopted in

■ Tested & adopted
■ Adopted
■ Tested

Where it can be used

This technology can be used in the colored agro-ecological zones.

Target groups



Low-dose pest control

<https://e-catalogs.taatafrica.org/technologies/low-dose-pest-control-seed-dressing-of-seed-with-fungicide-and-insecticide>

Last updated on 22 May 2024, printed on 22 May 2024

Enquiries techs@taatafrica.org