Aflasafe®: Aflatoxin management

Aflatoxin-safe fields and crops for safer food in Africa

Aflasafe® is a biocontrol technology for aflatoxins management that uses harmless types of the fungus Aspergilus flavus which do not and cannot produce the toxins. The atoxigenic fungi are coated onto ordinary sorghum grain for transferring these innovative biocontrol agents to farmers' fields.

International Institute of Tropical Agriculture (IITA)
Ortega-Beltran, Alejandro

This technology is TAAT1 validated.

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

Gender assessment 4

Climate impact 5

Problem

- Widespread aflatoxin contamination in staple crops, animal feeds, and processed foods across Africa.
- Consumption of contaminated food leads to severe health issues such as liver cancer, weakened immunity, and organ damage.
- Aflatoxin contamination renders food unfit for consumption and trade, resulting in significant economic losses.

Solution

- Prevents aflatoxin production using harmless strains of Aspergillus flavus.
- Affordable solution to reduce aflatoxin levels in food safely.
- Tailored to African conditions, utilizing native atoxigenic fungal strains.
- Selected through rigorous field testing.
- Halts aflatoxin contamination during transportation, storage, and processing.

Key points to design your project

To use this technology in your project, plan these activities:

- Calculate the product quantity based on the cost (12 to 20 USD per Ha) and the requirement (10 kg per ha).
- Factor in the delivery, import, and duty costs from the supplier to the site.
- Budget for training and support from a team of trainers during installation.
- Develop communication materials (flyers, videos, radio, etc.) for the technology.
- Follow post-harvest practices (drying and storage) for the improved maize variety.
- Work with agricultural institutes and agro-dealers in your country.

Cost: $$$ **12 - 20 USD** per Ha

ROI: $$$ **16 %** Increase in income

10 kg/ha Recommended dosage application

4 kg/acre Recommended dosage application

IP Trademark

Technology from

ProPAS

Commodities

Maize, Sorghum/Millet, Groundnut, Chili peppers, Sesame, Sunflower

Sustainable Development Goals

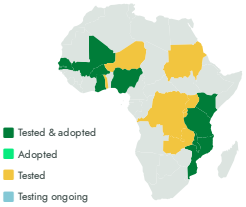
Categories

Production, Prevention & storage, Inputs, Pesticide

Best used with

- Drought Tolerant Maize Varieties and Water Efficient Maize Varieties ›

Tested/adopted in



Where it can be used

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