Aflasafe KE01™

Aflatoxin kills!

Aflasafe protects your maize from deadly aflatoxin





A fully natural product, Aflasafe is environmentally and farmer-friendly – no protective gear needed. Here, Aiddah Mutua broadcasts Aflasafe on her maize plot in Kathiani, Machakos County, Eastern Kenya, in December 2013. Eastern Kenya is an aflatoxin hotspot. Aiddah is a long-term partner, as one of the 24 pioneer farmers who were involved in demonstrating the efficacy of Aflasafe KE01.

What is Aflasafe, how is it made and how does it work?

Aflasafe is a 100% natural product for controlling poisonous *Aspergillus flavus* (*A flavus*) in food crops, including maize. Aflasafe pushes out aflatoxin-producing types of *A flavus*. Aflasafe is mainly roasted sterile sorghum (99.7% of the product), coated with four atoxigenic (ie, non-poison-producing) types of *A flavus* native to Kenya. To avoid confusion with sorghum to eat, Aflasafe is dyed blue using food colour.

After broadcasting and exposure to sufficient moisture, the friendly Aflasafe fungi grow out, and the blue-coloured sorghum grains will now be covered with green spores. These growing fungi will first appear as white fuzz and later appear as green fuzz containing millions of spores. The green spores will eventually spread to the crop, carried by wind and insects in the same manner that aflatoxin-producing fungi are spread.

Aflasafe can be used with intercropping. It will not harm other crops because it is a natural product made from fungi obtained from the country's crops and soils. Nor does intercropping affect Aflasafe's performance.



Made-in-Kenya Aflasafe KE01 from a test run at the Katumani Aflasafe factory. The green colour band along the bottom certifies that non-hazardous Aflasafe has the highest World Health Organisation standard for safety. Manufacture and distribution will be by our R&D partner, the Kenya Agricultural and Livestock Research Organization. Across Africa, our R&D partner is the United States Department of Agriculture – Agricultural Research Service.

What are the directions for use?

- 1. Prior to broadcasting Aflasafe, the plot should be weeded, fertiliser applied, and all other agricultural practices carried out in the field.
- Broadcast Aflasafe by hand 2–3 weeks before flowering at the rate of 10 kilos per hectare (4 kilos per acre). If possible, apply Aflasafe after rains, or when rains are forecasted, or when the soil is moist.
- Ensure that Aflasafe stays on the soil surface. For the spores to grow, they must be above ground. Therefore, DO NOT CARRY OUT ANY OPERATION THAT WILL BURY AFLASAFE UNDER THE SOIL after application. Such operations should all be done in Step 1 above.
- 4. Five to 10 days after broadcasting Aflasafe, visit the field and observe the colour of the carrier grains. There should be a greenish growth on some or all sorghum carrier-grains if soil moisture is adequate. If there is no greenish growth, return to the field after 3–5 days and check again.
- To realise Aflasafe's full potential, ensure you follow good agricultural, harvest and postharvest practices, and follow ALL the instructions and precautions on the pack.





Aflasafe Technology Transfer and Commercialization Project (ATTC)

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