Biological Control of Sorghum and Millet Insect Pests with Natural Enemies

Protect crops using natural pest allies for sustainable pest control in Africa

Biological control uses indigenous predators and parasitoids to combat pests like the Millet Head Miner and Fall Armyworm. Released into fields, these natural enemies prevent pest outbreaks and crop damage. This eco-friendly method enhances ecosystems and food security, reducing the need for chemical pesticides.

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This technology is TAAT1 validated.

7·7 Scaling readiness: idea maturity 7/9; level of use7/9

Project adoption 1

Technology integrated in the ENSURE project.

Inclusion assessment 4

Climate impact 7

Problem

- Pests cause significant crop losses, threatening food security in Sub-Saharan Africa.
- Overuse of pesticides leads to environmental harm and health risks.
- Many farmers lack access to effective pest management solutions, increasing vulnerability to infestations.

Solution

- Parasitoid wasp *Habrobracon hebetor* targets pests' caterpillars.
- Biological control techniques reduce infestations and ensure food supply.
- Parasitoid wasp *Telenomus remus* prevents Fall Armyworm outbreaks.

Key points to design your program

Biological Control of Sorghum and Millet Insect Pests with Natural Enemies can be integrated into sorghum and millet value chain development, integrated pest management, food security, and climate-smart agriculture programs to reduce crop losses, minimize pesticide use, and improve crop productivity. Its adoption contributes to **SDGs 2, 3, 12, 13, and 15**. To integrate this technology into your project, plan and budget for the following activities and prerequisites:

- **Facilitate access** to biological control agents, mass-rearing materials, and field release equipment.
- **Establish partnerships** with **ICRISAT**, national agricultural research and extension services, and local communities.
- **Conduct** demonstrations and training on biological control and integrated pest management, and **monitor** technology adoption, pest incidence, and sorghum and millet productivity.

6,000 USD	**3—4** USD	IP
per year for operation	per "ready-to-use" bag	Open source / open access

Technology from

ProPAS

Commodities

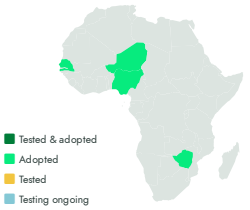
Sorghum/Millet

Sustainable Development Goals

Categories

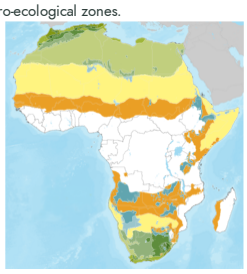
Production, Inputs, Natural Enemies

Tested/adopted in



Where it can be used

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



Target groups

Farmers