# (b) CABI PlantwisePlus

## **ZAMBIA UPDATE** MAY 2025

PlantwisePlus is a global programme led by CABI that empowers smallholder farmers to increase their incomes, improve food security and safety, and reduce biodiversity loss through **sustainable crop production practices**.

Under the three impact pathways of PlantwisePlus – pest preparedness, pesticide risk reduction, and farmer advisory – a range of activities are being implemented **in Zambia**.

### IMPACT

### Tackling cassava brown streak disease: A national priority

Cassava is more than just a crop in Zambia – it's a lifeline, feeding nearly 30% of the population. However, since 2018, **cassava brown streak disease (CBSD) has posed a significant threat**, causing severe yield losses, **affecting over 5 million people**. CBSD first emerged in Zambia's North-Western province and has since spread rapidly. Although it has not yet been detected in most of the country's ten provinces, its continued spread poses a serious threat to food security and disrupts various industries reliant on cassava starch, from biofuels to brewing. A baseline assessment undertaken by CABI in a few districts in 2022 estimated losses at USD 500,000. If CBSD were to reach the major cassava-growing regions, the economic impact could be far more severe, underscoring the **urgent need for nationwide containment efforts**.

### A coordinated response

In 2021, PlantwisePlus and Zambia's Ministry of Agriculture launched a communication campaign to raise awareness, promote disease management practices, and distribute clean, disease-free cassava cuttings. The campaign included multilingual flyers and media engagement, as well as plant health rallies that reached **over 3,770 farmers**, almost doubling its initial target. **Read the blog** 

"The media landscape in Zambia underwent a significant change due to the campaign. It shifted the media's focus towards cassava, improving the quality of reporting and promoting sustainability." Journalist, Kemnet Television.

In 2023, the campaign ramped up distribution efforts, providing **4,300 disease-free cuttings** in Nsama District and training **16 lead farmers** as cassava seed producers. Media engagement increased, with TV adverts on ZNBC and radio programmes broadcast bi-weekly across four provinces. Follow-up activities, including field inspections and stakeholder meetings, yielded positive results,

with **70% of farmers adopting improved practices**, significantly reducing CBSD incidence. **Read the blog** 

### Scaling for sustainability

CABI built on this progress by expanding an agribusiness model to multiply disease-free seeds and continuing policy advocacy and media engagement throughout 2024. This holistic approach, combining community involvement, education, and practical solutions, has helped stem the spread of CBSD and supported local business development, particularly among women and young farmers.

To keep the momentum going into 2025, CABI is training extension staff from the Department of Agriculture and ZARI to support cassava seed producers who will soon be licensed as seed inspectors. This will help maintain seed quality and support farmers as they scale up. At the same time, efforts are underway to link these producers with buyers, building a stronger, more sustainable seed system from the ground up.

### From lab to field: Advancing biocontrol for key crop pests



Research and fieldwork are well underway in Zambia, with promising progress in using biological control to tackle two major invasive pests. These efforts are helping to pave the way for more sustainable and environmentally friendly pest management solutions.

View and download our infographic for a visual overview of various biological control approaches.

### Classical biological control of the tomato leafminer

A recent local survey identified five species of parasitoids naturally attacking the tomato leafminer (Phthorimaea absoluta, previously known as *Tuta absoluta*). While their presence is encouraging, their low numbers mean they're not yet effective at large-scale control. CABI is actively engaging with the Zambian government to explore a classical biological control approach: introducing exotic natural enemies to manage the pest sustainably and reduce reliance on chemical pesticides.

### Augmentative biological control of fall armyworm

New developments have also emerged in controlling fall armyworm (Spodoptera frugiperda). Field trials using a local strain of the beneficial fungus Metarhizium rileyi have shown stronger results than chemical pesticides, with crops experiencing significantly less leaf damage during the last rainy season. Building on this momentum, CABI, working with partners at the University of Zambia (UNZA) and the Zambia Agricultural Research Institute (ZARI), is now focused on refining how and when to apply the fungus for maximum impact.

### How does the fungus work?



Spores land on the insect



The insect dies and fungus grows externally



and grow inside

For more information on these activities or others under PlantwisePlus in Zambia, please contact:

Dr Natasha Mwila, Regional Director, Southern Africa

**T:** +26 0967 619 665

#### E: southernafrica@cabi.org

5834 Mwange Close, Kalundu, PO Box 37589, Lusaka, Zambia

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