

# Improved Varieties of Plantain for Tropical Lowlands



Better Plantain Varieties for Thriving Farmers

The "Improved Varieties of Plantain for Tropical Lowlands" makes stronger and healthier plantains that can resist diseases and pests. It does this by mixing different kinds of plantains to create new varieties. These special plantains grow well in different climates and have more leaves and fruits.





International Institute of Tropical Agriculture (IITA) Moses Nyine

Technology from

**ProPAS** 

Commodities

Banana/Plantain

Sustainable Development Goals











### Categories

Production, Improved varieties,

Disease resistance. Insect resistance. + 0

### Best used with

- In-Vitro Banana Tissue Culture Propagation >
- Propagation of Banana and Plantain Disease-Cleaned Suckers >
- Intercropping Strategies for Banana and Plantain >
- · Spacing and Stand Management in Banana and Plantain >
- Banana Peels as Feed and Organic Resource >
- Value-added Processing of Bananas and Plantain >

Tested/adopted in



This technology is **TAAT1** validated.





Scaling reas...
8/9; level of use 8/9

Gender assessment



Climate impact

### **Problem**

- · Black leaf streak disease causing significant yield losses ranging from 33% to 50%.
- · Weevils and nematodes undermining corm and root systems.
- Declining soil fertility due to poor management practices.

### Solution

- This technology aims to combat black leaf streak disease, weevils, and nematodes.
- · Focus on high productivity and drought resilience to mitigate yield losses.
- · Emphasis on preferred cooking traits to meet consumer preferences.
- · Adaptation to diverse climatic and production conditions.

## Key points to design your project

The adoption of improved plantain varieties offers significant benefits for food security and income in disease-prone areas with fluctuating climates. Here's a concise summary:

### **Key Activities:**

- · Selecting suitable cultivars based on climate, management, production goals, and market needs.
- Educating stakeholders—multipliers, farmers, processors—about the advantages like disease resistance and higher yields.
- Creating training hubs for seed multipliers and farmers on propagation techniques and best farming

A dedicated team of trainers should be engaged to provide comprehensive training and support during the project implementation. The budget should cover the costs for training sessions and post-training assistance.

290-1000 usp Planting material/ha

ROI: \$\$\$ 500 %

Benefit to cost advantages starts from the second cycle harvest onwards

Open source / open access

1400 usp

Production inputs and labor per ha

 $\bigcirc$ <sub>IP</sub>