

Propagation of Banana and Plantain Disease-Cleaned Suckers

Propagate Success with Clean Suckers

Macro-propagation involves two techniques: field-based (decapitation) and detached corm (beds). It ensures disease-free seedlings, promoting uniform growth and stress resistance. Clean knives and hardened sprouts are vital for success.



Complete decapitation with excised meristem (top) and sprouting suckers (bottom)

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Technology from
ProPAS

Commodities
Banana/Plantain

Sustainable Development Goals

This technology is **TAAT1 validated**. Scaling readiness: idea maturity 8/9; level of use 8/9

Gender assessment

Climate impact

Problem

- Natural regeneration often results in contaminated banana and plantain planting materials, harming productivity and lifespan.
- Traditional methods result in non-uniform growth, affecting the overall efficiency of banana and plantain cultivation.
- Conventional methods may lead to stress-prone plantlets, negatively impacting their adaptation and performance in the field.

Solution

- Macro-propagation ensures the production of banana and plantain seedlings free from pests and diseases, promoting healthier and more resilient crops.
- Macro-propagation contributes to increased productivity and prolonged lifespan of banana and plantain plants.
- This technique reduces financial barriers by offering a low-cost method of obtaining disease-free seedlings
- Macro-propagation ensures more uniform growth of banana and plantain seedlings.

Categories
Production, Practices, Seed system

Best used with

- [Improved Varieties of Plantain for Tropical Lowlands >](#)
- [Improved Varieties of Banana for the African Highlands >](#)

Tested/adopted in

Cost: \$\$\$ 1500 USD per 8000 plantlets Nusery four months maintenance	ROI: \$\$\$ 725—1050 USD Net profit per cycle
340 USD 2,500 plantlets shade house	2,300 USD Cost of chamber of 8,000 plantlets
Open source / open access	

Where it can be used

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



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<http://taatdb-web/org/technologies/propagation-of-banana-and-plantain-disease-cleaned-suckers>

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