

# Spacing and Stand Management in Banana and Plantain

## Optimized Spacing, Maximum Yield

This technology optimizes banana and plantain plant spacing to boost yield, considering factors like plant variety, climate, and soil fertility. It uses various planting systems and may require herbicide use and stem base "earthing-up" in windy areas.



This technology is **TAAT1 validated**.



Scaling readiness: idea maturity  
8/9; level of use 9/9

Gender assessment



Climate impact



### Problem

- High plant densities cause uneven growth, delayed maturity, and increased labor.
- Low densities lead to weed competition and yield variability.
- Unmanaged stands accumulate pests and diseases.
- Insufficient wind protection damages plants.

### Solution

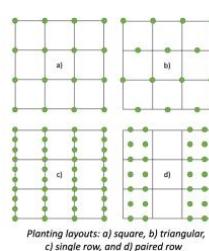
- Proper spacing promotes uniform growth, reduces labor, and optimizes yield.
- Adequate spacing minimizes resource competition and maximizes sunlight exposure.
- Square block planting provides wind protection.
- Spacing aids in weed management and pest/disease control.

**100 t/ha/year**

Dwarf Cavendish planted at 2500 to 4400 plants per ha



Open source / open access



**International Institute of Tropical Agriculture (IITA)**  
Godfrey Taulya

Technology from

ProPAS

Commodities

Banana/Plantain

Sustainable Development Goals



Categories

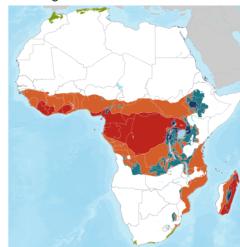
Production, Practices, Yield improvement

Tested/adopted in



Where it can be used

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



Target groups

Farmers



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<https://e-catalogs.taat-africa.org/org/technologies/spacing-and-stand-management-in-banana-and-plantain>

Enquiries [e-catalogs@taat.africa](mailto:e-catalogs@taat.africa)

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