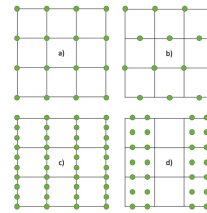


Spacing and Stand Management in Banana and Plantain

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.



Planting layouts: a) square, b) triangular, c) single row, and d) paired row



International Institute of Tropical Agriculture (IITA)
Godfrey Taulya

Technology originally documented by

ProPAS

Commodities

Banana/Plantain

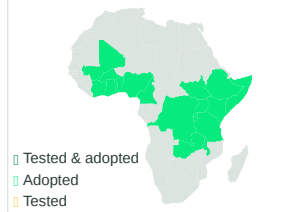
Sustainable Development Goals



Categories

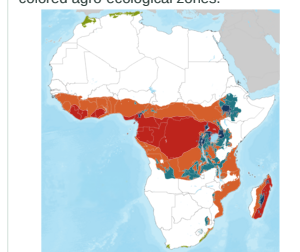
Production, Practices, Yield improvement

Tested/adopted in



Where it can be used

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



Target groups

Farmers

This technology is **TAAT1 validated**.

8-9



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

Gender assessment

3

Climate impact

7

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.

Key points to design your project

The Spacing and Stand Management technology in Banana and Plantain farming boosts yield and mitigates climate impact, aiding both small-scale and large-scale producers. It contributes to SDGs 2 (Zero Hunger) and 13 (Climate Action) by maximizing yield and improving resource efficiency.

For successful implementation in Africa, the following steps are crucial:

- Engaging stakeholders
- Training farmers
- Setting up demonstration plots
- Providing support services
- Conducting regular monitoring and evaluation

The cost of training varies based on several factors. It's advisable to reach out to the technology provider or a local agricultural extension service for detailed information.

100 t/ha/year

Dwarf Cavendish planted at 2500 to 4400 plants per ha

IP

Open source / open access



Spacing and Stand Management in Banana and Plantain

<http://taatdb-web/gov/technologies/spacing-and-stand-management-in-banana-and-plantain>

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