

Banana Ripening Induced Ripening of Banana for Increased Marketability and Storage

Ripening Solutions for Quality and Efficiency

The Induced Ripening of Banana for Increased Marketability and Storage technology is a method designed to enhance the ripening process of bananas, specifically dessert bananas, to ensure they are market-ready and have an extended shelf life. In this process, bananas are artificially ripened using various chemical agents, most notably ethylene gas.



Industrial ripening chamber with refrigeration and gas control (Credit: Nilkamal)



International Institute of Tropical Agriculture (IITA)
Patchimaporn Udomkun

Technology originally documented by

ProPAS

Commodities

Banana/Plantain

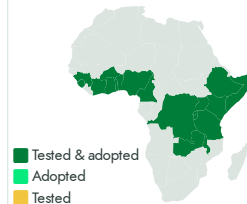
Sustainable Development Goals



Categories

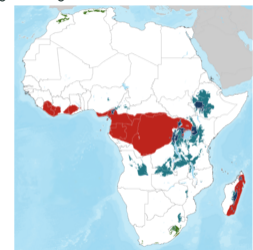
Prevention & storage, Equipment, Post-harvest handling

Tested/adopted in



Where it can be used

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



Target groups

Farmers, Sellers

✓ This technology is **TAAT1 validated**.

8•8

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

Gender assessment 4

Climate impact 4 1

Problem

- Bananas, especially plantains, suffer significant post-harvest losses due to transportation damage and spoilage.
- Traditional ripening methods, such as wrapping banana bunches with green leaves, are time-consuming and result in non-uniform ripening.
- Consumers prefer ready-to-eat bananas, and fruit sellers need a consistent supply of ripe fruit to meet this demand.

Solution

- Artificial ripening with ethylene gas ensures that bananas are ready for the market, reducing the risk of post-harvest losses.
- The technology allows for the acceleration or slowing down of the ripening process based on market demand, optimizing the supply chain.
- The technology meets consumer demand for ready-to-eat bananas, benefiting both fruit growers and sellers.

Cost: \$\$\$ **3,500 USD**

Constructing artisanal chambers

17,000 USD

Industrial semi-automated ripening chambers of 5 tones of banana



Trademark



Banana Ripening

<https://e-catalogs.taatafrica.org/org/technologies/banana-ripening-induced-ripening-of-banana-for-increased-marketability-and-storage>

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