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)

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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.

Key points to design your project

The technology of induced ripening offers cost-effective solutions for enhancing the marketability and storage of bananas, empowering farmers and aiding in poverty alleviation. Steps to integrate this technology include:

- Conducting market assessments, developing a business plan,
- Allocating resources for training and support,
- Collaborating with agricultural institutions.

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

Constructing artisanal chambers

17,000 USD

Industrial semi-automated ripening chambers of 5 tones of banana

IP

Trademark

Technology from

ProPAS

Commodities

Banana/Plantain

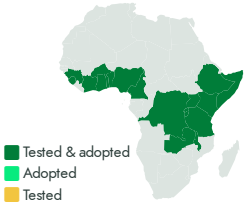
Sustainable Development Goals

2 ZERO HUNGER · 3 GOOD HEALTH AND WELL-BEING · 8 DECENT WORK AND ECONOMIC GROWTH · 1 NO POVERTY

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