

Silage production from sweet potato vines and tubers

Fodder Enrichment for Thriving Livestock

Sweet potato silage production is an agricultural innovation that efficiently turns underutilized resources into high-quality animal fodder. The fermentation process preserves nutrients, making it a valuable addition to traditional feeds. Sweet potato silage promotes rapid livestock growth and maintains good health.



International Potato Center (CIP)
Norman KWIKIRIZA

✓ This technology is **TAAT1 validated**.

7·8 Scaling readiness: idea maturity: 7/9; level of use: 8/9

Technology from
ProPAS

Commodities
Sweet Potato

Sustainable Development Goals

Categories
Transformation, Practices, Post-harvest management

Tested/adopted in

Where it can be used

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

Problem

- **Resource Wastage:** Leftover sweet potato parts perish in hot, moist conditions.
- **Fodder Availability:** Persistent gaps exist in fodder availability.
- **Digestibility and Nutrition:** Fresh vines have poor digestibility and nutritional value.
- **Resource Collection:** Harvesting leftover sweet potato parts is labor-intensive.

Solution

- **High-Quality Fodder:** Converts leftovers into nutritious animal feed.
- **Bridging Fodder Gaps:** Ensures consistent fodder availability.
- **Enhanced Digestibility and Nutrition:** Improves digestibility and conserves nutrients through fermentation.
- **Efficient Resource Utilization:** Reduces labor and effort in resource collection by providing a sustainable and cost-effective solution.

Key points to design your business plan

Farmers/Breeders:

1. **Training:** Participate in sweet potato silage production training.
2. **Materials:** Gather sweet potato vines and tubers, a chopper, plastic sheets or tubes, sealing materials, and salt or sun-dried poultry manure.
3. **Feedstock Preparation:** Harvest and chop the vines and tubers, then sun-dry them.
4. **Silage Production:** Layer the chopped material in a container (70% vines, 30% tubers, 0.5% salt or manure), ensuring each layer is compacted.
5. **Storage:** Seal the container tightly and let the silage ferment for about 30 days.
6. **Usage:** Regularly check the silage for spoilage. Once ready, it can be used to feed livestock.

Remember to always follow local regulations and best practices.

Gender assessment 4

Climate impact 7

Target groups
Breeders, Farmers

