

Post-Harvest Management:

Curing

The harvested tubers are allowed to shade dry for few hours in the field, which helps harden the skin.

Storage

Store the cured tubers in cool, dry, and well-ventilated storage facilities. A storage temperature between 4°C and 12°C is ideal for long-term storage.

Yield:

With the recommended package of practices, potato yields can range from 30 to 40 tonnes per hectare, depending on the variety and local growing conditions.

Pest and Disease Management:

Organic pest and disease management in potatoes uses natural methods like-

- ✓ Crop rotation
- ✓ Resistant varieties
- ✓ Row covers to control pests
- ✓ Resistant varieties
- ✓ Neem oil and biological agents like *Bacillus subtilis* help manage insects and diseases.



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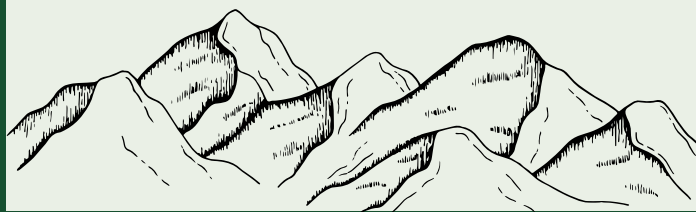
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PACKAGE OF PRACTICES FOR POTATO CULTIVATION



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Introduction:

Potato (*Solanum tuberosum* L.) is a vital food crop in Nagaland, extensively consumed across the state. Its affordability and rich nutritional value make it a dietary staple in many Naga households. With an estimated per capita consumption of around 93 kg per person annually, potato cultivation is a key contributor to the state's agricultural economy.

Climate and Soil Requirements:

Climate

Potato is best suited to the cool, temperate climate of Nagaland. The ideal growing temperature ranges between 12°C and 22°C, with sufficient moisture throughout the growing period.

Soil

The crop thrives in the well-drained sandy loam and medium loam soils commonly found in Nagaland. These soils, rich in organic matter, support healthy tuber growth. The soil pH should ideally range from 5.5 to 8.0.

Varieties:

Short duration (70-90 days)

- Kufri Chandramukhi
- Kufri Ashoka
- Kufri Jawhar

Medium duration (90-110 days)

- Kufri Jyoti*
- Kufri Badshah
- Kufri Pukhraj

Long duration (110-130 days)

- Kufri Kanchan *
- Kufri Megha*
- Kufri Swarna *

* Suitable under Nagaland conditions

Field Preparation:

Land Preparation

Prepare the land by ploughing 2-3 times, followed by harrowing to achieve a fine tilth. Incorporate organic manure such as FYM or compost during the final ploughing.



Bed Preparation

- Use the flat bed method in areas with optimal soil moisture.
- Plant on ridges in regions with higher moisture levels.
- In drier areas, plant tubers in furrows to conserve moisture.

Seed Rate and Spacing:

Seed Selection

Certified seeds are recommended to ensure good yield. Select healthy, disease-free tubers with 2-3 eyes.

Seed Size and Rate:

- Optimum size for tubers weighing 30-50g.
- Use a seed rate of 20-25 quintals per hectare.

Sowing Time

The best planting time in Nagaland is from March to April.

Spacing

Maintain a row spacing of 60 cm and a plant-to-plant distance of 20 cm.

Manures:

Organic Manures

Apply 5 tonnes of FYM or compost per hectare before planting to enrich the soil.

Earthing Up:

Purpose

Earthing up is essential for preventing tuber greening, enhancing tuber formation, and controlling weeds.

Timing

- First earthing up: 20-25 days after planting.
- Second earthing up: 45-50 days after planting.
- Third earthing up: 65-70 days after planting.

Harvesting:

Maturity Indicators

Harvest the crop when the haulms begin to yellow and the tubers have matured, typically 90-120 days after planting.

Harvesting Method

Cut the haulms and wait 10-15 days before digging up the tubers. Harvest during dry weather to minimize damage to the tubers.

