Package of Practices (POP) – Sugarcane Variety UP 0097

Introduction

UP 0097 is a widely adapted, mid-season variety with versatile performance across loam and sandy loam soils of Central and Western UP. Its strong tillering, consistent mid-high sugar recovery (10.5%), and suitability for both spring and autumn planting have made it a popular choice for large farms and smallholders alike in Muzaffarnagar, Meerut, and Lucknow districts.

Land Preparation

Soil and Climate: Loam and sandy loam soils; pH 6.5–7.5. Hot humid climate with 75–150 cm rainfall or assured canal irrigation.

Tillage: 3 ploughings to 28–30 cm. FYM 10–12 t/ha incorporated in last ploughing. Level field; form furrows 90 cm apart.

Planting

Timing: Spring (February–March preferred). Autumn (October–November) also feasible.

Seed material: 37,500 three-budded setts/ha. Row spacing: 90 cm (75 cm for paired row); depth: 20–25 cm.

Seed Treatment

- HWT: 52°C for 30 minutes.
- Chemical: Bavistin 0.1% + Malathion 0.1% dip for 10 minutes.
- Bio-fertilizer: Azotobacter + PSB @ 2 kg/ha each.

Planting Methods

Furrow method: Standard 90 cm furrow planting; setts placed buds-up, covered with soil.

Paired row method: 45 cm + 90 cm spacing for intercropping with mustard or potato.

Pest protection: Chlorpyrifos 20 EC @ 5 L/ha in furrow at planting.

Nutrient Management

Fertilizers: 260 kg N, 85 kg P_2O_5, 110 kg K_2O/ha.

Basal: Full P + K + 1/3 N at planting.

Top dressing: 1/3 N at 30–45 DAP; 1/3 N at 90 DAP.

Bio-fertilizers: Azotobacter @ 2 kg/ha in 3 splits at 30, 60, 90 DAP.

Irrigation

Total: 10–12 irrigations.

- Germination: Every 7 days.
- Grand growth: Every 15 days.
- Maturity: Withhold 30 days before harvest.

Method: Furrow irrigation. Drip with fertigation can save 35% water.

Weed Control

Pre-emergence: Atrazine @ 2 kg a.i./ha at 3 DAP.

Post-emergence: 2,4-D @ 1 kg a.i./ha at 30 DAP.

Manual: Earthing up at 90 DAP for mechanical weed control and lodging prevention.

Pest and Disease Management

- Early shoot borer: Trichogramma release + Chlorpyrifos in furrow at planting.
- Pyrilla: Release Epiricania melanoleuca egg cards.
- Red Rot: Clean certified seed + Bavistin dip; rogue infected plants.
- Smut: HWT mandatory; rogue whip shoots.

Yield

Yield potential: Plant crop: 80–100 t/ha. Ratoon crop: 65–80 t/ha.

Sugar recovery: 10.5% CCS.

Best suited for: Central and Western UP — Muzaffarnagar, Meerut, Lucknow, Unnao districts.

Ratoon Management

Stubble shaving: To 8–10 cm depth immediately after harvest.

Fertilizer: 30 kg extra N/ha; full K_2O dose.

Irrigation: Within 24 hours of harvest.

Weed control: Atrazine 1.5 kg/ha at 3 DAS; 2,4-D at 30 DAS.

Trash mulch: Retain and spread trash for moisture conservation.

Fair and Remunerative Price (FRP) of Sugarcane

The FRP is the minimum price that sugar mills are legally required to pay sugarcane farmers, fixed by the central government on CACP recommendations.

Season	FRP (₹/quintal)	Base Recovery
2025–26	₹355	10.25%
2024–25	₹340	10.25%
UP SAP 2024–25	₹370 (early varieties)	—

A premium of ₹3.46 per quintal is paid for every 0.1% increase in recovery above 10.25%. For mills with recovery below 9.5%, the minimum price is ₹329.05 per quintal.