Package of Practices for Maize

Importance

Maize is the third most important cereal crop after rice and wheat. It is used for food, fodder, poultry feed, and industry. It has high yield potential and is adaptable to different seasons.

Climate & Soil

Temperature: 20–30°C optimum. Rainfall: 50–80 cm required. Soil: Fertile, well-drained sandy loam to clay loam, pH 6.5–7.5.

Improved Varieties / Hybrids

Kharif: DHM 117, Vivek 9, HQPM 1, Bio 9681. Rabi: Ganga 11, Deccan 107, HQPM 5. QPM: Shaktiman-2, Shaktiman-3.

Field Preparation

2-3 deep ploughings followed by harrowing. Apply 10-15 t/ha FYM during land preparation.

Sowing

Seasons: Kharif (June–July), Rabi (Oct–Nov), Summer (Jan–Feb). Spacing: Row 60–70 cm, Plant 20–25 cm. Seed rate: Composite 20–25 kg/ha, Hybrid 15–20 kg/ha. Seed treatment: Carbendazim 2 g/kg or Trichoderma 4 g/kg seed.

Nutrient Management

Fertilizer dose: 150:75:75 NPK kg/ha (or as per soil test). Apply 1/3 N + full P & K as basal. Remaining N in 2 splits: knee-high & tasseling stages. Zinc-deficient soils: Zinc sulphate 25 kg/ha.

Irrigation

5-6 irrigations required. Critical stages: knee-high, tasseling, silking, grain filling.

Weed Management

Pre-emergence herbicide: Atrazine 1.0 kg/ha. Hand weeding at 20–25 DAS.

Pest & Disease Management

Stem borer: Spray Chlorantraniliprole 18.5 SC @ 150 ml/ha. Fall Armyworm: Spray Spinosad 0.3 ml/L. Turcicum Leaf Blight: Spray Mancozeb 2.5 g/L. Maydis Leaf Blight: Spray Zineb or Carbendazim 2 g/L.

Harvesting & Yield

Harvest when husk turns brown and grains are hard. Yield: Composite 40–50 q/ha, Hybrids 60–80 q/ha.