COTTON CROP SCHEDULE
NUTRIENTS, PEST & DISEASE MANAGEMENT

Asian Crop Care

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- Nutrient Management in cotton is crucial for maximizing yield, improving fibre quality, and maintaining soil fertility.
- Cotton is a long-duration, nutrient-demanding crop, and its nutrient requirements vary with growth stages.
- Here's a **stage-wise nutrient management plan** for cotton.

Crop Stage	Nutrient Needs	Practices
Pre-Sowing and Land Preparation. Improve Soil Fertility and prepare a nutrient-rich seedbed	**Basal Fertilizer Application:** Based on Soil Properties & Soil Test Report. • **Phosphorous** (P) and **Potassium** (K) – entire Dose. • Partial **Nitrogen** (N) - ~25% of the Total	**Organic Manure**: Incorporate 5-10 tons/Hectare of well-decomposed FYM (farmyard manure) or Compost to improve soil structure.
Germination to Early Vegetative Stage (0-25 Days After Sowing Days) Ensure healthy seedling establishment and early root development.	Moderate **N**, high **P** for root development, Starter dose of Micronutrients.	Apply Starter **NPK** fertilizers (e.g. DAP or NPK blends). For better initial growth stage use **Hi-ZINC** (if soil is Zinc-deficient). Dosage: 10 Kg Per Acre.

Vegetative Growth Stage (25 – 45 Days) Promote Vigorous shoot growth and leaf development	• High **N** requirement. • Balanced **N:K** ratio for healthy growth	• Top-dress 25-30% of **N** at 25-30 days. • Foliar Spray of micronutrients if deficiency symptoms appear (**Iron, Manganese, Zinc, Boron)** • Maintain adequate soil moisture to avoid nutrient stress.

Square Formation to Flowering Stage (45-75 Days). Enhance Reproductive development, flower formation, and boll set.	• High **N** and **K**, moderate **P**. • Micronutrients are critical **(Boron, Zinc, Molybdenum).**	• Top-dress another 25-30% of **N** at 45 Days. • Apply **Marvel KMS**, foliar spray 3 – 4 GMS per litre of Water. • **Borosil** for foliar spray 1KG per Acre.

Boll Development to Maturity (75-120 Days) Maximize boll filling, fibre development, and boll retention.	• High **K**, low to moderate **N**	• 2% DAP spray helps in boll retention. • Foliar spray of **Marvel KMS**, Every 10-15 days during boll development. • Avoid excess **N** at this stage-it can delay maturity and reduce fibre quality.

ASIAN CROP CARE – COTTON CROP PESTS & DISEASE MANAGEMENT STAGE WISE PRODUCT PORTFOLIO

STAGE WISE	MAJOR PESTS	DAMAGE SYMPTOMS	CONTROL PRODUCTS	MAJOR DISEASES	SYMPTOMS & FAVOURABLE CONDITIONS.	CONTROL PRODUCTS
Germination & Seedling Stage (0-20 Days after Sowing) Seedling emerges and starts developing roots and first leaves.	Root grubs Cutworms Termites	Damage roots and stems, Poor plant health	For Control Cutworms, Foliar Spray – 2 ML/Litre of Water. For Control Root grubs & Termites, Drenching - 2.5ML/Litre of Water.	Fusarium Wilt	Yellowing, Wilting, Stunting & Warm, Dry Soils	For foliar Spray or Drenching 2ML/Litre of Water

Vegetative Stage (21-50 Days) Rapid leaf and stem development. Plant builds canopy for photosynthesis .	Jassids (Leaf Hoppers) Aphids Thrips, Whiteflies 	Sucking sap, Leaf Curling, Stunted Growth 	 Dosage: 2.5 ML/Litre of Water.	Verticillium Wilt 	V-Shaped chlorosis, Vascular browning & Cool Temperatures 	 + Only Drenching SENSOR XTRA 2 ML & AGROCINE 0.5 GM Per Litre of Water.

Square Formation (51-70 Days) Flower buds (squares) begin forming. Important for setting future yield.	Spotted bollworm (early) Whiteflies Mites 	Bud dropping Sap sucking 	 For Controlling Larvae and Sucking Pests. Dosage – 1ML + 1GM / Litre of Water. + For Better Flowering – Future Yields, Dosage – 0.5 ML/Litre of Water	Bacterial Blight 	Angular leaf spots, black arm, boll rot & High humidity, Rains. 	 For Foliar Spray 2 ML/Litre of Water. + For Foliar Spray 1 GM/Litre of Water.

Flowering Stage (71-100 Days) Flowers open; pollination occurs. Boll development begins post - pollination.	Helicoverpa (American bollworm) Spotted Bollworm Pink bollworm Whiteflies 	Damage to buds, flowers, Early bolls. 	 For Control All types of Bollworms in this Stage, Dosage foliar Spray – 1.5 ML/Litre of Water. + Foliar Spray 2 ML/Litre of Water.	Alternaria Leaf Spot 	Circular brown leaf spots & Wet, Warm Conditions 	 For foliar Spray 2 ML/Litre of Water

Boll Formation & Development (101-140 Days) Bolls Grow in Size; Seeds and fibre mature inside. High Nutrient and Water demand.	Pink bollworm Helicoverpa Armigera Mealybugs 	Bore into bolls, reduce fibre quality Mealy bug Affected Plant. 	 Dosage: For foliar Spray 2.5 ML/Litre of Water. + Dosage: For Control Mealy Bugs 2.5 ML/Litre of Water.	Anthracnose 	Sunken lesions on bolls, Stems & Moist, Humid Weather 	 For foliar Spray 2 ML/Litre of Water

Boll Opening & Maturity (141-180 Days). Bolls crack open to expose lint. Harvesting typically begins	Bollworms (Late) Mealybugs 	Effect open bolls, Secondary infections 	 Dosage: 0.40 ML/Litre of Water. + Dosage: 2.5 ML/Litre of Water.	Cotton Leaf Curl Virus (CLCuV) 	Leaf curling, stunting, vein thickening & Whitefly infestation, Hot/dry climate. 	 Dosage: 1GM+2.5ML/Litre of Water. For Better Results Spray 2 Times in 4 Days Interval. + Dosage: 2ML/Litre of Water.

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