

Crop-Wise Fertilizer Prescription

A **crop-wise prescription** based on the soil testing report helps farmers understand the specific fertilizers and amendments they need to apply for optimal crop growth. Below is a structured format that outlines recommendations based on the soil test results and the specific crop to be cultivated.

1. Client Information

- **Client Name:**
- **Farm Location:**
- **Date of Soil Testing:**
- **Sample ID:**
- **Crop to be Grown:** (e.g., Wheat, Rice, Maize)

2. Soil Test Summary

- **Soil pH:**
- **Soil Type:** (Sandy, Clayey, Loamy, etc.)
- **EC (dS/m):**
- **Organic Carbon (%):**
- **Nutrient Deficiency:** (Based on soil test results)
- **Salinity or Sodicity Issues:** (If any)

3. Fertilizer and Amendment Recommendations (Crop-Specific)

Nutrient/Amendment	Current Soil Level	Recommended Level for Crop	Required Fertilizer / Amendment	Quantity (kg/acre)	Timing of Application	Method of Application	Remarks
Macro-Nutrients							
Nitrogen (N)	(Soil Test Result)	(Recommended Level)	Urea/DAP/Organic Source	(kg/acre)	(Pre-sowing, At sowing)	(Broadcast, Fertigation)	
Phosphorus (P)	(Soil Test Result)	(Recommended Level)	DAP/SSP/Organic Source	(kg/acre)	(At sowing)	(Drilling with seed, Banding)	
Potassium (K)	(Soil Test Result)	(Recommended Level)	MOP/Organic Source	(kg/acre)	(Pre-sowing, At sowing)	(Broadcast, Banding)	
Secondary Nutrients							
Calcium (Ca)	(Soil Test Result)	(Recommended Level)	Gypsum/Lime	(kg/acre)	(At planting, Pre-planting)	(Soil application)	For correcting soil acidity
Magnesium (Mg)	(Soil Test Result)	(Recommended Level)	Dolomite/Lime	(kg/acre)	(Pre-planting)	(Soil incorporation)	
Sulfur (S)	(Soil Test Result)	(Recommended Level)	Ammonium sulfate/Elemental Sulfur	(kg/acre)	(Pre-sowing)	(Broadcast)	
Micro-Nutrients							
Zinc (Zn)	(Soil Test Result)	(Recommended Level)	Zinc Sulfate/Organic Source	(kg/acre)	(Pre-sowing, Foliar application)	(Soil application/Foliar)	
Iron (Fe)	(Soil Test Result)	(Recommended Level)	Iron Chelate/Organic Source	(kg/acre or ml/acre)	(Foliar application)	(Foliar spraying)	
Boron (B)	(Soil Test Result)	(Recommended Level)	Borax/Organic Source	(kg/acre)	(Pre-sowing)	(Broadcast, Foliar)	
Organic Carbon	(Soil Test Result)	(Ideal Organic Matter %)	Farm Yard Manure (FYM)	(tons/acre)	(Pre-sowing)	(Broadcast)	To improve soil fertility
Soil pH Correction							
Lime (For acidic soil)	(Soil Test Result)	(Target pH for Crop)	Lime	(tons/acre)	(Before planting)	(Incorporate into soil)	Apply lime to neutralize pH
Gypsum (For sodic soil)	(Soil Test Result)	(Target pH for Crop)	Gypsum	(tons/acre)	(Before planting)	(Broadcast)	To improve soil structure

4. Irrigation and Water Management

- **Water Requirement for Crop:** (L/acre or mm/day)
- **Irrigation Frequency:** (Based on soil type and crop stage)
- **Water Quality Management:** (If salinity or pH issues are found in the soil or water)

5. Crop Management Practices

- **Tillage Recommendations:** (Based on soil texture and structure)
- **Cover Crops or Mulching Suggestions:** (For improving soil health and moisture retention)
- **Pest and Disease Control Suggestions:** (If any issues are predicted based on soil conditions)

6. Expected Yield Improvement

- **Current Yield (based on historical data):**
- **Expected Yield After Implementation of Prescription:** (Estimation based on corrected soil fertility)

Prescribed by:

- **Name:**
- **Agronomist/Lab Name:**
- **Date of Report:**
- **Contact Information:**

Notes:

- Re-testing after 6-12 months is recommended to monitor soil improvements.
- Apply fertilizers as per the recommended dosages to avoid nutrient imbalances.

This format gives a detailed recipe tailored to the crop's specific needs, ensuring that soil deficiencies are corrected and the right nutrients are applied at the right time for optimal growth. You can further customize this template based on regional crop requirements or farm-specific conditions.