

Corn Nutrition, Physiological, and Weed Management:

Key For Identification of Mineral Deficiencies

Nitrogen

- Promotes vegetative growth
- Poor growth and root development. Leaves turn pale yellow. Red stems. Low yields.
- Nitrogen is very soluble and easily leached from the soil. In Maize, first ten days requirement of nitrogen is minimal and it should be applied in three split doses. Peak demand stretches from 15-55 days.

Phosphorous

- Promotes initial and final root growth and plant productivity.
- Retarded plants. Purple older leaves. Dark yellow leaf tips. Purple stems. Poor growth. Low/Poor yields.
- Low solubility; not easily lost. Should be applied before planting to provide uniform seedling emergence.

Potassium

- Involved in enzyme activity. Develops resistance to disease. Promotes crop health.
- Leaf margins yellow and necrotic/Leaf Death. Bare ear tips. Weak Stalks. Poor yields.
- Demand stretches from seedling to grain filling. Not easily lost from soil.

Zinc

- Promotes leaf development and stalk elongation
- Interveinal Chlorosis in young leaves. White bands in younger leaves. Low yields.
- Basic/Foliar spray of Zinc Sulphate (5kg/ac) is recommended.

Magnesium

- Constituent of chlorophyll.
- Interveinal yellowing of older leaves. Rust-brown striped leaves.
- Foliar spray of Magnesium Sulphate 2% per acre.

Sources and Links

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