

JULY 2024 NEWSLETTER

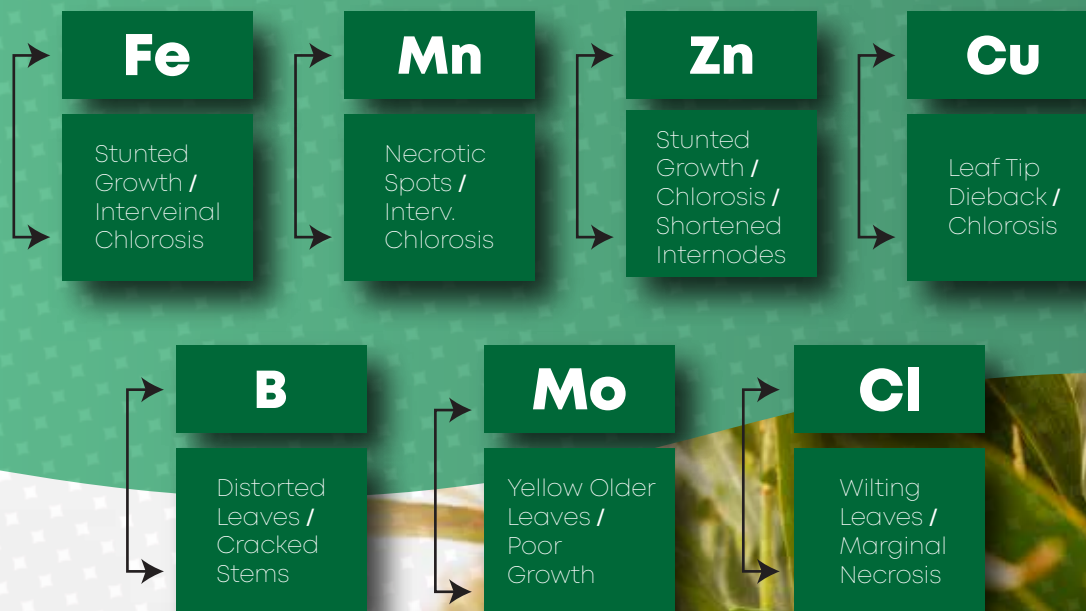


MICRONUTRIENTS & DEFICIENCY SYMPTOMS IN PLANT TISSUE

BORON DEFICIENCY AND MAJOR EFFECTS ON OTHER NUTRIENTS (MICRO & MACRO)

Micronutrients, although required in smaller quantities compared to macronutrients, play critical roles in the physiological and biochemical processes essential for plant growth and development. Their availability and balance can significantly impact crop health, yield, and quality.

Micronutrients & Deficiency Symptoms



Deficiency Symptoms (with Pictures)



Fe Deficiency in Wheat



Mn Deficiency in Canola



Boron Deficiency in Canola



Cu Deficiency in Wheat



Zn Deficiency in Canola



Mo Deficiency in Canola



Cl Deficiency in Wheat

BORON DEFICIENCY, RESULTING PROBLEMS AND IMPACTS ON PLANTS

Boron Deficiency correlation with:	Problem Caused in Plants	Results on Plants
N	<ul style="list-style-type: none">- Disrupts the activity of enzymes involved in nitrogen metabolism.- Results in poor root development- Less transport of nutrients across cell membranes	Leads to inefficient N utilization, reduces plant ability to uptake N from soil, and disrupts the N transport within the plant
P	Disrupts phosphorus uptake and transport	Reduces P availability for critical processes such as energy transfer, root development, and flowering
K	Affects potassium uptake and its distribution within the plant	Chlorosis and Necrosis
Ca	Leads to poor calcium utilization, resulting in weak cell walls	Issues like blossom end rot in tomatoes and tip burn in leafy vegetables
Fe	Leads to poor iron uptake and translocation	Interveinal chlorosis.
Mn, Zn, Cu	Disrupts the uptake and transport of these micronutrients	Chlorosis, stunted growth
Mo	Leads to a significant impact on molybdenum uptake, transport, and utilization	Leaf distortion and marginal necrosis

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