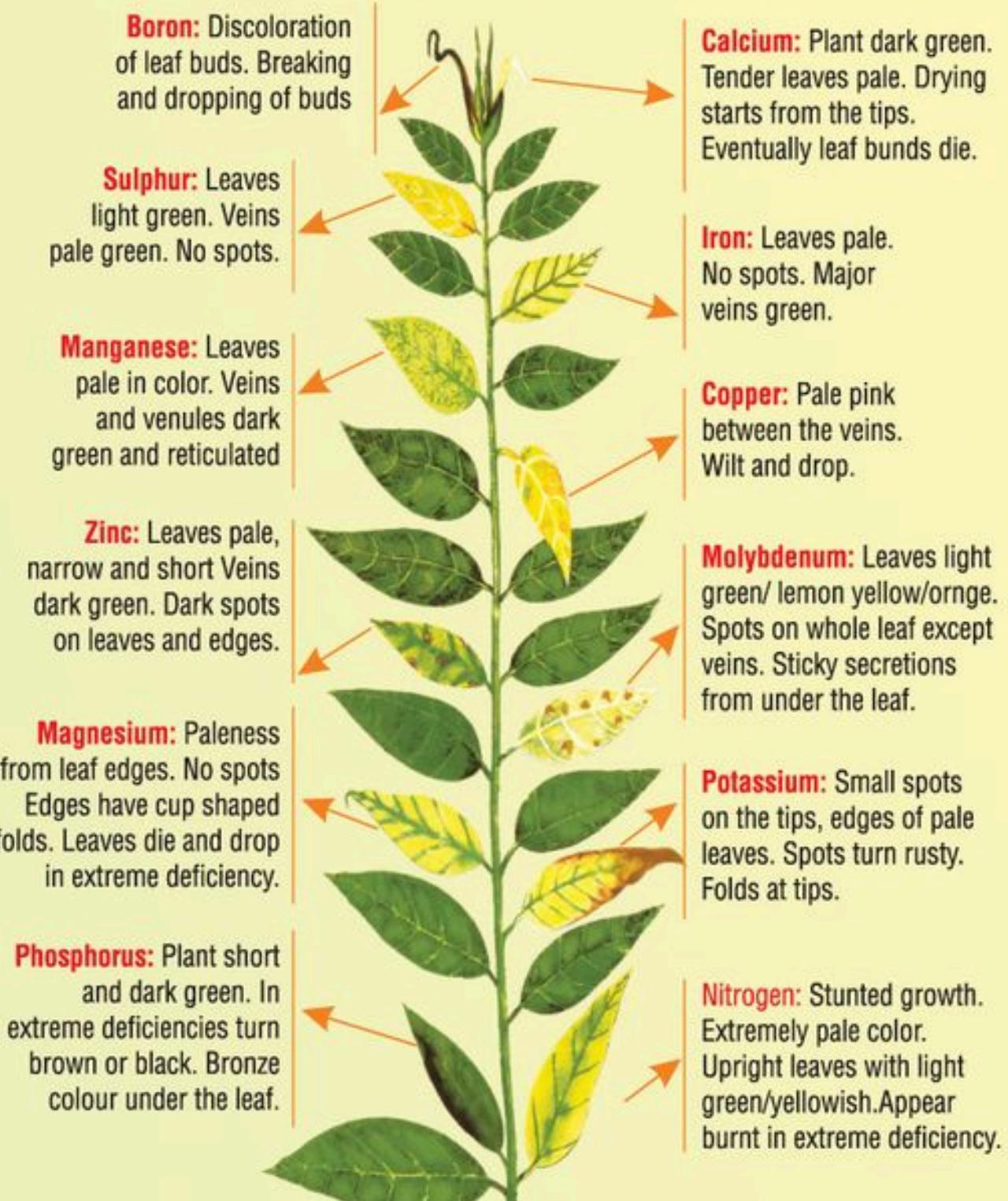


## How to Recognize Nutrient Deficiency in Plants and Their Symptoms

<u>Inorganic Element</u>	<u>Deficiency Symptom</u>
<b>Nitrogen (N)</b>	Plants stunted, yellowing from bottom up and leaf tip back to petiole. Reduced size. Slow, stunted growth.
<b>Phosphorous (P)</b>	Plants stunted, shorter internodes, purple or dark green foliage; old leaves die back; flowers and fruit poor. Slow growth, delayed maturity.
<b>Potassium (K)</b>	Older leaves scorches on margin; weak stem; fruit shriveled, uneven ripening.
<b>Boron (B)</b>	Tip of growing plant dies; bud becomes light green; roots are brown in center; flowers do not form.
<b>Calcium (Ca)</b>	Young leaves turn yellow then brown; growing tip bends; short, dark roots.
<b>Iron (Fe)</b>	Young leaves are yellow between veins first, top to bottom; veins, margins, and tips stay green.
<b>Magnesium (Mg)</b>	Leaves are thin, lose green color from between veins from bottom of plant up; tend to curve upward.
<b>Manganese (Mn)</b>	Tissue between veins turns white; leaves have dead spots; plant is dwarfed.
<b>Zinc (Zn)</b>	Terminal leaves are small; bud formation is poor; leaves have dead areas.
	Information from 'The Vegetable Book, A Texan's guide to gardening' –Dr. Sam Cotner

## Deficiency Chart of Micronutrients



THE COLOUR REPRESENTED ARE INDICATIVE.  
THEY MAY VARY FROM PLANT TO PLANT