

Chapter 12

MINERAL NUTRITION

Toxicity of micronutrients:

The requirements of micronutrients is always in low amounts while moderate decrease causes deficiency and moderate increase causes toxicity. Any mineral ion concentration in tissues that reduces the dry weight of tissue by about 10% is called toxic, many times excess of an element may inhibit the uptake of other element and may cause deficiency.

Example:

Mn toxicity, prominent symptom is presence of brown spots around chlorotic veins.

1. Excess Mn inhibits uptake of iron and Mg.
2. Excess Mn will compete with Mg for binding enzymes.
3. Excess Mn will inhibit translocation of Ca in plants.