

Magnesium (Mg) - mobile

Deficiency: Common indoors.
Lower and later-middle leaves
develop yellow patches
between darker green
veins and rusty brown
spots on leaf margins,
tips and between veins. Leaf tips
usually curl upward before dying. The



A

entire plant could discolor in a few weeks and if severe turn a yellow/whitish tinge before browning and dying. Minor deficiencies can escalate and cause a diminished harvest.

It is often in soil but unavailable because soil is too wet/cold or acidic/cold. An excess of K, ammonia (nitrogen) and calcium (carbonate) bind Mg in soil. Small root systems are unable to take in enough Mg to supply heavy demand. A high EC slows water evaporation and diminishes Mg availability.

- ✦ Intervenial yellowing, irregular rust-brown spots on older leaves
- ✦ Leaf tips turn brown and curl upwards
- ✦ Rust-brown spots multiply and intervenial yellowing increases
- ✦ Spots and yellowing envelop entire plant
- ✦ Leaves dry and die in extreme cases

Treat Deficiency: Water with two teaspoons of Epsom salts (magnesium sulfate) per gallon of water. For fast results, spray foliage with a 2 percent solution of Epsom salts. Greening starts at top of plant and moves downward. Add same dose until symptoms disappear. Or apply magnesium sulfate monohydrate. Add fine dolomite lime when planting to ensure a supply of calcium and Mg.

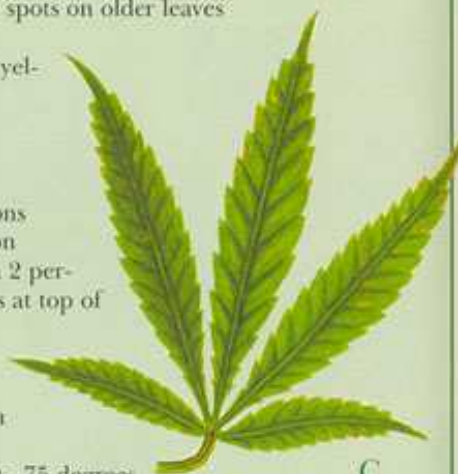
Keep root zone and nutrient solution 70 - 75 degrees

E. Keep ambient air tem-

perature at 75 degrees day and 65 degrees night. Use a complete fertilizer with Mg. Keep soil pH above 6.5, keep hydroponic pH above 5.5, and lower high EC for a week.

Toxicity is rare and difficult to discern with the naked eye. If extremely toxic, Mg conflicts most often with calcium, especially in hydroponics.

Toxic buildup in soils is uncommon.



C

D

