

Information Sheet: Cannabis Plant Nutrient Disorders

Iron Deficiency

Starts at top of plant with new growth.



Iron deficiency (Fe) early stage

Iron deficiency (Fe) progression

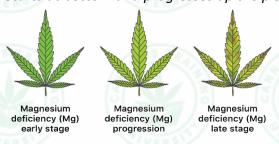
Iron deficiency (Fe) late stage

Possible treatments:

- Spray leaves with chelated iron
- Adjust the pH to the correct level
- Flush the system with clean, non-reverseosmosis water that has the correct pH level
- Add a calcium-magnesium supplement
- Avoid over-watering

Magnesium Deficiency

Starts at bottom and progresses up the plant.



Possible treatments:

- If using coco coir or reverse osmosis water in a hydro system, keep roots between 6.0 and 6.5 pH
- If pH levels are good, supplement with CalMag
- Add worm castings or dolomite lime to media to raise pH
- Consider flushing system with clean water of correct pH mixed with magnesium supplement

Nitrogen Deficiency

Starts at bottom and progresses up the plant.



Nitrogen deficiency (N) early stage



Nitrogen deficiency (N) progression



Nitrogen abundance (N) early stage

Possible treatments:

- Add fertilizer with high nitrogen level
- Add ammonium nitrate to soil
- Add bat guano to soil
- Add seaweed, kelp, or other organic nitrogen supplement to soil
- Add beneficial microbes and soil amendments with nitrogen-cycling bacteria to soil

Zinc Deficiency

Starts at top of plant with new growth.



Zinc deficiency (Zn) early stage



Zinc deficiency (Zn) progression



Zinc deficiency (Zn) late stage

Possible treatments:

- Ensure that pH is within acceptable levels
- Add a Fe-Zn-Mn micronutrient mix
- Add Zinc sulfate (ZnSO4), chelated zinc, or zinc oxide (ZnO)