


# Deficiency Guide


Even when you use a high quality, consistent nutrient you could still run into deficiency problems. In this case, the deficiency is often caused by other factors than the nutrient (read more on page 26 of this CANNA[al]l). This deficiency guide helps you to first recognise the deficiency (what can you see? And secondly, what can you do?). We have produced this guide in collaboration with CANNA Research. We hope it is a useful tool to hang on your wall so you can check it easily although we hope you won't need it often.

## Calcium




**What can you see?**  
Yellow/brown spots, surrounded by a sharp brown outlined edge.

**What can you do?**  
Add calcium by applying a liquid lime fertiliser such as a calcium nitrate solution.




## Phosphorus




**What can you see?**  
Small plant with purple/black necrotic leaf parts. Leaves become malformed and shriveled.

**What can you do?**  
Mix inorganic phosphate fertiliser THOROUGHLY through the potting mix or add extra liquid phosphate when growing in hydroponics.




## Magnesium



**What can you see?**  
Rusty brown spots. Cloudy, vague yellow spots between the veins.

**What can you do?**  
Spray with a 2% solution of Epsom salts every 4-5 days during about a week.



## Iron



**What can you see?**  
Strong yellowing of especially the young leaves and growth shoots between the veins.

**What can you do?**  
The best thing is to spray the plants with a watery solution of EDDHA or EDTA chelates.




## Nitrogen



**What can you see?**  
Purple stalks, yellowing leaves and leaves fall off.

**What can you do?**  
Raise EC of the feeding or add extra nitrogen.




## Potassium




**What can you see?**  
Dead edges on the leaves.

**What can you do?**  
In case the EC in the substrate or potting mix is high, you can rinse it with clean water. Add potassium yourself.



## Manganese



**What can you see?**  
Yellow stripes appear between the leaf's side veins.

**What can you do?**  
Using products that contain trace elements (Tracemix).

