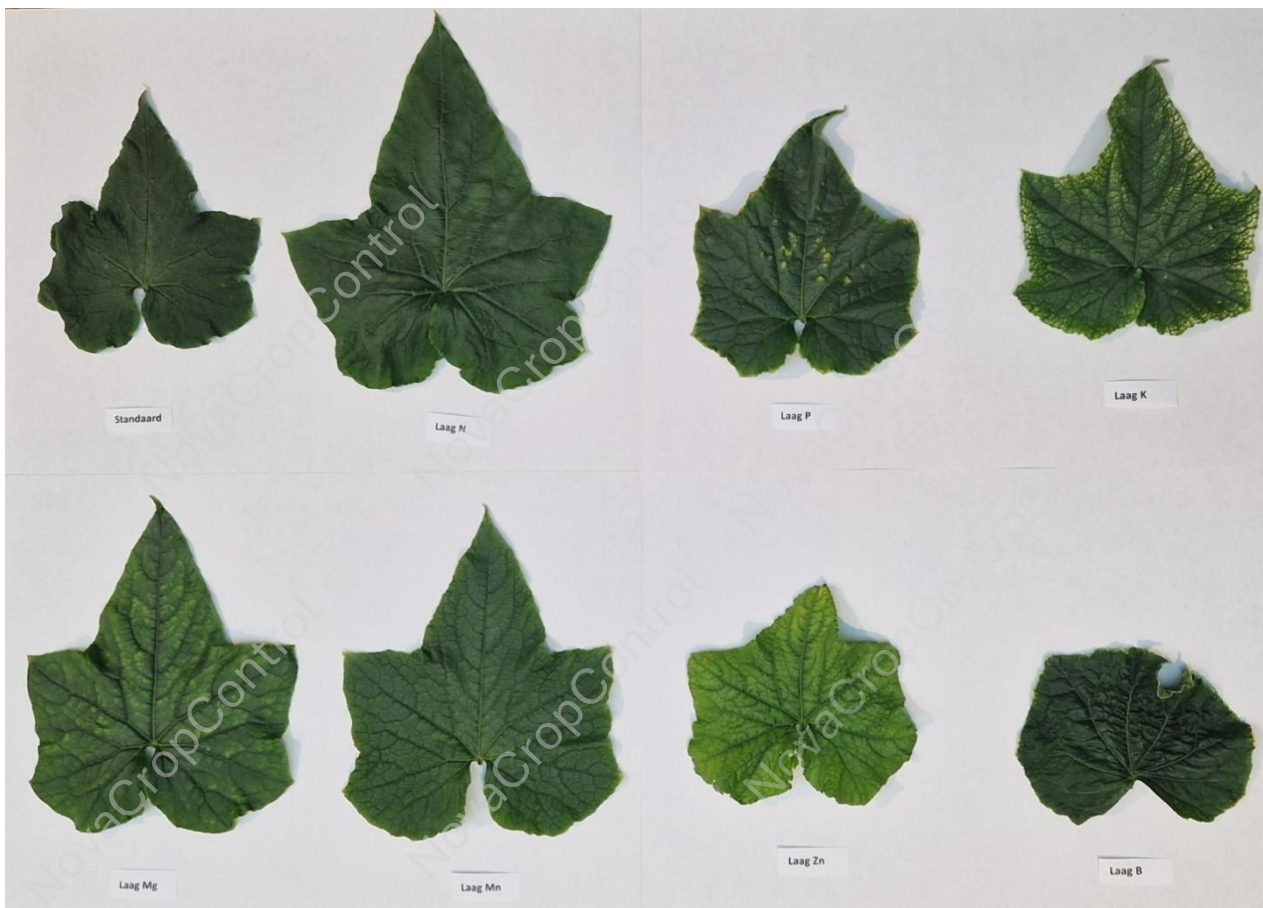


**Symptoms of mineral deficiencies and excess in**

# **Cucumber**

**N, P, K, Mg, S, Mn, Zn, B and Cu deficiency**

**Fe and B excess**



 **NovaCropControl**



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The images shown in this document are only guidelines, the symptoms can vary per crop and cultivation. In case of doubt about your crop health, we advise to do plantsap analysis.





# Standard fertilization

## Young leaves

The leaves of plants grown with standard fertilization are evenly green of color, with a lighter yellow-green border on the leaves.



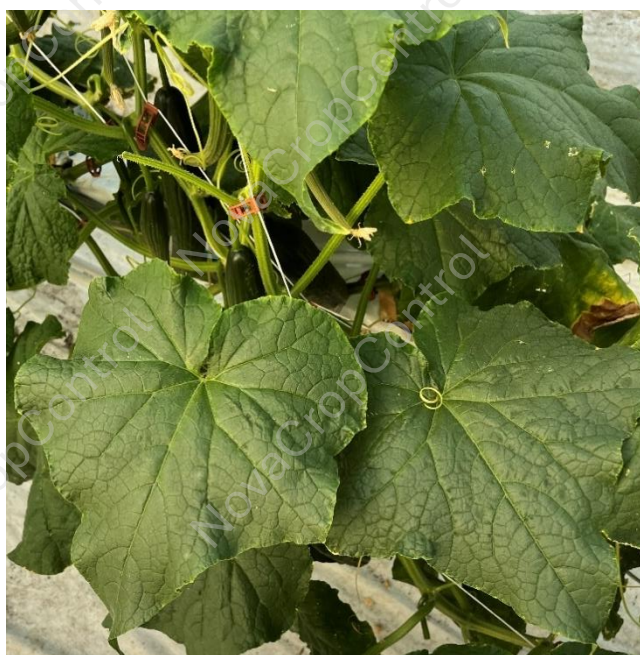




# Standard fertilization

## Old leaves

In the older leaves this border is brown of color, and there are brown spots spread across the leaves.







# Nitrogen deficiency

The leaves with nitrogen deficiency are yellow-green of color, compared to the standard fertilization, with bright yellow spots coming from the leaf edges. The leaves feel more smooth and age less.







## Phosphate deficiency

The plants and leaves with phosphate deficiency are smaller compared to the standard fertilization. The leaves are darker green of color and contain more brown spots, the yellow-green or brown colored border is worse compared to the standard fertilization.







## Potassium deficiency

The leaves with potassium deficiency show yellow coloring between the veins, with white or brown spots in this coloring. The leaves are more brittle compared to the standard fertilization.







# Magnesium deficiency

The leaves with magnesium deficiency show yellow-brown coloring between the veins, with signs of burning in this coloring. The leaves feel more smooth compared to the standard fertilization.







# Sulfur deficiency

The young leaves with sulfur deficiency are yellow of color, the older leaves have yellow-green spots. The plants, leaves and cucumbers are smaller compared to plants grown on standard fertilization.







## Iron excess

The leaves of plants grown with excessive iron were darker green compared to plants grown on standard fertilization. The leaves with iron excess were also bumpier.







# Manganese deficiency

The leaves with manganese deficiency show yellow-green spots between the nerves. The leaf edges show more burned spots compared to the standard fertilization.

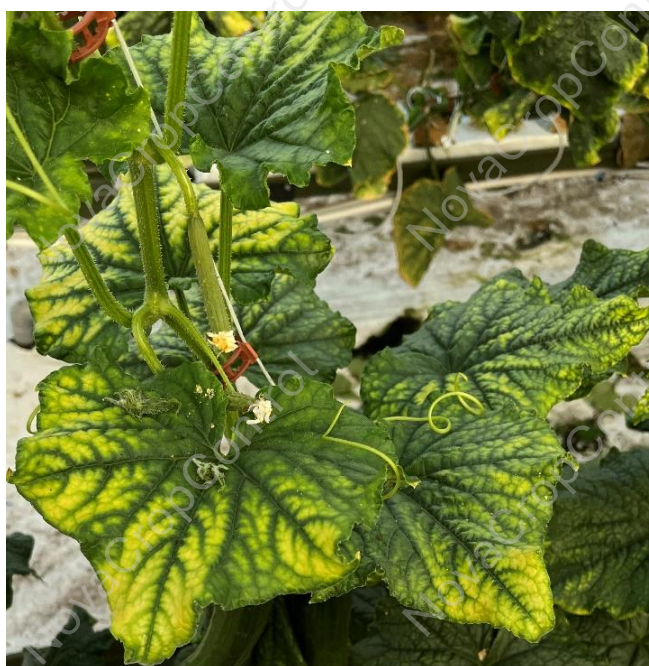
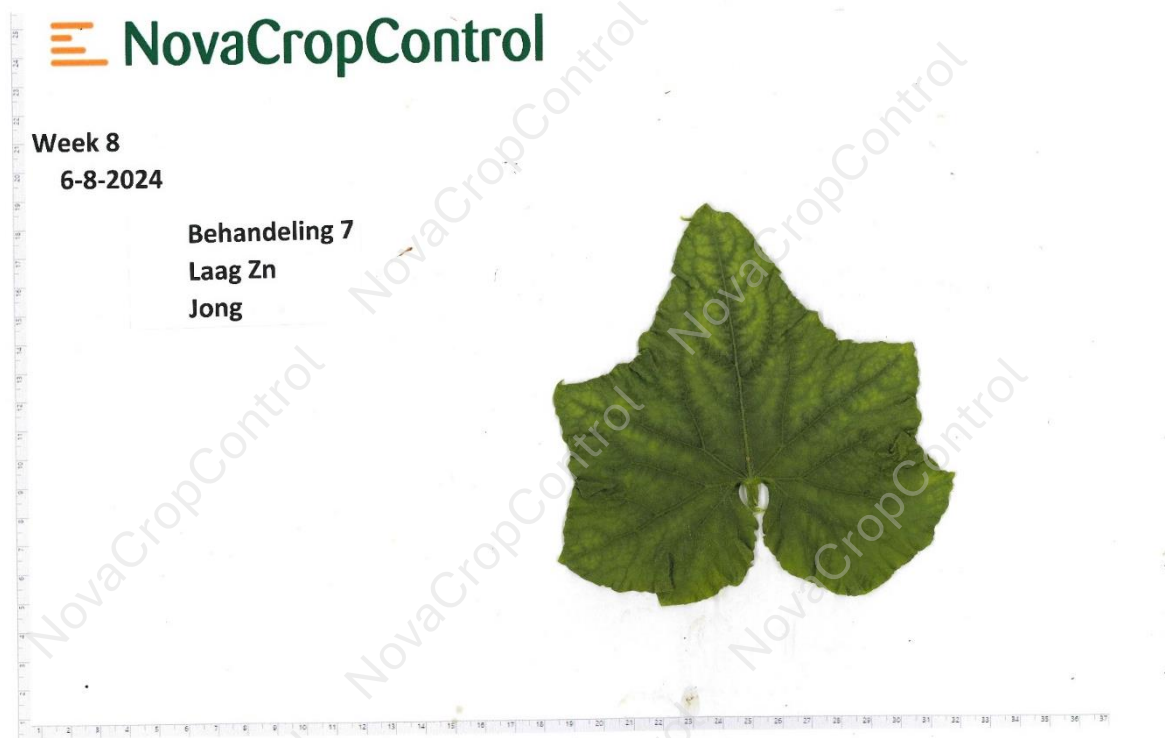






## Zinc deficiency

The plants with zinc deficiency are smaller compared to the standard fertilization, the leaves are also smaller and are wavier. They have a bright yellow coloring between the nerves, with more brown spots and border. The cucumbers are smaller and bumpier.

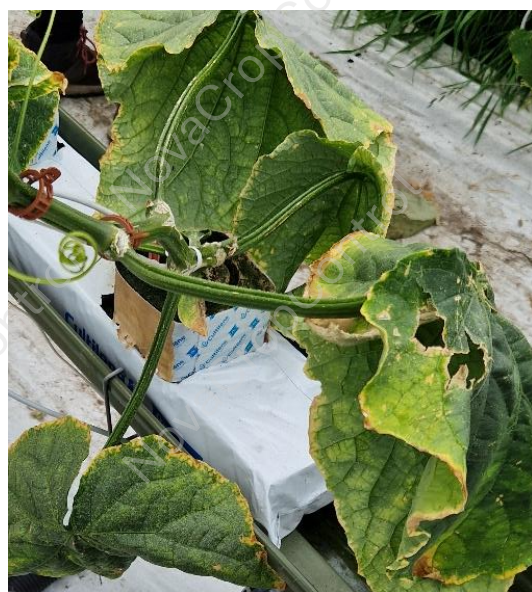






## Boron deficiency

The plants with boron deficiency are smaller compared to the standard fertilization, because the top stops growing. The leaves are smaller and deformed, and feel crispier. The leaves are dark green of color, from the tips a yellow or brown color moves into the leaves. The plant produces no cucumbers, the leaf axil tear in.







## Boron excess

The plants with boron excess showed yellow coloring of the leaf edges, this edge hindered leaf growth which resulted in bulging leaves. The leaves aged faster compared to the standard leaves.







## Copper deficiency

The plants with copper deficiency showed deformed and smaller leaves compared to leaves of plants with standard fertilization, in the older leaves yellow to brown spots appeared. Plants with copper deficiency also grew less cucumbers compared to the standard fertilization.

 **NovaCropControl**

Week 6

25-9-2025

Behandeling 8

Laag Cu

Oud

