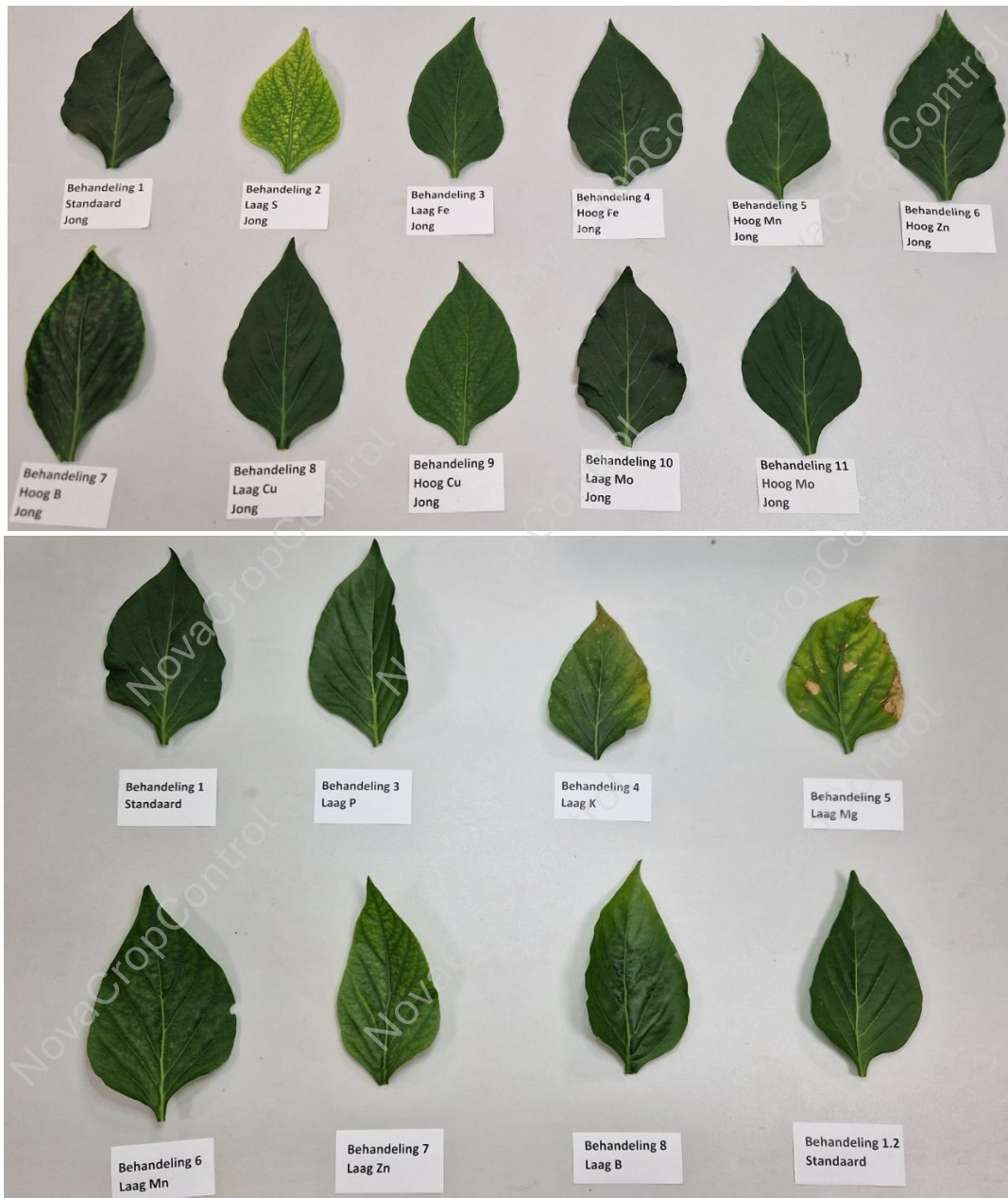


Symptoms of mineral deficiencies and excess in

Bell pepper

P, K, Mg, S, Fe, Mn, Zn, B and Cu deficiency

Fe, Mn, Zn, B and Cu excess



 NovaCropControl



Index:

Standard fertilization young	3
Standard fertilization old.....	4
Phosphorus deficiency	5
Potassium deficiency	6
Magnesium deficiency.....	7
Sulfur deficiency	8
Iron deficiency	9
Iron excess	10
Manganese deficiency.....	11
Manganese excess	12
Zinc deficiency.....	13
Zinc excess	14
Boron deficiency	15
Boron excess	16
Copper deficiency	17
Copper excess	18



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 young leaves of pepper plants grown with standard fertilization are evenly dark green of color, the leaves on the top of the plants are brighter green.



 **NovaCropControl**

Week 12

29-7-2025

Behandelings 1

Standaard

Jong





Standard fertilization

Old leaves

The old leaves of pepper plants grown with standard fertilization are dark green of color as well. The old leaves hang downwards (sometimes curled up).





Phosphorus deficiency

The leaves with phosphorus deficiency contain yellow-green spots between the veins, especially in the tip of the leaves.

 **NovaCropControl**

Week 14
1-10-2024

Behandeling 3
Laag P
Oud





Potassium deficiency

The leaves with potassium deficiency show yellow-green coloring between the veins, with white to brown spots in this coloring. The plants with potassium deficiency lack growth both in plant and leaf length compared to the standard fertilization, the leaves also feel weaker.

 **NovaCropControl**

Week 14
1-10-2024

Behandeling 4
Laag K
Jong





Magnesium deficiency

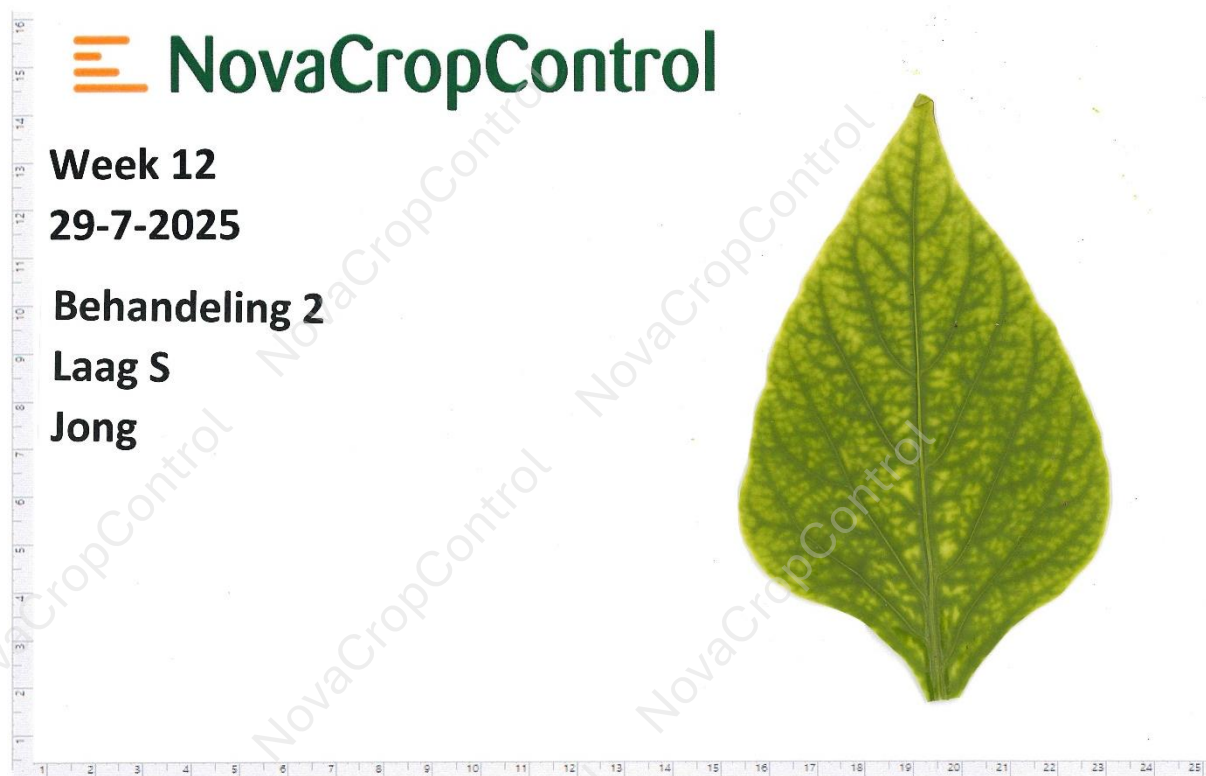
The leaves with magnesium deficiency show bright yellow coloring between the veins, with dead spots in this coloring.





Sulfur deficiency

The leaves with sulfur deficiency are yellow colored between the veins, the leaves and plants are smaller compared to plants grown with standard fertilization. The deficiency symptoms are worse in the top of the plants.





Iron deficiency

Plants with iron deficiency show light green spots between the veins of the leaves and yellow-green spotted leaves in the top of the plants.

Please note that [zinc excess](#) and [copper excess](#) show the same symptoms.



Week 12

29-7-2025

Behandeling 3

Laag Fe

Jong





Iron excess

The plants grown on fertilization with iron excess showed light green or brown spots in the older leaves, for the first weeks after being exposed to the iron excess.





Manganese deficiency

The leaves with manganese deficiency show yellow-green spots between the veins, especially in the tip of the leaves.





Manganese excess

The leaves with manganese excess show a yellow coloring of the veins and around them.





Zinc deficiency

The leaves with zinc deficiency show a bright yellow coloring between the veins, with brown necrotic spots, the old leaves also curl up more compared to the standard fertilization. The plants with zinc deficiency produce less and smaller peppers compared to the standard fertilization.





Zinc excess

Zinc excess obstructs iron uptake, resulting in [iron deficiency](#). The plants show light green spots between the veins of the leaves and yellow-green spotted leaves in the top of the plants.



Week 12

29-7-2025

Behandeling 6

Hoog Zn

Jong





Boron deficiency

A yellow to brown coloring moves into the leaves with boron deficiency, from the top of the leaves. In some plant tops the plant and leaf growth stop. The leaves are crispier compared to the standard fertilization, the plants with boron deficiency also produce less and smaller peppers.



 **NovaCropControl**

Week 13
24-9-2024

Behandeling 8
Laag B
Oud





Boron excess

The plants with boron excess show light green to yellow spots in the leaves. The leaves look more pinched compared to plants with standard fertilization.

 **NovaCropControl**

Week 12

29-7-2025

Behandeling 7

Hoog B

Jong





Copper deficiency

Plants with copper deficiency show light green to brown spots in the younger leaves. The plants lack growth in the top of the plant, compared to the plants with standard fertilization.



Week 6

19-6-2025

Behandeling 8

Laag Cu

Jong





Copper excess

Copper excess obstructs iron uptake, resulting in [iron deficiency](#). The plants show light green spots between the veins of the leaves and yellow-green spotted leaves in the top of the plants.

