New

VitaFer Mn Complex

Innovative foliar fertilizer containing Mn (manganese), 100% chelated with an organic factor (heptagluconic acid). Intended for emergency and preventive supply of manganese.

5,95% Mn + 2,98% N	%(m/v)	Density 1,19 kg/l	pH 5,0 – 6,0

The role of manganese in the plant:

- It has a positive effect on the nitrogen balance of plants and prevents excessive accumulation of nitrates in the plant. It promotes protein production and the synthesis of sugars and fats
- It increases enzymatic activity, improves photosynthesis and increases the amount of chlorophyll in leaves
- It takes part in the regulation of the plant's hormonal balance and activates enzymes responsible for the breakdown of carbohydrates
- Increases the mechanical resistance of plants by activating lignin production
- It has a beneficial effect on the development of the root system and stimulates the accumulation of phosphorus. Increases the growth of hairy roots
- Increases frost resistanc. Improves plant resistance to the negative effects of abiotic and biotic stress

Manganese deficiency causes:

- "Mottled chlorosis" on young leaves leading to necrosis and partial death of the leaves. Streaky spots between the nerves. These symptoms lead to necrosis and leaf fall.
- Narrowing of the roots in their central part and inhibited their development
- Inhibition of plant growth
- Limited uptake of nutrients from the soil: in particular phosphorus and nitrogen.
- Greater susceptibility of cereals to the negative impact of drought diseases

Recommendations for use:

- For preventive and emergency use in the event of a manganese deficiency. In particular for crops with a high demand for this ingredient: sugar beet, winter rapeseed, potatoes, ground vegetables and ornamental plants, corn, cereals, legumes, orchards and berries.
- In crops grown on alkaline or freshly limed soils (pH above 6.0)
- To optimize the flowering and fruiting process.
- During drought periods to increase resistance to abiotic stress conditions
- To increase frost resistance in winter crops
- In order to increase resistance to the negative impact of pathogens (e.g. drought diseases in cereals)
- In order to improve the quantity and quality of the main crop and its storage parameters

Dosage and timing of application:

Crop	Dose (l/ha)	Timing and number of treatments
Winter cereals	1–2	1 autumn treatment from the 4 leaf stage (no later than 3–4 weeks before the winter break in vegetation), 2 spring treatment in the tillering stage
Oilseed rape	1–2	1 autumn treatment from the 4th – 6th leaf stage (no later than 3–4 weeks before the winter break in vegetation), 1 treatment in spring after the start of vegetation
Spring cereals	1–2	1 treatment from phase 3–4 to the beginning of tillering
Sugar beets	1–3	1 treatment in the 4–6 leaf phase
Potatoes	1–2	2–3 treatments from the shoot formation phase to reaching 40% of the final weight of the tubers, the interval between treatments is at least 10–14 days
Vegetables	0,5–1	1 – 2 from the 4th leaf phase, during intensive growth or in periods unfavorable for manganese uptake (drought), the interval between treatments is at least 12 –14 days
Orchards and berry patches	3	3 – 4 treatments. 1 – 2 preventive treatments after flowering or when symptoms of manganese deficiency occur. In apple and pear trees, 1–2 treatments to improve the storage durability of the fruit and their color. The interval between treatments is 12 – 14 days

–fetigation: 0.25%

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