

TECHNICAL ESSENTIALS



Mn 500 plus SC Improved manganese (Mn) SC formulation

Foliar manganese For arable crops

Introduction

Manganese (Mn) was proven to be essential to plants about 100 years ago (1922). Although essential, it is required in small quantities, and is classified as a trace element.

This *Technical Essentials* focusses on manganese nutrition and includes important new trials data.

Why manganese?

Amongst other things, manganese is essential for oxidation and reduction (energy management) processes in the plant. Crucially manganese is necessary for the control of free radicles formed by the splitting of water during photosynthesis. Manganese is also involved in the germination and development of pollen.

Availability of manganese

Mn availability in soils is linked to soil pH. It is mostly available in slightly acidic soils. It is also affected by soil organic matter content (high organic matter decreases availability of Mn) and soil microbial activity (increased activity such as occurs when the soil warms up, increases availability). Plants take up Mn as the Mn²⁺ ion which is easily leached from the soil. It is relatively immobile in the plant. Mn is transported in the xylem water-transport system – like calcium and magnesium.

Why foliar application of manganese?

Deficiencies can be conveniently addressed by inexpensive foliar applications and at modest cost.

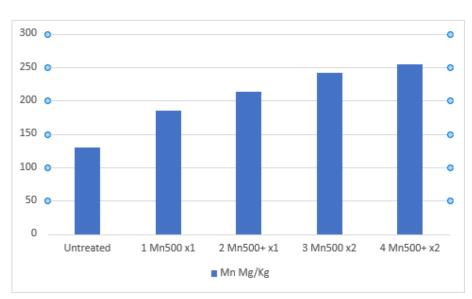
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Solufeed Mn 500 plus SC mixes in the tank with many other commonly applied agrochemicals to minimise sprayer passes through the crop.

The concentrated product has a low application rate of 1-2 litres per hectare and the free-flowing liquid formulation makes it easy to use, handle and store.

Why Solufeed Mn 500 plus SC?

Solufeed Mn 500 plus SC is formulated with the addition of a unique blend of Fulvic and Humic acids that helps the uptake of the product into the plant leaves. These organic acids – the ultimate break-down products from the degradation or organic matter - are "made-innature", being extracted from soil water that is destined for human consumption. These materials can be described as "natures chelating agents" and result in increased foliar uptake of the manganese into the leaf.



Mn 500 trials on Winter Wheat. December 2022.

Directions for use

Application rates: 1 - 2 litres per ha (use higher dose in severe deficiency).

Directions: Apply as a conventional foliar spray using a convenient volume of

water to suit the crop being sprayed – typically 200 litres per ha.

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Observe normal foliar application precautions.



Application Timing: In general, begin applications early in the season when there is sufficient leaf area to absorb the spray.

Compatibility: Compatible with many other fertilizers and agrochemicals. Always check the label of the companion product for restrictions.

Mn500+ product details

Pack: 5 litre jerrycan

Pallet: 51 x 2 x 5 litres per pallet

Health & Safety: An MSDS is available to professional users upon request.

Important

Always read the label before using any product.

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Please note that products may differ or be unavailable in certain territories.

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