TECH TOPIC

Zincflo[®]Plus

Liquid Fertiliser

Zinc is an essential micronutrient required by the plant for growth and development.

Zinc deficiencies are common on calcareous (high in lime or calcium carbonate), high pH soils that are sandy in texture or have relatively high soil phosphorous levels.

In Zinc deficient areas, essential zinc nutrients are lost each time you harvest your crop, so for optimum results, apply zinc every season.

Total Nitrogen (N) 56 g/L Total Sulphur (S) 35 g/L Zinc (Zn) 145 g/L

Always refer to the label for complete details.

THE BENEFIT OF ZINC CHELATE

Zinc performs essential functions within the plant that stimulate auxin and enzyme development. Auxins play an essential role in coordination of many growth and behavioral processes in the plant life cycle. Enzymes catalyse or increase the rate of chemical reactions, which determine the metabolic pathway of plant cells.

The most common forms of zinc micronutrients are oxides and chelates. The main difference between the two forms is that oxides are generally less soluble than chelates. Chelates are in the most readily available form for uptake into the plant.

Chelated zinc applied as a seed treatment enables the zinc to remain available to the plant longer than an oxide form.

Zincflo Plus is a chelate form of zinc that is completely soluble so that it delivers this essential micronutrient directly on the seed in the most highly concentrated form where it is required for growth and development of the plant.

BENEFITS

- 14.5% zinc chelated concentrate that increases yield and protein value, especially in zinc deficient soils
- Also contains 5.6% Nitrogen as urea and 3.5% Sulphur as sulphide
- Zincflo[®] Plus applied professionally to the seed improves grain yield and reduces the detrimental effects of drought and disease
- Compatible with other seed treatments
- Zincflo Plus improves plant vigour and enhances disease resistance
- Easy to apply low dust formulation, unlike zinc oxide seed treatments which are high dust formulations

Chelates explained:

- · Chelates are chemical bonds or claws that help hold metal ions such as zinc in solution, making it efficient for the plant to absorb them.
- Chelated zinc forms a complex with amino and citric acids that transport minerals through the membranes of plants as a ready to use intact molecule.
- Less energy is required from the plant to metabolise zinc in a chelated form.
- Chelates, or sequestering agents, have the ability to bind to insoluble forms of zinc in the soil, which in turn increases the nutrient availability for plants.

As water-soluble forms of zinc are rare in the soil, Zincflo Plus can assist in correcting zinc deficiency by sequestering the zinc from the soil, making it available to the plant.

Recommended application rates: wheat, barley, oats - 3L/tonne seed

A study conducted in 2007 at Horsham showed the positive effects on grain yield when Zincflo Plus was used in conjunction with various seed treatments fungicides on wheat seed.

Effect of Zincflo Plus on grain yield (t/ha) of wheat (cv. Goroke) naturally infected with common bunt (Tilletia tritici)



Horsham, 2007

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