

Soil fertilization with micronutrients and inspiring practical tests with chelates to prove their function

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Description:

Theory and practical illustrative tests will be combined in this Masterclass, a cooperation between the Soil Chemistry and Chemical Soil Quality Chair group (Wageningen University, NL) and Nouryon Micronutrients (formerly called AkzoNobel Micronutrients).

We will learn:

- Which factors in the soil determine the availability of micronutrients,
- How we can assess micronutrient availability,
- What plants do to enhance micronutrient uptake in order to avoid deficiencies,
- Conceptual possibilities to enlarge the availability of micronutrients,
- Chelating ligands: Ideal carriers to promote availability,
- What makes chelating ligands specific for binding a target metal?
- Differences between iron chelates – do you know why the ortho-ortho isomer is so important?
- Differences (visual and explained) between complexes, partial chelation and full chelation of metals,
- Differences in adsorption of copper to peat

Theme: Advances in measuring and modelling soil processes

Keywords: Chelates, Soil-Availability, Micronutrients, Iron

Type of masterclass: Tutorial and experiments in groups

