

Chelating Agents for Micronutrient Fertilisers

Description of Technology

This invention could replace a number of different chelating agents that are currently used in fertiliser products. We have discovered two separate environmentally friendly agents, one based on a bacteriological product and a second based on polymer technology. These agents have been found to be considerably more effective in ensuring plant uptake of trace elements by complexes trace elements (Zn, Cu, Mn, etc) into more 'lipophilic' state than the currently used chelating agents in fertiliser products.

Commercial Applications

Current trace element fertilisers are relatively ineffective on askaline and calcareous soils, where micronutrient deficiencies are most sever. More than 900 million hectares of the world's soil is deemed as alkaline or calcareous. Synthetic chelates, such as EDTA, used in micronutrient fertilisers are not readily absorbed by roots due to membrane exclusion. Additionally, agricultural use of EDTA is being increasingly restricted in Europe and product cost has mainly limited micronutrient fertiliser use to high-value crops. Our products are less expensive and more effective than those chelating agents currently used in fertilisers to promote uptake into plants in micronutrient deficient areas.

For Further Details

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