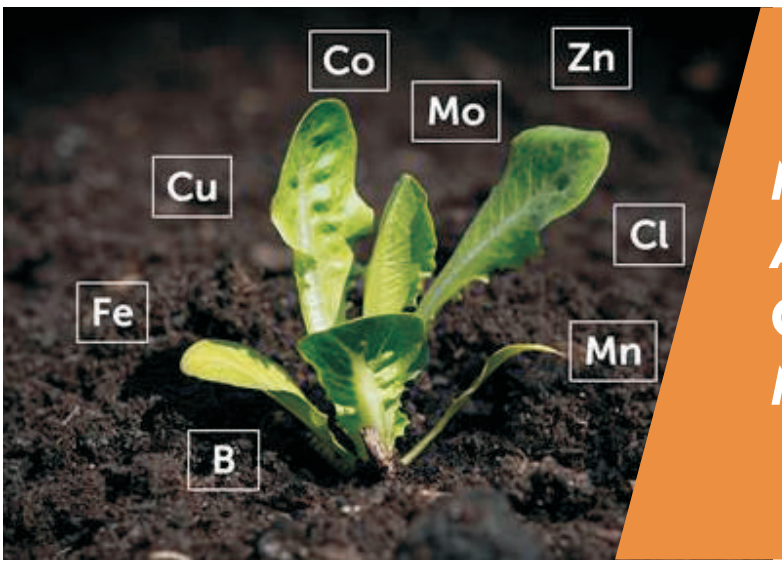

MAHADHAN COMBI: A SOURCE OF CHELATED MICRONUTRIENTS

Micronutrients are equally important in plant nutrition as are Macronutrients. Plants grown in micronutrient deficient soils display similar reductions in productivity as those in macronutrient deficient ones.

Micronutrient deficiency is most often observed on high pH and Calcareous soils. About 85% of soils in our operational geography fall in this category of high pH and Calcareous type, wherein widespread deficiency of Iron, Zinc & Boron is observed and is marked by an abysmally low micronutrient fertilizer use efficiency of 2 - 5%.

Chelation is a mechanism that increases micronutrient availability to plants.

Realising the important role that chelates play in plant nutrition, we have enriched our product basket with a product named Mahadhan Chelated Combi which supplies micronutrients in a chelated form.

Important features of Mahadhan Chelated Combi are given in a Q & A format below for easy understanding and communicating to farmers:

Why Chelated micronutrients?

Chelated Combi is a powerful formulation of Fe, Mn, Zn, Cu & B in a chelated form. It confers the following benefits:

- Improves the bio availability of micro nutrients and in turn contributes to the productivity and profitability of commercial crop production.
- Superior performance as compared to the conventional Sulphate salts of micro nutrients, in low-micronutrient soil with a high pH.
- Improves micro nutrient use efficiency and makes micro nutrient fertilization more cost effective.

What is the composition of Mahadhan Chelated Combi?

Mahadhan Chelated Combi is composed of the following:

Iron (Fe): 2.5 %Manganese (Mn): 1.0%Zink (Zn): 3.0% Copper (Cu): 1.0%Boron (B): 0.5%

What is the mechanism of action of a Chelate?

A Chelate is an organic compound in which two or more atoms are capable of binding to the same metal atom (in our case Fe, Mn, Zn, & Cu), thus forming a ring around the metal cation and protecting it from precipitation. Chelates are both natural as well as synthetic. Iron, Zinc, Copper & Manganese are the micronutrient cations which form metal-chelate complexes. In their chelated form, they are protected from reaction with inorganic soil constituents that would cause them to form insoluble precipitates or make them unavailable for plant uptake.

What is the recommendation for using Mahadhan Chelated Combi?

It should be sprayed on the foliage at a dilution rate of 1.0 gm per litre of water. Since it is compatible with all the pesticides (insecticides/fungicides) applied on crops, it can be used as tank mix, by following the standard procedure for preparing tank mix.

Crop	I application	II application	III application	IV application
Seasonal crops: Pulses, Oilseeds & Vegetables (Days after sowing/ transplanting)	30	60	-	-
Seasonal crops (extended season): Cotton, Tomato Ginger & Turmeric (Days after sowing/ planting)	30	60	90	-
Annual crops: Sugarcane, Banana, Grape Pomegranate, Papaya (Days after planting)	45	90	135	180