Nano Molybdenum



Nano Molybdenum fertilization through foliar sprays can effectively supplement internal molybdenum deficiencies and rescue the activity of molybdoenzymes. The current understanding on how plants access molybdate from the soil solution or later redistribute it once in the plant is still unclear; however, plants have similar physiological molybdenum transport phenotypes to those found in prokaryotic systems.

Components	(%) w/w
Molybdenum as Mo	0.75
Reducing Agents	0.05
Organic Acids	0.05
Organic Carbon	0.75

Dosage & Application

Agriculture: 150–300ml in 200L water per acre in two split doses with a gap of 15 days

Deficiency Symptoms in Crops

Molybdenum-deficiency symptoms show up as a general yellowing and stunting of the plant. A Mo deficiency can also cause marginal scorching and cupping or rolling of leaves

Soil pH to Molybdenum Ratio

Molybdenum becomes more available as soil pH goes up, the opposite of most other micronutrients. If a soil is alkaline (> 7.0, pH) or is high in Ca (> 1.5 percent), Cu availability is reduced. As a result, the Cu:Mo ratio can be altered and Cu supplementation may be needed

Benefits

- Molybdenum nutrition is an essential component to healthy plant growth
- Known to participate in various redox reactions in plants as part of the pterin complex Moco. Moco is particularly involved in enzymes, which participate directly or indirectly with nitrogen metabolism. However, Moco is also uniquely involved in ABA synthesis where it has a significant effect on ABA levels in plant cells and consequently a role in water relations and transpiration rates through stomatal control and in stress related responses.
- Required for the synthesis and activity of the enzyme nitrate reductase
- Nano Molybdenum is vital for the process of symbiotic nitrogen (N) fixation by Rhizobia bacteria in legume root modules