

MOLYBDENUM

42
Mo
95.95

Antagonism

High Mo levels can reduce the availability of:

- Copper
- Nitrogen
- High Sulfur reduces Mo availability

Stimulation

- Good supply of Mo improves nitrogen uptake and conversion

Functions

- Co-factor in the enzyme nitrate-reductase
- Aids in the conversion of nitrates to ammonium (initial stage of synthesis of proteins)
- Helps plants to utilize nitrate N
- Essential for rhizobia to enable legume crops to fix aerobic (atmospheric) N
- Involved in phosphate and Fe metabolism

Deficiency Symptoms

- Similar to N deficiency
- Yellow, pale leaves
- Stunted growth
- Necrotic leaf margins and tips
- Symptoms begin in older leaves first
- Flower wither or are suppressed

Factors Affecting Availability

- Soils with low P levels
- Soils derived from parent materials low in Mo
- Low pH soils (especially if they contain Al or Fe oxides)

Sensitive Crops

- Cucurbits, crucifers, pulses

Visual Guide

