IRON

26
Fe
55.845

Antagonism

High Fe levels can reduce the availability of:

- Phosphorus
- Zinc

Stimulation

- Fe increases nitrogen fixation and use

Functions

- Chlorophyll development and function
- Plays a role in energy transfer
- Important for structure of proteins and enzymes
- Involved in nitrogen fixation

Deficiency Symptoms

- Young leaves will show interveinal chlorosis with green veins
- Stunted growth
- Yellowing of leaves (margins and tips can scorch) will appear later in season
- Reduced yield and quantity

Factors Affecting Availability

- High pH soils
- After heavy liming
- Soils with high levels of metallic ions
- Poorly drained and/or aerated soils
- Soils with high levels of Cu
- Soils with low K availability, especially when associated with high K levels
- High $N\text{-}NO_3^-$

Sensitive Crops

- Vines, fruit crops, stone fruit, citrus fruit, field peas, beans, cereals, blueberries, soybeans

Visual Guide