# MICRONUTRIENT DEFICIENCY SYMPTOMS IN SUGARCANE



# **IRON (Fe)**

Interveinal chlorosis of the whole leaf in young ratoon cane

May develop into chlorosis of the whole plant

- Often patchy within the field
- Usually occurs when soil pH is >8
- May also be induced by excess Mn in acid soils



#### **COPPER (Cu)**

- Green blotches on young leaves
- Apical meristem remains alive, but internode elongation is reduced
- 'Droopy top' stalks lack turgidity
- Leaves become bleached and rolled
- General vigour and tillering is reduced

### ZINC (Zn)

- Pale yellowing of the whole field
- Leaf blade is chlorotic, midrib stays green
- Reduced tillering and shortened internodes
- Red lesions and necrosis of the leaf tip
- Zn deficiency impairs the metabolism of P

#### MANGANESE (Mn)

- Pale uniform striping
- Confined to centre and tip of leaf
- Leaf may become bleached and frayed towards the tip
- Although chlorotic, the leaves do not wilt
- Excess Mn can induce Fe deficiency









## **BORON (B)**

- Immature leaves are choloric, but do not wilt
- Long parallel interveinal streaks]
- Ladder-like lesions on the leaves
- Serrations on the leaf edges



#### **MOLYBDENUM (Mo)**

- Mainly affects older leaves
- Short longitudinal chlorotic streaks on the apical third of the leaf
- Stalks become short and slender
- Older leaves die back



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