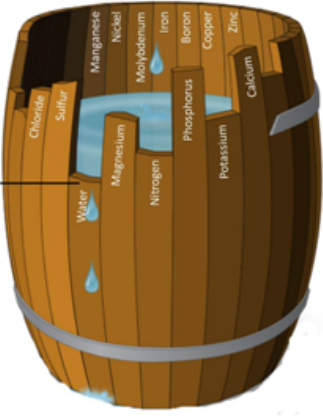


# April Newsletter

## Crop Nutrition - How Does Your Farm Rate?



When it comes to crop nutrition, the big three in the mind of most people are nitrogen (N), phosphorous (P) and potash (K). While these nutrients are essential to plant growth, there are many other contributing factors that could be robbing your crop from reaching its potential. The Law of the Minimum is based on the idea that adding nutrients that are already in plentiful supply will not help your crop. Instead, it's a better idea to see what nutrients are in low supply and how that is impacting your crop.



### Copper (Cu)

- Activates enzymes
- Responsible for catalyzing reactions in plant growth processes
- Strong link to Vitamin A production in crop
- Highly responsive crops to Cu are tomatoes & wheat
- Can monitor Cu levels in crop with tissue test

### Zinc (Zn)

- Most common micronutrient for limiting yield
- Gaining popularity in corn starter fertilizer programs
- Having excessive P levels in soil can limit availability of Zn
- Zn can be applied in either a band or broadcast

### Manganese (Mn)

- Found in plant enzymes
- Important to photosynthesis
- Accelerates germination of crop
- Helps to improve the availability of P and Ca
- Highly responsive crops include soybeans & wheat
- No residual in soil, meaning that annual applications are needed

### Boron (B)

- Essential to cell wall, root growth & nutrient uptake
- Impacts the uptake of K in cell
- Making this nutrient available all season long is vital (especially during grain fill)
- Highly responsive crops include alfalfa, sugar beets, tomatoes & soybeans
- Fine line between deficient & toxic - application at 0.5 lb/ac

### Sulphur (S)

- Historically, sulphur has been sufficiently supplied by acid rain
- With acid rain levels being reduced, S deficiency is more prevalent
- Research shows that S deficiency in wheat can equate to a 10-20 bu/ac yield loss.

