Sulphur Deficiency Symptoms

Sulphur plays an important role in the following:

- Sulphur is a constitute of three essential amino acids which are vital to crop protein production. (cysteine, cystine, methionine)
- Chlorophyll (Photosynthesis) formation.
- Nitrogen fixation Legumes and soil bacteria.
- Formation of Enzymes, Coenzymes as well as plant hormones.
- Production of Glycosides (Give taste and odor to plants in the mustard and onion families.)
- S-containing sulfolipids (oil synthesis / formation)
- Vitamin production

Factors which may lead to Sulphur deficiency in the soil:

- Reduction in sulphur containing fertilizers (I.E. SSP vs. MAP / DAP)
- Higher rain fall—because of leaching of soluble sulphates on light textured soils.
- Naturally sulphur deficient soils such as Grey wooded, thin black, or sandy soils.
- Imbalanced soils where Nitrogen fertilization has been over applied resulting in a poor N-S ratio.
- Following rotations of high S demanding crops such as canola and alfalfa.

Sulphur deficiency symptoms:

- Small, spindly plants with short, slender stalks
- Slow growth rate with delayed maturity, particularly with cereals
- Young leaves are light green to yellowish color, with even lighter colored veins
- Reduced nodulation of legumes
- Spotting of leaves
- Plants may flower but have reduced seed set as happens with canola, lentils and alfalfa.
- Light or pale patches of crop growth that vary throughout the field (S variability).



Sulphur Deficiency on Canola



Sulphur Deficiency on Sugar Cane



Sulphur Deficiency on Corn

