



# Premium UAN Solution

## Why Use SN30 – Premium UAN

- Contains 2% Sulphur in solution for convenient application of Sulphur
- Has 6.7% more Nitrogen per Gal than industry standard 28% UAN
- More stable form of Nitrogen, reduces loss through volatilization
- The plants nutrient demand for Nitrogen and Sulphur is simultaneous

## Sulphur Deficiency

- Deficiency occurs in NEW growth first
  - Stems turn yellow
  - Leaves turn bright yellow
  - Interveinal Chlorosis
- Results in a 'stunted plant' – with short slender stalks
- Sulphur Deficiency will affect a plant's protein synthesis, structure, and chlorophyll production
- Seedlings from Sulphur deficient plant prove to have a higher mortality rate
- \*\* Distinguishable from nitrogen deficiency since nitrogen deficiency affects the OLD growth first



## The Importance of Sulphur

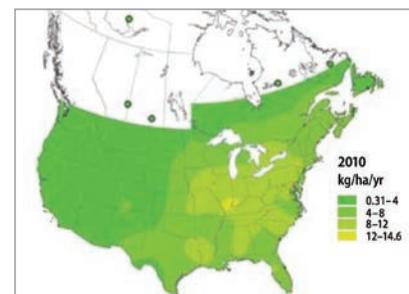
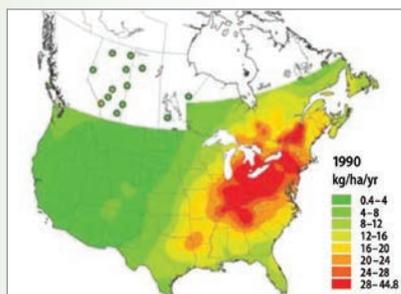
- Considered a secondary Macronutrient – behind NPK – in terms of importance to crop productivity
- Sulphur is a component of the amino acids cysteine and methionine making Sulphur essential for protein synthesis in plants
  - Stimulates seed production
- Sulphur plays an important role in plant physiology and protection against environmental and biotic stresses
- Helps maintain dark green foliage, promotes nodule formation on legumes, encourages more vigorous plant growth

## Why Sulphur is more important today?

### Atmospheric Deposition

Industrial pollution, despite its myriad of negative effects, has provided a benefit to agricultural production in some areas as a source of Sulphur. Sulphur is emitted into the atmosphere primarily through burning of fossil fuels. These emissions can travel long distances in the atmosphere and are eventually deposited as Sulphur dioxide or as sulfates, often in precipitation. Air pollution control efforts have greatly reduced the amount of Sulphur emissions and, consequently, the amount of Sulphur deposition from the atmosphere. This change has been greatest in eastern regions of the U.S. and Canada, where deposition from industrial emissions formerly contributed large amounts of Sulphur to the soil.

### Average Annual Sulphate Deposition from Precipitation (1990 compared to 2010)



### Better for the Environment/Higher Nitrogen Use Efficiency

Sulphur slows soil urease when mixed with UAN and surface banded. Urease is an enzyme that converts urea and water to ammonia and carbon dioxide. If surface-applied UAN is hydrolyzed too quickly, part of the ammonia produced can leak back into the atmosphere and be lost. Sulphur is not the most effective urease inhibitor when compared to specific urease inhibitors. To have your Nitrogen stabilized and get maximum protection available use one of Sylvite's SylLock products to assist. However, applying SN30 in a band can slow urea hydrolysis significantly, comparably to standard UAN.