



# Rapid and Readily Available Potassium

## Need for Potassium:

- Activator of numerous plant growth enzymes, directly impacting protein, starch, and ATP synthesis
- Adjustment of pH within plant cells
- Regulation of water pressure in plant cells
- Enhance carbon dioxide fixation during photosynthesis

### Potassium Deficiency Symptoms

Symptoms show as firing of the leaf margins (edges).



Potassium (K) .....20%

**Use Rates**

Soil Applied / 2x2 / Y-Drop  
1-12 qts/Acre

In-Furrow  
1-2 qts/Acre

Foliar  
1-4 qts/Acre

## Features and Benefits of K GRO:

- Synergistic dual mode-of-action for stress protection
- Potassium and Yield Burst components work together to activate and enhance the plants natural defense mechanisms against abiotic stress
- Plant stressors are a common occurrence, K GRO ensures your crop is prepared

## Synergistic Dual Mode-of-Action



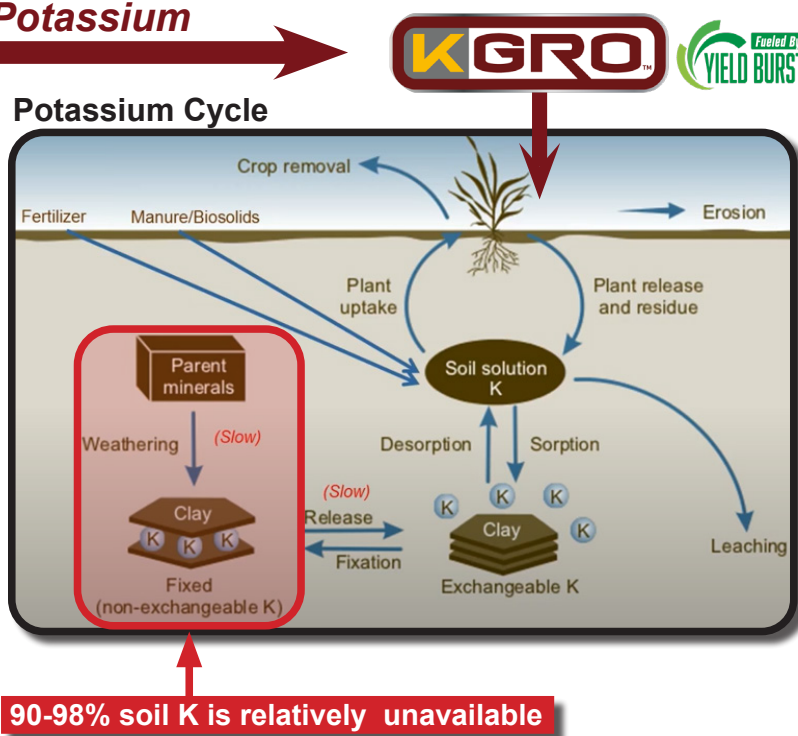
# Understanding Potassium Tendencies

Soil processes negatively influence potassium availability to the plant. **K GRO** is an excellent solution to minimize these yield limiting challenges.

## Rapid & Readily Available Potassium

At Planting, Side-Dress, Foliar

- **K GRO** is more rapidly absorbed into plant tissues than other potassium sources
- Application flexibility permits applications to be made at planting, side-dress, or foliar
- Despite factors that may limit K availability from the soil (see below), **K GRO** ensures potassium availability



## What factors influence potassium availability?

Key Factors	Less Plant Available K	More Plant Available K
<b>K Base Saturation</b>	< 2%	2-4%      4-8%
<b>K ppm</b>	< 80 ppm	80-160 ppm      > 160 ppm
<b>Soil pH</b>	pH Decreases <i>Higher Acidity - Increased Al<sup>3+</sup> &amp; H<sup>+</sup> ions on CEC</i>	pH Increases <i>Less Acidity - Less Al<sup>3+</sup> and H<sup>+</sup> ions on CEC</i>
<b>Soil Moisture</b>	Lower Soil Moisture Levels	Higher Soil Moisture Levels
<b>Clay Type</b>	2:1 or 1:1 Non-Expanding Clays <i>Illite, Kaolinite, etc.</i>	2:1 Expanding Clays <i>Smectite, Vermiculite, etc.</i>

This information is summarized from reports and studies conducted by University of MN, Iowa State University, Michigan State University, North Dakota State University, Purdue University, Becks Hybrids, AgPHD