

K-MAG BRIEFS™

Brought to you by IMC Global — Producers of Quality Crop Nutrients

For High-Yielding, High-Quality Cotton

An excellent 3-in-1 source of K, Mg and S

All nutrients are in the readily-available, water-soluble sulfate form

Does not affect soil pH

Low salt index



Cotton's potassium (K) demands are significant, but this high-value crop needs a proper balance of all the essential nutrients for enhanced disease resistance and fiber quality. An overall strategy that combines the best materials, rates, timing, and application methods to produce optimum yields is the ultimate goal.

A product of mineral earth extracted from deep below the New Mexico soil surface, K-Mag is a naturally occurring source of potassium (21-22% K₂O), magnesium (10.5-11% Mg) and sulfur (21-22% S) — essential nutrients for cotton production. All the nutrients in K-Mag are in the highly available, water-soluble sulfate form.

Each nutrient in K-Mag plays a critical role in cotton production:

Potassium (K)

Of all the essential nutrients, K is crucially important during early boll set. K increases crop water-use efficiency and it activates more than 80 different plant enzymes responsible for protein synthesis, starch formation and cell division. K also plays a role in disease resistance, most notably against “white speck.”

Magnesium (Mg)

Maintaining a proper balance between K and Mg in the soil and in plant tissues is crucial to sustaining yields. High levels of added K can inhibit Mg uptake. Photosynthesis, the process of converting light into plant energy, stops without adequate Mg.

Deficiencies of Mg appear first on the lower leaves as a purplish-red color between green veins.

Sulfur (S)

S is increasingly becoming recognized as a critical nutrient for quality cotton production. In

In a recent study conducted by the University of Florida, applying 40 lb/A of S increased yields by 100 to 500 lbs/A. S fertilization is most important on sandy, low organic matter Coastal Plain soils. When young leaves turn yellow, it's a sure sign of S deficiency. Low pH in the subsoil also decreases the availability of accumulated S, leaving N free to leech away.

Nutrient Utilization (lb/A) by Cotton

Yield	K ₂ O	Mg	S
1500 lb/A	153	35	40

Source: PPI

Summary of Benefits

K-Mag is a premium fertilizer choice that supplies critical nutrients, like Mg and S, often overlooked by traditional N-P-K programs

Unlike other fertilizers, K-Mag is in a nearly 100% water-soluble form, so nutrients are immediately available to plant roots. Yet, K-Mag dissolves slowly.

K-Mag eliminates any chance of fertilizer burn from its nutrients since its unique traits include low chloride levels and a low salt index.

As a neutral salt, K-Mag boosts yields without decreasing soil pH.

Typical broadcast rates are 150-300 lb/A, but soil analyses should direct usage. Additional K may be required.

If your crop needs a boost in yield and quality, it may be time to incorporate the benefits of K-Mag into your fertilization program. Contact us today to learn more about K-Mag.

