



## Higher yields are available with K-Mag<sup>®</sup> fertilizer



### **K-Mag benefits**

*Supplies essential nutrients often overlooked by traditional NPK programs*

*Virtually 100% water-soluble – K, Mg and S are immediately available to crops*

*No risk of fertilizer burn thanks to low chloride levels and a low salt index*

*Helps boost yields without affecting soil pH*

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

### **Why K-Mag?**

The shortage of just one essential nutrient can shortchange cotton productivity and profits. Growers can optimize yields and maximize profits by providing a balanced soil fertility program that ensures all 17 essential nutrients are available to plants.

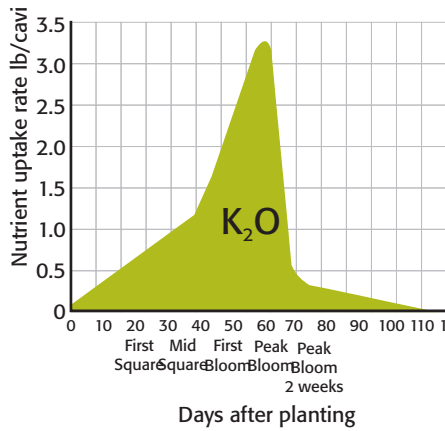
K-Mag fertilizer provides three essential nutrients in the highly available sulfate form. Available in PREMIUM, GRANULAR and STANDARD grades, K-Mag provides 21-22% potassium (K<sub>2</sub>O), 10.5-11% magnesium (Mg) and 21-22% sulfur (S).

Also known as langbeinite, potassium magnesium sulfate, or double sulfate of potash, K-Mag is sourced from ore beds deep beneath the earth's surface, where an isolated lake of ocean water once existed. Langbeinite, an evaporite mineral, is one of the most soluble salts in the ocean.

### **Increase cotton yields**

Raising a healthy, high-yielding cotton crop calls for a precise nutrient management plan that provides the right nutrients, at the correct rates at exactly the right time. During the spring, when heat units are low, cotton grows slowly and removes lower levels of nutrients. However, during peak growing months, June and July, the rapidly growing plant aggressively begins removing high levels of nutrients. Enhanced disease resistance and top quality fiber depends on proper soil fertility.

## K Uptake by Cotton



*K uptake rates reached maximum during mid-bloom and declined rapidly as the boll matures (Mullins and Burmester, 1990).*

## K-Mag provides three essential nutrients critical to a growing cotton crop:

### Potassium (K)

K is crucially important during early boll set; shortages of K likely will result in lower yield. 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)

Mg is at the center of the chlorophyll molecule, involved in protein synthesis, enzyme systems and oil synthesis. Maintaining a proper balance between K and Mg in the soil and in plant tissues is important to sustaining cotton yields. High levels of added K can inhibit uptake of Mg. Mg deficiency

appears first on the lower leaves as a purplish-red color between green veins. K-Mag helps supply K and Mg in the proper balance. K-Mag provides a readily available soluble source of Mg, and it supplies K and Mg in the proper balance.

### Sulfur (S)

S is essential for protein production. Since cottonseed is rich in protein, it's not surprising that cotton requires a relatively large amount of S. S deficient plants tend to be short with few vegetative branches and small bolls. Early deficiency symptoms include yellowing of young leaves in the upper canopy. S shortages are more common in sandy, low organic matter soils. And, since the Clean Air Act of 1990, S deficiencies have become even more widespread. K-Mag helps replenish S in the highly available sulfate form.

Ensure your cotton crop has all the nutrients it needs to thrive.

Contact us today to learn about adding K-Mag to your balanced soil fertility program!

**kmag.com**



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