



## **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?**

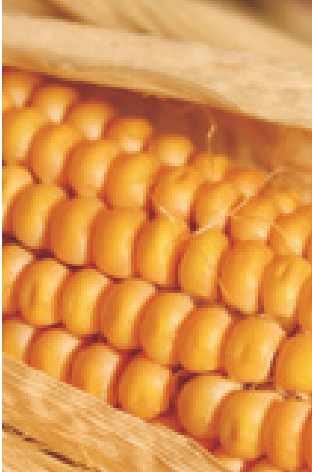
The shortage of just one essential nutrient can shortchange corn yield and quality. Growers can optimize crop yields and maximize profits by providing a balanced soil fertility program that ensures all 17 essential nutrients are available to plants.

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 corn yields**

Balanced soil fertility is an absolute must for high-yielding corn production. Yields are often limited by low soil pH and nutrient deficiencies. Corn is a demanding crop, requiring as much K as it does nitrogen (N) – more than 200 lbs/A. High-yielding corn also takes up more than 30 lbs/A of both S and Mg. These “secondary” nutrients are certainly not secondary in importance to corn. Deficiency of S and Mg can limit the potential of the crop.



**K-Mag is an ideal source of K when there is also a need for Mg and/or S in a fertilizer program. It supplies three essential nutrients without affecting soil pH.**

*Potassium (K)*

High corn yields require high amounts of applied K, particularly during early stand development and before pollination. At these times, absorption rates can reach 10 pounds per acre per day. Second only to nitrogen (N) in plant requirements, K is a key component of both drought tolerance and photosynthesis. In fact, photosynthesis rates in K-stressed corn leaves may be reduced by up to 95%. As the primary nutrient behind developing root systems, K also is crucial for timely development and crop quality. K

deficiencies often result in weak stalks and lodging.

*Magnesium (Mg)*

A balance of Mg is vital to the well being of all organisms. In plants, the first observable signs of Mg starvation is a decrease in the rate of photosynthesis. As rates of photosynthesis decline, so do growth, quality and yield. Mg influences many complex nutrient relations. Mg promotes phosphorus (P) absorption, but high K rates can inhibit plant uptake of Mg. K-Mag provides a readily available soluble source of Mg, and it supplies K and Mg in the proper balance.

*Sulfur (S)*

Corn needs S to completely fill the ear, develop a healthy root system and prevent lodging. S is a key element in proteins, and it is vital to vitamin synthesis in plants – an important determinant of crop quality. S deficiencies are increasing worldwide, largely due to the reduction in S emissions brought about by the Clean Air Act of 1990. S deficiencies can have significant effects on yield. Some experts estimate that for each day S is deficient past the first 21 days after emergence, a loss of 1-2 bu/A, and even total crop failure, can occur. K-Mag can help remedy S shortages by providing S in the sulfate form.

Ensure your corn 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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