



Higher yields are available with K-Mag[®] 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 wheat yields and quality. Growers can optimize wheat 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 (K₂O), 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 wheat yields

A balanced soil fertility program is the cornerstone of profitable wheat production. In the past, nitrogen (N) often was the only consideration for wheat fertilization, but phosphorus (P) and K are key to growth and tillering. Also, "secondary" nutrients, such as S, certainly are not secondary in their importance to wheat. Additions of S have been linked to doubled wheat yields or better when applied at rates of 20-30 lb S/A.



Each of the three essential nutrients in K-Mag contributes to increased wheat productivity:

Potassium (K)

Wheat requires as much K as N. On average, 180 pounds of K are removed by one 80-bushel crop with the straw removed, and 98 percent of K uptake occurs before flowering. K is associated with increased moisture and N use efficiency, as well as decreased incidence of disease and lodging. K also increases stem diameter and strength, boosts grain weight and reduces shriveled grains. As K concentrations increase, transpiration losses decrease, and plants are better able to withstand drought. To increase K use efficiency, split applications should

be made on deep sandy soils in high rainfall areas.

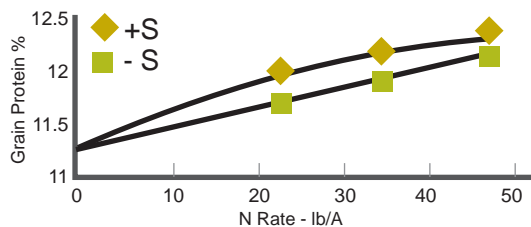
Magnesium (Mg)

Mg is the heart of the chlorophyll molecule – essential for photosynthesis. Low spring temperatures can depress Mg absorption in the rooting zone during key growth stages. Additionally, high K rates can induce Mg deficiencies in low-Mg soils. K-Mag helps provide a soluble source of Mg, and it supplies K and Mg in the proper balance.

Sulfur (S)

S fertilization can dramatically increase wheat protein levels, making it an important component of high-quality wheat. A 2007 Montana State University study showed that additions of soluble S significantly increased winter wheat grain protein content and overall grain yield. Optimum responses to S were measured at about 10 to 15 lbs S/A. In Virginia, the addition of 30 lbs S/A at GS 30 (jointing) helped achieve desirable grain protein levels (see below).

Bread wheat response to rates of foliar N at GS 45 with and without 30 lbs S/A at GS 30



Ensure your wheat 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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