

K-MAG BRIEFS™

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

For High-Yielding, High-Quality Rice

3-in-1 combination of K, Mg and S promotes balanced nutrition

Supplies a readily-available sulfate source of nutrients

Maintains soil pH

Rice production is regarded by some as the single most important economic activity in the world since roughly half of the world's population relies on it as a primary food source. Quality rice production demands balanced nutrient management for maximum yields and disease resistance.

A product of mineral earth extracted from deep below the New Mexican soil surface, K-Mag is a 100% natural source of potassium (21-22% K₂O), magnesium (10.5-11% Mg) and sulfur (21-22% S) — essential nutrients for crop growth.

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

Potassium (K)

Potassium is a key element of all cereal crops because it impacts grain fill. High-yielding rice cultivars need high K inputs to replenish levels lost during production. A 7000 lb. grain crop can remove 170 lbs. of K, more than 1.5 times as much as N. Potassium also has a profound effect on increasing resistance to disease and insects. By increasing stem strength and producing healthy leaves, plants benefit from increased pest tolerance.

Magnesium (Mg)

Magnesium, the core element in chlorophyll, is at the center of complex nutrient reactions. For instance, Mg promotes phosphorous (P) absorption.

However, Mg uptake can actually be inhibited by high K rates. Without Mg, chlorophyll does not perform and photosynthesis becomes impossible. As rates of photosynthesis decline, so do quality and yield. Using K-Mag in a fertilizer regime will help maintain a proper balance between K and Mg.

Sulfur (S)

Ample S levels promote efficient use of N fertilizers, as both elements are essential in protein formation. Soils lacking in S may experience reduced protein content in rice grain. Extensive research conducted by the Food and Agriculture Organization of the United Nations showed an average yield of 375 lbs. grain/A in response to S. Quality rice yields depend on proper protein amounts.

Fertilization Reduces Brown Planthopper (BPH) Infestation

K Applied (lbs/A)	BPH Count Number / Sq Meter*
0	800
33	625
67	580
100	302

**105 days after planting*

Summary of K-Mag 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 100% water soluble, so nutrients are immediately available to plant roots. Yet, K-Mag Granular dissolves slowly, thus releasing nutrients as the plants develop.

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.

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

