

# K-Mag AGRI FACTS

Brought To You By IMC — Producers of Quality Crop Nutrients

## High-Yielding, High-Quality Peanuts With K-Mag

Balanced, proper plant nutrition is a key to high-yielding, high-quality peanuts. Not only do peanuts require large quantities of potassium, they require magnesium and sulfur in the proper amounts to achieve a balanced fertility program.

### How Much Potassium, Magnesium And Sulfur Do Peanuts Need?

Although peanuts are commonly grown on sandy soils, these soils often have few available nutrients. Therefore, to achieve high yields and assure good quality, it is important to have a finely tuned fertility program.

To produce a 4,000 lb/a peanut yield, the crop utilizes 185 pounds of potash, 25 pounds of magnesium and 21 pounds of sulfur per acre . . . however, additional quantities of these nutrients must be available in the soil to assist a rapidly growing peanut plant.

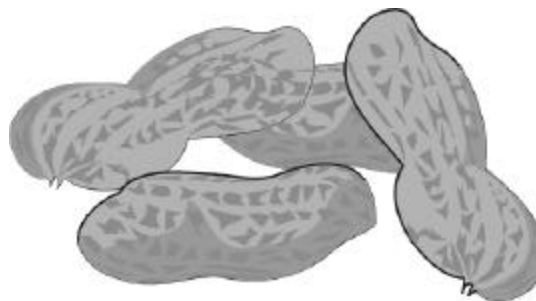
### Why Should You Add Magnesium And Sulfur?

There is less magnesium and sulfur available from indirect sources than there used to be. The trend toward higher-analysis fertilizers makes it much less common for sulfur to be included as a by-product in fertilizer. In addition, environmental controls have reduced the levels of sulfur-dioxide emitted from manufacturing plants. So there is less sulfur that makes its way from the atmosphere to the soil when it rains.

Statistics show that there is a trend toward less direct application of magnesium and sulfur to many agricultural crops, including peanuts. At the same time, removal of these nutrients is increasing, as farmers strive for higher and more profitable yields. These factors suggest that magnesium and sulfur need to be built into your peanut fertilization program.

### Why K-Mag?

Individual nutrients perform best when properly teamed with other nutrients in a complete fertility program.



K-Mag is an excellent source of sulfur, potassium and magnesium in a water-soluble sulfate form. This 3-in-1 fertilizer is a combination of readily available sulfur (22% S), potash (22%  $K_2O$ ) and magnesium (11% Mg).

K-Mag is completely water soluble yet it is in a mineral form which dissolves slowly to resist leaching. It does not change the soil pH, even at high application rates.

K-Mag's low salt index and low chloride content are two additional features attractive to peanut growers. Since peanuts have high nutrient requirements and thus demand heavy applications of fertilizer, growers usually prefer nutrient sources that have a low salt index.

Here is how each of the nutrients in K-Mag contributes to peanut yield and quality:

### Potash

The 22% potash ( $K_2O$ ) content of K-Mag is key to quality peanuts . . . strengthening their tolerance to disease. The relationship between potash and other nutrients is critical, particularly for plants grown on light, sandy soils. High K content can depress uptake of magnesium and may actually reduce yields on magnesium-deficient soils. So the unique balance of potash and magnesium that K-Mag provides is particularly beneficial to peanuts and other crops grown on light soils.

### **Sulfur**

K-Mag contains 22% S (67% sulfate,  $\text{SO}_4$ ), the nutrient that is considered the fourth major plant food. Sulfur aids initial growth and helps sustain vigorous growth throughout the season. The nutrient also helps synthesize essential amino acids for plant proteins and oils, which contributes to peanut yield and quality.

### **Magnesium**

Unlike many other sources, K-Mag provides Mg that is 100% water soluble. The 11% Mg (18%  $\text{MgO}$ ) content in K-Mag is essential for chlorophyll production, phosphorus (P) absorption and stimulation of plant growth. Magnesium is the center of the chlorophyll molecule, the driving force for converting the sun's energy into a usable form by the plant (photosynthesis). Better nutrition helps the plant withstand stress caused by insects and spray damage.

### **Start Using K-Mag For Better Peanuts**

You can use K-Mag in combination with other fertilizers or apply it directly. The information in Table 1 shows the range of K-Mag rates typically applied and the amount of nutrients supplied at each rate. Your own application rate should be based on crop needs, soil test results, research data, as well as your own yield goals and experience.

**Table 1. K-Mag Application.**

Rate (lb/A)	Nutrients Supplied (lb/A)		
	$\text{K}_2\text{O}$	Mg	S
200	44	22	44
400	88	44	88
600	132	66	132