K-Mag® Insight

ALFALFA



Higher Yields are Available With K-Mag® Fertilizer

The K-Mag Advantage

Provides a balance of naturally combined potassium (K), magnesium (Mg) and sulfur (S) — all in one granule.

FEATURES

- 3-in-1 nutrient source
- Low chloride
- Water solubility
- pH neutral

BENEFIT

- Higher yield and profitability

Why K-Mag?

The shortage of just one essential nutrient can shortchange alfalfa yields and quality. 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 a highly available and soluble form. Available in PREMIUM, GRANULAR and STANDARD grades, K-Mag provides 21–22% potassium (K_2O),10.5–11% magnesium (Mg) and 21–22% sulfur (S).

Also known as langbeinite or potassium magnesium sulfate, K-Mag is sourced from ore beds deep beneath the earth's surface, where an isolated lake of ocean water once existed. Langbeinite is an evaporite mineral but becomes soluble upon soil application.

Increase Alfalfa Yields

Good soil fertility and proper soil pH are two of the most important factors impacting alfalfa yields. Continuous alfalfa production can rapidly deplete the soil of nutrients. Plus, proper soil pH ensures nitrogen-fixing bacteria can thrive. Supplying essential nutrients without increasing soil acidity, K-Mag can dramatically boost alfalfa yields and profits.

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Potassium (K)

Potassium is the major nutrient required by alfalfa. In fact, alfalfa requires at least 4 times more K than phosphorus (P); each ton of harvested alfalfa removes about 58 lbs K_2O/ac of potash. Low K soil test levels often are an underlying cause of winter kill, early establishment of broadleaf weeds and grasses compared to more fertile fields. Proper K fertilization contributes to key plant functions, such as photosynthesis, root growth and disease resistance, all of which improve the vigor and yield of alfalfa plants.

Magnesium (Mg)

High K rates can inhibit plant uptake of Mg, a nutrient that is central to photosynthesis. Many soils may test high in Mg, but the Mg may not be available to the plant. While dolomitic limestone is a good source of Mg, it has limited solubility and may not become available to the alfalfa crop fast enough to overcome deficiency problems. K-Mag provides a balanced supply of soluble Mg, S, and K for maximum nutrient uptake.

Sulfur (S)

Correcting a S-deficient soil has been shown to significantly increase alfalfa yields. Topdressing S in the sulfate form helps ensure S is immediately available to plants. Sulfur is essential for the bacteria living on alfalfa root nodules to fix N. It also is an important component of plant proteins. On a dry matter basis, one ton of harvested alfalfa hay removes about 6 pounds of S.

Pounds of Nutrient Removed per Ton of Alfalfa (Dry Matter Basis)

Nutrient	Amount Removed (lbs nutrient / ton DM)
P_2O_5	14
K_2O	58
Ca	30
Mg	6
S	6
B	0.08
Zn	0.05

Source: Alfalfa Management Guide, American Society of Agronomy (2011, Table 4, Page 18)

Ensure your alfalfa 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
1-877-BUY-KMAG (1-877-289-5624)

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