Comparison of Diamond-K Gypsum with Lime: A Comparison In Agronomic Performance

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Diamond-K Gypsum is an innovative solution grade gypsum. The following are some of the key benefits offered:

- Can be applied via sprinkler, drip, and (broadcast) furrow and flood.
- Sulfate sulfur and calcium percentages are 22.5 and 18 respectively.
- Effective sieve sizes can go through 100, 200, 325 meshes, with accuracies of 100, 97.6, and 92 percent respectively.
- Excellent source of available calcium for soil and plant health, as well as vigor.
- Excellent calcium source for salt remediation, Ca:K, Ca:Mg, Ca:P balances in the soil, and ultimately in plants.
- Enhances soil texture and structure, as well as flocculation of soil particles and water penetration.
- Offers readily available sulfate sulfur for plant use, balances N:S ratios in soils that strongly impact protein synthesis in plants.
- Sulfur is a must for nitrogen fixing nodules, chlorophyll formation, protein synthesis, amino acids and vitamins.
- Sulfur is a natural antifungal element, resists diseases, aids in seed germination, and acts as a key cofactor for microorganisms’ lives, in addition to human and animal health.
- Gypsum is 200 times more soluble than lime (Dr. Ann Presley KSU)

- In all soils, regardless of pH, gypsum is a good calcium additive when calcium is needed. (Dr James Walworth University of Arizona)
• Gypsum reduces aluminum toxicity in acidic soils.

**Lime:**

• **Lime is a naturally occurring mineral, which has been used to improve soil pHs of <7.**

• **Lime solubilities increases in acidic soils (pH<7) and decreases as soil pH increases (pH >8.2 ).**

• **Lime is a good source of calcium for soil and plant health. However, it is important to know the soil pH to make lime work to the fullest.**

• **In calcareous soils, applying lime with the intent of increasing soluble calcium is inherently illogical. Lime occurs naturally in alkaline soil, but needs sulfur or sulfuric acid to reclaim the soils.**

• **Lime may slightly improve water penetration in acid soils(pH 6 or <6). However, there is no improvement at pH levels of 7 or >7.**