

# Highly Soluble Form of Calcium



### Figure 1\*



**Figure 1**\* Soybean seedlings' growth hindered by crusted surface.

## A Boost for Beans GypsuMax<sup>®</sup>

According to research conducted at the USDA's ARS National Soil Erosion Lab at Purdue University, gypsum counteracts the effect of aluminum toxicity in low pH soils, restricts phosphorous runoff, and boosts the uptake of iron by decreasing negative impacts of bicarbonates. The sulfur in gypsum enables farmers to enjoy dramatic increase in soybean yields. Gypsum also decreases instances of surface crusting and mold in soybean plants because the water is able to navigate through the soil.





**Figure 2\*** Infiltration rate for a Blount soil with and without surface-applied gypsum. Gypsum can serve as a soil amendment to improve soil physical properties, water infiltration, and percolation. Illustration by Dr. Darrell Norton, USDA.

\*Source: Ohio State University Extension Bulletin 945



- Aids in disease prevention
- Increases crop yields
- Greater water solubility, allowing gypsum to be available to roots sooner than limestone
- Improves drainage through particle and clay flocculation
- Improves soil structure
- Decreases compaction through flocculation
- · Reduces soil crusting and cracking
- Improves uniformity of plant growth
- Reclaims fields high in sodium and magnesium found in low quality soils and irrigation water
- Improves physical and chemical properties of soils
- Reduces erosion, loss of nutrients, and phosphorus concentrations
- Mitigates subsoil acidity and aluminum toxicity
- Enables better root penetration to plant nutrients such as nitrogen, sulfur, air, and water

#### Figure 1\*



**Figure 1\*** Application of synthetic gypsum increases water infiltration and percolation. Foreground shows section where the gypsum has been applied, and background shows the control section without gypsum. Norton and Rhoton, 2007.

### TYPICAL ANALYSIS Calcium Sulfate Dihydrate (Dry Weight Basis)

Calcium	21%
Sulfur	17%
pH	
Particle Size95%	Passing #100
Bulk Density	~80 lbs/ft3
CaSO4-2H2O Purity	>90%
Free Moisture	
Rate = 1000 lbs/Acre	

\*Source: Ohio State University Extension Bulletin 945

For more information, visit GypsuMax.com or call us at 844-822-8385. Charah Inc., 12601 Plantside Drive, Louisville, KY 40299