Nutrients for This Season

Every plant needs Calcium to grow, and many crops require higher levels during the growing season. Much of calcium uptake occurs within a four to six week period after bloom. With rapid plant growth calcium has been shown to aid in structural integrity of stems that hold flowers and fruit, as well as the quality of the fruit. The fruit is at the end of the plant’s transport system, and since calcium doesn’t move well within the plant, it is important to have a good supply of available calcium at the roots to help ensure it gets delivered to the fruit.

Agricultural Gypsum is defined as Dihydrate, consisting of Calcium, Sulfate and Water, written CaSO$_4$.2H$_2$O. The two water molecules in Gypsum permit a quicker, more efficient release of soluble Calcium and Sulfur for your crop than CaSO$_4$, Anhydrite.

Dolomite, Limestone, Dolomitic...

What is the difference anyway? If there was a scale to demonstrate the difference between limestone and dolomite it would look like the one below, with pure Calcite or Limestone on one end, pure Dolomite on the other, and ours in the middle.

Pure Limestone has no Magnesium Carbonate, MgCO$_3$, while pure Dolomite has almost equal parts of Calcium and Magnesium Carbonate, CaMg(CO$_3$)$_2$. When choosing between AgLime and AgDolo, studies suggest choosing a product that gives the most liming value per dollar. Value can be determined by product availability, a soils need for Mg, desired speed of acid neutralization, and most importantly effectiveness or the Lime Score. Both our products have the same particle size but the AgDolo has a higher CCE, Calcium Carbonate Equivalent, making it more effective and giving it a higher Lime Score. This means you may be able to apply less per acre. Always check with your Certified Crop Advisor regarding your soil needs.

Helena Chemical, The Importance of Calcium in Plant Nutrition, Don Paradise, Helena Product Manager, Western Division

Applying Lime to Raise Soil pH, EM 9057 OSU Extension