

Super Lime Plus

Naturally (Chelated Calcium) with Carbohydrates

**ENERGY + SUPPLEMENTAL CALCIUM
FOR PASTURES, ROW CROPS, GARDENS & LAWNS**

ELIMINATE THE NEED FOR BAGGED LIME

Farmers and Landscapers all use lime in their programs at one point or another. Many farmers use lime every year regardless, They will tell you it " Sweetens the soil ". This is some what true, but not like adding sugar to a cup of coffee to make it sweeter. ***It's deeper than that***

Focusing on the "sweetened soil " aspect of this, lime releases calcium into the soil which is vital for plant cell wall division, cell function and strong leaves, it also pulls other nutrients into the plant and helps raise the soil PH. With more cells and stronger leaf structure, better Photosynthesis by the plant occurs. **Now comes the sugar rush !**

Plants feeds on sunlight energy, leaves take in carbon dioxide from the air and give off oxygen, then water is absorbed into the leaves as well as the roots.. During this process, sugar is created as a byproduct of this photosynthesis.

The sugar produced is a carbohydrate that the plant draws it's energy from to grow, re-grow and for production. Carbohydrates are vital to the soil microbes that create humus as well. Carbohydrates give both the plant and biology energy to fend off harmful microorganisms and disease. So when it comes to plants, **the more carbohydrates the better!**

Back to the Granular lime, whether its powder or pellet lime, it takes time to dissolve and has no carbohydrate properties, furthermore the calcium needs to be made available or usable by the plant (**chelated**), This is a slow process and depending on the soil, it could take months meaning the optimal window of opportunity is often missed.

That is why **Super Lime Plus** offers a clean pure source of usable (**chelated**) calcium that has been fortified using carbohydrates that will immediately provide usable energy to the plant and soil.

By giving them an abundant source of ready made energy, plants and soil microbes will thrive and direct more of their own energy into production and health

Function of Calcium in the soil

Replaces Hydrogen (H) at the soil surface, Reduces soil acidity
Essential for microbial life and proper organic matter building
Helps microbes process atmospheric nitrogen (N) more effectively
Helps to transfer other nutrients into the plant via the root system
Helps to raise the pH in acidic soil allowing N-P-K fertilizers work properly

Function of Calcium in the plant

Helps to build protein formation by converting nitrate Nitrogen ($\text{NO}_3\text{-N}$)
Helps Activate various plant growth enzymes functions within the plant
Contributes to improved strength, disease resistance and stress relief
Necessary for cell wall division and function which lead to better growth
Adds strength and shelf life in fruits and vegetables
Builds stress relief in turf grass during the active cutting season

CAUTION

Super Lime Plus is highly concentrated and CAN NOT be mixed with other products

Application Rates:

For Lawns and Gardens: Apply 3 oz per 1000 sf using a min of 2 GAL of water. 1 gallon will treat up to 1 acre. If you are using a hose-end attachment spray such as ortho dial and spray, set the dial to 2 oz per gallon of water and just wet the top of the grass or garden as you apply. Spring and fall are the best times to apply.

For ACID Soils Types : Apply at 6 to 8 oz per 1000 sf using a min of 4 to 6 GAL of water, lightly water in immediately following. **NOTE:** Using Root Magic 7 to 10 days later will help to further raise the PH significantly. For soils with a PH below a 5.0 we recommend these steps twice in the season. Spring and fall.

For bare Soil Apply at 8 to 10 oz per 1000 sf with min 6 GAL of water, till under and wait 15 days before planting. For bare soil with PH below 5.0 use up to 2 gallons per acre. till it into the top 1-2 inches of soil. And wait 15 to 20 days before planting.

Foliar Feeding: For Calcium deficient Flower and vegetable gardens, simply mist both tops and bottoms of leaves to the point of runoff with a 2 oz per gallon of water solution. Always apply early morning or after sundown for best results. An adjustable hand held pump sprayer is ideal .Apply as needed. **DO NOT OVER APPLY** . Row Crops. Apply 1 to 2 quarts per acre. Use a minimum of 15 gallons of water.

Tree & Shrubs. Apply 2 to 3 oz per min 2 GAL of water or 1 Gal per acre using a minimum of 30 gallons of water.

Soil pH is a measurement of the acidity or alkalinity of a soil. On the pH scale, 7.0 is neutral. Below 7.0 means acidic and above 7.0 is alkaline. A pH range of 6.8 to 7.2 is termed **near neutral** but ideally most gardeners should maintain the range of 6.0 to 7.0

Soil pH is an important chemical property because it affects the availability of nutrients to plants and the activity of soil microorganisms. as pH increases (becomes less acid), the number of negative charges on the colloids increase, thereby increasing CEC.

Most nutrients that plants need can dissolve easily when the pH of the soil solution ranges from 6.0 to 7.5. With a pH below 6.0, some nutrients, such as nitrogen, phosphorus, and potassium and Magnesium, are less available. When pH exceeds 7.5, iron, manganese, and phosphorus are less available