

ROOT AND MICROBIAL BIO-STIMULANT

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CALCIUM AVAILABILITY

Maintaining available calcium levels in the pore space of the soil with GSR Growing Calcium retains soil structure while stimulating microbial activity and plant growth.

ROOT GROWTH

The majority of calcium uptake occurs in the root tip. Available calcium in the pore space of the soil promotes root hair development and proper mineral uptake.

CELLULAR STRUCTURE

Available calcium is key in building pectin, the glue which holds a cell wall together. Strong cellular development with available calcium builds robust soil microbes and boosts plant immunity.

ABOUT GSR GROWING CALCIUM

Genesis Soil Rite Growing Calcium (GSR) is mix of available calcium formulated to build calcium levels within the pore-space of the soil. Saturating the pore space of the soil with available calcium can maintain healthy soil structure (aerobic zone) throughout the growing season by reducing the movement of calcium away from the soil colloid. As the plant develops and microbial activity accelerates, the demand for available calcium grows. Without available calcium, soil biological organisms may draw down soil calcium levels causing dispersive soil conditions.

GSR Growing Calcium is the ideal blend of available calcium that keeps your soil life in balance similar to the way your mother kept your life in balance. With micro-dosed topical applications of GSR Growing Calcium your plant, soil, and microbes will have the nutritional building blocks they need throughout the growing season to yield vigorous -nutrient dense- plant growth while maintaining soil health and reducing the carbon footprint.



GSR GROWING CALCIUM - THE "MOTHER" OF ALL MINERALS

HOW GSR GROWING CALCIUM WORKS

Genesis Soil Rite (GSR) Growing Mix is formulated to feed the plant and soil microbes. Similar to GSR Dormant Calcium, GSR Growing Calcium is manufactured to increase the dissolution rate of calcium carbonate creating what we refer to as "available" calcium.

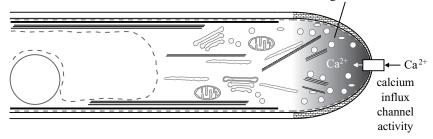
Upon application, GSR Growing Calcium saturates the pore space of the soil with available calcium. A pore space saturated with available calcium reduces the isomorphous substitution of calcium away from the soil colloid to feed the plant. This is important as the calcium surrounding the soil colloid is critical to maintaining healthy aerobic soil.

Available calcium, in the pore space of the soil, is also vital to root hair development. Calcium enters the plant via calcium channels on the root hair. Soil pore space saturated with available calcium increases the calcium concentration in the plant root hair and can stimulate root hair development.

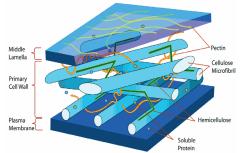
calcium

gradient

Figure 1: The physiology of a plant root hair



Once in the plant, a high calcium concentration in the root encourages the development of pectin in the cellular tissue of the plant. Pectin, which is the glue binding together the cell wall, enhances a plant's immunity by building strong cellular walls. Saturating the soil's pore



space with available calcium ensures that your soil, plant and microbes have the building blocks required to build a positive agroecosystem. GSR Growing Calcium can balance soil calcium levels and stimulate soil biological activity. It is the "mother" of all minerals in the soil and corrects even the toughest soil.

BENEFITS

- Maintains Soil Health
- Stimulates Root Growth
- Increases Plant Immunity
- Strengthens Soil Microbes
- Increases Calcium Availability
- Enhances Biological Activity
- Accelerates Nutrient Cycling
- Suitable for Hydroponics
- Replaces Dry Calcium Applications
- Low Shipping Cost
- Small Carbon Footprint
- Easy to Apply
- Approved for Organic Production with Most Certifying Agencies

APPLICATION RATES

Genesis Soil Rite (GSR) Growing Calcium is a dry flowable powder which suspends in water.

GENERAL APPLICATION RATES

45 - 454 grams GSR Growing Calcium per acre

GSR Growing application rates are based on soil calcium levels, depth of root zone, soil electrical conductivity, and crop. A deeper rooting crop will require a higher application rate. GSR Growing Calcium can be tank mixed with fertilizers. DO NOT tank mix with pesticides. Please consult the product label and the Soil Works staff for recommendations and application rates.