

Whey2Grow®



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Whey2Grow® is biobased fertilizer formulated to promotes plant growth, flowering and fruiting while enhancing soil microbial growth.



- USDA Bio-Preferred Product
- Dairy and plant ingredients are fermented using Lactobacillus bacteria.
- Whey2Grow® (6.4 – 1.4 – 2.3) is a highly nutritious and bio-stimulant containing product.
- Fermentation product produced using proprietary Lactobacillus bacteria, bacterial protein and nutrient rich dairy and plant ingredients.
- Contains Ammonium Lactate and is rich in nutrients, amino acids, peptides and bioactive metabolites essential for plant growth and development.
- A prebiotic formulated to deliver >87% organic matter and more than 35% carbon to promote soil and rhizosphere health.



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Whey2Grow® is biobased fertilizer formulated to promote vigorous growth, stronger vibrant turf and foliage, reduced plant stress on a variety of plants, and increased bloom and flower production on flowers, fruits, vegetables, and improved yield.



- **DIRECTIONS FOR MIXING: SHAKE WELL BEFORE EACH USE.** Read and follow the Label. Mix thoroughly with clean water and use the diluted product within 24 hours of mixing. When mixing with other products or materials, a quart jar test should be used to evaluate compatibility. When available use should be consistent with a soil test, recommendations by certified crop advisors or agronomist or in accordance with an approved nutrient plan.
- **APPLICATIONS:** The diluted concentrate may be applied as a foliar spray, foliar drench or applied directly to the soil. Applications can be made with sprayers, watering canister, hose end sprayers or through drip irrigation.
- **General gardening including annual and perennial flowers, and vegetables:** Mix 1-2 oz of Whey2Grow® with water per gallon in a sprayer or watering can. A gallon will cover approximately 10-20 sq. ft. and apply every 7 to 14 days during the growing season. Slower growing plants can be fed less often.
- **Greenhouse, Nursery and Landscape:** Mix 1-2 oz of Whey2Grow® with water per gallon in a sprayer or watering can and apply every 7 to 14 days as a foliar or drench.
- **Shrubs, and trees:** Mix 1-2 oz of Whey2Grow® with water per gallon in a watering can. Pour the mixture around shrubs and trees.
- **Turf:** Apply monthly at the rate of 1-3 gallons/acre (2.9-8.8 oz per 1,000 sq. ft.)
- **Specialty Crops & Agriculture:**
 - **Cannabis:** Mix 1-2 oz of Whey2Grow® with water per gallon in a sprayer or watering can and apply every 7 to 14 days as a foliar, drench or drip irrigation.
 - **Commercial vegetables including strawberries:** Apply Whey2Grow® as a foliar application or through drip irrigation at 1-5 gallon/acre throughout the growing season.
 - **Other crops:** Apply Whey2Grow® as a foliar application at the rate of 1- 2 qt/acre.

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Benefits

- Promotes improved color, plant growth, root growth and branching, flowering, plant vigor and health and yield.
- Readily available source of ammoniacal nitrogen, key plant nutrients, amino acids, peptides and bioactive metabolites.
- Bio-stimulant product that supplements the plant and soil rhizosphere with Ammonium Lactate, a source of carbon and energy for microbes and plant cells.
- A prebiotic that promotes a sustainable approach to soil health and enhances microbial growth, supplies organic matter and carbon leading to improved root growth and density while aiding management of thatch.



Plant Nutrition & Health

- >93% of the Total Nitrogen supplied in the Ammoniacal form that promotes branching and lateral root growth, foliage, blooms and improves overall production of turfgrass and other plants.
- Supplies key nutrients for soil and foliar uptake including N, P, K, Fe, Zn, Mn, Mg, Ca, Cu and Na required for plant growth and production.
- Provides improvements in plant color (greening), plant health and tremendous growth and yield.
- Lactate stimulates natural plant processes and is readily metabolized in plant cells, increasing pyruvate which is converted to energy in the TCA (Krebs cycle).
- Lactate naturally occurs in root and leaf tissue. Lactate helps promote enzymes that regulate natural plant defense mechanisms that aid in plant stress such as drought, pathogen defense, along with stomatal and root uptake leading to improved nutrient utilization by foliage and roots while under stress.



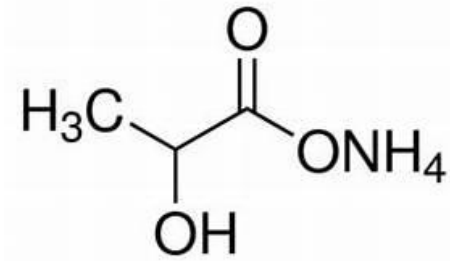
Soil Mineralization, Microbial Activity and Soil Health



- C:N ratio of 3:1 which leads to rapid mineralization and release of nitrogen.
- A source of carbon and energy for plants and soil microbes.
- Lactate stimulates microbial growth and shifts microflora community to organisms involved in soil fertility and plant growth-promoting bacteria such as rhizobium, Lysobacter genera and Pseudomonas sp..
- Soil qualities are improved for deeper rooting and better penetration of water and nutrients. Unproductive soil is can be rebuilt and replenished.
- Delivers >87% organic matter and more than 35% carbon to promote soil and rhizosphere health and enabling root growth and elongation.

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Ammonium Lactate



- Whey2Grow® contains >70% Ammonium lactate.
- Ammonium Lactate is formed during fermentation through conversion of lactose by proprietary Lactobacilli bacteria.
- In the soil, Ammonium Lactate is a source of carbon and energy for microbes and can be absorbed by plant roots.
- Ammonium Lactate is oxidized in the plant to pyruvate by a plant enzyme, glycolate oxidase 3, which is then utilized in the TCA or Krebs cycle to produce energy.