



TURF FORMULA

Bio-Nutrient Activator

SUPERCAL

Liquid Calcium

The Edge Your Turf Needs This Season

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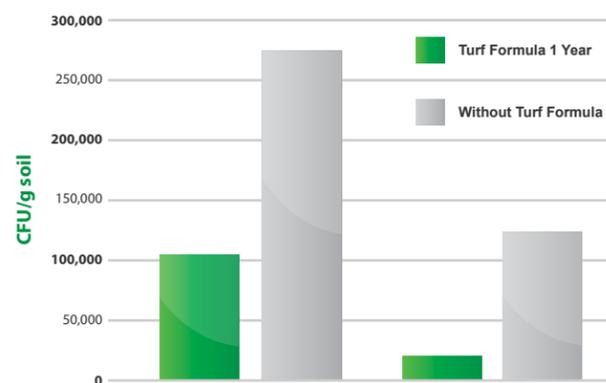
Turf Formula® is a storehouse of essential elements and growth promoting substances for use in the seeding, sprigging, sodding, and maintenance of turf grass.

Turf Formula® is a scientifically balanced formula of macro and micro-nutrients, carbohydrates, enzymes, amino acids, stabilized oxygen and other natural growth supplements. **Turf Formula**® boosts plant growth and works to provide the maximum release and uptake of nutrients in the soil for turf grass production.

University research has shown **Turf Formula**® increases nutrient availability up to 68%. Research also proves that **Turf Formula**® lowers sodium levels in the soil and plant tissue. Since sodium competes with potassium for uptake, high sodium levels can greatly reduce the plants ability to absorb nutrients. High sodium levels are also conducive to high nematode counts.

RESEARCH

SOIL DELETERIOUS BACTERIA COUNTS



5,500,000 CFU/GRAM OF SOIL → **187,500,000** CFU/GRAM OF SOIL

The microbiology division of EMSL Analytical in New York, NY recently investigated the effects of the active ingredients in **Turf Formula**® and **SuperCal**® when applied to soil media. The soil was tested for colony forming units (CFU) before treatment and then 24 hours later after treatment.

The CFU per gram of soil went from 5,500,000 to 187,500,000 after application. This represents a 3,400% increase in colony forming units per gram over the untreated soil.

Advantages Reported by Turf and Golf Professionals using Turf Formula®

- Increases fertilizer and chemical efficiency.
- Reduces alkalinity, salt buildup and chemical carryover.
- Increases sugar and protein content in leaf tissue.
- Builds humus, speeds up the breakdown of organic matter and thatch.
- Increases root mass and penetration, improves uptake of water and nutrients from soil.
- Improves the overall health of turf grass resulting in better resistance to insect and disease pressure.
- Promotes faster recovery of turf.

Turf Formula Effects on Golf Greens

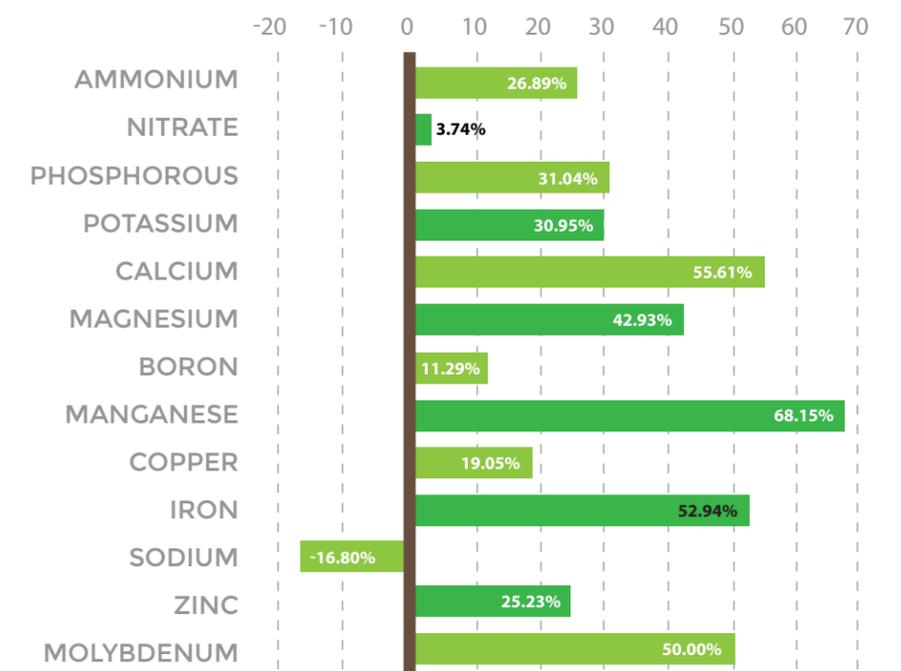
- 36% Decrease in Brown Patch Disease
- 35% Increase in Root Mass
- 33% Nematode Reduction
- 73% Salt Reduction in 90 Days

Research results provided by University of Missouri-Columbia and Dr. A.H. Hunter, Orange City, FL



PERCENT OF CHANGE IN NUTRIENT UPTAKE & AVAILABILITY USING THE ACTIVE INGREDIENTS IN TURF FORMULA®

Research conducted by Lincoln University, Jefferson City, MO



SUPERCAL

Liquid Calcium

When planning your fertility program for nitrogen, phosphorus, and potassium, remember to include a column for **SuperCal®** liquid calcium.

It could be the edge your turf needs this season!

Calcium is the most commonly overlooked element in soil fertility, which is puzzling given the fact that no other element is used more by weight and volume in the soil than calcium. Calcium is also the second highest element by percentage in plant tissue. Literally, **calcium levels in the soil and plant are the backbone of an effective fertility program** and **SuperCal®** is a proven, cost effective source to supply the calcium your turf needs.



The benefits of calcium in turf production are numerous, primarily in regard to root and cell wall development. Research indicates that pathogens probe their way into a cell and inject their enzymes to weaken and eventually break the cell down. Thus, a stronger cell membrane can actually slow down or even stop this attack. **SuperCal®** enhances the strength of the cell tissue for greater resistance to disease and enhanced fluid retention during adverse weather conditions.

With today's new bentgrass varieties and lower mowing heights, there has never been a greater need for calcium supplements like **SuperCal®**. Calcium allows plants to use sunlight, carbon dioxide, water, nitrogen, and other minerals more efficiently and is also essential in starch conversion.

Why is available calcium so important?

- Calcium is the most important fertilizer element and a direct nutrient to growing plants.
- Calcium neutralizes soil acidity.
- Calcium improves activity of favorable soil bacteria and the decomposition of organic materials.
- Calcium promotes root development.
- Calcium improves soil structure.
- Calcium improves the efficiency and availability of fertilizers.
- Calcium reduces phosphate fixation.
- Calcium increases water penetration and water holding capacity.

SuperCal® Benefits

SuperCal® contains 10% soluble calcium which can help compensate for calcium deficiencies in the soil and plant. The calcium in **SuperCal®** remains soluble and available in the soil, but there is another aspect to **SuperCal®** which makes it totally unique compared to other calcium products.

SuperCal® is formulated with a proprietary blend of organic acids that work in the soil, breaking down insoluble calcium and converting it to an available form which plants can utilize. By using **SuperCal®**, hundreds of pounds of insoluble calcium per acre can be brought into solution insuring that the growing plant has an adequate supply.



For a fertility program that is a cut above the rest, use Turf Formula® and SuperCal®. It could be just the edge your turf program needs this season.

HOW TO APPLY

Turf Formula® and SuperCal®

Turf Formula® Recommended Application

Turf Formula® should be applied monthly for the maintenance and enhancement of a well established turf grass. The rate and amount of application can, and should be altered to address the specific requirements of the user as to climate and soil conditions. Nutrient levels in the soil should be monitored with routine soil tests.

TEES AND GREENS:

Apply **Turf Formula®** at rates of 2-4 oz./1,000 Sq. Ft. every 10-15 days throughout entire growing season.

FAIRWAYS AND ROUGH:

Apply **Turf Formula®** at rates of 1 quart/acre every 30 days throughout entire growing season. (Use half rates every 15 days if stressed and/or during hot, dry conditions.)

LAWN CARE & SOD PRODUCTION:

Apply **Turf Formula®** at rates of 1 quart/acre every 30 days throughout entire growing season. (Use half rates every 15 days if stressed and/or during hot, dry conditions.)

NOTES:

- **Turf Formula®** should be applied in early AM or late PM, if possible, followed by watering.
- **Turf Formula®** is compatible with most fertilizers and chemicals. Fertilizer and chemical rates may be reduced by 25%.
- **Turf Formula®** can be applied through any type sprayer or by means of injection pump through irrigation system.
- **Turf Formula®** should be stored out of direct sunlight.

SuperCal® Recommended Application

SuperCal® can be applied as a foliar feed, root dip, or soil applied. These various types of application enable the soil and plant to benefit from the naturally balanced nutrients found in **SuperCal®**. **SuperCal®** is recommended for application on all varieties of turf grass.

TEES & GREENS:

Apply **SuperCal®** at rates of 4-8 oz./1,000 sq. ft applied every 30 days throughout the entire growing season.

FAIRWAYS & ROUGH:

Apply **SuperCal®** at rates of 3-6 gallon/acre applied in early spring when growing season begins, or 1 gallon/acre every 30 days throughout the entire growing season.

LAWN CARE & SOD PRODUCTION:

Apply **SuperCal®** at rates of 3-6 gallon/acre applied in early spring when growing season begins, or 1 gallon/acre every 30 days throughout the entire growing season.

NOTES:

- **SuperCal®** should be applied in early AM or late PM, followed by watering, if possible.
- **SuperCal®** can be applied through any type sprayer or by means of injection pump through irrigation system.
- **SuperCal®** can be mixed with most nitrogen solutions, soil applied herbicides, pesticides and fungicides. (Always do a jar test first to insure compatibility.)

IMPORTANT: To avoid the formation of insoluble precipitates, **DO NOT** mix **SuperCal®** with materials containing phosphates or sulfates. **Do NOT** mix **SuperCal®** with 2-4D Amine or any glyphosate based herbicide.



Visit us online at www.agrigro.com

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