

A Symbol of Quality
GROW MORE®

GROW ORGANITE

For



ORGANIC
Slow Release Nitrogen

NON-STAINING IRON • ORGANIC PHOSPHATE

GROW ORGANITE **5-3-0**

- Slow Release Organic Nitrogen
- Provides Trace Amounts of Zinc, Manganese
- Provides Iron, Sulfur & Magnesium for Deep Green Effect.
- Non - Burning

ANALYSIS

Total Nitrogen (N)	5.00%
1.0% Water Soluble Nitrogen	
4.0% Water Insoluble Nitrogen	
Available Phosphate (P ₂ O ₅).....	3.00%
Calcium (Ca)	1.40%
Magnesium (Mg)	0.20%
Sulfur (S)	1.20%
Iron (Fe).....	4.00%
Manganese (Mn)	0.05%
Zinc (Zn)	0.05%
Derived from Biosolids	

Two Products for Deep Greening Effect

TURF GRASS & LANDSCAPE

SGN 120-130

For fairways, roughs, sport fields, parks lawn care & landscaping.

GREENS GRADE

SGN 60-70

For greens, tees or when a smaller particle size is required. Greens Grade settles into & below turf surfaces for clean play through on putting surfaces.

A well planned fertility program is a basic part of turf grass maintenance. Turf grass that is under fertilized tends to be thin with poor color, over fertilizing, with high levels of soluble nitrogen tends to encourage thatch problems and be prone to insect and disease damage. Grow Organite releases slowly over time, avoiding excessive amounts of Nitrogen being available too quickly after application.

NOTE: Grow Organite fertilizer complies with all applicable U.S. EPA 40 CFR part 503 and State Regulations. Also exceeds the U.S. EPA's exceptional quality definition.

GOLF: GREEN & TEES

	WARM SEASON TURF		COOL SEASON TURF	
	Nitrogen /1000 sq. ft.	Grow Organite	Nitrogen /1000 sq. ft.	Grow Organite
Spring	1 - 2 Lbs.	20 - 40 Lbs.	Spring	1 Lb. 20 Lbs.
Summer	1 - 2 Lbs.	20 - 40 Lbs.	Summer	1/2 Lb. 10 Lbs.
Fall	1 - 2 Lbs.	20 - 40 Lbs.	Fall	1 Lb. 20 Lbs.
Fall Over Seeding	1 Lb.	20 Lbs.	Dormant	1 1/2Lbs. 30 Lbs.

WARM SEASON TURF GRASS - Bermuda-Grass, Zoysia-Grass, Buffalo-Grass, Tall Fescue, Paspalum, Kikuyu-Grass. Optimal temperature range 80-95°F.

COOL SEASON TURF GRASS - Bentgrass, Bluegrass, Poa Annula, Rye Grass, Tall Fescue and Fine Fescue. Optimal Temperature range 60-75°F.

FAIRWAYS, ROUGHS & SPORT TURF

	WARM SEASON TURF		COOL SEASON TURF	
	Nitrogen /1000 sq. ft.	Grow Organite	Nitrogen /1000 sq. ft.	Grow Organite
Spring	1 - 2 Lbs.	20 - 40 Lbs.	Spring	1 Lb. 20 Lbs.
Summer	1/2 - 1 Lb.	10 - 20 Lbs.	Summer	1/2 Lb. 10 Lbs.
Fall	1 Lb.	20 Lbs.	Fall	1 Lb. 20 Lbs.
Fall Over Seeding	1/2 - 1 Lb.	20 - 30 Lbs.	Dormant	1 1/2Lbs. 30 Lbs.

Note: Grow Organite will provide green growth effect lasting up to 6 weeks per application. Optimal mineralization soil temperature 15 - 25°C.

PARKS, CEMETERY COMMERCIAL TURF

	WARM SEASON TURF		COOL SEASON TURF		
	Nitrogen /1000 sq. ft.	Grow Organite	Nitrogen /1000 sq. ft.	Grow Organite	
Spring	1 Lb.	20 Lbs.	Spring	1 Lb.	20 Lbs.
Summer	1 Lb.	20 Lbs.	Summer	1/2 Lb.	10 Lbs.
Fall	1 Lb.	20 Lbs.	Fall	1 Lb.	20 Lbs.
Fall Over Seeding	1 Lb.	20 Lbs.	Dormant	1 1/2Lbs.	30 Lbs.

DORMANT FEEDING

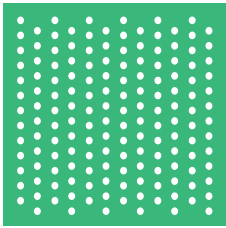
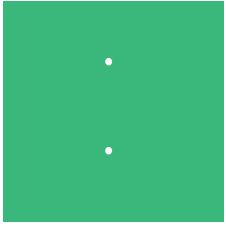
This application is optional, soil microbial activity is slow during the winter months. However small amounts of nutrients released during the winter provide earlier recovery from winter and damage from early season play.

SPOON FEED WITH GREENS GRADE GROW ORGANITE

Plants take up nutrients from the soil solution therefore good fertilizer distribution is necessary. Other important factors that influence response are nutrients in an available form in the right place (root zone), at the right time and in the amount the plant needs.

Frequent light applications provide a more constant supply of nutrients for soil microbes to mineralize and in turn provide sustained even growth removing the peaks and valleys from the growth cycle and eliminating streaking caused from overlapping and skips.

The example below demonstrates this effect. It is far easier to apply 0.30 lb of nitrogen per 1000 sq. ft. with 6 lbs. of Green Grade Grow Organite than it is with 1.1 Lb of standard granular 27% chemical nitrogen fertilizer.

EXAMPLE 15" x 5" Area of Treated Soil	
6 Lbs. Grow Organite / 1000 sq. ft.	1.1 Lbs. Typical Granular Fertilizer / 1000 sq.ft
<p>If you apply 0.30 Lbs Nitrogen pr 1000 sq. ft.</p>  <p>Potential Nutrient Intercept Point</p> <p style="text-align: center;">167 Grow Organite Granules</p>	 <p style="text-align: center;">2 Granules (assuming perfect Distribution)</p>

RESIDENTIAL LAWN CARE AND LANDSCAPING

Lawn Care - Grow Organite is slow release, providing extended feeding as plants grow. 2% non-stain iron plus slow release Nitrogen provides greening without growth for up to 6 weeks.

Established Lawns: Apply in rotary spreader or drop spreader at the rate of 15 lbs. per 1,000 sq.ft. (0.75 Lb Nitrogen).

FEEDING SCHEDULE

Southern Climate; Late March - May - Early September - Early October - Mid November

Northern Climate; Mid April - May - Early September - Early November

New Lawns: Before sodding or seeding - incorporate into the top 2 inches of soil 15 lbs. Grow Organite per 1,000 sq. ft. after the third mowing of the lawn, apply 15 lbs. Grow Organite per 1,000 sq.ft.

Shrubs: For established plants broadcast 4lbs. per 100 sq. ft. under the drip zone of the leaves.

Annuals & Perennials: Mix into the bed when preparing the soil in the spring 3 lbs. per 100 sq. ft. After flowers appear, apply 2lbs. per 100 sq. ft. around base of plants.

Roses: Use 2 lbs. per 100 sq. ft., re-apply every 4 to 6 weeks through the season.

Note: 1 Lb. = approx 3 cups of Grow Organite

SPECIAL FEATURES

The **organic nitrogen** in Grow Organite offers advantageous efficiency over inorganic ammonium, nitrate and urea nitrogen sources. When inorganic urea and ammonium forms of nitrogen are deposited on moist soil they undergo a series of chemical conversions to ammonia. A portion of the ammonia gas escapes to the atmosphere rather than becoming a plant nutrient. Nitrate nitrogen does not absorb strongly to soil particles, and is readily leached below the root zone. Organic Nitrogen - being derived from proteins, amino acids including nitrogen found within living organisms must be mineralized by soil microbes, this provides a slow but continuous supply of nitrogen which is taken up by the plant rather than lost to the atmosphere or ground water. Under warm condition (77 to 95°F) the slow release portion of Grow Organite Nitrogen (75% Slow Release N) can be expected to provide nitrogen release for up to 6 weeks or longer.

CARBON/NITROGEN RATIO:

The C/N ratio of organic fertilizer is important for two reasons:

- 1) Intense competition among soil microorganisms and plants for available soil nitrogen occurs when fertilizers having a high C/N ratio are applied to soil. Microbes use carbon to build cells and the nitrogen to synthesize protein.
- 2) The C/N ratio of fertilizers helps determine their rate of mineralization and rate at which Nitrogen is made available to plants. If organic fertilizer has a C/N greater than 20:1 (low nitrogen) soil microbes cannot obtain enough nitrogen and cause a loss of plant available nitrogen (deficiency) called immobilization. Grow Organite with the advantageous low C/N ratio of 4:1 has a high nitrogen content, high enough for soil microbe needs plus excess organic nitrogen for conversion (mineralization) to plant available slow release nitrogen. Up to 6 weeks without excessive top growth.

	C/N Ratio		C/N Ratio
Grow Organite	4:1	Grass Clippings from Fertilized Lawn	31:1
Sewage Sludge	12:1	Small grain corn stalks	80:1
Alfalfa Meal	13:1	Sawdust, Woodchips	400:1
Sheep Manure	17:1		
Poultry Manure	18:1		
Horse Manure	50:1		

"Non-Staining Iron - Through the biological process of creating Grow Organite, organic acids such as oxalic, citric, tartaric and H⁺ ions (hydrogen) helps solubilize iron and produce organic complexes (chelate). Grow Organite iron does not stain concrete and walks, and the biologically chelated iron releases gradually providing a dark greening effect that lasts up to 6 weeks."

ORGANIC PHOSPHOROUS: Organic bound phosphorous has been synthesized by microorganisms during the creation of Grow Organite and exists as **1)** inositol phosphates or phosphate esters of a sugar like compound, **2)** nucleic acids, **3)** phospholipids. Phosphorous held in organic form is mineralized by the same general process that releases nitrogen, and is stable over both acidic and alkaline pH. Inorganic phosphorous is immediately available but subject to rapid fixation or absorption of phosphate ions on soil particles. Grow Organite's organic bound phosphorous is released by mineralization thereby improving phosphorous availability to plants by reducing the tendency of the mineral fraction of the soil to fix phosphorous.

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