



Professional Turfgrass Management Recommendations

The professional turf management sector demands products that can deliver rapid as well as extended results with as much “value added” characteristics that can be made available. Until recently, the natural organic industry has not delivered on all of these requirements making a high degree of organic management difficult. Converted Organics has addressed these demands resulting in a line of liquid, soluble and granular products not before available to the market.

The high temperature thermophilic digestion process that Converted Organics uses to recycle clean food waste is unique to the organic fertilizer industry and results in liquid and granular products that not only provide the most rapid nutrition response but also a very high degree of disease and environmental stress resistance. Furthermore, and of equally significant importance, is that Converted Organics has developed the first totally soluble, high nitrogen organic products that can be utilized in any golf, professional lawn care or sports turf maintenance programs. Soil microbial populations and activities are rapidly stimulated as well as maintained over extended periods. The industry low C/N ratios account for the “burst” of microbial activity necessary for reduced disease and environmental stresses as well as reductions in thatch accumulation and increased CEC, soil aeration and water holding capacities.

Converted Organics has made professional turfgrass maintenance more effective, cost efficient and environmentally friendly with the addition of our industry “first” organic fertility, biostimulant, soil microbial stimulant and soil enhancing “tools”.

Product Descriptions and Characteristics:

All Converted Organics products are derived from either food grade or clean, separated food waste sources giving them the most diverse sources of organic materials in the industry, hands down. The source materials from other companies within the industry are one dimensional and are either derived from slaughterhouse waste, chicken/turkey bi-products, biosolids and other minor organic sources. Converted Organics products are quite literally, yesterday’s breakfast, lunch and dinner comprised of various meat, seafood, vegetable and fruit sources along with a diversity of liquid food waste. This array of organic sources results in extensive and diverse levels of biologically active amino acids, proteins, simple and complex carbohydrates and, most importantly, high levels of cytokinin activity along with a natural suite of antioxidants so important to SAR disease and stress resistance.



Lysine Technology:

Converted Organics has incorporated the high nitrogen essential amino acid lysine into liquid and granular products to achieve the highest soluble organic nitrogen levels in the industry. Over two years of evaluations and testing at the University of Illinois, University of Florida and California Polytechnic State University have shown lysine to be the most soluble, fast acting organic fertilizer to date with results close to those of urea during mid-season applications. Soluble organic nitrogen levels reaching 15% are achievable with lysine technology allowing, for the first time, the ability for organic liquid programs as the sole source of nitrogen in any management plan.

Liquid Products:

LC 1-1-1

LC or "Liquid Concentrate" is the basic liquid that is derived from the thermophilic digestion of food waste. Tested for over 5 years, LC has been shown conclusively to have powerful disease suppression/plant resistance capabilities over a wide array of crop species including a two year study performed by Dr. Frank Rossi at Cornell on golf turf indicating a reduction by 75% of fungicides is possible with the use of LC. LC is in a concentrated form which can be diluted at a 10/1 to 25/1 water/LC ratio.

Turf Blend 6-0-4

Turf Blend is the first organic liquid that can be used as a primary nitrogen source throughout the professional turfgrass management sector, with special emphasis on spoon feeding programs. The high nitrogen level is attained through the addition of lysine to our primary LC product which results not only in high organic nitrogen, but also the stress protective/resistance qualities associated with the LC.

Granular Products:

Converted Organics granular products for the professional turf sector come in standard SGN 200 and Greens Grade SGN 80. Our production process allows us to price the two granulars at the same low levels which are well below the competition.

Turf Blend 8-1-4 (Standard and Greens Grade)

The standard product for professional turf comes in both SGN 80 and 200 and has a low C/N ratio of 4-5 allowing for quick breakdown and response after applications. The SGN 80 greens grade is highly uniform in size and density without troublesome dust. The greens grade granular



can also be very effective on any professional turf areas requiring a faster response time (due to the much smaller particle size and increased surface area).

Ornamental/Floral Blend 4-1-8

A lower nitrogen product with twice the potassium level for ornamentals, flowers and trees. Although developed for ornamentals, this blend can also be very effective on any turf area requiring higher levels of potassium for increased environmental stress resistance.

NitroShield 10-0-4

NitroShield high nitrogen granular is supplemented with completely soluble granular lysine of the same SGN allowing for an almost immediate response, similar to urea in mid-season while maintaining a 6-8 week residual activity. NitroShield represents a breakthrough in organic granular technology by combining the totally soluble lysine with our slow release granular material.



Golf Turf Program Maintenance Suggestions

Product and rate recommendations should be considered as general suggestions for a typical golf course. Rates and frequencies of application will vary significantly depending upon region and environmental/cultural conditions.

Cool Season Turfgrass:

Greens and Tees:

- **Liquid Turf Blend 6-0-4:** 1/8 – ¼ lbN/1000 every 7-21 days
- **NitroShield Granular 10-0-4:** A rapid initial response with the soluble lysine followed by a 6-8 week slow release residual. Greens Grade 80SGN. ½ - 1.0 lbsN/1000 every 6-8 weeks if used without liquid nitrogen. Half that amount in conjunction with Liquid Turf Blend 6-0-4 (used on the low range suggested).
- **Granular Turf Blend 8-1-4 or 4-1-8:** 1/4-1/2 lbN/1000 every three months in conjunction with liquid programs.
- **Granular only:** ½ - 1.0 lbN/1000 every 2-3 months
- **LC disease/environmental stress resistance:** 1/10 to 1/25 dilution applied every 7-14 days in addition to above recommendations.

Fairways and Roughs:

- **Granular Turf Blend 8-1-4 or 4-1-8:** Fairways at 1.0lb N/1000 every three months first season, ½ lbN/1000/3 months second season and beyond. Roughs at 1-2 lbN/1000/season applied mid-late spring and late summer – early fall months.
- **LC disease/environmental stress resistance:** 1/25 dilution rate applied every 7-21 days depending upon disease severity. Use as a preventative at 1/25 dilution and as a curative at 1/10 dilution.

Warm Season Turfgrass:

Greens and Tees:

- **Liquid Turf Blend 6-0-4:** 1/8 - ¼ lbN/1000/week for bermudagrass greens.



- **NitroShield Granular 10-0-4:** A rapid initial response with the soluble lysine followed by a 6-8 week slow release residual. Greens Grade 80SGN. 1.0 lbsN/1000 every month if used without liquid nitrogen. Half that amount in conjunction with Liquid Turf Blend 6-0-4 (used on the low range suggested).
- **Granular Turf Blend 8-1-4 or 4-1-8:** ½ to 1.0 lbN/1000/month on a “granular only” programs and 1/4 lbN/1000/month in conjunction with the liquid recommendations.
- **LC disease/environmental stress resistance:** 1/10 dilution applied every 7-14 days during high stress/disease incidence periods with 1/25 dilution during winter months every 14-21 days.

Fairways and Roughs:

- **Turf Blend 8-1-4 or 4-1-8:** 1.0-2.0 lbN/1000 every 2-3 months. Roughs at 0.5-1.0 lbN/1000 every 3-4 months.
- **LC disease/environmental stress resistance:** 1/25 dilution every 7-21 days as a preventative increasing to 1/10 dilution during high disease/stress periods.



Sports Turf Suggested Application Rates

Rates and recommendations are based upon high usage sports fields which are subject to frequent and continuous activities requiring a high level of recuperative potential.

Cool Season Sports Turf:

- **Granular Turf Blend 8-1-4:** 0.5-1.0 lbN/1000 every two months with higher rates during the summer months. More aggressive granular programs should use **NitroShield 10-0-4** for more recuperative potential.
- **Turf Blend Liquid 6-0-4:** ¼-1/2 lbN/1000 every month if used in conjunction with granulars to increase recuperative potential on sports turf with high usage rates and consistence damage/compaction.

Warm Season Sports Turf:

- **NitroShield 10-0-4:** ½ to 1.5 lbsN/1000 every 2-6 weeks for intensely used sports turf requiring high levels of recuperative potential.
- **Turf Blend Liquid 6-0-4:** Same recommendations as for granular above if used as only nitrogen source and disease/stress resistance is needed.
- **Both Liquid and Granular Program:** Adjust liquid rates up during high disease/stress periods.



Professional Lawn Care Application Rate Suggestions

- **Granular Turf Blend 8-1-4 or 4-1-8:** For both cool and warm season turf a base of these granulars are recommended.
- **LC liquid disease/stress suppressant:** Applications of 1/10 during high stress periods and 1/25 during normal environmental conditions every 2-4 weeks.