Get Your Nutrition – For Turf, That Is

Check out this roundup of fertilizer and nutrient products that will surely cater to your turf needs

Steady delivery

NITAMIN Steady-Delivery fertilizers from **Georgia-Pacific Resins** not only improve the health and density of the turf, they also help grass grow at a consistent rate. By ensuring that a steady supply of nitrogen is continually available within the soil, NITAMIN fertilizers keep turf healthy and green for months without the need for re-application.

Fertilizer products containing NITAMIN as the nitrogen source of choice are available in liquid and soon-to-be commercialized granular forms. The NITAMIN product line also includes a patent-pending way of delivering nitrogen to turf in the form of NITAMIN Coated Sand, which combines topdressing with nitrogen fertilization.

For more information, visit www.nitamin.com.

Slow-release liquid fertilizer

Regal Chemical Co. offers a variety of fertilizers – from brand-name products to custom blends, from quick start to slow release and from liquid to dry. One of the products the company offers is Liqui-Green, a slow-release liquid, specifically formulated methane urea fertilizer. LiquiGreen is engineered to maximize plant growth in harmony with soil chemistry. It contains Nitamin as a nitrogen source. *For more information, visit www.regalchem.com*

Turf program

Profile Products offers Profile Golf, a new program that it says will help promote turf health, speed establishment and control sediment erosion.

The program consists of two components: incorporating amendments into the soil to promote fast root establishment and applying materials on the surface to promote rapid germination. Company agronomists and certified professionals in erosion and sediment control will work with superintendents to create customized plans for their golf courses. *For information, visit www.profileproducts.com.*

Foliar products

Milliken Turf Products offers True Foliar NPK Phosphite 10-20-16, an improved version of True Foliar P 6-12-6. In addition to a general increase in the content of all macronutrients, the product now contains a phosphite source derived from phosphorous acid. True Foliar NPK Phosphite contains a minimum of 10 percent of the company's proprietary seaplant extract.

The company also offers SeaBlend, a blend of high-quality organic and synthetic ingredients, to produce a rich turf color.

For more information, contact www.milliken.com.

Dry-soluble combination

Becker Underwood offers VigaROOT, used in spray application programs to reduce stress and stimulate root growth through enhanced water and nutrient uptake. VigaROOT is a dry-soluble combination of iron-chelated manganese, chelated zinc, natural humic substance, seaweed extract, yucca, and a proprietary blend of natural sugars, vitamins, amino acids, and beneficial bacteria. For more information, visit

www.beckerunderwood.com.

Composted chicken manure

EarthWorks Natural Organic Products has been formulating and manufacturing dry and liquid organic soil amendments since 1988. Its products include Replenish 5-4-5 – Formulated Organic Fertilizer. The foundation of the product is composted chicken manure with 40 percent of the product made of rock minerals and carbon activators. Turf is a cover crop, *Continued on page 88*

MIKE KLEMME

Get Your Nutrition - For Turf, That Is

Continued from page 86

one that is constantly de-mineralizing the soil, and 5-4-5 is a good way to "Replenish" this mineral content and provide the plant with a sustainable supply of needed macro and minor nutrients, the company says.

Replenish 5-4-5 provides as much as 60 percent more organic matter than a mealbased product, which is the basis for using organics.

For more information, visit www.soilfirst.com.

Meal-based fertilizer

Nature Safe fertilizers are constructed mealbased fertilizers derived from feed-grade proteins such as meat, bone, blood, poultry, fish and feather meals as well as bakery by-products and humates, not waste by-products. Nature Safe promotes strong turf color and builds stress tolerance. Some of its products include:

8-3-5 Stress Guard Fertilizer is for new or established turf or can be used during renovation and overseeding. It amends stressed areas and is a good product for greens, the company says.

10-2-8 All Season Fertilizer enhances root and shoot stability with controlled plant growth. It improves overall disease management by increasing the efficiency of fungicides. It's a good fertilizer for tees, fairways and ornamental plantings, the company says. For more information, visit www.naturesafe.com.

L- amino acid-based fertilizers

Nutramax Agriculture offers products that feature only biologically active L-form amino acids obtained through enzymatic hydrolysis of natural protein. Included is MACRO-SORB foliar, a biofertilizer based on amino acids. It allows for greater absorption and transport of nutrients through the leaves into the plant. The action of L- amino acids and substances with phytohormonal effect in MACRO-SORB foliar helps to regulate the opening of the stomata, increase water potential, regulate osmotic pressure, slow down photorespiration and increase net photosynthesis.

MACRO-SORB foliar is a true systemic with no phytotoxic effects and is tank mix compatible with soluble fertilizers, fungicides, insecticides, plant growth regulators and herbicides. For more information, visit www.nutramaxlabs.com.

Balanced, long-term nutrients

Proforma is **ProSource One's** own premiumquality private brand of geographically specific fertilizers. Proforma fertilizers provide balanced, long-term nutrients for both the turf and the soil microflora. They supply the soil and turf with the plant materials needed to maintain a complete and healthy system. For more information, visit www.prosourceone.com.

Potassium sulfate

LebanonTurf offers a variety of fertilizers, including Expo, a cost-effective, controlled-release source of potassium sulfate, which extends the agronomic benefits of potash. Leaching studies have demonstrated that the potash in Expo requires significantly more water to be completely leached than does the potassium in "regular" sulfate of potash.

LebanonTurf also offers a line of organicbased fertilizers. The company developed LebanonTurf 10-2-10 and 14-2-10 with the help of Nature Safe. These products showcase the best technologies of each company: Meth-Ex 40 features the high-activity methylene urea complex from LebanonTurf and Nature Safe's high-efficiency constructed organics. For more information, visit www.lebanonturf.com.

Organic fertilizer

Milorganite's organic fertilizer is versatile and can be used anywhere a superintendent or groundskeeper deems necessary. Milorganite is ideal for a variety of applications: greens; fairways and roughs; tee boxes; trees; planting beds; and flowering shrubs. For more information, visit www.milorganite.com.

Foliar auxiliary nutrients

Floratine offers a variety of foliar auxiliary nutrients designed to address the photosynthetic and chlorophyll requirements of turfgrasses. The products include Astron, Per "4" Max, ProteSyn, Knife-Fortified iron supplement, Renaissance and others.

The company also offers value-added foliar nutrients to provide linear sustenance and support even, consistent growth. *For more information, visit www.floratine.com.*

Microbial-based products

Novozymes Biologicals, ROOTS Plant Care Group offers TurfVigor and Turf Food microbial fertilizers, designed to provide turf with a total nutrition package. Both offer a blend of extended-release nutrients, patented strains of beneficial microbes and the ROOTS biostimulant complex. Choose TurfVigor for liquid applications and Turf Food for granular application. *For more information, visit www.rootsinc.com and www.novozymes.com/roots.*

Combination products

Bio Basics LLC markets natural-based granular fertilizers using Pasteurized Poultry Manure from Perdue Farms as the base for both the stand-alone product and the ALLY product line. PPM 4-2-3 alone provides excellent carbon and calcium sources for the plant and soil while performing as a slow-release fertilizer. The alliance of PPM and regionally specific blends of synthetic fertilizer allows the customer to apply sufficient N-P-K requirements along with organic carbon and mineral sources at the same time.

For more information, visit www.biobasic.biz.

Polymer technology

Pursell Technologies Inc. offers POLYON controlled-release fertilizers, which feature the patented polymer technology that provides gradual feeding for months. POLYON-coated nutrients feature an extremely durable ultra-thin polyurethane coating that provides nutrition at precisely the right time when plants need major, minor and secondary elements, according to the company.

Through a patented reactive layers coating process, the ultra-thin POLYON coating is chemically bonded to nutrient granules, creating an extremely durable and reliable granule for 100-percent controlled release. *For more information, visit www.polyon.com.*

Micronutrient delivery system

Clawel Specialty Products offers Specialized Nutritional Formulas that are a combination of nutrients and other compounds that contain hormone precursors, natural plant aminoacids, plant vitamins and anti-stress (antioxidants) substances. A proper combination of nutrients and biostimulants will enhance photosynthesis, negate toxic levels of stress producing substances (oxidants) and enhance root production.

Clawel also offers Premium Fertilizers, a combination of different nutrient formulations designed for specific needs. For more information, visit www.clawel.com.

Controlled-release nitrogen

Nu-Gro Technologies offers Organiform Controlled Release Nitrogen. Organiform 30-0-0 is a reacted nitrogen product, similar to Nu-Gro's other proprietary products. Organiform offers an intermediate release, up to 24 weeks. Based on carbon-linked polymer chains, Organiform has 55-percent water insoluble nitrogen.

The company also offers Nitroform and Nutralene fertilizers. The controlled-release mechanisms in the fertilizers give plants the nitrogen they require when they require it, according to the company. For further information, visit www.nugrotech.com.

Continued on page 90

Get Your Nutrition - For Turf, That Is

Continued from page 88

Fertilizers

PRO-SOL offers its turf fertilizers Chameleon and Transition intended for direct application. Chameleon contains iron with a combination of eight essential macro-, secondary and micronutrients. Transition contains potash with a combination of four essential secondary andmicronutrients. For more information, visit www.fritinc.com.

Remineralizer and bioinoculant

Soil Technologies Corp. introduces TurfTech Bio-Min, a new re-mineralizer and bioinoculant for golf course turf. The patented technology combines three agronomic tools in one easy-to-use formula. Research on TurfTech Bio-Min has demonstrated that the product reduces fertilizer requirements, suppresses common turfgrass pathogens and improves water infiltration.

One of the unique contributions of TurfTech Bio-Min is the addition of a micronized volcanic rock powder that delivers more than 60 trace elements not found in conventional N-P-K fertilizer. When applied to soil and plants, TurfTech Bio-Min strengthens the cell wall and activates enzyme activity. For more information, visit www.soiltechcorp.com.

Fertilizer/wetting agent

Precision Laboratories offers three analyses of Cascade Plus Fertilizer, a wetting agent and fertilizer-combination product. It's available in an all-synthetic 15-0-10 analysis, a 5-1-0 all- organic analysis and a 10-1-4 organic and synthetic combination. The three analyses have a 150 sgn particle size, making them appropriate for use on tees, fairways and roughs.

For more information, visit www.precisionlab.com.

Microbial inoculant

Growth Products offers Companion, a microbial inoculant that contains Bacillus subtilis GB03 microbes, which guickly colonize the root zone. It is good for use with sterile soils, as well as with high sand content tees and greens. A vigorous beneficial microbe population means healthier soil and plants.

The company also offers Essential Plus, a root stimulator that contains plant extracts such as humic acid, L-amino acids and a natural wetting agent not found in standard NPK fertilizers. For more information, visit www.growthproducts.com.

Longer term feeding

LESCO offers NOVEX, which offers chemical and particle production techniques to provide guicker, initial green-up, more nutrient release and longer-term feeding for healthier turf. Fast-acting nitrogen is released initially for quick greening but is balanced with greater amounts of controlled-release nitrogen compounds, resulting in green-up that continues long term. NOVEX uses a unique particlecompounding technique. Rather than combining multiple nutrient particles into a single fertilizer bag, LESCO manufacturers NOVEX so that each particle contains every nutrient. For more information, visit www.lesco.com.

Methylene urea technology

The Andersons Golf Products offers fertilizer with Contec methylene urea technology for controlled even-nutrient release. The fertilizer also provides a high rate of potash from potassium sulfate. It dissolves quickly into the turf canopy when irrigated.

The Andersons also offers Fertilizer Plus Millennium Ultra, a weed and feed granular formulation. Millennium Ultra contains three separate herbicides, including clopyralid to combat and control clover.

For more information, visit www.Andersons-GolfProducts.com.



Quality and consistency

UHS's Signature Brand Fertilizer Blue Line is comprised of products that feature quality and consistency, the company says. UHS's premium offering is found in its Signature Brand Fertilizer Green Line bag. These products feature Balanced Chain Methylene Urea (BCMU).

For more information, visit www.uhsonline.com.

Foliar absorption

Grigg Brothers products have been specifically designed for foliar application and foliar absorption. All product contains "facilitators" that aid penetration into plant cells, effectively translocate to sites of action, and provide all or most of the nutrients needed by plants to chelate minerals. In addition to special facilitators, Grigg Brothers products contain an organic base, consisting of natural organic compounds which function metabolically and are found naturally in the plant. For more information, visit www.griggsbros.com.

Liquid irons

PBI/Gordon offers biostimulants and micronutrients. Its liquid irons include RROMEC and FeRROMEC AC. The former provides fast, dependable green-up, usually within 24 hours of application, and corrects chlorosis due to iron deficiency. The latter is an aminecompatible formulation for FeRROMEC green-up that can be tank-mixed with other turf care products.

The company also offers turf biostimulants, including FOCUS, which contains high concentrations of turf-beneficial materials extracted from humic acid and Kelp in precise ratios for optimum turf response for resistance and recovery from stress. For more information, visit www.pbigordon.com.

Humus-based product

Gro-Power Premium Green 5-3-1 is a multipurpose homogeneous fertilizer/soil conditioner. Using the company's Matrix technology, the product was developed for greens, tees and any other areas where fine-bladed bent and hybrid bermuda turf grasses are utilized. The particle size will ensure even distribution, rapid penetration into the root zone and minimum mower pick-up.

The basic material in Gro-Power Premium Green 5-3-1, as in all the Gro-Power products, is humus. Humus promotes bacterial propagation, which tends to improve soil structure, helps to increase the moistureholding capacity and helps in breaking up compacted soils.

For more information, visit www.gropower.com.