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Proven Results®

TECHNICAL BULLETIN

SPEED UP SPRING GREEN UP WITH GRIGG PROVEN FOLIAR® NUTRIENTS

The Role of Nutrients in Spring Green Up

For many turf managers in northern climates, turfgrass recovery from winter dormancy and/or damage remains slow due to several factors including turf species, air and soil temperatures, and the extent of winter damage to plant crowns and roots. In cases where winter injury is less severe, a foliar fertilizer that provides balanced and efficient mineral nutrients will stimulate plant metabolism and subsequently, stimulate turf green up and growth. Vertical and lateral growth promotes vigor and recovery from winter stress and dormancy. Spoon feeding organically chelated nutrients provides controlled growth when soil temperatures are suboptimal. These nutrients play an important role in plant physiological functions, such as protein biosynthesis (nitrogen; N), energy transfer (phosphorus; P), chlorophyll production (magnesium; Mg and iron; Fe), and optimum photosynthetic capacity (manganese; Mn).

GRIGG Proven Foliar Nutrients

GRIGG Proven Foliar nutrients are formulated with a proprietary blend of organic chelating agents that were designed and have been proven to increase nutrient use efficiency (Gaussoin, 2009). Nutrient efficiency enhances plant nutrient utilization and performance and helps limit nutrient leaching. GRIGG's Spring Green Up nutrition program and GRIGG Proven Foliar nutrients ensure that an adequate supply of nutrients are present when soil temperatures are still sub-optimal and/or other soil, physical or chemical properties limit nutrient uptake through plant roots.

**For a distributor near you contact:
800 300 6559 or www.grigg.co**

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GRIGG Spring Green Up Nutrition Program

This program is designed for use on golf course putting greens and tees, and also sports fields. The first application should be made after the first or second mowing. The following GRIGG Proven Foliar nutrients should be applied 3-4 times every 7-10 days:

- **GRIGG Ultraplex®** - 6 fl oz / 1,000 ft²
- **GRIGG Nutra Green™** - 6 fl oz / 1,000 ft²

Nutra Green is a foliar 5-10-5 with 1.0% Mg, 0.5% Mn and 0.1% Zn. Ultraplex is a foliar 4-0-3 with 1.95% Fe, 0.4% Mn and 0.4% Zn, plus a buffering agent, non-ionic surfactant and biostimulant package. The buffering agent allows the spray tank solution to resist changes in pH, while the surfactant maximizes application intake. The biostimulants enhance turfgrass tolerance to abiotic stress.

This program may be supplemented with GRIGG GreenSpec® granular nutrients, such as GRIGG Seven Iron™ 7-7-7 at aeration. Seven Iron contains GRIGG's proprietary protein nitrogen which provides a slow, even release of nitrogen to promote recovery. It also contains soluble iron (Fe) for enhanced color and zinc (Zn). Seven Iron should be applied at a rate of 7 lbs per 1,000 ft² (0.5 lbs N/1,000) after aeration and sand topdressing to promote recovery from mechanical stress and provide outstanding color for 4-5 weeks.

References

Gaussoin, R., C. Schmidt, K. Frank, T. Butler, H. Liu, W. Jarvis, and C. Baldwin. 2009. Foliar uptake of nutrients applied in solution to Creeping Bentgrass (*Agrostis palustris* Huds.), Annual bluegrass (*Poa annua* var. *reptans* (Hausskn.) and Ultra-Dwarf Bermudagrass (*Cynodon dactylon* x *C. transvaalensis* Burt-Davy). *International Plant Nutrition Colloquium* (University of California Davis). Paper 1396.