

Standard BioPro® Overseeding Program for Sports Fields

The agronomists at BioPro recommend this overseeding program to provide a unique source of phosphorous and other nutrients. Success is assured utilizing safe and environmentally friendly products while providing great results and peace of mind.

Application Recommendations

The following program should be used as a guide. **Products and rates can be modified based on tissue and soil analysis, specific conditions and/or growth/color preferences.** All product quantities are on a per *acre* basis.

14 Days prior to overseeding

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|---------------------|------------|
| 1) Kleenstart 6-0-0 | 1.0 gallon |
| 2) H3O | 2.0 gallon |

48 Hours Later

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|-----------------------|--------------|
| 1) MultiPurpose 6-0-0 | 1.0 gallon |
| 2) Enviro P 7-21-0 | 10.0 gallons |
| 3) Permate | 2.0 gallons |
| 4) CytoGro | 2.0 pints |

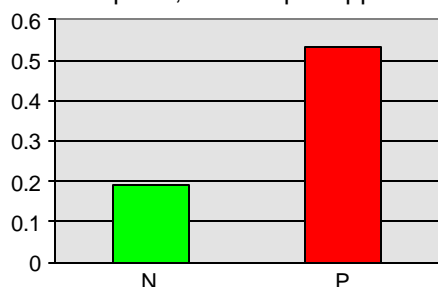
14 Days after germination (and every 7 days)

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|------------------------|-------------|
| 1) Multipurpose 6-0-0 | 1.0 gallon |
| 2) Greens Plus 14-4-10 | 5.0 gallons |
| 3) Tuff Greens 0-0-13 | 0.5 gallon |
| 4) Nutrisolve | 2.0 gallons |

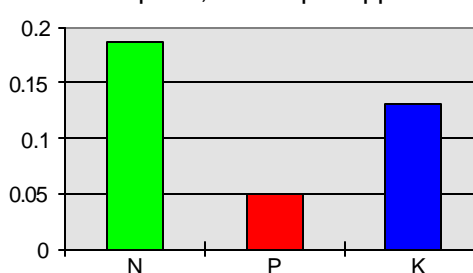
30 Days after germination and monthly

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|------------|------------|
| 1) H3O | 0.7 gallon |
| 2) CytoGro | 1.0 pint |

Pounds per 1,000 S.F.per application



Pounds per 1,000S.F.per application



Mixing: Fill spray tank with ½ the necessary water; add Multi-Purpose first, then other products one at a time; if *Calcium Plus* is in the mix add it last; add remaining water.

Note: Syringe lightly after application of liquid products.

This program is designed to provide these amounts of nutrients prior to seeding:

Nitrogen-----0.206 lb. per 1,000 Square Feet

Phosphorous-----0.503 lb. per 1,000 Square Feet

This program is designed to provide these amounts of nutrients after seed establishment:

Nitrogen-----0.748 lb. per 1,000 Square Feet per Month

Phosphorus-----0.200 lb. per 1,000 Square Feet per Month

Potassium-----0.520 lb. per 1,000 Square Feet per Month

Nutrient Monitoring Program

Monitoring nutrient levels in leaf tissue and soils is critical for designing the most efficient nutrient program. BioPro recommends the use of a diagnostic service that provides soil, water, and NIRS (Near Infrared Reflectance Spectroscopy) tissue analysis. With these diagnostic results, BioPro nutrient programs may be modified to correct imbalances and prevent future problems.

BioPro Products

CytoGro (Liquid Root Biostimulant) is an EPA registered hormone biostimulant that improves turf tolerance to stress resulting from disease, insect damage, drought, and soil temperature extremes by augmenting cytokinins and auxins, the turf's natural growth hormones.

Enviro P 7-21-0 (Liquid Nutrient Blend) is an exceptional source of phosphorus for turf. A patented production process complexes organic acids from leonardite with phosphorus producing a very stable fertilizer that retains phosphorus in the root zone substantially longer than conventional phosphorus sources, which are commonly tied up in the soil. Phosphorus is particularly important in the establishment and development of new seedlings. Enviro P is most effective when used in pre-plant applications, and as the continuing phosphorus source during establishment. It gives new turf a substantial head start in a shorter period of time.

Greens Plus 14-4-10 (Liquid NPK Nutrient Blend) is a balanced nutrient blend with nitrogen, phosphorous, and potassium in the same ratio as they are generally found in plant tissue. Nitrogen is supplied as a polymethylene urea blend to provide uniform turf growth and color. This product contains 8.85% controlled release nitrogen, and organic acids from leonardite, which may enhance nutrient uptake.

H3O (Liquid Soil Moisture Management Product) employs a revolutionary new chemistry formulated to manage root zone moisture, making efficient use of water and protecting the turf from the harmful effects of drought stress, thus reducing disease pressure and root shrinkage. It attracts and holds free water molecules from the air within the soil, and efficiently transfers them to the plant root.

Kleenstart 6-0-0 (Soil Remediation Product) contains enzymes designed to aid in the breakdown of toxic compounds, and organic acids that sequester heavy metals and other soil toxins resulting from the accumulation of pesticide residues, salts, or other chemicals that restrict plant growth.

Multi-Purpose 6-0-0 (Liquid Organic Soil Conditioner) is a unique mixture of organic acids and biostimulants derived from a biological composting and extraction process. It is designed to increase nutrient availability to the plant, stimulate soil microbial activity, increase root mass, and improve overall turf quality.

Tuff Greens 0-0-13 is a unique blend from potassium, calcium, silica, iron, and organic acids formulated to create a more playable and stress resistant turf. Tuff Greens is particularly effective when used on fields prior to and during tournaments and other heavy use periods. In addition, it provides excellent performance when used as part of a regular turf fertility program.

Nutrisolve (Liquid Micronutrient Blend) is a complete blend of micronutrients chelated with a proprietary combination of citric, fulvic, and other organic acids. Chelates stabilize nutrients and enhance their uptake and translocation within the plant. Micronutrient content: S 2.79%, Fe 2%, Mn 2%, Zn 0.75%, Cu 0.25%, B 0.08%