

***Prescriptive Agronomic  
Formulations***

**DESIGNED TO FACILITATE RAPID  
AND SUSTAINABLE PLANT GROWTH**



## ESTABLISH LONG-TERM VEGETATION

With a novel formulation of slow-release nitrogen, humic acid, plant hormones and inoculants, new **BioPrime™** assures sustainable vegetative cover.

## STIMULATE GROWTH

New **JumpStart™** gets vegetation off to a faster, stronger start by improving water penetration and maximizing nutrient conversion.

## Comprehensive, Customized Solutions for Your Site

Profile Erosion Control Solutions (PECS™) combines the industry's most comprehensive assortment of erosion and sediment control technologies and innovative Green Design Engineering™ to help you maximize erosion control and vegetation establishment on slopes, channels, shorelines, fine turf areas and environmentally sensitive sites. Our dedicated team of erosion control and agronomic experts will work with you to analyze your soil conditions to create and implement a complete solution, utilizing a range of proven Profile products.



# LONG-TERM EROSION CONTROL STARTS HERE

## Grow denser vegetation, faster with advanced agronomic solutions from Profile

Profile's new ProPlus® prescriptive agronomic formulations are designed to boost the fertility and vitality of soils at critical stages of plant development. Each product addresses specific soil and growing conditions to enhance soil structure, increase soil moisture infiltration and retention, improve nutrient uptake by plants, stimulate germination and growth, and help achieve denser vegetative cover—providing maximum erosion control. These advanced agronomic solutions include:

- Soil neutralizers to raise or lower soil pH
- Growth stimulators and enhancers to achieve faster germination and establishment with sustained long-term plant vitality

## SPECIFY 'IN THE GROUND' SOLUTIONS ON VIRTUALLY EVERY PROJECT TO ENHANCE YOUR SUCCESS

If you are not comprehensively addressing vegetation establishment by starting with a soil analysis, you are not effectively ensuring your erosion control solution will be a success. Profile Products has developed the industry's leading technologies for controlling erosion—proven to be the most effective at keeping bare soil in place. What makes Profile Erosion Control Solutions truly superior, however, is that these innovative technologies are also proven to establish vegetation more quickly and more completely— providing both immediate and lasting protection.

Profile's agronomic experts have engineered our novel ProPlus formulations to take the effectiveness of products such as Flexterra® Flexible Growth Medium™ (FGM™), Hydro-Blanket® Bonded Fiber Matrix (BFM) and the GreenArmor™ turf reinforcement system to even higher levels. This unique, synergistic combination results in superior erosion control and denser, long-term vegetation.

**BALANCE SOIL pH FAST**  
NeutralLime™ and Aqua-pHi™ quickly neutralize acidic and alkaline soils, improving nutrient uptake for greater plant density and coverage.

IN THE GROUND



### PECS IS A UNIQUE, FULLY INTEGRATED APPROACH TO YOUR SITE, INCLUDING:

Agronomic solutions that promote rapid seed germination and long-term vegetation establishment

ON THE GROUND



Innovative products that prevent erosion on slopes, channels, shorelines, streambanks and wetlands while minimizing risk to the environment

BY YOUR SIDE



Green Design Engineering ensures unfailing support from agronomic and erosion control experts to help select and install the right products for maximum results

# QUICKLY BALANCE SOIL

## Soil neutralizers:

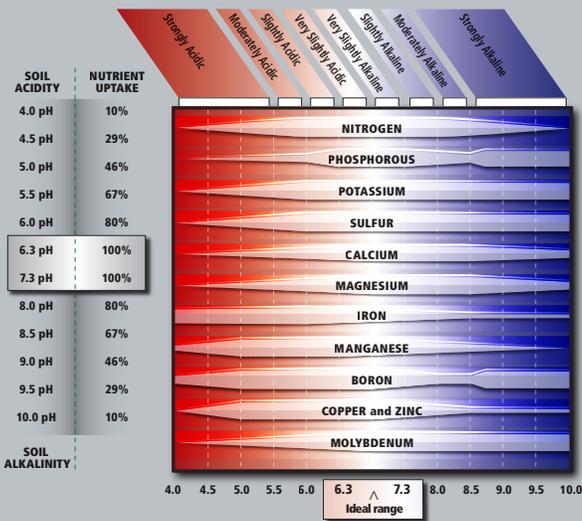
Balance soil pH to dramatically improve sustainable growth on your next project

Soil pH is second only to moisture availability in its immediate impact on vegetation establishment. New ProPlus® NeutraLime™ and Aqua-pHix™ quickly neutralize acidic and alkaline soils, promoting more complete germination and improving nutrient uptake. The faster you establish vegetation, the sooner you can walk away from an erosion control project. These new prescriptive agronomic formulations from Profile Products will help you do just that by:

- Making nutrients such as nitrogen, phosphorus, potassium, calcium, iron, zinc and others more readily available in the soil solution for plant uptake and conversion
- Loosening soils to improve water infiltration and to promote more robust root development
- Facilitating more complete nutrient utilization to minimize leaching or runoff into streams, rivers, lakes, bays and groundwater



**pH Range for Optimal Nutrient Uptake**



**Typical Application Rates for ProPlus® Aqua-pHix™ and NeutralLime™**

pH	Application Rate
> 10.0	Contact Profile agronomist for specific site recommendations
9.3 – 10.0	20 gal/ac of Aqua-pHix <sup>1</sup>
8.7 – 9.2	10 gal/ac of Aqua-pHix
8.0 – 8.6	5 gal/ac of Aqua-pHix <sup>2</sup>
7.4 – 7.9	2.5 gal/ac of Aqua-pHix
6.3 – 7.3	
5.9 – 6.2	2.5 gal/ac or 40 lb/ac of NeutralLime
5.5 – 5.8	5 gal/ac or 80 lb/ac of NeutralLime
5.1 – 5.4	10 gal/ac or 160 lb/ac of NeutralLime
4.7 – 5.0	15 gal/ac or 240 lb/ac of NeutralLime
4.2 – 4.6	25 gal/ac or 400 lb/ac of NeutralLime
< 4.2	Contact Profile agronomist for specific site recommendations

<sup>1</sup> The minimum dilution rate for application with seed is 300 parts water to 1 part Aqua-pHix. For example, do not mix seed with more than 10 gallons of Aqua-pHix in a 3,000-gallon machine. In highly alkaline soils, apply seed in a separate step.  
<sup>2</sup> Soil pH derived from a calcareous soil requires a minimum of 10 gallons per acre to appropriately modify the soil solution. Defer to soil test to determine soil type.  
 Never mix Aqua-pHix with JumpStart.



**CHOOSE AQUA-pHIX™ FOR SOIL pH VALUES OVER 7.3**

This proprietary formulation of self-buffering, chelated organic and inorganic acids is designed to help manage alkaline soils (pH values > 7.3). It is safe for people, animals and equipment, more effective and easier to use than any other acidifier on the market, and the most cost-efficient treatment available. Nothing else on the market today will modify alkaline soils faster than Aqua-pHix™—its effect is immediate.

**Aqua-pHix:**

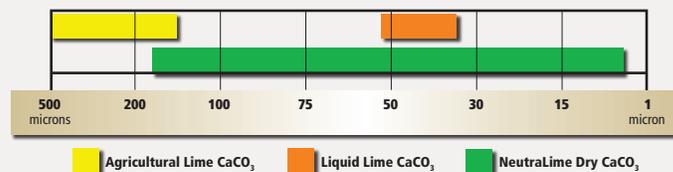
- Dissolves bicarbonates and displaces sodium in the soil
- Immediately begins to lower pH of alkaline soils and resultant soil solution
- Assists vegetative establishment in calcareous saline soils
- Is effective for 3 to 6 months (depending on precipitation)

**CHOOSE NEUTRALIME™ FOR SOIL pH VALUES LESS THAN 6.3**

One 40-pound bag of NeutralLime™ Dry contains 50 percent more calcium carbonate (CaCO<sub>3</sub>) than the highest concentrated 2.5-gallon jug of liquid lime. It mixes easily in the tank and improves soil pH within 3 to 7 days after application. Its graduated particle sizing extends maximum effectiveness up to 18 weeks.

NeutralLime™ Liquid is also available for use in conventional hydroseeding equipment. It improves soil pH within 7 to 10 days after application with an effectiveness of up to 12 weeks. It features a high concentration of the purest form of limestone available.

**Specify Rapid and Sustained Results**



Smaller micron particles react quickly in the soil. The effect becomes more gradual as the micron particle size increases. The graduated sizing of NeutralLime Dry means it releases CaCO<sub>3</sub> more quickly and over longer time periods compared to other fast-response liming sources.

# FAST, LONG-TERM VEGETATION

## Profile growth stimulants and enhancers:

Dramatically increase your odds of successful vegetation

When prescribed in response to specific soil conditions, ProPlus<sup>®</sup> JumpStart<sup>™</sup> and BioPrime<sup>™</sup> will accelerate the growth of dense vegetation by:

- Improving soil structure
- Increasing nutrient uptake
- Achieving faster germination and vegetation establishment
- Sustaining long-term plant vitality

## Nutrients stay with the plants and away from water bodies

The biological components in JumpStart and BioPrime have been proven in numerous independent efficacy trials, including university and USDA testing to deliver improved germination, increased root mass and better overall plant health.

In independent testing, surface applications of JumpStart and BioPrime biological components were applied on established vegetation under controlled conditions. These evaluations confirmed that the resulting increase in biomass dramatically improves plant uptake of nutrients and prevents them from running off into bodies of water. These valuable BMPs can help ensure your NPDES regulatory compliance.



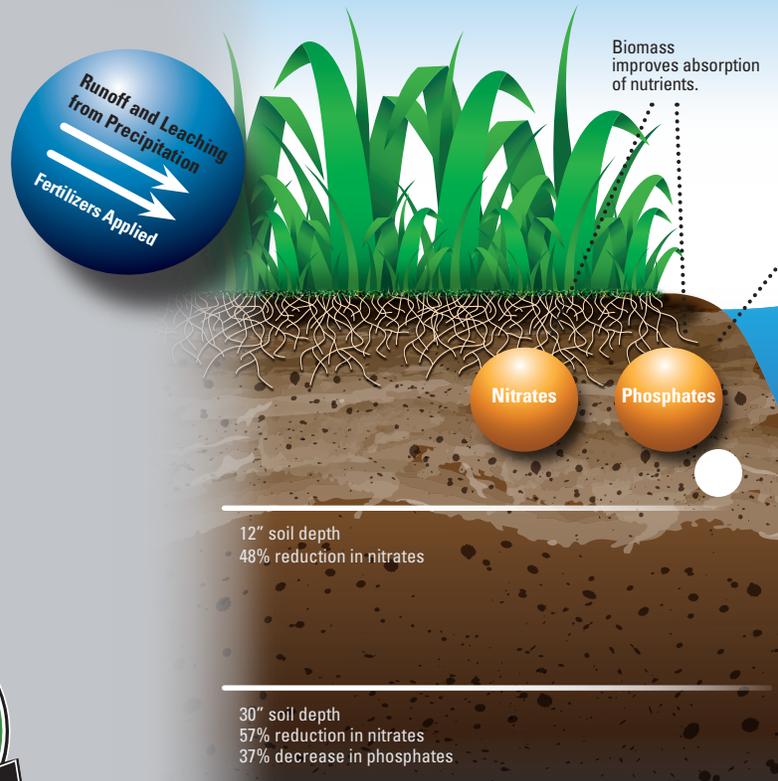
Typical Application Rates\* for ProPlus<sup>®</sup> JumpStart<sup>™</sup> and BioPrime<sup>™</sup>

EC <sup>1</sup>	TDS <sup>2</sup> ppm	SAR <sup>3</sup>	CEC% Sodium <sup>4</sup>	%OM <sup>5</sup>	%OA <sup>6</sup>
< 0.75	< 480	< 3.0	< 4.0	> 2.0	> 2.5
0.75 – 1.5	480 – 960	3.1 – 4.0	4.1 – 6.0	1.5 – 2.0	1.7 – 2.5
1.6 – 3.0	961 – 1920	4.1 – 5.0	6.1 – 7.0	0.75 – 1.4	1.0 – 1.6
> 3.0	> 1920	5.1 – 6.0	7.1 – 9.0	< 0.75	< 1.0

<sup>1</sup>Electrical Conductivity <sup>2</sup>Total Dissolved Salts <sup>3</sup>Sodium Absorption Ratio

<sup>4</sup>Sodium as % Base Saturation CEC (Cation Exchange Capacity) <sup>5</sup>Organic Matter <sup>6</sup>Organic Acids

\*Comprehensive soil test can be coordinated by Profile. See back panel for details.



## JUMPSTART™ GIVES YOU A JUMP START ON GROWTH

JumpStart™ is a proprietary liquid formulation containing a soil penetration agent, humic acid and over 200 species of beneficial soil bacteria to:

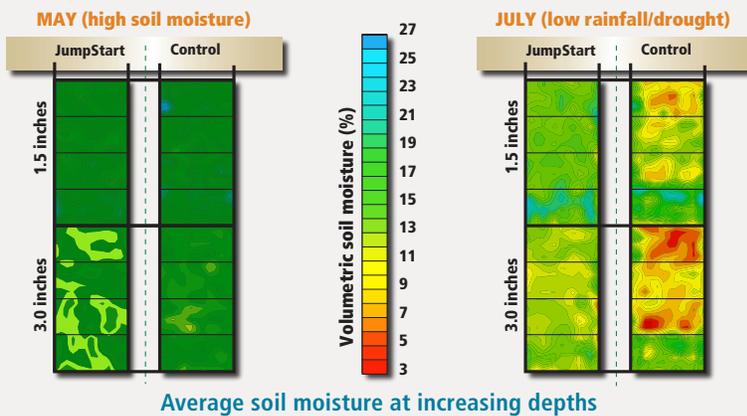
- Improve moisture infiltration and retention for faster, more complete germination and uniform stands of vegetation
- Promote faster nutrient uptake and conversion to get plants off to a faster, stronger start
- Provide a hormonal plant response to maximize root development and plant stress tolerance
- Reduce soil compaction and salinity for deeper root penetration
- Reduce nutrient leaching and runoff to ensure more complete environmental stewardship

### JUMPSTART SPEEDS GERMINATION AND GROWTH

An independent trial utilizing the ASTM D7322 test method for Growth Establishment documented a synergistic effect of JumpStart in getting grass off to a fast start. Compared to the control area after 14 to 21 days, the seeded area with JumpStart experienced:

- 275% more seed germination
- 281% greater plant height
- 115% greater plant mass

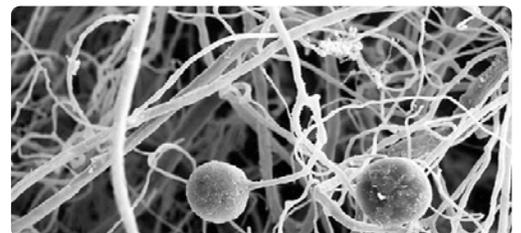
### JumpStart improves water infiltration and retention in dry conditions



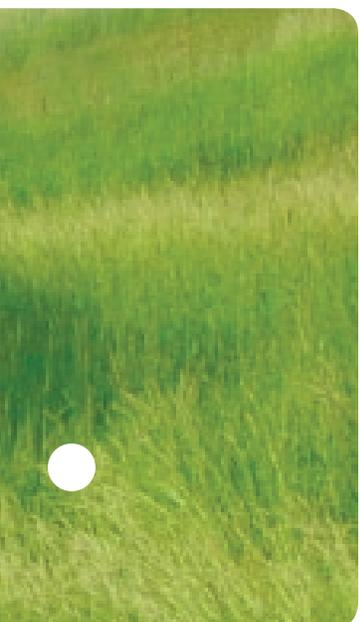
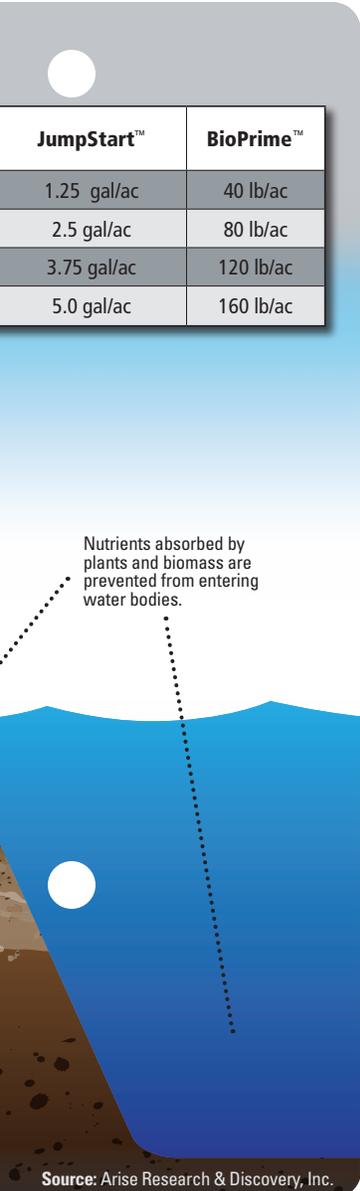
## BIOPRIME™ DELIVERS LONG-TERM EFFECTIVENESS

BioPrime™ biostimulant is designed to address issues affecting long-term plant vitality. With a guaranteed analysis of 18-0-0, its four active ingredients include slow-release nitrogen, seaweed extract, humic acid and Endo Mycorrhizae. The nitrogen's proprietary release technology is ideally suited to revegetation of bare soils. Depending on the amount of rainfall and biological soil activity on a site, the nitrogen is released for 9 to 17 months. Working with the other ingredients, this advanced formulation is designed to:

- Continually feed nitrogen to plants for an extended period, ensuring plant health in low maintenance installations
- Optimize the efficient and effective delivery of macro and micronutrients to plants
- Significantly decrease soil compaction and soil surface evaporation
- Increase root mass, top growth and cell structure
- Reduce plant stress due to cold, heat, drought or high soil salinity



Hyphae produced by Endo Mycorrhizae spores in BioPrime attach to grass roots and dramatically increase water and nutrient uptake. This not only greatly benefits the health and development of the plant, it helps prevent nutrient contaminants from migrating into ground water or running off into streams or lakes.



## Improve Your Soil, Enhance Your Success

Your Profile erosion control or agronomic professional can help arrange for a comprehensive soil test to assess soil texture, organic matter, nutrient deficiencies, pH and potentially phytotoxic soil conditions that can negatively impact sustainable plant growth and establishment. We can then help you analyze those results and make recommendations for optimal fertilization rates and Profile ProPlus® prescriptive agronomic formulations that will enhance the fertility and vitality of your soils. Call 1-800-508-8681 to get started today.



*Your Trusted Partner In Soil Solutions* 



For technical information, distributor location and customer service call (800) 508-8681.  
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