



PanaSeá Plus®

0•2•2 Liquefied Sea Plant Extract

Guaranteed Analysis

Available Phosphoric Acid (P₂O₅)2.00%
Soluble Potash (K₂O)2.00%

Nutrients derived from: *Kelp Extract, Phosphoric Acid.*

PANASeá PLUS ACCELERATES ESTABLISHMENT AND ENHANCES THE QUALITY OF TURF AND LANDSCAPES BY HELPING PLANTS DEVELOP DEEPER, HARDIER ROOT SYSTEMS. TURF AND PLANTS TREATED WITH PANASeá PLUS ARE MORE STRESS TOLERANT AND VIGOROUS.

PanaSeá Plus Liquefied Sea Plant Extract builds bigger, stronger root systems, increases turf tolerance to various stresses, improves quality and color and also accelerates seed germination. As its name implies, it is a solution for many of the common problems that affect golf courses and sports turf — problems that arise from the highly intensive maintenance regimes to which turf grasses are subjected, as well as seasonal stresses like heat and drought.

The Result You Want: Bigger, Better Roots

The most important way PanaSeá Plus contributes to plant growth and health is through root establishment and root biomass development. This is because the health of the root system dictates the health of the plant.

“Differences in root mass between fertilizer amendments were found to be highly significant. PanaSeá Plus combined with urea Nitrogen, and PanaSeá Plus combined with the 6-1-3 urea based fertilizer treatment had significantly more root mass...”

Effect of Irrigation and Bio-Organic Fertilizers on Quality, Thatch, and Rooting of Creeping Bentgrass
Michigan State University

Knowledgeable superintendents understand that the causes of problems start long before symptoms are visible. They understand the need for aggressive agronomic intervention and they start with programmed PanaSeá Plus applications as soon as they start mowing. The outcome is significantly healthier, denser, deeper root systems.

Bigger, better root systems come from programmed applications of naturally occurring cytokinins and other beneficial constituents contained in PanaSeá Plus. PanaSeá Plus not only outperforms synthetic cytokinins, but also all other biostimulants.

“PanaSeá at the recommended rate showed 79% better root development than the control.”

“PanaSeá at the recommended rate showed from 25-36% better root development than the synthetic product at the same concentrations.”

Root Strengthening in Sod Production
Virginia Polytechnic Institute

During high stress periods when plants stop producing their own hormones, PanaSeá Plus provides necessary cytokinins to stimulate and sustain cell division in root tissue. This proactive biostimulation strategy helps to offset the negative impact on root development from shrinking internal cytokinin production.

PanaSeá Plus is a proprietary blend of several liquefied sea plant extracts. It's also the richest single source — more than twice that of its nearest competitor — of naturally occurring cytokinins.

“The best results came from PanaSeá Liquefied Sea Plant Extract which improved the rooting by 9.528 pounds per square foot.”

Effects of Root Enhancing Amendments on Kentucky Bluegrass Blend Sod
University of Illinois

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At the University of Georgia fourteen biostimulants from twelve companies were tested for their effects on the growth and quality of Penncross Creeping Bentgrass. Only PanaSeá Plus and one other product produced statistically significant root enhancement. And PanaSeá Plus did so in the hottest month of the summer.

PanaSeá Plus... 100% Natural Liquefied Sea Plant Extract

PanaSeá Plus is 100% liquefied sea plant extract. We use proprietary technologies that preserve the naturally-occurring hormones, nutrients, trace elements and other beneficial constituents present in the sea plants which are harvested from the cold, mineral-rich waters of the North Atlantic. Recent research shows that these sea plants also contain unique antioxidant compounds. Because we use the sea plants themselves, and do not reconstitute from dehydrated powders or liquid concentrates, we can deliver the richest, most cost-effective blend available today.

Superior Stress Tolerance, Delayed Senescence and Accelerated Germination

In addition to bigger and deeper roots, golf course superintendents and grounds maintenance professionals apply PanaSeá Plus for:

- Better turf quality and density
- Superior stress tolerance
- Less thatch
- Delayed senescence
- Accelerated seed germination and early establishment

In addition to enhancing root development and stress tolerance, the cytokinins in PanaSeá Plus also raise the threshold at which premature senescence in leaf tissue occurs during high temperatures. In effect, PanaSeá Plus improves the turf's wilt tolerance during heat stress.

And PanaSeá Plus is the only biostimulant to both increase root development and reduce thatch significantly (44.2% compared to untreated controls.)

More Roots, Less Thatch

At Michigan State University, eleven products from seven companies were evaluated for their effects on quality, thatch, and rooting of Creeping Bentgrass. PanaSeá Plus finished first overall.

"PanaSeá Plus combined with N had 26.8% less thatch compared to N alone and 44.2% less thatch compared to untreated controls."

Effect of Irrigation and Bio-Organic Fertilizers
on Quality, Thatch, and Rooting of Creeping Bentgrass
Michigan State University

Unlike many other biostimulants on the market, PanaSeá Plus is compatible with type II growth regulators.

The Inside Story on Biostimulants

Biostimulants, by definition, are non-nutritional growth enhancers. This means that their mode of action is hormonal; they stimulate growth through means other than nutrition. Why do you need them? Because turf and other plants are complex organisms that need more than just the N-P-K commonly supplied by fertilizers. They need amino acids, micronutrients and growth hormones, among other things. When you are selecting a biostimulant for your program, make sure it's been thoroughly researched and that its claims have been scientifically proven.



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