REVEGETATION SUCCESS

Enhancing Turf Establishment with NrGizer Liquid Fertilizer

This case study highlights a successful revegetation project at Vancouver International Airport, where our team utilized NrGizer, a high-performance liquid fertilizer, to establish turf-type tall fescue (TTTF) in runway and taxiway safety areas. The project involved site preparation, soil analysis, and hydroseeding with a specialized fertilization plan. Despite challenging soil conditions, the application of NrGizer significantly improved soil fertility, enhanced nutrient uptake, and promoted rapid turf establishment. The results demonstrated a lush, uniform turf cover with strong root development and effective suppression of non-target vegetation. This study showcases the efficacy of NrGizer in large-scale revegetation and sustainable soil management.

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Case Study: Successful Revegetation Project at Vancouver International Airport Using NrGizer Liquid Fertilizer

Project Overview

In 2023, our team undertook a revegetation project at Vancouver International Airport, focusing on restoring vegetation in the runway and taxiway safety areas. The primary objective was to aerate and re-nourish nutrient-lacking native soil for the establishment of a robust turf-type tall fescue (TTTF) cover while preventing the growth of non-target vegetation. Given the challenging soil conditions, we leveraged our high-performing liquid fertilizer, NrGizer and liquid Kelp to ensure optimal soil fertility and successful turf establishment.

Site Preparation

Before seeding, the site underwent thorough preparation:

- **Soil Analysis:** Laboratory testing revealed a high gravel content (birds-eye sized) with moderate to low fertility. Organic matter, nitrogen, and phosphorus levels were insufficient to support healthy turf establishment. However, the pH was suitable for immediate planting.
- **Vegetation Removal:** The existing vegetation was eradicated through tilling to an 8" inch depth, grading and final grooming.
- **Fertilization Strategy:** Based on soil test recommendations, a turf starter fertilizer was required to enhance nutrient availability before seeding. This provided the perfect opportunity to introduce NrGizer, a bio-stimulant liquid fertilizer designed to enrich soil health and promote strong root development. At every 4" of tilling depth, NrGizer, Kelp and Granular Fertilizer were added for optimal blending.

Application & Seeding Process

To ensure final optimal growth, we applied a combination of organic fertilizers with the hydroseeding mixture:

Seed Type:

- **Rising Moon TTTF, a drought-tolerant variety resistant to bird interference.**
- **Seeding Rate: 300 lbs per acre.**

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Fertilization Plan:

- **Granular fertilizer (16-32-6) at 200 lbs per acre.**
- **NrGizer Liquid Fertilizer at 4 gallons per acre (diluted with water and applied via hydroseeder).**
- **Liquid kelp at 1 gallon per acre (applied with the seeder).**
- **Extra tackifier to aid in mulch stability and withstand the jet blast.**

Why NrGizer?

NrGizer played a critical role in the success of this project, delivering a suite of benefits that set it apart as a superior liquid fertilizer and soil amendment. This innovative product combines the power of fish hydrolysate, amino acids, humic acid, carbon, and beneficial bacteria to create an unparalleled formula for plant and soil health.

- **Complete Nutritional Support:** NrGizer provides a blend of essential macro- and micronutrients, ensuring plants receive a balanced diet of nitrogen, phosphorus, and potassium, along with trace elements like magnesium, sulphur, and iron. These nutrients work together to drive growth, enhance chlorophyll production, and improve overall plant resilience.
- **Amino Acid Powerhouse:** Packed with 18 different amino acids, NrGizer supports cell division, root elongation, and overall plant metabolism. Key amino acids like glutamine and glycine boost growth, while hydroxyproline and proline contribute to stress resistance and plant development.
- **Superior Soil Enhancement:** NrGizer improves soil structure by increasing organic matter and enhancing microbial activity. Its humic acid content binds with soil particles, boosting water retention by up to 30% and ensuring sustained moisture availability—critical in airport environments where water management is key.

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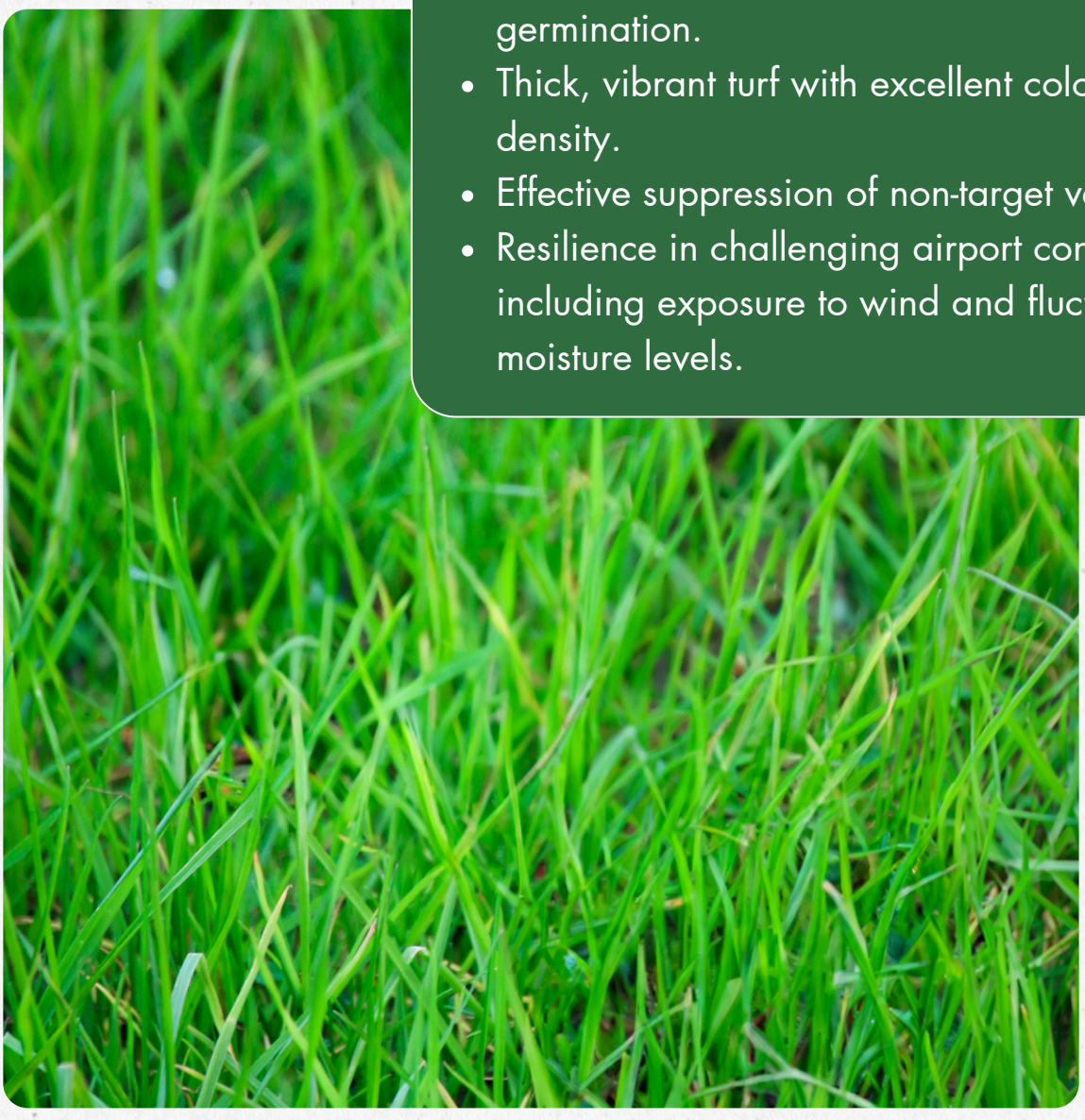
- **Microbial Boost for Soil Health:** This fertilizer is teeming with beneficial bacteria, including phosphorus-solubilizing bacteria, nitrifying bacteria, and cellulose-degrading bacteria. These microbes work synergistically to enhance nutrient availability, improve disease resistance, and break down organic material into usable plant nutrients.
- **Stress Tolerance & Disease Resistance:** The amino acids and humic acid in NrGizer help plants withstand biotic and abiotic stressors, including drought, extreme temperatures, and soil imbalances. The inclusion of omega-3 fatty acids further strengthens cell walls, reducing susceptibility to diseases and improving overall plant vigour.
- **Enhanced Root Development & Germination:** NrGizer accelerates root development, allowing for deeper, stronger root systems that improve anchorage and nutrient absorption. This ensures a dense, uniform turf that can withstand environmental pressures while suppressing invasive weeds.

- **Improved Water Management:** The carbon content in NrGizer plays a crucial role in reducing water evaporation and optimizing moisture retention, making it an excellent solution for sustainable landscaping and revegetation projects.
- **Proven Performance:** Independent trials have demonstrated NrGizer's ability to increase plant yield and biomass compared to conventional fertilizers. It outperforms traditional synthetic and organic alternatives, delivering higher returns on investment for large-scale projects like airport revegetation.

Results

The application of NrGizer led to the successful establishment of a lush, uniform TTTF cover, demonstrating:

- Strong root development and rapid germination.
- Thick, vibrant turf with excellent color and density.
- Effective suppression of non-target vegetation.
- Resilience in challenging airport conditions, including exposure to wind and fluctuating moisture levels.



Conclusion

This project showcases the power of NrGizer in overcoming soil fertility challenges and promoting sustainable vegetation growth. By integrating this liquid fertilizer into our hydroseeding and soil amendment strategy, we achieved outstanding results in a demanding environment.

With proven success in large-scale revegetation projects, NrGizer continues to be a game-changer for erosion control, soil health, and long-term vegetation management.

Let's Work Together

Erosion Control Contractors Inc. delivers sustainable solutions for soil erosion and dust control. We specialize in hydroseeding, slope stabilization, sediment control, and DustFloc application, working with construction companies, mines, developers, and municipalities.

With years of expertise, our team provides tailored, eco-friendly services that meet regulatory standards and minimize environmental impact. At **Erosion Control Contractors Inc.**, we are dedicated to protecting the environment and ensuring the success of every project.

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