

CASE STUDY

Indian Springs Golf Course 2023 Trial Results

Rebuilder 0 - 17 - 0 - 12

www.replenishnutrients.com

www.biomeakers.com



About Biome Makers

Biome Makers' unique BeCrop® technology provides the global standard in microbial soil analysis, adding a biological approach to farmland soil performance. The patented technology digitizes the functions of the microbial community. Combining genomics, machine learning, and ag data, it identifies microbial biomarkers to provide a meaningful explanation of soil biology function.

Problem

The challenge of maintaining soil health and microbial diversity in the context of turfgrass management is of growing concern. This study investigated whether the Replenish Nutrients Rebuilder formula can enhance soil biology at Indian Springs Golf Course, compared to the standard grower fertilizer program. The Rebuilder formula is a regenerative fertilizer that contains a variety of nutrients sourced from rock phosphate, elemental sulphur and compost. The product is designed to promote more resilient and healthier turf and agricultural systems.

Project

Replenish Nutrients completed BeCrop® trials to analyze the product's benefits on turfgrass in Montana, USA. The Rebuilder formula was applied on two fairways, with the remaining course utilizing a synthetic fertilizer program. Soil samples were taken before application and three times after application. The treatments include 166 lbs/acre of Rebuilder and an equivalent synthetic fertilizer application.

BeCrop® Trials provided insight into the functionality, hormone production, and stress adaption potential of each of the treatments.

Results

The Rebuilder formula improved the soil biology in **36 microbiome categories** as identified by the BeCrop® technology. Here are some of the highlights:

1. Improvement in Plant Health Microbes

The application of Rebuilder improved the microbial communities of auxin, EPS (Exopolysaccharides), ACC-deaminase (1-aminocyclopropane-1-carboxylate deaminase), salicylic acid, and salt tolerance promoting microbes.

2. Improved Phytohormone (PGR producer) Metrics

The Rebuilder treatment increased the microbes that support various plant growth regulators (PGR)

3. Improved Nutrient Cycling

Rebuilder showed the most statistically significant favorable changes in P and K cycling and organic matter release (decomposition)

AT A GLANCE

Project

Product: **Rebuilder 0 - 17 - 0 - 12**

Location: **Eureka, MT USA**

Irrigation: **Regular-Sprinkler**

Soil Type: **Sandy Loam**

Crop Type: **Turfgrass**

Results

1. Improvement in Plant Health Microbes
2. Improved Phytohormone Metrics
3. Improved Nutrient Cycling

		Rebuilder	
		+	-
		Favorable Changes	
		Adverse Changes	
Nutrition	Functional Categories		
	Carbon	9	3
	Nitrogen	1	3
	Phosphorus	6	
	Potassium	1	1
Plant Health	Micronutrients	1	4
	Phytohormones	2	
	Stress Adapt. Compounds	12	
	Biocontrol		1
Pathogen Risk		4	1
Totals		36	13

Biome Makers Microbiome Summary