

# SUSTĀNE® FOUNDATION™ BIOTIC SOIL AMENDMENT TRIALS, TESTING, AND RESULTS

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Below is the test report for Sustāne FOUNDATION (Biotic Soil Amendment) utilizing ASTM-D7322 standard test method for determination of Erosion Control Product (ECP) ability to encourage seed germination and plant growth under bench-scale conditions. [American Society for Testing and Materials]

The ASTM D7322 test\* is a comparison between the percent improvement of the product to both the concurrent control, (bare soil) experiment run simultaneously with the product, and a historical average control which is the average value of all bare soil test results over the previous six-year period. Bare soil control is inherently variable in terms of bio mass produced, so comparing performance to a historical average is an attempt to mitigate the inherent variability in the test. As validated by ASTM D7322 Sustāne FOUNDATION™ performed exceptionally well in both analyses, but especially well when compared against the concurrent bare soil control.

## SUSTĀNE FOUNDATION™ BIOTIC SOIL MEDIA TEST SUMMARY Germination & Vegetation Growth ASTM D7322

STANDARD INDEX TEST METHOD FOR DETERMINATION OF HECP (Hydraulically Applied Erosion Control Product)  
PERFORMANCE IN ENCOURAGING SEED GERMINATION AND PLANT GROWTH

Property	Units	Day	Concurrent Control Count	2015-2020 Ave. Control Count	FOUNDATION vs. Concurrent Control Count	Concurrent Control Percent	FOUNDATION vs. % of Conc. Control	2015-2020 Ave. Control Percent	FOUNDATION vs. 2015-2020 Control Percent
Seeds Germinated per Area	No. per 4 sq. in.	0	0.00	0.00	0.00	0%	0%	0%	0%
		7	0.22	1.59	6.44	100%	2900%	100%	405%
		14	1.89	8.39	17.11	100%	906%	100%	204%
		21	1.89	10.37	<b>17.78</b>	100%	<b>941%</b>	100%	<b>172%</b>
Average Plant Height	inches	7	0.67	0.62	0.89	100%	134%	100%	144%
		14	1.16	1.39	2.71	100%	233%	100%	195%
		21	1.99	2.15	<b>3.76</b>	100%	<b>189%</b>	100%	<b>175%</b>
Plant Mass per Area	mg. per 4 sq. in.	21	5.80	17.26	<b>71.52</b>	100%	<b>1233%</b>	100%	<b>414%</b>

Denver Downs Research Facility Texas Research International, Inc. - Environmental Division

### \*Scope

1.1 This test method evaluates the effect of Erosion Control Products (ECPs) on seed germination and vegetation enhancement.

1.2 This test method evaluated the effects of FOUNDATION™ (BSM), a hydraulically-applied erosion control product (HECP) on seed germination in a controlled environment.

