

# SUSTÂNE® FOUNDATION

**BIOLOGICALLY ACTIVE** HYDRO-SEEDING MEDIA

**FOUNDATION** 

KNOWN WORLDWIDE FOR SIMPLY THE BEST... ...NATURAL FERTILIZER & SOIL BUILDERS!

## HYDRAULICALLY APPLIED SOIL AMENDMENT, & SEED GROWTH MEDIA

## SUSTÂNE FOUNDATION

#### Recommended Use

For use in DOT roadside establishment, erosion control projects, mine site reclamation, burn area reestablishment, and dune restorations.

#### Description

Easy-to-apply seedbed amendment for rapid seed germination and vegetative establishment. FOUNDATION soil building media stays where it's applied, is rich in organic carbon, vital plant nutrients, and microbiology to replenish depleted soils.

FOUNDATION's unique blend of best-in-class ingredients for reclaiming depleted soils includes wild rice hulls, sphagnum peat, coconut coir, biochar, aerobic compost, plant-based tackifier, amino acids, and Sustane's proprietary blend of four Endomycorrhizae species.

# OUNDATION



#### **Benefits of Sustane FOUNDATION**

• FOUNDATION holds the seed application in place, improves soil structure, and porosity creating an ideal seed

germination and rooting environment

Contains 4 species of endomy-

corrhizal fungi for enhanced water and nutrient uptake by plants

 Aerobic compost provides soil beneficial microorganisms for improved nutrient cycling and ongoing plant growth

• Rich in organic carbon for depleted soils

- Amino acids help produce chlorophyll which leads to quality photosynthesis
- Contains biochar to promote biological activity and improve soil quality
- Increases plant mass 400% over untreated control -See next page
- Easy application mixes readily with water, seed, and flows smoothly



Hydro-seeded FOUNDATION forms a ground-gripping mesh that stays where it's applied. FOUNDATION retains moisture and creates an ideal environment for seed germination. FOUNDATION provides seed the time, protection, and the elements of plant nutrition and soil health for plants to get established.

## SUSTANE® FOUNDATION™ BIOTIC SOIL AMENDMENT



## SUSTÂNE FOUNDATION TRIALS, TESTING, AND RESULTS

"As validated by ASTM D7322 FOUNDATION performed exceptionally well in both analyses, but especially well when compared against the concurrent bare soil control."

Below is the test report for Suståne 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 Sustane FOUNDATION™ performed exceptionally well in both analyses, but especially well when compared against the concurrent bare soil control.

# SUSTANE 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	17.78	100%	941%	100%	172%
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	3.76	100%	189%	100%	175%
Plant Mass per Area	mg. per 4 sq. in.	21	5.80	17.26	71.52	100%	1233%	100%	414%

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.

对外包围的 化原则 医水浸渍 计对称电话 化二甲基甲基甲基

Item # Suståne FOUNDATION 60-72-1691 Package Size Units / Pallet

50-lb. bales 36 bags / pallet 1800 lb. net weight

Composition	Peat, Coir, wild Rice Hulls, BIO-CHAR, aerobic compost, plant-based tackifier, amino acid, and endo-mycorrhizae.
рН	6.5
Moisture	< 15%
Organic Matter	> 85%
C:N	< 35:1

V. 06152022

# SUSTÅNE° FOUNDATION™ BIOTIC SOIL AMENDMENT TRIALS. TESTING. AND RESULTS

"As validated by ASTM D7322 FOUNDATION performed exceptionally well in both analyses, but especially well when compared against the concurrent bare soil control."

Below is the test report for Suståne 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 Sustane FOUNDATION™ performed exceptionally well in both analyses, but especially well when compared against the concurrent bare soil control.

# SUSTANE 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

		PE	ERFORMANCE I	N ENCOURAGI	NG SEED GERM	INATION AND	PLANT GROWT	Н	
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	17.78	100%	941%	100%	172%
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	3.76	100%	189%	100%	175%
Plant Mass per Area	mg. per 4 sq. in.	21	5.80	17.26	71.52	100%	1233%	100%	414%

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.