



Anaheim Office
May 11, 2023
Report 23-121-0025

Zanker Landscape Materials
675 Los Esteros Road
San Jose, CA 95134

Attn: Beto Ochoa

RE: Premium Potting Mix

Analytical Results and Comments

The reaction of this soil is slightly alkaline at a pH of 7.2 with free lime favorably low. These levels are in the range preferred for most plants.

Salinity (ECe), sodium and boron are all slightly elevated for a direct planting medium. Application of thorough initial irrigations should decrease the soluble salts including boron to a safer range for sensitive plants.

Iron is low while the remaining nutrient elements are reasonably well supplied. Potassium is particularly abundant.

The C/N ratio at 20.8 is favorable. The as-received bulk density is 1079 lbs./ yd³. Moisture content is a little low at 16.9% and could result in some dustiness.

Organic content at 18.8% on a dry weight basis is favorable.

Recommendation

Iron can be improved with the addition of 1 pound of iron sulfate per cubic yard of material. The end user will need to supplement nitrogen and this should begin at shortly after planting.

If we can be of any further assistance, please feel free to contact us.

A handwritten signature in black ink, appearing to read "J. Kiefer", is positioned above the typed name.

Joe Kiefer
jkiefer@waypointanalytical.com

Emailed 4 pages: beto@zankerrecycling.com

COMPOST / AMENDMENT EVALUATION

Send To : Zanker Landscape Materials 675 Los Esteros Road San Jose CA 95134	Project : Premium Potting Mix	Report Number : 23-121-0025 Customer Number : 01002 Date printed : 05/11/2023 Date received : 05/01/2023 Page : 1 of 3 Lab Number : 59396
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Sample Id : **Premium Potting Mix**

Nutrient	Total - Dry Weight	Extractable - Dry Weight	Saturation Extract	Sufficiency Factor
Nitrogen (N)	0.54 %	122 ppm		1.4
NH ₄ -N		43 ppm		
NO ₃ -N		79 ppm		
Phosphorus (P)	0.13 %	68 ppm		1.3
Phosphorus (P ₂ O ₅)	0.3 %	156 ppm		
Potassium (K)	0.3 %	1651 ppm	8.8 meq/L	4.9
Potassium (K ₂ O)	0.36 %	1997 ppm		
Calcium (Ca)	3.55 %	3014 ppm	6.9 meq/L	0.7
Magnesium (Mg)	1.97 %	693 ppm	7.5 meq/L	1.2
Sodium (Na)	0.1 %		16.4 meq/L	
Sulfur (S)	0.11 %			
Sulfate (SO ₄)			4.9 meq/L	1.6
Chloride (Cl)			17.9 meq/L	
Copper (Cu)	52.4 ppm	2.4 ppm		0.7
Zinc (Zn)	86.7 ppm	8 ppm		0.6
Manganese (Mn)	389 ppm	18 ppm		0.6
Iron (Fe)	3480 ppm	32 ppm		0.3
Dilute Acid Fe		0.15 %		
Boron (B)	24 ppm		1.32 ppm	4.4

Test	Result
pH (sat paste)	7.2 s.u.
% Half Sat.	43
TEC	255 meq/kg
Qualitative Lime	Low
Salinity (EC of sat ext.)	3.4 dS/m
SAR (Sodium adsorption ratio)	6.13
Sodium as % of ECe	44 %
Bulk Density - Dry	902 lbs/yd ³
Bulk Density - As Received	1079 lbs/yd ³
Moisture - As Received	16.4 %
Organic	18.8 %
Weight of organic / yd ³	170 lbs/yd ³
Weight of mineral / yd ³	732 lbs/yd ³
C/N Ratio	20.8

Gradation	
Wt Percent Retained 1"	0.0 %
Wt Percent Retained 1/2"	0.4 %
Fraction Passing 1/2 inch Screen - Dry Weight Basis	
Screen Opening	% Passing
Passing 9.5mm	98.6 %
Passing 6.4mm (1/4")	91.0 %
Passing 4.75mm	84.0 %
Passing 2.36mm	68.1 %
Passing 1.00mm	46.6 %
Passing 0.50mm	32.9 %

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NUTRIENT SUMMARY

Test	Amount Per Cubic Yard				Amount Per Ton, As Rec'd				Available as a % Of Total
	Total		Available		Total		Available		
Nitrogen	4.87	lbs	0.11	lbs	9.03	lbs	0.2	lbs	2
Phosphorus (P)	1.13	lbs	0.06	lbs	2.1	lbs	0.11	lbs	5
Phosphorus (P ₂ O ₅)	2.59	lbs	0.14	lbs	4.8	lbs	0.26	lbs	5
Potassium (K)	2.7	lbs	1.49	lbs	5.01	lbs	2.76	lbs	55
Potassium (K ₂ O)	3.27	lbs	1.8	lbs	6.06	lbs	3.34	lbs	55
Calcium	32.03	lbs	2.72	lbs	59.37	lbs	5.04	lbs	8
Magnesium	17.79	lbs	0.62	lbs	32.97	lbs	1.16	lbs	4
Sulfur	0.98	lbs	0.06	lbs	1.81	lbs	0.11	lbs	6
Copper	0.76	ozs	0.03	ozs	1.4	ozs	0.06	ozs	4
Zinc	1.25	ozs	0.11	ozs	2.32	ozs	0.21	ozs	9
Manganese	5.61	ozs	0.26	ozs	10.41	ozs	0.48	ozs	5
Iron	50.22	ozs	0.47	ozs	93.1	ozs	0.86	ozs	1
Boron	0.35	ozs	0.02	ozs	0.64	ozs	0.03	ozs	5
Organic Matter	170	lbs			314	lbs			

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POTENTIAL RATE LIMIT FACTORS

Test	% Volume rate limit	Cubic yard amendment per 1000 sf to 6"							
		1	2	3	4	5	6	7	8
		Volume % amendment blend with sandy loam							
		5	11	16	22	27	32	38	43
EC sat. ext.	79 %								
Sodium sol.	No Limit								
Chloride sol.	98 %								
Boron sol.	67 %								
NH ₄ -N	No Limit								
Available									
Nitrogen	No Limit								
PO ₄ P	No Limit								
Copper	No Limit								
Zinc	No Limit								

Rate limit estimates based on amending a non-problematic sandy loam

RELATIVE IMMEDIATE NUTRIENT AND ORGANIC VALUE

* Example Rate 43 %	Slight	Moderate	Abundant
Nitrogen			
Phosphorus			
Potassium			
Calcium			
Magnesium			
Copper			
Zinc			
Manganese			
Iron			
Sulfate			
Organic Matter			

* If no chemical characteristics are rate limiting, the example rate is based on organic content of the amendment (up to a max of 43%).

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Chloride (Cl)			17.9 meq/L	
Copper (Cu)	52.4 ppm	2.4 ppm		0.7
Zinc (Zn)	86.7 ppm	8 ppm		0.6
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