Analysis of Fertilizer Products Sold in Connecticut During 2020-2022

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Department of Analytical Chemistry

The Connecticut Agricultural Experiment Station New Haven, CT



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INTRODUCTION

In the State of Connecticut, the Agricultural Commodities Division of the Department of Agriculture is responsible for the regulation and inspection of commercial fertilizer products. A sampling of these products is delivered to The Connecticut Agricultural Experiment Station for analysis to ensure label compliance.

METHODS

After delivery to The Connecticut Agricultural Experiment Station these products were sub-sampled and prepared for analysis. The samples were analyzed for nitrogen, (N), phosphorus (P; as P2O5) and potassium (K; as K2O) using standard analytical methods. In some cases, secondary and micronutrients (Ca, S, Mg, Cu, Fe and Zn) analysis is requested. Fertilizer samples are readied for analysis by hot nitric acid digestion using a SCP Sciences Hot Block. The nitrogen content is determined by using a Leco FP-628 combustion analyzer. P and K nutrient content along with requested micronutrients are determined using a Thermo Scientific iCAP 6500 Inductively Coupled Plasma -Optical Emission Spectroscopy (ICP-OES).

RESULTS AND DISCUSSION

From January 1, 2020 through December 31, 2020, January 1, 2021 through December 31, 2021, and January 1, 2022 through December 31, 2022, the Department of Analytical Chemistry at The Connecticut Agricultural Experiment respectively, analyzed 36, 34 and 35 fertilizer products that were for sale in Connecticut. These products were collected by Agricultural Commodities Inspectors at The Connecticut Department of Agriculture. The products were collected at manufacturing facilities and wholesale dealers as well as from retail stores. The fertilizer products, along with the sample analysis results and guarantees can be found in Table 1-3, for 2020, 2021 and 2022, respectively, for N, P and K. Notably, in 2022, 6 fertilizer products (FTRBIO22 -01 to 06) derived from biosolids were included and were analvzed specifically for PFAS (perpolyfluoroalkyl substances). All samples contained PFAS levels that exceeded the State DEEP recommendation of 1.4 ng/g. PFAS are synthetic

organofluorine chemical compounds that have multiple fluorine atoms attached to an alkyl chain found in soil, water and air and are considered toxic.

Fertilizer products are reported to be unsatisfactory (failed) if the nutrient amount in the sample is found to differ from the label guarantee according to the percent analytical variation guidelines as established by the Association of American Plant Food Control Officials (AAPFCO).

Collectively for all three years under review, the number of samples deemed unsatisfactory in one or more nutrients was 15. Specifically, 2 samples failed for N (representing 1.9% of the total samples), 3 samples failed for P (representing 2.9% of the total samples), and 10 samples failed for K (representing 9.5% of the total samples)

Table 1. Fertilizer Products Analyzed in 2020

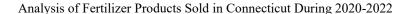
Sample Number	Analysis	Brand Name	N				P205	,	К2О			
			Amount (%)	Pass/Fail	Guarantee	Amount (%)	Pass/Fail	Guarantee	Amount (%)	Pass/Fail	Guarantee	
WSN20-01 Fert	NPK	Miracle - Gro	23.9	Passed	Guarantee 24%	8.5	Passed	Guarantee 8%	16.5	Passed	Guarantee 16%	
WSN20-02 Fert	NPK	Miracle - Gro	33.3	Passed	Guarantee 30%	10.1	Passed	Guarantee 10%	9.0	Failed	Guarantee 10%	
WSN20-03 Fert	NPK, Mg, B, S, Cu, Fe, Mn, Zn	Miracle - Gro	7.7	Passed	Guarantee 6%	14.1	Passed	Guarantee 12%	5.0	Failed	Guarantee 6%	
WSN20-04 Fert	NPK	Miracle - Gro	4.3	Passed	Guarantee 3%	9.1	Passed	Guarantee 7%	4.9	Passed	Guarantee 4%	
WSN20-05 Fert	NPK	Jobes Fertilizer Spikes	14.0	Passed	Guarantee 13%	5.6	Passed	Guarantee 4%	8.4	Passed	Guarantee 5%	
WSN20-06 Fert	NPK	Jobes Fertilizer Spikes	17.1	Passed	Guarantee 15%	7.3	Passed	Guarantee 3%	5.5	Passed	Guarantee 3%	
WSN20-07 Fert	NPK	Jobes Fertilizer Spikes	11.5	Passed	Guarantee 8%	13.0	Passed	Guarantee 11%	12.7	Passed	Guarantee 11%	
WSN20-08 Fert	NPK	Jobes Organics	2.6	Passed	Guarantee 2%	18.5	Passed	Guarantee 7%	7.4	Passed	Guarantee 4%	
WSN20-09 Fert	NPK	Bonide	9.9	Passed	Guarantee 10%	10.2	Passed	Guarantee 10%	9.5	Passed	Guarantee 10%	
WSN20-10 Fert	NPK, Mg, B, S, Fe, Mn, Mo, Zn	Osmocote Plus	15.8	Passed	Guarantee 15%	9.4	Passed	Guarantee 9%	11.9	Passed	Guarantee 12%	
WSN20-11 Fert	NPK	Osmocote	14.2	Passed	Guarantee 14%	11.9	Failed	Guarantee 14%	11.3	Failed	Guarantee 14%	
WSN20-12 Fert	NPK, B, Cu, Fe, Mn, Mo, Zn	Schultz	22.3	Passed	Guarantee 20%	21.0	Passed	Guarantee 20%	15.3	Passed	Guarantee 15%	
WSN20-13 Fert	NPK, Fe, Mn, Zn	Schultz	10.2	Passed	Guarantee 10%	16.4	Passed	Guarantee 15%	10.2	Passed	Guarantee 10%	
WSN20-14 Fert	NPK, Mg, B, Cu, Fe, Mn, Mo, Zn	Jack's Classic	10.2	Passed	Guarantee 10%	33.6	Passed	Guarantee 30%	22.1	Passed	Guarantee 20%	
WSN20-15 Fert	NPK, B, Cu, Fe, Mn, Mo, Zn	Jack's Classic	21.6	Passed	Guarantee 20%	20.9	Passed	Guarantee 20%	21.4	Passed	Guarantee 20%	
WSN20-16 Fert	NPK	Neptune's Organic Harvest	0.14	Passed	Guarantee 0%	0.03	Passed	Guarantee 0%	1.1	Passed	Guarantee 1%	
WSN20-17 Fert	NPK	Neptune's Harvest Organic	2.8	Passed	Guarantee 2%	3.8	Passed	Guarantee 4%	0.41	Failed	Guarantee 1%	
WSN20-18 Fert	NPK	Neptune's Harvest Organics	1.7	Passed	Guarantee 2%	3.3	Passed	Guarantee 3%	0.74	Passed	Guarantee 1%	
WSN20-19 Fert	NPK	Dr. earth	2.7	Passed	Guarantee 2%	0.6	Passed	Guarantee 1%	2.7	Passed	Guarantee 2%	
WSN20-20 Fert	NPK, Ca	Espoma Organic	1.0	Passed	Guarantee 1%	3.3	Passed	Guarantee 3%	3.4	Passed	Guarantee 1%	
WSN20-21 Fert	NPK	Espoma Organic	1.0	Passed	Guarantee 1%	2.6	Passed	Guarantee 2%	3.6	Passed	Guarantee 2%	
WSN20-22 Fert	NPK, Mg, Ca, S	Espoma Organic	3.9	Passed	Guarantee 4%	3.8	Passed	Guarantee 3%	4.1	Passed	Guarantee 3%	
WSN20-23 Fert	NPK, Mg, Ca, S	Espoma Organic	4.0	Passed	Guarantee 4%	4.8	Passed	Guarantee 3%	4.9	Passed	Guarantee 4%	
WSN20-24 Fert	NPK, Mg, Ca, S	Espoma Organic	4.4	Passed	Guarantee 4%	4.0	Passed	Guarantee 1%	6.1	Passed	Guarantee 5%	
WSN20-25 Fert	NPK, Mg, Ca, S	Espoma Organic	5.4	Passed	Guarantee 5%	5.9	Passed	Guarantee 3%	3.7	Passed	Guarantee 3%	
WSN20-26 Fert	NPK, Fe	Nuti One	5.5	Passed	Guarantee 5%	5.7	Failed	Guarantee 7%	6.8	Passed	Guarantee 5%	
WSN20-27 Fert	NPK, Mg, S	Nuti One	10.9	Passed	Guarantee 10%	10.1	Passed	Guarantee 10%	9.5	Passed	Guarantee 10%	
WSN20-28 Fert	NPK	Bonide Garden Rich	3.4	Passed	Guarantee 3%	9.8	Passed	Guarantee 10%	3.2	Passed	Guarantee 3%	
WSN20-29 Fert	PK, Fe	Fox Farm				2.1	Passed	Guarantee 0.5%	0.87	Passed	Guarantee 0.7%	
WSN20-30 Fert	NPK, Mg, B, Cu, Fe, Mn, Zn	Fox Farm	7.0	Passed	Guarantee 6%	4.3	Passed	Guarantee 4%	3.2	Failed	Guarantee 4%	
WSN20-31 Fert	NPK, Mg, Ca	Fox Farm - Happy Frog	4.9	Passed	Guarantee 4%	10.5	Passed	Guarantee 9%	4.8	Passed	Guarantee 3%	
WSN20-32 Fert	NPK, Ca	Fox Farm - Happy Frog	5.9	Passed	Guarantee 5%	6.8	Passed	Guarantee 7%	3.3	Passed	Guarantee 3%	
WSN20-33 Fert	NPK, Ca, S	Encap										
WSN20-34 Fert	NPK, Ca, CaCo3, CCE	Encap										
WSN20-35 Fert	NPK, Ca, S	Whitney Farms	10.1	Passed	Guarantee 10%	5.6	Passed	Guarantee 3%	8.4	Passed	Guarantee 6%	
WSN20-36 Fert			7.0	Passed	Guarantee 5%	4.2	Passed	Guarantee 2%	5.4	Passed	Guarantee 4%	

Table 2: Fertilizer Products Analyzed in 2021 (MDL = method detection limit)

Sample Number	Analysis	Brand Name	Nitrogen				P20	05		K2O			
			Amount (%)	Pass/Fail	Guarantee	Amount (%)	Pass/Fail	Guarantee	Amount (%)	Pass/Fail	Guarantee		
KAN21-01Z	Nitrogen, P2O5, K2O	Espoma Bio - tone	4.4	Passed	Guarantee 4%	5.1	Passed	Guarantee 3%	3.8	Passed	Guarantee 3%		
KAN21-02Z	Nitrogen, P2O5, K2O	Scotts	10.6	Passed	Guarantee 10%	11.2	Passed	Guarantee 10%	10.2	Passed	Guarantee 10%		
KAN21-03Z	Nitrogen, P2O5, K2O	Scotts	11.5	Passed	Guarantee 11%	8	Passed	Guarantee 7%	7.5	Passed	Guarantee 7%		
KAN21-04Z	Nitrogen, P2O5, K2O	Miracle Grow	6.9	Passed	Guarantee 6%	14.5	Passed	Guarantee 12%	5.5	Passed	Guarantee 6%		
KAN21-05Z	Nitrogen, P2O5, K2O	Miracle grow	NA	<mdl< td=""><td>Guarantee 0.02%</td><td>NA</td><td><mdl< td=""><td>Gaurantee 0.02%</td><td>0.04</td><td>Passed</td><td>Guarantee</td></mdl<></td></mdl<>	Guarantee 0.02%	NA	<mdl< td=""><td>Gaurantee 0.02%</td><td>0.04</td><td>Passed</td><td>Guarantee</td></mdl<>	Gaurantee 0.02%	0.04	Passed	Guarantee		
KAN21-06Z	Nitrogen, P2O5, K2O	Espoma Holly - Tone	4.1	Passed	Guarantee 4%	4.4	Passed	Gaurantee 3%	4.8	Passed	Guarantee 4%		
KAN21-07Z	Nitrogen, P2O5, K2O	Jacks	19.8	Passed	Guarantee 20%	23.0	Passed	Gaurantee 20%	22.2	Passed	Guarantee 20%		
KAN21-08Z	Nitrogen, P2O5, K2O	Miracle Gro	30.6	Passed	Guarantee 30%	10.5	Passed	Gaurantee 10%	11.0	Passed	Guarantee 10%		
KAN21-09Z	Nitrogen, P2O5, K2O	Schultz	21.6	Passed	Guarantee 20%	21.4	Passed	Gaurantee 20%	16.3	Passed	Guarantee 15%		
KAN21-10Z	Nitrogen, P2O5, K2O	Schultz	10.2	Passed	Guarantee 10%	15.6	Passed	Gaurantee 15%	10.5	Passed	Guarantee 10%		
KAN21-11Z	Nitrogen, P2O5, K2O	Miracle gro	1.04	Passed	Guarantee 1%	1.1	Passed	Gaurantee 1%	1.1	Passed	Guarantee 1%		
KAN21-12Z	Nitrogen, P2O5, K2O	Osmocote	14.4	Passed	Guarantee 14%	13.9	Passed	Gaurantee 14%	14.0	Passed	Guarantee 14%		
KAN21-13Z	Nitrogen, P2O5, K2O	Neptunes Harvest	2.14	Passed	Guarantee 2%	4.3	Passed	Gaurantee 4%	0.22	Failed	Guarantee 1%		
KAN21-14Z	Nitrogen, P2O5, K2O	Osmocote	16.2	Passed	Guarantee 15%	8.7	Passed	Gaurantee 9%	12.3	Passed	Guarantee 12%		
KAN21-15Z	Nitrogen, P2O5, K2O	Orchid	0.96	Passed	Guarantee 1%	3.5	Passed	Guarantee 3%	4.0	Passed	Guarantee 1%		
KAN21-16Z	Nitrogen, P2O5, K2O	Jobes	9.4	Passed	Guarantee 6%	20.0	Passed	Guarantee 18%	7.5	Passed	Guarantee 6%		
KAN21-17Z	Nitrogen, P2O5, K2O	Jobes	14.7	Passed	Guarantee 8%	16.2	Passed	Guarantee 11%	14.1	Passed	Guarantee 11%		
KAN21-18Z	Nitrogen, P2O5, K2O	Jobes	17.9	Passed	Guarantee 11%	6.1	Passed	Guarantee 3%	4.7	Passed	Guarantee 4%		
KAN21-19Z	Nitrogen, P2O5, K2O	Miracle Gro	23.7	Passed	Guarantee 24%	8.8	Passed	Guarantee 8%	16.9	Passed	Guarantee 16%		
KAN21-20Z	Nitrogen, P2O5, K2O	Espoma Bulb - Tone	5.4	Passed	Guarantee 3%	5.6	Passed	Guarantee 5%	3.5	Passed	Guarantee 3%		
KAN21-21Z	Nitrogen, P2O5, K2O	Espoma	4.3	Passed	Guarantee 4%	5.9	Passed	Guarantee 3%	4.6	Passed	Guarantee 4%		
KAN21-22Z	Nitrogen, P2O5	Coast of Maine	6.7	Passed	Guarantee 6%	2.7	Passed	Guarantee 2%					
KAN21-23Z	Nitrogen, P2O5, K2O	Miracle gro	8.2	Passed	Guarantee 8%	10.0	Passed	Guarantee 8%	9.5	Passed	Guarantee 8%		
KAN21-24Z	Nitrogen, P2O5, K2O	Jobes Organics	4.8	Passed	Guarantee 2%	14.8	Passed	Guarantee 8%	10.0	Passed	Guarantee 8%		
KAN21-25Z	Nitrogen, P2O5, K2O	Miracle - Gro	11.3	Passed	Guarantee 11%	4.1	Passed	Guarantee 3%	8.3	Passed	Guarantee 8%		
KAN21-26Z	Nitrogen, P2O5, K2O	Fox Farm	6.2	Passed	Guarantee 6%	4.1	Passed	Guarantee 4%	4.3	Passed	Guarantee 4%		
KAN21-27Z	Nitrogen, P2O5, K2O	Tiger Bloom	3.7	Passed	Guarantee 2%	7.4	Passed	Guarantee 8%	4.4	Passed	Guarantee 4%		
KAN21-28Z	Nitrogen, P2O5, K2O	Loveland Products	7.0	Failed	Guarantee 15%	NA	<mdl< td=""><td>Guarantee 0%</td><td>9.0</td><td>Failed</td><td>Guarantee 12%</td></mdl<>	Guarantee 0%	9.0	Failed	Guarantee 12%		
KAN21-29Z	Nitrogen, P2O5, K2O	Loveland Products	16.6	Passed	Guarantee 15%	0.67	Passed	Guarantee 0%	9.5	Passed	Guarantee 02%		
KAN21-30Z	Nitrogen, P2O5, K2O	Loveland Products	6.4	Passed	Guarantee 5%	9.3	Passed	Guarantee 10%	10.0	Passed	Guarantee 10%		
KAN21-31Z	Nitrogen, P2O5, K2O	Loveland Products	25.1	Failed	Guarantee 28%	8.2	Passed	Guarantee 07%	15.8	Passed	Guarantee 14%		
KAN21-32Z	Nitrogen, P2O5, K2O	Loveland Products	16.1	Failed	Guarantee 19%	24.8	Passed	Guarantee 19%	18.2	Passed	Guarantee 19%		
KAN21-33Z	Nitrogen, P2O5, K2O	Loveland Products	13.6	Passed	Guarantee 13%	14.8	Passed	Guarantee 13%	13.1	Passed	Guarantee 13%		
KAN21-34Z	Nitrogen, P2O5, K2O	Loveland Products	10.3	Passed	Guarantee 10%	24.3	Passed	Guarantee 20%	15.7	Failed	Guarantee 20%		

Table 3: Fertilizer Products Analyzed in 2022 (MDL = method detection limit)

Samuel Brand Name				Nitrog	en		P205		К2О		
Sample Number	Number Analysis		Amount (%)	Pass/Fail	Guarantee	Amount (%)	Pass/Fail	Guarantee	Amount (%)	Pass/Fail	Guarantee
FERT 22 - 001	Fertilizer Label Guatantee: N P K	Coast of Maine - Fish Bone Meal	6.9	Passed	Guarantee 5%	18.0	Passed	Guarantee 13%			
FERT 22 - 002	Fertilizer Label Guatantee: N P K	Espoma - Organic Bone Meal	5.4	Passed	Guarantee 4%	21.7	Passed	Guarantee 12%			
FERT 22 - 003	Fertilizer Label Guatantee: N P K	Espoma - Garden Food	4.7	Passed	Guarantee 5%	11.5	Passed	Guarantee 10%	4.9	Passed	Guarantee 5%
FERT 22 - 004	Fertilizer Label Guatantee: N P K	Espoma - Rose-tone	5.2	Passed	Guarantee 4%	4.5	Passed	Guarantee 3%	2.2	Passed	Guarantee 2%
FERT 22 - 005	Fertilizer Label Guatantee: N P K	Espoma - Cottonseed Meal	6.6	Passed	Guarantee 6%	2.7	Passed	Guarantee 2%	1.9	Passed	Guarantee 1%
FERT 22 - 006	Fertilizer Label Guatantee: N P K	FoxFarm - Happy Frog Tomato and Vegetable	5.7	Passed	Guarantee 5%	7.9	Passed	Guarantee 7%	4.3	Passed	Guarantee 3%
FERT 22 - 007	Fertilizer Label Guatantee: N P K	Miracle Gro - All Purpose Plant Food	23.5	Passed	Guarantee 24%	9.7	Passed	Guarantee 8%	18.4	Passed	Guarantee 16%
FERT 22 - 008	Fertilizer Label Guatantee: N P K	Miracle Gro - Performance Organics All Purpose	11.5	Passed	Guarantee 11%	3.3	Passed	Guarantee 3%	8.2	Passed	Guarantee 8%
FERT 22 - 009	Fertilizer Label Guatantee: N P K	Miracle Gro - Performance Organics Edibles	9.3	Passed	Guarantee 9%	6.0	Passed	Guarantee 4%	11.4	Passed	Guarantee 12%
FERT 22 - 010	Fertilizer Label Guatantee: N P K	Proven Winners - Premium Continuous Release Plant Food for Flowering Plants	15.6	Passed	Guarantee 15%	7.3	Passed	Guarantee 7%	15.4	Passed	Guarantee 15%
FERT 22 - 011	Fertilizer Label Guatantee: N P K	Jack's Classics - Orchid Special	27.4	Passed	Guarantee 30%	14.3	Passed	Guarantee 10%	13.4	Passed	Guarantee 10%
FERT 22 - 012	Fertilizer Label Guatantee: N P K	Jack's Classic - Hydrangea Blue	7.7	Passed	Guarantee 7%	1.6	Failed	Guarantee 3%	4.1	Passed	Guarantee 3%
FERT 22 - 013	Fertilizer Label Guatantee: N P K	Schultz - Plant Food Liquid Plant Food Plus Micronutrients	10.3	Passed	Guarantee 10%	15.5	Passed	Guarantee 15%	9.5	Passed	Guarantee 10%
FERT 22 - 014	Fertilizer Label Guatantee: N P K	Shultz - Cactus Liquid Plant Food Plus Micronutrients	2.8	Passed	Guarantee 2%	7.4	Passed	Guarantee 7%	7.0	Passed	Guarantee 7%
FERT 22 - 015	Fertilizer Label Guatantee: N P K	Espoma - Bio-tone Starter Plus	4.6	Passed	Guarantee 4%	4.9	Passed	Guarantee 3%	3.7	Passed	Guarantee 3%
FERT 22 - 016	Fertilizer Label Guatantee: N P K	Espoma - Tomato and Vegetable Food	1.2	Passed	Guarantee 1%	2.8	Passed	Guarantee 3%	4.4	Passed	Guarantee 1%
FERT 22 - 017	Fertilizer Label Guatantee: N P K	Espoma - Orchid Bloom Booster	1.3	Passed	Guarantee 1%	2.9	Passed	Guarantee 3%	4.4	Passed	Guarantee 1%
FERT 22 - 018	Fertilizer Label Guatantee: N P K	FoxFarm - Grow Big Liquid Plant Food	6.8	Passed	Guarantee 6%	4.7	Passed	Guarantee 4%	4.4	Passed	Guarantee 4%
FERT 22 - 019	Fertilizer Label Guatantee: N P K	Neptune Harvest - Fish Fertilizer	2.2	Passed	Guarantee 2%	4.4	Passed	Guarantee 4%	0.22	Failed	Guarantee 1%
FERT 22 - 020	Fertilizer Label Guatantee: N P K	Jobe's Organics - Herb Plant Food Powder	3.7	Passed	Guarantee 3%	3.3	Passed	Guarantee 3%	5.2	Passed	Guarantee 3%
FERT 22 - 021	Fertilizer Label Guatantee: N P K	Osmocote - Smart Release Plant Food Outdoor and Indoor	16.2	Passed	Guarantee 14%	8.8	Passed	Guarantee 9%	11.2	Passed	Guarantee 12%
FERT 22 - 022	Fertilizer Label Guatantee: N P K	Jobe's Fertilizer Spikes Tree and Shrub Fertilizer Spikes	18.0	Passed	Guarantee 15%	3.9	Passed	Guarantee 3%	5.1	Passed	Guarantee 3%
FERT 22 - 023	Fertilizer Label Guatantee: N P K	Jobe's Fertilizer Spikes Fruit Tree Spikes	13.0	Passed	Guarantee 8%	15.2	Passed	Guarantee 11%	13.6	Passed	Guarantee 11%
FERT 22 - 024	Fertilizer Label Guatantee: N P K	Miracle-Gro - Blooming Houseplant Food		<mdl< td=""><td>Guarantee .05%</td><td>1.2</td><td>Passed</td><td>Guarantee 1%</td><td>0.58</td><td>Passed</td><td>Guarantee 0.5%</td></mdl<>	Guarantee .05%	1.2	Passed	Guarantee 1%	0.58	Passed	Guarantee 0.5%
FERT 22 - 025	Fertilizer Label Guatantee: N P K	Jobe's Organics - Fast Start Planting Tablets	2.5	Passed	Guarantee 2%	18.4	Passed	Guarantee 7%	7.5	Passed	Guarantee 4%
FERT 22 - 026	Fertilizer Label Guatantee: N P K	Jobe's Fertilizer Spikes For Beautiful Houseplants	16.2	Passed	Guarantee 13%	5.8	Passed	Guarantee 4%	6.1	Passed	Guarantee 5%
FERT 22 - 027	Fertilizer Label Guatantee: N P K	Scotts - Evergreen, Flowering Tree and Shrub Continuous Release Plant Food	12.9	Passed	Guarantee 11%	9.5	Passed	Guarantee 7%	8.5	Passed	Guarantee 7%
FERT 22 - 028	Fertilizer Label Guatantee: N P K	Miracle- Gro - Indoor Plant Food Spikes	7	Passed	Guarantee 6%	14	Passed	Guarantee 12%	5.2	Failed	Guarantee 6%
FERT 22 - 029	Fertilizer Label Guatantee: N P K	Sustane - Compost Tea Bags	3.8	Passed	Guarantee 4%	8.2	Passed	Guarantee 6%	4.5	Passed	Guarantee 4%
FERT 22 - 030	Fertilizer Label Guatantee: N P K	Dr. Earth - Bat Guano	6.6	Passed	Guarantee 7%	3.2	Passed	Guarantee 3%	1.4	Passed	Guarantee 1%
FERT 22 - 031	Fertilizer Label Guatantee: N P K	Miracle- Gro - Pour and Feed Singles		<mdl< td=""><td>Guarantee 0.02%</td><td></td><td><mdl< td=""><td>Guarantee 0.02%</td><td></td><td><mdl< td=""><td>Guarantee</td></mdl<></td></mdl<></td></mdl<>	Guarantee 0.02%		<mdl< td=""><td>Guarantee 0.02%</td><td></td><td><mdl< td=""><td>Guarantee</td></mdl<></td></mdl<>	Guarantee 0.02%		<mdl< td=""><td>Guarantee</td></mdl<>	Guarantee
		Jobe's Organics - For Beautiful Succulents	3.9	Passed	Guarantee 2%	15.5	Passed	Guarantee 8%	9.0	Passed	Guarantee 8%
		Ferti Technologies - Accu Blu 45 - 0 - 0	44.9	Passed	Guarantee 45%		<mdl< td=""><td>Guarantee 0%</td><td></td><td><mdl< td=""><td>Guarantee 0%</td></mdl<></td></mdl<>	Guarantee 0%		<mdl< td=""><td>Guarantee 0%</td></mdl<>	Guarantee 0%
		Ferti Technologies - U Premium 46-0-0	46.4	Passed	Guarantee 46%		<mdl< td=""><td>Guarantee 0.0%</td><td></td><td><mdl< td=""><td>Guarantee 0.0%</td></mdl<></td></mdl<>	Guarantee 0.0%		<mdl< td=""><td>Guarantee 0.0%</td></mdl<>	Guarantee 0.0%
		Ferti Technologies 0 Opti + 44.5 - 0 - 0	43.6	Passed	Guarantee 44.5%	0.51	Passed	Guarantee 0.0%	0.71	Passed	Guarantee 0.0%



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Equal employment opportunity means employment of people without consideration of age, ancestry, color, criminal record (in state employment and licensing), gender identity or expression, genetic information, intellectual disability, learning disability, marital status, mental disability (past or present), national origin, physical disability (including blindness), race, religious creed, retaliation for previously opposed discrimination or coercion, sex (pregnancy or sexual harassment), sexual orientation, veteran status, and workplace hazards to reproductive systems unless the provisions of sec. 46a-80(b) or 46a-81(b) of the Connecticut General Statutes are controlling or there are bona fide occupational qualifications excluding persons in one of the above protected classes. To file a complaint of discrimination, contact Dr. Jason White, Director, The Connecticut Agricultural Experiment Station, 123 Huntington Street, New Haven, CT 06511, (203) 974-8440 (voice), or <u>Jason.White@ct.gov</u> (e-mail). CAES is an affirmative action/equal opportunity provider and employer. Persons with disabilities who require alternate means of communication of program information should contact the Chief of Services, Michael Last at (203) 974-8442 (voice), (203) 974-8502 (FAX), or <u>Michael.Last@ct.gov</u> (e-mail).