

*The  
Connecticut  
Agricultural  
Experiment  
Station,  
New Haven*

Analysis of  
Fertilizers Sold  
in Connecticut  
1996

BY MARY JANE INCORVIA MATTINA

*Bulletin 942*

*March 1997*

From January 1, 1996 to December 31, 1996 the Department of Analytical Chemistry analyzed 193 fertilizer samples to determine that the label guarantee on the product is in compliance with State of Connecticut regulations. Determinations of the macronutrients, nitrogen, phosphorus (as  $P_2O_5$ ) and potassium ( $K_2O$ ), as well as a large number of micronutrients were made.

Thirty-two different manufacturers were represented in this year's survey. Of the total number of samples analyzed 62 samples (32.1%) were deficient in one or more of the macronutrients. A sample is considered to be unsatisfactory if the value for a parameter is below the guaranteed value by more than the permissible percentage established by the Association of American Plant Food Control Officials. Specifically, 30 samples (15.5%) were deficient in nitrogen, 14 samples (7.2%) were deficient in phosphorus, and 37 samples (19.2%) were deficient in potassium. The results of the analyses for macronutrients are provided in Table 1. Of the 33 samples analyzed for micronutrients, 10 (30.3%) were found to be deficient in one or more micronutrients. These results are summarized in Table 2. A deficiency in either table is indicated by a minus (-) sign next to the deficient analyte.

The samples were collected by Alton VanDyke and John Schneider of the Connecticut Department of Agriculture. The analyses were performed by Craig Musante and Mamie Pyles under the supervision of Dr. David Stilwell.

The Connecticut Agricultural Experiment Station is an Equal Opportunity, Affirmative Action Employer. Persons with disabilities who require alternate means of communication of program information should contact the Station Editor at (203) 789-7223 (voice) or 789-7232 (FAX) or [caesadm@caes.state.ct.us](mailto:caesadm@caes.state.ct.us) (e-mail).

Table 1. Results of fertilizer analyses for macronutrients.

Manufacturer	Sample Description	Nitrogen		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		%G	%F	%G	%F	%G	%F
A.H. HOFFMAN INC.							
	Country Cottage Garden Fertilizer 5-10-5	5	4.5	10	9.6	5	4.7
	Country Cottage Perennial Flower Food 10-10-10	10	9.7	10	8-	10	8-
	Hoffman Dehydrated Super Manure 4-2-2	4	6.4	2	4.9	2	3.3
	Hoffman Holly Food 4-6-4	4	5.1	6	12.1	4	4.6
AGRI TURF, INC.							
	Agri Turf 50% Organic All-Purpose Slow Release 10-6-4	10	9.6	6	8	4	4.5
	Agri Turf All-Purpose Garden 5-10-5	5	7	10	15.1	5	6.9
	Agri Turf All-Purpose Garden Fertilizer 5-10-10	5	8.5	10	12.9	10	13.3
	Agri Turf All-Purpose Lawn & Garden 10-10-10	10	10.9	10	13.7	10	12.5
	Agri Turf Evergreen Plant Food 6-8-6	6	16.1	8	19.9	6	8.9
	Agri Turf Insect Control Plus Fertilizer 21-3-8	21	23	3	4.6	8	8.2
	Agri Turf Lawn, Tree & Shrub Food 10-6-4	10	10.2	6	7.9	4	4.3
	Agri Turf Professional 15-15-15	15	12.7-	15	13.4-	15	18.4
	Agri Turf Seed and Sod Starter 14-21-6	14	13.9	21	21.3	6	16.3
	Agri Turf Step 2 Premium Late Spring 28-3-12	28	29.1	3	3.8	12	11.3
	Agri Turf Step One Premium Spring w/Crabgrass Control 25-3-1	25	22.1-	3	3	10	12.7
	Agri Turf Weed 'n Feed Broadleaf Killer Plus Fertilizer 25-3-5	25	26.1	3	3.1	5	5.7
AGWAY							
	Agway Blend-Rite 10-10-10	10	9.1-	10	10.5	10	10.5
	Agway Blend-Rite 15-15-15	15	17.1	15	19.5	15	13.3-
	Agway Blend-Rite 15-8-12	15	15.1	8	10.4	12	13.9
	Agway Blend-Rite 5-10-10	5	4.78	10	9.6	10	9.6
	Agway Blend-Rite Alfa B 0-10-40 with Boron	0	0	10	9.6	40	44.8
	Agway Bulk Blend 0-10-43	0	0	10	16.5	43	38-
	Agway Bulk Blend 0-11-44	0	0	11	13.1	44	44.5
	Agway Bulk Blend 0-11-44	0	0	11	13.5	44	45.9
	Agway Bulk Blend 0-11-44	0	0	11	14.8	44	43
	Agway Bulk Blend 0-4-28	0	0	4	6.3	28	26.9
	Agway Bulk Blend 13-24-20	13	14.4	24	31.1	20	17.1-
	Agway Bulk Blend 15-3-12	15	13.5-	8	9.5	12	13.2
	Agway Bulk Blend 17-14-14	17	18	14	17.7	14	14.2
	Agway Bulk Blend 18-18-18	18	18.7	18	19.8	18	14.7-
	Agway Bulk Blend 18-18-18	18	19	18	23.5	18	17.8
	Agway Bulk Blend 21-11-17	21	20.4	11	16.5	17	16.7
	Agway Bulk Blend 21-8-24	21	22.8	8	10.6	24	23.4
	Agway Bulk Blend 22-11-20	22	22.6	11	15.2	20	19.7
	Agway Bulk Blend 23-0-29	23	22.4	0	0	29	32.6
	Agway Bulk Blend 23-11-14	23	24.2	11	14.9	14	16.3
	Agway Bulk Blend 23-12-18	23	24.1	12	11.9	18	17.8
	Agway Bulk Blend 23-12-18	23	25.3	12	13.1	18	17.8
	Agway Bulk Blend 23-12-8	23	16.2-	12	19.6	8	22.6
	Agway Bulk Blend 24-0-27	24	24.5	0	0	27	28
	Agway Bulk Blend 24-12-18	24	24.1	12	15.1	18	17.6
	Agway Bulk Blend 24-12-18	24	24.6	12	15	18	15.1-
	Agway Bulk Blend 24-8-12	24	24.1	8	12.6	12	15.5
	Agway Bulk Blend 24-8-16	24	25.5	8	10	16	16
	Agway Bulk Blend 25-7-16	25	28	7	8.8	16	14.5-
	Agway Bulk Blend 26-13-13	26	25.8	13	20	13	13.8
	Agway Bulk Blend 26-5-20	26	19.5-	5	5.7	20	30.6

Table 1. Results of fertilizer analyses for macronutrients (continued).

Manufacturer	Sample Description	Nitrogen		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		%G	%F	%G	%F	%G	%F
Agway	Bulk Blend 27-6-16	27	25.1-	6	6.9	16	20.3
Agway	Bulk Blend 27-7-18	27	25.8-	7	9.7	18	23.9
Agway	Bulk Blend 29-7-10	29	27.8-	7	11.9	10	12.5
Agway	Bulk Blend 33-5-7	33	34.8	5	8.5	7	6.2-
Agway	Bulk Blend 7-30-22	7	8.1	30	35	22	21.6
Agway	Bulk Blend Corn Starter 7-30-22	7	7.2	30	32	22	24.4
Agway	Bulk Blend Corn Starter 7-30-22	7	7.9	30	34.7	22	23.3
Agway	Early Edge Crop Starter 10-20-10	10	11.3	20	16.8-	10	8.8-
Agway	Garden Plant Food 5-10-5	5	4.74	10	9.8	5	5.2
Agway	Greenlawn 32-3-5	32	34.8	3	2.9	5	5.5
Agway	Greenlawn Turf Starter Fertilizer 11-25-11	11	10.4	25	23.5-	11	14
CADWELL & JONES							
C&J	Specialty 10-10-10	10	5-	10	5.3-	10	7.4-
C&J	Specialty 10-20-20	10	10.3	20	20.9	20	17.5-
C&J	Specialty 10-6-4	10	14.6	6	7.3	4	3.8
C&J	Specialty 14-14-14	14	13.7	14	15.3	14	16.4
C&J	Specialty 15-3-6	15	18.5	3	4.5	6	7
C&J	Specialty 20-4-12	20	21.1	4	5.3	12	13.6
C&J	Specialty 25-5-20	25	25.3	5	5.1	20	15.2-
C&J	Specialty 5-10-10	5	3.5-	10	7.4-	10	8-
C&J	Surge 7-7-7	7	6.34-	7	4.8-	7	7.1
C&J	Turf Products 30-3-10	30	35.8	3	3.5	10	6.2-
Cadwell & Jones	Seed Booster 18-23-12	18	16.1-	23	19.2-	12	12.5
Nassau Suffolk Turf Services	23-0-23	23	21.7-	0	0	23	24.4
Nassau Suffolk Turf Services, Inc.	20-10-10	20	29.3	10	11.4	10	7-
Super Surge Lawn Food	20-10-10	20	26.8	10	12.1	10	9.9
CHEVRON CHEMICAL CO. ORTHO CONSUMER PRODUCT DIV.							
Rapid Gro	All-Purpose Plant Food 8-8-8	8	8.6	8	9.4	8	8.3
Rapid Gro	Plant Food 23-19-17	23	23.6	19	20.2	17	16.6
CROP PRODUCTION SERVICES							
CPS		7.3	8.4	8.3	1.9-	9.2	9.6
CPS	0-10-40 with Boron	0	0	10	11.9	40	38.5
CPS	0-15-30	0	0	15	17.3	30	29.9
CPS	10-10-10	10	6.7-	10	7.9-	10	8.2-
CPS	10-10-10	20	12.1	20	26.3	20	19.7
CPS	10-17-25	10	12.1	17	22.3	25	21.5-
CPS	10-20-20	10	8.3	10	10.9	10	8.5
CPS	10-23-1	10	9.6	23	24.2	1	1.9
CPS	10-6-12	10	13.7	6	11.5	12	11.5
CPS	10-7-17	10	10.2	7	8.7	17	18.7
CPS	10-8-10	10	8.5-	8	9.3	10	13.6
CPS	12-15-15	12	13.1	15	17.8	15	15
CPS	15-15-15	15	16.1	15	15.6	15	19.2
CPS	19-19-19	19	19.9	19	22.9	19	19
CPS	2-0-14	2	2.5	0	0	14	19.3
CPS	6-12-12	6	9.5	12	19.8	12	10.8-
CPS	6-5-9	6	6.3	5	6.9	9	10.5
CPS	Bulk Blend 14-3-5	14	23.7	3	10.6	5	8.3
CPS	Bulk Blend 17-0-38	17	15.3-	0	0	38	41
CPS	Bulk Blend 17-7-31	17	18.2	7	9.8	31	32
CPS	Bulk Blend	25	24.9	4	5.2	24	25.7
Crop Production Services	10-10-20	10	10.9	10	9.8	20	24.7

Table 1. Results of fertilizer analyses for macronutrients (continued).

Manufacturer	Sample Description	Nitrogen		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		%G	%F	%G	%F	%G	%F
Crop Production Services	10-20-30	10	10.5	20	24	30	28.3-
Crop Production Services	15-10-10	15	13.3-	10	10.9	10	9.6
Crop Production Services	15-8-12	15	17.5	8	13	12	12.8
Crop Production Services	24-12-18	24	26.6	12	15.5	18	16.1-
Crop Production Services	25-10-20	25	19.8-	10	12.6	20	26.6
Crop Production Services	25-5-20	25	28	5	12.3	20	14.3-
Crop Production Services	4-11-23	4	4.6	11	13.5	23	24.5
Crop Production Services	8-24-16	8	8.5	24	27.6	16	15.7
Custom	30-0-20, ID# 002579-0000	30	26.8-	0	0	20	23.3
Village Green	5-10-5	5	3.9-	10	9.2-	5	4.7
Village Green Prof. Turf Food	10-6-4, 50% Slow Release N with Pellime	10	12.7	6	6.5	4	4
Village Green Prof. Turf Food	5-10-5	5	3.1-	10	8.3-	5	5.1
Village Green Prof. Turf Food	10-6-4	10	6.5-	6	4.4-	4	2.7-
Village Green Prof. Turf Food	10-10-10	10	7.8-	10	10	10	9.8
Village Green Prof. Turf Food	12-25-12	12	12.8	25	32.4	12	11.4
Village Green Prof. Turf Food	18-11-17	18	23.3	11	23.1	17	13.7-
Village Green Prof. Turf Food	20-10-10	20	21.8	10	13.6	10	9.54
Village Green Prof. Turf Food	24-3-5	24	31.3	3	11.3	5	3.5-
Village Green Prof. Turf Food	28-5-11	28	32.4	5	7.5	11	10.3
Village Green Prof. Turf Food	5-10-10	5	4.2-	10	10.9	10	8.7-
DECRAAN AG. SUPPLIES							
DeCran Deluxe	10-10-10	10	10.9	10	10.8	10	9.5
DeCran Deluxe	5-10-5	5	5.2	10	12.5	5	6.3
DOM D'AGOSTINO'S NURSERIES							
Dom D'Agostino's Acid-One for Evergreens	5-7-5	5	5.9	7	8.6	5	3.6-
DRAGON CORP.							
Dragon All Purpose Plant Food	10-10-10	10	10.3	10	11.5	10	9.5
EARTHGRO, INC.							
Earthgro Natural Organic Mineral Lawn Food	8-2-4	8	8.5	2	3.5	4	5
EARTHWORKS NATURAL ORGANIC PRODUCTS							
Earthworks Lawn & Garden Fertilizer	5-4-5	5	7.9	4	11.3	5	7.1
Earthworks Lawn Fertilizer 14-2-5, Natural Organic with Urea		14	14.6	2	4.1	5	7.8
GRACE-SIERRA HORTICULTURAL CO.							
Peter's Professional Soluable Plant Food	12-36-14	12	14	36	41.2	14	15.6
LEBANON CHEMICAL CORP.							
Green Gold Crabgrass Control Plus Lawn Food	25-3-3	25	25.4	3	4.1	3	5.2
Green Gold Re-Nu Seed Starter Fertilizer	11-23-10	11	13.1	23	26.9	10	13.1
Greenskeeper 10-6-4, 50% Organic N Fertilizer		10	9.8	6	6.5	4	4.7
Greenskeeper 20-8-8 Fertilizer		20	20	8	8	8	9.4
Lebanon	5-10-10	5	6.6	10	13.2	10	13.1
Lebanon Country Club	13-25-12	13	13.6	25	26.9	12	12.2
Lebanon Country Club Fertilizer 12-4-8 with Trimec Herbicide		12	12.1	4	4.7	8	7.6
Turfmaster Lawn Food	27-3-3	27	28.6	3	4.2	3	3.2

Table 1. Results of fertilizer analyses for macronutrients (continued).

Manufacturer	Sample Description	Nitrogen		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		%G	%F	%G	%F	%G	%F
LOFT'S, INC.							
	Loft's All Purpose Lawn Fertilizer 10-6-4	10	12.9	6	6.7	4	4.7
	Loft's All Season Seed Starter 20-22-14	20	25.7	22	25.3	14	14.5
	Loft's Lawn Food 28-3-8	28	27.2	3	4	8	8.9
	Loft's Lawn, Garden & Shrub Food 10-10-10	10	10.1	10	13.7	10	12.2
MILORGANITE DIVISION							
	Milorganite 6.0-2.0-0	6	6.4	2	3.7	0	0
MIRACLE-GRO LAWN PRODUCTS, INC.							
	Miracle-Gro Extra Long Lasting Lawn Food 32-3-5	32	33.4	3	3.8	5	6.4
	Miracle-Gro Quick Start Starter Solution 4-12-4	4	4.8	12	13.7	4	4.2
NECESSARY ORGANICS, INC.							
	Concern Vitalize Fish & Kelp Formula 3-2-2	3	8.5	2	4.3	2	2.2
NUTRICO, INC.							
	Nutrico All Purpose 10-10-10	10	8.7-	10	10	10	9.4
	Nutrico Garden & Shrub 5-10-5	5	5.6	10	12	5	4.9
	Nutrico Premium Fall Lawn Winterizer with Iron 10-20-12	10	10.3	20	23.2	12	8.9-
	Nutrico Premium Lawn Fertilizer 26-4-6	26	27.5	4	6.2	6	6.3
	Nutrico Professional 19-19-19	19	21	19	24.6	19	15.1-
	Nutrico Professional 20-5-7	20	20.5	5	5.4	7	7.5
	Nutrico Professional 32-5-7	32	32.6	5	7.3	7	6.9
	Nutrico Starter Fertilizer 14-22-6	14	14.4	22	22.7	6	5.9
	Nutrico Tomato Shrub & Garden Food 5-10-10	5	4.3-	10	10.2	10	8.6-
	Nutrico Tree & Turf 10-6-4	10	7.3-	6	7.3	4	4.6
NUTRITE CORP./PARKER FERTILIZER							
	Nutrite All Purpose 20-20-20	20	21.2	20	22.6	20	19
OLD FOX CHEMICAL, INC., C/O CADWELL & JONES							
	Old Fox Fall Feed 25-5-20	25	25.6	5	5.9	20	19.4
	Old Fox Green Gro 20-4-8	20	23.6	4	5.2	8	9.9
	Old Fox Super Vegetable Pride 10-10-10	10	13.3	10	12.7	10	8-
	Old Fox Tree & Shrub Food 18-11-17	18	16.1-	11	16	17	18
	Old Fox Turf Food 10-6-4	10	9.52	6	5.9	4	4.9
PURSELL INDUSTRIES INC.							
	Servistar Fall Feed, Winterizer 20-4-10	20	19.5	4	3.6	10	9.3
	Servistar Lawn Fertilizer 30-3-3	30	33.5	3	3.5	3	2.4-
RICHLAWN TURF FOOD INC.							
	Old Farmer's Almanac Natural Organic Lawn & Garden 5-3-2	5	6.5	3	5.1	2	2.9
ROSS DANIELS INC.							
	Ross Gro-Stakes for Fruit & Ornamental Trees & Shrubs 8-16-16	8	12	16	17.3	16	17.3
SCHULTZ CO.							
	Schultz Instant All-Purpose Plant Food 20-30-20	20	20.2	30	31.3	20	20

Table 1. Results of fertilizer analyses for macronutrients (continued).

Manufacturer	Sample Description	Nitrogen		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		%G	%F	%G	%F	%G	%F
SCOTTS/SIERRA HORTICULTURAL PRODUCTS							
	Osmocote Vegetable & Bedding Plant Food 14-14-14	14	14.1	14	14.7	14	13.2
STERN'S MIRACLE-GRO PRODUCTS							
	Miracle-Gro Plant Food 15-30-15	15	14.6	30	34.3	15	14.9
SUDBURY CONSUMER PRODUCTS CO.							
	Sudbury Cactus Juice 1-7-6	1	1.1	7	7.6	6	5.6
THE ESPOMA CO.							
	Espoma Bone Meal 4-12-0	4	5	12	26.3	0	0
	Espoma Bulb-Tone 4.0-10.0-6.0	4	4.6	10	12.1	6	7.9
	Espoma Garden-Tone 4.0-6.0-6.0	4	4.6	6	8	6	8
	Espoma Holly-Tone 4-6-4	4	4.7	6	8.4	4	6.2
	Espoma Organic Lawn Food 18-8-6	18	20.6	8	9.3	6	5.4
	Espoma Plant-Tone 5.0-3.0-3.0	5	5.9	3	7.4	3	3.4
	Espoma Rose-Tone 6.0-6.0-4.0	6	5.5	6	8.2	4	4
	Espoma Tree-Tone 9-5-4	9	9.8	5	7	4	5
THE SCOTTS CO.							
	Scott's Starter Fertilizer 20-27-5	20	20.7	27	29.2	5	5.3
	Scott's Step 1 Crabgrass Preventer + Fert. 32-3-10	32	32.1	3	2.9	10	12.6
	Scott's Step 4 33-3-10	33	33	3	3.6	10	11.3
	Scott's Super Turf Builder 35-3-5	35	35.8	3	3.5	5	5.6
TRUE GREEN CHEM LAWN							
	Tru-Green Chem Lawn with Weed Control	13	2.3	3.25	0.76	6.5	1.3
VIGORO INDUSTRIES							
	Gro-Tone Bone Meal 6-12-0	6	4.2	12	17.2	0	0
	Gro-Tone Dried Blood 6-0-0	6	13.5	0	0	0	0
	Gro-Tone Fall, Winter & Starter Fertilizer 12-23-18	12	12.9	23	25.6	18	18.4
	Gro-Tone Lawn Fertilizer 30-4-6	30	32.8	4	3.7	6	6.3
	Gro-Tone Plant Food 5-10-5	5	9.3	10	16.4	5	6.7
	K-Gro Lawn Fertilizer 29-3-4	29	34.3	3	3	4	2.6
	K-Gro Lawn Starter & Fall Fertilizer 18-24-12	18	19.7	24	26.8	12	10.4
	K-Gro Weed & Feed 28-3-3	28	27.2	3	2.8	3	2.5
	K-Mart Lawn & Garden Food 10-10-10	10	10.4	10	11.3	10	9.1
	K-Mart Lawn & Garden Food 10-6-4	10	10.9	6	8.8	4	3.9
	K-Mart Lawn & Garden Food 13-13-13	13	14.4	13	12.9	13	12.8
	Suburban 5-10-10	5	7.1	10	14.7	10	11
	Vigoro All-American Lawn & Garden 5-10-5	5	3.7	10	7.5	5	6.3
	Vigoro Lawn Fertilizer 24-4-8	24	32.1	4	3.8	8	4.4
WEATHERLY CONSUMER PRODUCTS							
	Jobs Fertilizer Spikes for Tomatoes 8-24-8	8	11.1	24	24.4	8	8.4

Table 2. Results of fertilizer analysis for micronutrients.

Manufacturer	Sample description	Micronutrients
A.H. HOFFMAN INC.		
	Country Cottage Perennial Flower Food 10-10-10	magnesium 5.4, calcium 9.5, sulfur 5.8, iron 0.56
	Country Cottage Garden Fertilizer 5-10-5	magnesium 9.0, calcium 15.9, sulfur 1.8, iron 0.58
AGRI TURF, INC.		
	Agri Turf Evergreen Plant Food 6-8-6	sulfur 0.8-
AGWAY		
	Agway Bulk Blend 0-11-44	boron 0.49
	Agway Bulk Blend 0-11-44	boron 0.5
	Agway Bulk Blend 0-10-43	boron 0.48
	Agway Blend-Rite Alfa B 0-10-40 with Boron	boron 0.42
	Agway Bulk Blend 7-30-22	magnesium 0.85, sulfur 1.68
	Agway Bulk Blend 0-11-44	boron 0.5
CHEVRON CHEMICAL CO./ORTHO CONSUMER PRODUCT DIV.		
	Rapid Gro Plant Food 23-19-17	boron 0.02, iron 0.1
	Rapid Gro All-Purpose Plant Food 8-8-8	boron 0.025, iron 0.096, copper 0.059, zinc 0.06, manganese 0.06
CROP PRODUCTION SERVICES		
	CPS 12-15-15	magnesium 4.9
	CPS 0-10-40 with Boron	boron 0.17
	CPS 30-0-20	magnesium 0.11-
	Crop Production Services 4-11-23	magnesium 4.56, zinc 1.18
DRAGON CORP.		
	Dragon All Purpose Plant Food 10-10-10	boron 0.053, iron 0.66, copper 0.04-, zinc 0.09, manganese 0.16-
MILORGANITE DIVISION		
	Milorganite 6.0-2.0-0	iron 3.75
MIRACLE-GRO LAWN PRODUCTS, INC.		
	Miracle-Gro Extra Long Lasting Lawn Food 32-3-5	sulfur 10.5, iron 1.0
NUTRICO, INC.		
	Nutrico Starter Fertilizer 14-22-6	iron 1.1, sulfur 2.8
	Nutrico Premium Fall Lawn Winterizer with Iron 10-20-12	iron 1.5
RICHLAWN TURF FOOD INC.		
	Old Farmer's Almanac Natural Organic Lawn & Garden Fert 5-3-2	calcium 8.5
STERN'S MIRACLE-GRO PRODUCTS		
	Miracle-Gro Plant Food 15-30-15	boron 0.022, copper 0.085, manganese 0.053, zinc 0.069, iron 0.19
SUDBURY CONSUMER PRODUCTS CO.		
	Sudbury Cactus Juice 1-7-6	calcium 1.0



Table 2. Results of fertilizer analysis for micronutrients.

Manufacturer	Sample description	Micronutrients
THE ESPOMA CO.		
	Espoma Bulb-Tone 4.0-10.0-6.0	magnesium 0.6, boron 0.014, calcium 8.8, sulfur 7.3, cobalt 0.0003, copper 0.042, iron 0.60-, manganese 0.046, sodium 0.41, zinc 0.096, molybdenum 0.0005
	Espoma Garden-Tone 4.0-6.0-6.0	magnesium 0.93, boron 0.024, calcium 6.3, sulfur 8.5, cobalt 0.0007, copper 0.05, iron 0.50-, manganese 0.096, molybdenum 0.0021, sodium 0.26, zinc 0.067
	Espoma Holly-Tone 4-6-4	magnesium 0.92, boron 0.02, calcium 4.4, sulfur 6.5, iron 1, cobalt 0.0004, copper 0.04, zinc 0.046, manganese 0.19, molybdenum 0.0005, sodium 0.35
	Espoma Plant-Tone 5.0-3.0-3.0	magnesium 0.67, calcium 6.8, boron 0.03, copper 0.08, sulfur 2.09, iron 1.14, zinc 0.22, molybdenum 0.0003, sodium 0.5, cobalt 0.0006, manganese 0.3
	Espoma Rose-Tone 6.0-6.0-4.0	magnesium 0.66, boron 0.03, calcium 5.0, sulfur 7.2, cobalt 0.0005, copper 0.08, iron 0.75-, manganese 0.08, molybdenum 0.001, sodium 0.34, zinc 0.17
VIGORO INDUSTRIES		
	Gro-Tone Fall, Winter & Starter Fertilizer 12-23-18	iron, 1.25
	Gro-Tone Lawn Fertilizer 30-4-6	iron, 0.59-
	K-Gro Lawn Fertilizer 29-3-4	iron, 0.24-
	K-Gro Lawn Starter & Fall Fertilizer 18-24-12	copper, 0.0005-, iron, 0.6-, manganese, 0.016-, zinc 0.004-
	Vigoro Lawn Fertilizer 24-4-8	iron, 0.28-



The Connecticut Agricultural Experiment Station, founded in 1875, is the first experiment station in America. It is chartered by the General Assembly to make scientific inquiries and experiments regarding plants and their pests, insects, soil and water, and to perform analyses for State agencies. The laboratories of the Station are in New Haven and Windsor; its Lockwood Farm is in Hamden. Single copies of bulletins are available free upon request to Publications; Box 1106; New Haven, Connecticut 06504. ISSN 0097-0905