

COMMERCIAL FERTILIZERS

Inspection report

1971

J. GORDON HANNA



COMMERCIAL FERTILIZERS
INSPECTION REPORT

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J. Gordon Hanna, Chief Chemist

Listed in this report for 1971 are the manufacturers' names, the number of samples of the products of each manufacturer collected, the number of these samples found deficient and the ratios of the percentages of nitrogen, phosphoric acid, potash, secondary and minor elements found to the percentages guaranteed. Results of 1140 samples of fertilizer produced by 117 manufacturers are summarized. A table of the tonnage sold during the period between July 1, 1970 and June 30, 1971 is included.

Analyses were made by Messrs. R. A. Botsford, S. Christie, S. P. Squires, W. Glowa, R. E. West, and Miss H. Kocaba. Inspection and sampling were by Mr. R. R. Nichols.

COMPLIANCE OF 1971 FERTILIZER SAMPLES WITH GUARANTEES

Manufacturer	No. of Samples	No. of guarantees			Samples deficient		Average % of claims	
		N	P ₂ O ₅ + K ₂ O	total	N	P ₂ O ₅ + K ₂ O	N	P ₂ O ₅ + K ₂ O
Agrico Chemical Co.	89	77	156	233	11	20	102.5	106.5
Agricultural Products Co., Inc.	9	9	18	27	0	1	107.6	108.9
Agricultural Supply Co.	1	1	2	3	0	0	108.5	118.6
Agriform International Chemicals, Inc.	2	2	4	6	0	0	105.8	131.1
Agway, Inc.	64	49	117	166	2	9	110.5	108.9
American Cyanamid Co.	4	4	0	4	1	-	98.3	-----
American Fertilizer Co.	4	1	2	3	0	1	100.2	90.2
Armour Agricultural Chemicals Co.	1	0	2	2	-	1	-----	93.5
Asgrow-Mandeville Co.	11	11	22	33	4	2	102.7	120.5
Atlas Fish Fertilizer Co.	1	1	2	3	0	0	107.2	125.5
H. J. Baker & Bros.	2	0	0	0	-	-	-----	-----
Baker Castor Oil Co.	4	0	0	0	-	-	-----	-----
The Bartlett Tree Expert Co.	1	1	2	3	0	1	97.7	92.3
Black Leaf Products Co.	4	4	8	12	0	0	105.1	105.5
Black Magic, Inc.	1	1	2	3	0	0	98.8	138.3
Bonide Chemical Co., Inc.	1	1	2	3	0	0	108.2	108.2
Boyle Midway, Inc.	1	1	2	3	0	0	111.0	110.0
Brookside Nurseries, Inc.	9	9	14	23	0	0	111.8	121.2
Cadwell & Jones, Inc.	33	30	57	87	2	10	102.4	111.2
Canadian Industries Limited	2	2	0	2	0	-	100.8	-----
Peter Cascio Nursery, Inc.	3	3	6	9	1	0	97.2	108.7
Central Farmers Fertilizer Co.	1	1	0	1	0	-	101.2	-----
Chamberlin & Barclay, Inc.	7	4	12	16	2	3	105.0	119.2
Chevron Chemical Co.	30	30	58	88	0	3	103.6	107.4
Chilean Nitrate Sales Corp.	7	7	1	8	0	0	100.0	100.0
Clinton Nursery Products, Inc.	1	1	2	3	0	0	107.5	106.9

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Corenco Corp.	56	49	93	142	2	7	111.5	116.5
Country Squire Fertilizers	1	1	2	3	0	0	101.2	124.8
The Danbury Garden Center	1	1	2	3	1	0	84.2	117.9
The Davey Tree Expert Co.	6	6	12	18	2	0	103.7	145.8
Diamond Shamrock Chemical Co.	2	2	4	6	0	0	125.6	135.2
E. I. duPont de Nemours & Co.	2	2	0	2	0	-	101.9	-----
Elanco Products Co.	6	6	12	18	0	1	108.4	103.9
The Espoma Co.	13	13	26	39	0	1	119.6	116.4
Estate Fertilizer Co.	1	1	2	3	0	0	111.8	109.0
Leon Ezzell, Inc.	4	4	8	12	1	1	112.9	110.2
Faesy & Besthoff, Inc.	33	29	55	84	2	1	124.6	125.3
Farmingdale Garden Laboratories, Inc.	3	3	5	8	0	1	122.2	111.1
Federal Chemical Co.	17	17	33	50	4	5	107.9	112.0
The Fer-Mel Corp.	15	15	24	39	1	1	103.2	101.1
The Fourniers Nurseries	2	2	4	6	2	2	87.5	101.0
Free Flow Fertilizer Co.	1	1	2	3	0	0	118.4	124.2
Garfield Williamson, Inc.	1	1	2	3	0	0	100.8	107.8
Glen Terrace Nurseries, Inc.	1	1	2	3	0	0	105.6	96.4
Goulard-Olena, Inc.	1	1	2	3	0	0	101.7	108.6
W. R. Grace & Co.	2	1	1	2	0	0	100.4	99.0
Grand Union Co.	2	2	4	6	0	1	112.6	101.9
Gransco Products Limited	1	1	2	3	0	0	131.2	138.7
The Great Atlantic & Pacific Tea Co.	11	11	21	32	0	1	111.8	128.4
Greenlife Products Co., Inc.	4	4	8	12	2	4	102.3	71.6
Green Ribbon Product Co.	1	1	2	3	0	0	95.2	100.8
Gro-Fast Fertilizer Associates	1	1	2	3	0	1	98.8	96.8
Halstead Distributing Co.	5	5	10	15	0	1	115.8	101.8
The Charles C. Hart Seed Co.	9	9	19	27	0	1	114.4	107.5

Commercial Fertilizers

Manufacturer	No. of Samples	No. of guarantees			Samples deficient		Average % of claims	
		N	P ₂ O ₅ +K ₂ O	total	N	P ₂ O ₅ +K ₂ O	N	P ₂ O ₅ +K ₂ O
Heritage House Products	18	18	36	54	0	3	107.4	111.0
A. H. Hoffman, Inc.	15	15	29	44	1	2	120.7	112.6
Hydroponic Chemical Co., Inc.	1	1	2	3	0	0	114.3	125.0
The Hy-Trous Corp.	2	2	4	6	0	0	119.0	145.8
International Minerals & Chemical Corp.	2	0	2	2	-	0	-----	102.5
Kerr-McGee Chemical Corp.	117	96	188	284	11	34	104.1	105.2
Koos, Inc.	5	5	9	14	1	3	147.5	127.7
E. J. Korvette	7	7	14	21	0	0	114.0	122.1
Lebanon Chemical Corp.	11	11	19	30	1	4	119.8	115.4
Leslie Agriform Corp.	1	1	2	3	0	0	101.2	119.7
Lewis International Co.	1	1	2	3	0	0	112.0	149.0
The Liberty Fertilizer Group	3	3	6	9	0	2	105.6	98.2
Limestone Products Corp.	1	1	2	3	1	1	92.8	93.3
Loff's Pedigreed Seed, Inc.	2	2	2	4	0	0	172.1	123.5
Luzerne Fertilizer Co.	3	3	6	9	0	0	109.9	106.1
McArdles Seed Co.	2	2	4	6	1	0	95.8	226.0
Nassau Garden, Inc.	19	19	38	57	1	0	114.5	124.2
Natural Plant Food Co., Inc.	3	3	6	9	0	0	90.8	105.1
New Plant Life Division	1	1	2	3	0	0	128.0	179.5
Old Deerfield Fertilizer Co.	4	4	8	12	0	2	107.3	94.7
Old Fox Agricultural Sales, Inc.	44	38	83	121	10	19	103.8	111.6
Olin Corp.	3	3	5	8	0	0	100.4	115.1
Organic Compost Corp. of Penna.	13	13	26	39	0	0	139.8	168.7
Patco Products, Inc.	4	4	8	12	0	0	107.0	112.0
Pennsylvania Dutch Fertilizer Co.	7	7	14	21	0	2	111.2	110.2
Perk-Up Products Co.	3	3	6	9	0	3	103.6	98.5

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Robert B. Peters Co., Inc.	1	1	2	3	0	0	99.0	99.8
Plantabbs Corp.	4	4	8	12	0	0	107.4	112.8
Frank Policastro & Sons, Inc.	2	2	4	6	1	0	88.7	103.3
Proen Products Co.	2	2	4	6	0	0	156.9	122.0
Professional Turf Products	3	3	6	9	1	0	104.8	156.8
Ralston Purina Co.	1	1	2	3	0	0	104.8	117.3
Ra-Pid-Gro Corp.	1	1	2	3	0	0	102.3	99.5
Relko, Inc.	3	3	6	9	0	1	122.7	152.0
Ross Daniels, Inc.	6	6	12	18	0	0	142.7	117.8
Ruhms Phosphate & Chemical Co.	1	0	1	1	-	0	-----	99.4
Sanford Seed Co.	2	2	4	6	0	0	114.3	112.4
Schultz Co.	1	1	2	3	0	1	112.8	100.5
O. M. Scott & Sons Co.	14	13	26	39	1	1	102.0	107.5
Sears, Roebuck & Co.	34	34	66	100	2	0	119.3	136.5
Sewerage Commission of Milwaukee	2	2	2	4	0	0	100.7	157.0
Shell Oil Co.	1	1	2	3	1	0	90.0	118.4
Sierra Chemical Co.	3	3	6	9	1	0	100.9	118.2
Smith-Douglass Division	27	27	51	78	1	1	109.2	129.9
The Specialty Manufacturing Co.	1	1	2	3	0	0	109.1	117.1
Stanford Seed Co.	1	1	2	3	1	0	94.2	105.0
Stern's Garden Products, Inc.	4	4	8	12	1	2	101.4	108.8
Stokle, Inc.	4	4	8	12	0	0	121.5	143.9
Swift Agricultural Chemicals	16	15	26	41	0	4	111.2	108.7
Swiss Farms, Inc.	6	6	12	18	0	0	108.3	116.2
Two Guys	9	9	18	27	1	6	104.7	106.0
Universal Chemical Co., Inc.	1	1	2	3	0	0	100.8	100.5
USS Agri-Chemical, Inc.	22	21	40	61	1	4	108.5	113.8
Vaughan's Seed Co.	1	1	2	3	0	1	100.0	92.5
Vigoro	4	4	8	12	1	0	99.0	127.2

Commercial Fertilizers

Manufacturer	No. of Samples	No. of guarantees			Samples deficient		Average % of claims	
		N	P ₂ O ₅ +K ₂ O	total	N	P ₂ O ₅ +K ₂ O	N	P ₂ O ₅ +K ₂ O
Walgren Tree Experts	2	2	4	6	0	0	101.5	135.6
Walker-Gordon Laboratory Co.	4	4	8	12	0	0	118.8	133.3
Warren's Turf Nursery	2	2	4	6	0	0	102.6	107.6
Andrew Wilson, Inc.	1	1	2	3	0	0	148.0	199.5
Wilson & George Myer & Co.	1	1	0	1	0	-	100.0	-----
S. D. Woodruff & Sons, Inc.	1	1	2	3	0	0	109.6	103.5

SECONDARY AND MINOR ELEMENTS

	No. of Samples	Element guaranteed	No. of guarantees	Guarantees deficient	Average % of claims
Agrico Chemical Co.	8	Boron	3	2	39
		Iron	1	0	137
		Magnesium	5	1	180
		Zinc	1	0	114
Agriform International Chemicals, Inc.	2	Calcium	2	0	206
		Iron	2	0	151
		Sulfur	2	0	186
Agway	26	Aluminum	1	0	125
		Boron	20	2	124
		Iron	4	1	188
		Magnesium	6	0	339
		Zinc	2	2	63
Asgrow-Mandeville Co.	2	Boron	2	0	138
		Calcium	2	0	182
		Copper	1	0	104
		Iron	1	0	772
		Magnesium	2	0	431
		Manganese	1	0	98
		Sulfur	2	0	334
Chevron Chemical Co.	17	Boron	5	1	78
		Calcium	6	1	100
		Iron	14	0	160
		Magnesium	1	0	177
		Manganese	2	1	80
		Sulfur	7	2	147
		Zinc	5	1	256

	No. of Samples	Element guaranteed	No. of guarantees	Guarantees deficient	Average % of claims	10
Chilean Nitrate Sales Corp.	4	Sodium	4	1	97	Connecticut Experiment Station Bulletin 731
Corenco Corp.	6	Iron	4	0	153	
		Magnesium	2	0	100	
Diamond Shamrock Chemical Co.	1	Iron	1	0	100	
Elanco Products Co.	1	Iron	1	0	403	
Encap Products Co.	1	Iron	1	0	108	
The Espoma Co.	3	Iron	3	0	953	
Faesy & Besthoff Corp.	17	Aluminum	1	0	111	
		Iron	16	4	154	
Federal Chemical Co.	7	Iron	4	0	1224	
		Magnesium	3	0	161	
Goulard-Olena, Inc.	1	Iron	1	0	380	
The Great Atlantic & Pacific Tea Co.	2	Iron	2	1	85	
Halstead Distributing Co.	1	Iron	1	0	173	
Heritage House Products	8	Boron	1	1	69	
		Chlorine	1	0	120	
		Copper	4	2	198	
		Iron	5	1	211	
		Magnesium	2	0	133	
		Manganese	4	0	180	
		Sulfur	1	0	332	
Zinc	4	0	175			

A. H. Hoffman, Inc.	6	Boron	1	1	37	Commercial Fertilizers
		Copper	1	0	720	
		Iron	6	0	146	
		Magnesium	1	1	70	
Kerr-McGee Chemical Co.	4	Aluminum	1	0	109	
		Magnesium	3	0	153	
Lebanon Chemical Corp.	2	Iron	2	0	2527	
Limestone Products Corp.	1	Calcium	1	0	96	
		Iron	1	0	175	
		Magnesium	1	0	135	
McArdles Seed Co.	1	Iron	1	1	17	
Nassau Garden, Inc.	9	Boron	1	1	0	
		Calcium	2	0	999	
		Copper	3	1	375	
		Iron	8	0	1685	
		Manganese	3	0	473	
		Zinc	3	1	116	
Nelsen Steel & Wire Co.	1	Iron	1	0	128	
Old Fox Agricultural Sales, Inc.	2	Magnesium	2	0	259	
Patco Products, Inc.	1	Iron	1	0	2480	
Ross Daniels, Inc.	2	Iron	2	0	175	
Sanford Seed Co.	2	Iron	2	0	1980	
O. M. Scott & Sons Co.	1	Iron	1	0	221	
Sears, Roebuck & Co.	11	Calcium	5	1	104	

No. of Samples	Element guaranteed	No. of guarantees	Guarantees deficient	Average % of claims
Sears, Roebuck & Co.	Chlorine	2	2	78
	Copper	1	1	46
	Iron	9	0	252
	Manganese	1	0	720
	Sodium	1	0	100
	Sulfur	1	0	116
	Zinc	1	0	620
	Iron	1	0	150
	Boron	1	0	2200
	Calcium	4	0	148
Sewerage Commission of Milwaukee	Chlorine	7	7	58
	Copper	1	0	160
	Iron	7	0	986
	Magnesium	1	0	99
	Magnesium	1	0	1683
	Sodium	1	0	640
	Sulfur	5	1	106
	Zinc	1	0	240
	Aluminum	1	0	111
	Iron	4	0	234
Smith-Douglas Division	Iron	1	0	330
	Magnesium	1	0	263
Swift Agricultural Chemicals	Iron	1	0	395
	Calcium	1	1	88
USS Agri-Chemical, Inc.	Iron	1	0	
	Magnesium	1	0	
Vigoro	Iron	1	0	
	Calcium	1	1	
Wilson & George Myer & Co.	Aluminum	1	0	
	Iron	4	0	

TONNAGES OF FERTILIZER MATERIALS AND MIXED FERTILIZERS PURCHASED DURING THE PERIOD OF JULY 1, 1970 - JUNE 30, 1971

	Tonnage
I. Chemical Nitrogen	
Ammonia, anhydrous	12
Ammonium nitrate	288
Ammonium sulfate	20
Calcium nitrate	9
Nitrate of soda	78
Urea	2,854
Urea-form	11
	<hr/> 3,272
II. Organics	
Castor pomace	63
Cottonseed meal	4,904
Dried blood	7
Dried manures	2,626
Fish meal	1
	<hr/> 7,601
III. Phosphates	
Bonemeal	139
Calcium phosphate	332
Diammonium phosphate	3
Superphosphate, 20%	548
Superphosphate, 46%	875
	<hr/> 1,897
IV. Potash	
Muriate of potash	2,787
Nitrate of soda-potash	3
Sulfate of potash-magnesia	23
Potassium nitrate	7
	<hr/> 2,820
V. Secondary and Micronutrients	
Borax	17
Iron sulfate	20
Magnesium sulfate	2
	<hr/> 39
VI. Mixed Fertilizers	
Commercial mixtures	38,449
Special and home mixtures	4,064
	<hr/> 42,513
Total	58,142

MIXED FERTILIZER DISTRIBUTION
 JULY 1, 1970 - JUNE 30, 1971

<u>Grade</u>	<u>Tons</u>	<u>Grade</u>	<u>Tons</u>
0-15-30	330	10-20-10	384
0-20-20	62	10-20-20	765
5-10- 5	1,134	12- 4- 8	184
5-10-10	2,502	15-10-10	3,193
8-10-10	3,467	15-15-15	684
10- 5- 5	422	16- 8- 8	139
10- 6- 4	3,517	20-10- 5	333
10- 8- 8	145	23- 7- 7	1,957
10-10-10	5,894	25- 5-10	62
		Miscellaneous*	13,275
		Total	38,449

*Small amounts or reported by less than three manufacturers.

THE CONNECTICUT
AGRICULTURAL EXPERIMENT STATION
NEW HAVEN, CONNECTICUT 06504

Paul E. Waggoner
Director

PUBLICATION

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