

COMMERCIAL FERTILIZERS

Report for 1966

J. GORDON HANNA



CIRCULAR OF THE CONNECTICUT AGRICULTURAL
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REPORT ON INSPECTION AND ANALYSIS OF
COMMERCIAL FERTILIZERS

1966

J. Gordon Hanna, Chief Chemist

The annual fertilizer report for 1966 differs from those for the two previous years in that it is issued in only one part. It includes data for 1966 similar to that given in Part I of the 1965 report. Listed 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, and potash found to the percentages guaranteed. The present circular summarizes the results on 746 samples of fertilizers produced by 165 manufacturers. A table of the tonnage sold during the period between July 1, 1965 and June 30, 1966 similar to that normally given in Part II of the annual report is included also in this circular.

Until August 1, 1966, the analytical work was under the direction of Dr. H. J. Fisher, Chief Chemist, at which time he retired and became Chemist Emeritus. Analyses were made by Messrs. Richard A. Botsford, Sherman Squires, Werner Mueller, Charles Hahn, and Miss Helen Kocaba. Inspection and sampling were by Mr. R. Richard Nichols. Mrs. Sunrae McLean and Miss Lois Hornig performed the necessary calculations to compile the tables.

COMPLIANCE OF 1966 FERTILIZER SAMPLES WITH GUARANTIES

Manufacturer	No. of samples		No. of guaranties		Samples deficient			Average % of claims	
	N	P ₂ O ₅ +K ₂ O	N	P ₂ O ₅ +K ₂ O	N	P ₂ O ₅ +K ₂ O	N	P ₂ O ₅ +K ₂ O	
Agrico Chemical Co.	32	27	58	85	6	8	102.3	103.6	
Agricultural Products Co.	6	6	12	18	0	0	115.1	108.0	
Agricultural Supply Co.	1	1	2	3	0	0	122.5	153.0	
Agway, Inc.	31	28	52	80	8	8	103.6	107.7	
Allied Chemical Corp.	2	2	0	2	1	-	104.3	--	
American Agricultural Chemical Co.	1	0	1	1	0	0	--	148.3	
American Cyanamid Co.	2	2	0	0	0	0	100.8	--	
American Fertilizer Co.	9	9	16	25	1	2	105.3	118.7	
Archer-Daniels-Midland Co.	2	2	0	0	0	0	102.6	--	
Armour Agricultural Chemical Co.	15	15	29	44	4	2	112.3	113.8	
Asgrow Seed Co.	7	7	14	21	0	1	108.4	121.4	
Atlantic Seed Co.	1	1	2	3	1	0	95.2	100.8	
Atlas Fish Fertilizer Co.	1	1	2	3	0	0	111.2	110.5	
Baker Castor Oil Co.	4	0	0	0	-	-	--	--	
F. A. Bartlett Tree Expert Co.	1	1	2	3	0	0	100.0	100.7	
Baugh and Sons Co.	1	0	1	1	0	0	--	102.1	
Bishop Processing Co.	1	1	1	2	0	0	113.4	111.6	
Black Magic, Inc.	2	2	4	6	0	0	116.0	119.3	
Blackstone Guano Co.	3	3	6	9	1	1	101.5	112.1	
Bonide Chemical Co.	3	3	6	9	3	3	92.1	78.6	
Boyle-Midway, Inc.	1	1	2	3	0	2	110.9	89.1	
Bristol Nurseries, Inc.	1	1	2	3	0	0	100.0	109.2	
Brookside Nurseries, Inc.	5	5	6	11	1	2	113.1	99.6	
Cadwell and Jones, Inc.	20	19	17	36	5	3	102.0	105.8	
California Chemical Co.	1	1	2	3	0	0	102.4	102.4	
Peter Cascio Nursery	3	3	6	9	1	2	100.1	99.1	
Central Farmers Fertilizer Co.	1	0	1	1	0	0	--	101.7	
Chevron Chemical Co.	2	2	4	6	0	0	103.4	105.0	

Commercial Fertilizers

Manufacturer	No. of samples	No. of guaranties			Samples deficient		Average % of claims		4
		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	
Chilean Nitrate Sales Corp.	4	4	0	4	0	0	100.3	--	Connecticut Experiment Station Circular 229
Circle P Plant Foods	1	1	2	3	0	0	142.2	556.8	
Clinton Nursery Products, Inc.	6	6	12	18	0	0	115.6	115.1	
Cocke and Company	3	3	0	3	1	0	103.1	--	
Connecticut Bi-Products, Inc.	1	0	0	0	0	0	--	--	
Consolidated Rendering Co.	60	48	105	153	12	18	107.3	111.0	
Country Squire Fertilizers	2	2	4	6	0	1	106.8	99.0	
Crouch Potting Soil & Products, Co.	1	1	2	3	0	1	104.0	98.7	
Danbury Garden Center	1	1	2	3	1	0	97.4	113.5	
Davey Tree Expert Co.	3	3	6	9	1	1	126.5	147.5	
Davis Products Corp.	1	1	2	3	0	0	102.4	105.5	
Delphos Soya Products Co.	3	3	0	3	0	0	104.2	--	
E. I. duPont de Nemours and Co.	6	6	6	12	0	1	104.5	104.4	
Eastern Dehydrating Co.	1	1	2	3	1	0	80.0	106.9	
Eastman Gelatine Corp.	5	0	5	5	0	0	--	101.9	
Elanco Products Co.	8	8	16	24	1	3	109.8	119.8	
Espoma Company	7	7	14	21	0	4	138.9	125.1	
Estate Fertilizer	1	1	2	3	0	1	102.4	99.5	
Excel Seed Co.	1	1	2	3	0	1	114.4	105.0	
Leon Ezzel, Inc.	2	2	4	6	1	2	119.0	103.9	
Faesy and Besthoff, Inc.	9	9	16	25	0	2	145.0	119.7	
Farmers Organic Corp.	2	1	2	3	1	0	106.0	105.3	
Farmingdale Garden Laboratories, Inc.	3	3	6	9	1	1	109.2	109.5	
Federal Chemical Co.	11	11	22	33	1	7	106.7	102.3	
Fer-Mel Corp.	9	9	18	27	2	3	103.4	104.7	
First National Stores, Inc.	4	4	8	12	2	1	101.8	110.2	
Garden Exchange Inc. of Trumbull	1	1	2	3	1	0	98.8	114.8	
Garfield Williamson, Inc.	2	2	4	6	0	0	100.8	113.0	
Gates General Corp.	1	0	0	0	-	-	--	--	

General Products of Ohio	3	3	5	8	1	1	103.3	94.3	Commercial Fertilizers
Glenn Terrace Nurseries	1	1	2	3	1	0	93.6	109.3	
Glorion Corp.	7	7	14	21	1	2	107.6	104.2	
Godfrey's Garden Shop	1	1	2	3	0	0	100.0	115.6	
Gold Star Nursery Co.	1	1	2	3	0	0	320.0	355.0	
Goldenrod Oil Meal Sales Co.	2	2	0	2	0	0	101.8	--	
Goulard and Olena, Inc.	8	8	13	21	0	2	296.0	289.0	
W. R. Grace and Co.	9	6	13	19	1	1	104.9	107.8	
Grand Union Co.	4	4	8	12	2	1	99.2	103.8	
Gray Chemical, Inc.	1	1	2	3	0	1	106.0	136.7	
The Great Atlantic & Pacific Tea Co., Inc.	4	4	6	10	2	0	94.0	108.4	
Green Beauty Products	1	1	2	3	0	0	102.4	114.5	
Green Ribbon Products Co.	3	3	6	9	1	0	105.6	109.2	
Green Thumb Products	1	1	2	3	0	1	102.9	90.0	
Greenlife Products Co., Inc.	8	8	16	24	2	2	143.4	114.1	
Gro Fast Fertilizer Associates	2	2	4	6	0	1	112.4	105.9	
Halstead Distributing Corp.	2	2	4	6	0	0	104.8	106.0	
Chas. C. Hart Seed Co.	6	6	11	17	0	1	117.3	116.0	
Heritage House Products	3	3	6	9	0	0	125.3	112.3	
Hess Oil Chemical Corp.	1	1	2	3	0	0	105.6	116.4	
Hills Korvette Supermarkets	4	4	8	12	0	0	106.6	104.0	
A. H. Hoffman, Inc.	3	3	6	9	0	0	125.5	112.4	
Holdridge Farm Nursery	1	1	2	3	0	0	100.8	105.6	
Hoosier Soil Service, Inc.	3	3	6	9	1	2	102.1	90.4	
Horton and Snyder	1	1	2	3	0	0	104.8	105.5	
Hy-Trous Corp.	2	2	4	6	0	0	164.0	115.0	
International Minerals & Chemical Corp.	17	11	23	34	2	1	107.3	111.3	
Kennett Oil Mill, Inc.	3	3	0	3	0	0	104.9	--	
Kerr-McGee Chemical Corp.	60	50	102	152	12	23	115.5	111.6	
Kind and Knox Gelatin Co.	3	0	3	3	0	0	--	100.6	
N. S. Koos and Son Co.	1	1	2	3	1	0	98.8	101.1	
E. J. Korvette, Inc.	11	11	22	33	2	1	137.3	133.9	

Manufacturer	No. of samples	No. of guaranties			Samples deficient		Average % of claims ⁶	
		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
Lancaster Cotton Oil Co.	1	1	0	1	0	0	99.3	--
Lebanon Chemical Corp.	4	4	7	11	0	0	112.4	127.6
Lewis Brothers, Inc.	1	1	2	3	0	0	103.6	106.7
Liberty Fertilizer Group	3	3	6	9	0	1	105.2	102.5
Loft's Pedigreed Seed, Inc.	4	4	6	10	2	0	147.3	111.7
Longlife Fish Food Products	1	1	2	3	0	0	102.4	105.0
Luzerne Fertilizer Co.	3	3	6	9	2	0	99.7	110.6
R. H. Macy and Co., Inc.	1	1	2	3	0	0	107.2	147.0
Mamlon Co.	1	1	2	3	0	0	100.5	109.6
McArdle's Seed Co.	2	2	4	6	0	0	108.8	125.6
Miller Chemical and Fertilizer Corp.	3	3	6	9	0	1	104.7	97.8
Mississippi Cottonseed Products Co.	3	3	0	3	3	0	97.2	--
Monsanto Co.	1	1	0	1	0	0	100.1	--
Natural Development Co.	3	3	6	9	1	3	105.7	95.6
Natural Plant Food Co.	2	2	4	6	0	1	99.0	93.0
Nelson Steel & Wire Co.	1	-	-	-	-	-	--	--
New Plant Life	1	1	2	3	0	0	122.0	126.0
Old Deerfield Fertilizer Co.	4	4	8	12	0	0	105.6	107.1
Old Fox Agricultural Sales, Inc.	26	24	51	75	3	10	103.0	103.9
Olin Mathieson Chemical Corp.	3	3	6	9	0	0	104.3	103.7
Organic Compost Corp.	6	6	12	18	0	1	236.0	267.1
Organic Growth Products Co.	1	1	2	3	1	0	96.0	119.8
Organic Soilbuilder Products Co.	2	2	4	6	0	0	114.0	192.5
Lee Patten Seed Co.	7	7	14	21	0	3	108.1	106.3
Pennsylvania Dutch Fertilizer Co.	4	4	8	12	0	2	103.4	108.7
Perk-Up Products Co.	1	1	2	3	0	0	128.0	106.6
Robert B. Peters Co.	9	8	17	25	0	2	109.1	105.3
Phillips Petroleum Co.	1	1	0	1	0	0	100.8	--
Plant Joy Co.	2	2	4	6	0	0	138.0	107.1

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Plantabbs Corp.	3	3	6	9	0	0	108.7	114.3
Platt's Garden Center	1	3	2	3	1	1	98.2	98.2
Point Judith Fisherman's Co-Op Assoc.	3	3	0	3	0	0	114.3	--
Frank Policastro and Sons	2	2	4	6	0	1	100.0	103.5
Potash Co. of America	2	0	2	2	0	0	--	101.9
Professional Turf Products Co.	1	1	2	3	0	1	159.4	80.1
Ra-Pid-Gro Corp.	1	1	2	3	0	1	108.7	97.3
Riverside Oil Mill	1	1	0	1	1	0	97.6	--
Ross Daniels, Inc.	4	4	8	12	0	0	107.3	111.1
Schultz Co.	1	1	2	3	0	1	121.2	75.0
O. M. Scott & Sons Co.	6	6	12	18	0	4	101.7	112.7
Seaboard Seed Co.	2	2	4	6	0	0	118.1	121.2
Sears, Roebuck and Co.	22	22	38	60	3	6	140.7	136.0
Sewerage Commission-City of Milwaukee	1	1	1	2	0	0	101.3	140.0
Shell Oil Co.	2	2	4	6	2	1	92.3	101.3
Sherwin-Williams Co.	4	4	4	8	0	0	105.5	158.5
J. Howard Smith, Inc.	8	8	0	8	0	0	111.0	--
Smith-Douglass, Div. of Borden Chemical Co.	12	12	21	33	2	4	109.1	105.3
Southern Cotton Oil, Div. Hunt Food and Industries	1	1	0	1	0	0	111.6	--
Southwest Potash Corp.	4	4	4	8	0	0	105.1	103.8
Specialty Mfg. Co.	2	2	4	6	0	0	109.6	109.8
Specialty Products Co.	3	3	5	8	0	1	112.4	109.6
Spencer Kellogg	3	3	0	3	0	0	112.2	--
Spencer Specialties Co.	1	1	2	3	0	0	100.8	104.4
Stern's Garden Products	3	3	6	9	1	0	101.7	107.3
Stim-U-Plant Laboratories	2	2	4	6	0	0	107.6	143.9
Stockdale Fertilizer Co.	1	1	2	3	0	0	144.0	112.5
Sudbury Laboratory	1	1	0	1	0	0	100.7	--
Swift and Co., Agr. Chem. Div.	15	15	28	43	1	2	106.2	107.2
Swiss Farms, Inc.	4	4	8	12	0	1	113.3	130.2

Commercial Fertilizers

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Manufacturer	No. of samples	No. of guaranties			Samples deficient		Average % of claim	
		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
Thomason Ranch, Div. Thomason Industries	2	2	4	6	0	0	109.0	212.7
Trebor Plant and Soil Co.	1	1	2	3	1	1	85.3	129.9
Trump Products, Inc.	1	1	2	3	1	1	66.0	63.3
Two Guys	11	11	20	31	8	5	98.4	103.0
Universal Chemical Co.	1	1	2	3	0	0	103.2	105.0
U. S. Borax and Chemical Corp.	2	0	0	0	-	-	--	--
Valley Feed and Supply Co.	1	1	2	3	0	0	146.7	243.0
Valu-Gro Corp.	2	2	4	6	0	2	106.4	98.6
Vaughan's Seed Co.	2	2	4	6	1	1	108.5	96.3
Vornado, Inc.	1	1	2	3	0	0	264.0	284.0
Walgren Tree Experts, Inc.	1	1	2	3	1	0	95.5	177.0
Walker-Gordon Laboratory	2	2	4	6	0	0	114.0	124.8
Oscar F. Warner	1	1	2	3	1	0	96.0	103.2
Warren's Turf Nursery	1	1	2	3	0	1	100.0	101.1
Western Auto Supply Co.	2	2	4	6	0	1	102.0	103.1
Andrew Wilson, Inc.	1	1	2	3	0	0	125.0	124.6
S. D. Woodruff and Sons	2	2	4	6	1	0	102.1	106.6

TONNAGES OF FERTILIZER MATERIALS AND MIXED FERTILIZERS PURCHASED DURING THE PERIOD OF JULY 1, 1965 - JUNE 30, 1966

	Tonnage
I. Containing chiefly nitrogen:	
Nitrate of soda	253
Sulfate of ammonia	3
Cyanamid	279
Urea	502
Nitrogen solutions	623
Castor pomace	226
Cottonseed meal	4,530
Linseed meal	359
Soybean meal	404
Unlabeled meal	76
Dried blood	3
Horn and hoof meal	4
Anhydrous ammonia	2
	<u>7,264</u>
II. Containing chiefly phosphoric acid:	
Superphosphate, 20%	2,544
Superphosphate, 46%	295
Dicalcium phosphate	134
Phosphate rock	40
Precipitated bone	39
	<u>3,052</u>
III. Containing chiefly potash:	
Muriate of potash	926
Sulfate of potash-magnesia	9
Cotton hull ashes	55
	<u>990</u>
IV. Containing nitrogen and phosphoric acid:	
Bone meal	337
Diammonium phosphate	1,358
Dry ground fish	5
Ammonium phosphonitrate	87
	<u>1,787</u>
V. Containing nitrogen and potash:	
Nitrate of potash	171
Nitrate of potash-soda	33
	<u>204</u>
VI. Mixed fertilizers:	
Commercial mixtures	57,172
Special and home mixtures	1,618
Special tobacco mixtures	6,887
	<u>65,677</u>
VII. Miscellaneous	
Borax	10
Sheep, cattle & poultry manure	2,432
Iron	1
	<u>2,443</u>
Total	81,417

MIXED FERTILIZER DISTRIBUTION

Grades approved for Connecticut

<u>Grade</u>	<u>Tons</u>	<u>Grade</u>	<u>Tons</u>
0-10-30	733	10-10-10	10,993
0-15-30	825	10-15-15	98
0-20-20	205	10-20-20	798
0-25-25	128	12-12-12	192
5-10-10	4,279	13-13-13	53
6- 3- 6	1,841	15-10-10	6,130
6- 8- 8	3,748	15-15-15	1,238
6-12-12	72	16- 8- 8	609
8- 6- 2	365	16- 8-12	60
8-12-12	130	20-10-10	195
8-16-16	678	20-20-20	22
10- 5- 5	666	24-12-12	16
		<u>Total</u>	<u>34,074</u>

Other Grades (10 tons or more)

1- 1- 1	18	9- 8- 3	38
3- 2- 1	108	9- 8- 8	1,077
4- 6- 4	74	10- 6- 4	6,945
4- 6- 6	20	10- 8- 8	21
4- 8- 8	26	10-20-20	822
4-10- 4	135	12- 4- 4	12
4-16-20	74	12- 4- 8	37
5- 0- 0	39	12- 5- 7	15
5- 4- 0	435	12- 6- 6	889
5- 4- 4	14	12- 7- 4	132
5- 8- 7	115	14- 3- 3	285
5-10- 5	2,268	15- 8-12	103
6- 3- 0	1,250	16- 8- 4	13
6- 8- 6	100	16-16-16	10
6-10-10	601	17- 4- 4	18
6-12- 4	111	20- 5- 5	461
6-24-24	39	20-10- 5	729
7- 0- 0	89	20-12- 8	240
7- 7- 7	457	22- 8- 4	163
7- 8- 5	11	23- 7- 7	1,969
7-10- 5	36	23-19-17	17
7-40- 6	23	24- 4- 6	478
8- 4- 4	15	24- 6- 6	26
8- 6- 4	709	24- 6- 8	72
8- 6- 6	13	24- 9- 5	17
8- 8- 8	20	25-10- 5	114
8-10-10	1,085	25-12-10	70
8-16- 8	39	30- 0- 0	54
9- 5- 3	126	Other grades	221
		<u>Total</u>	<u>23,098</u>

Grand Total

57,172

THE CONNECTICUT
AGRICULTURAL EXPERIMENT STATION
NEW HAVEN, CONNECTICUT 06504

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