

COMMERCIAL FERTILIZERS

Inspection report

1972

J. GORDON HANNA



COMMERCIAL FERTILIZERS
INSPECTION REPORT

1972

J. Gordon Hanna, Chief Chemist

Listed in this report for 1972 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 790 samples of fertilizer produced by 110 manufacturers are summarized. A table of the tonnage sold during the period between July 1, 1971 and June 30, 1972 is included.

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

COMPLIANCE OF 1972 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
Acme Insecticide Division, Sherwin Williams	2	2	4	6	0	0	104.1	107.8
Agrico Chemical	47	40	88	128	4	17	102.2	102.7
Agricultural Products	8	8	16	24	1	0	105.1	115.1
Agway	54	43	91	134	2	5	111.6	113.3
Amax Chemical	2	2	2	4	0	0	100.3	104.0
American Cyanamid	1	1	0	1	0	-	101.1	-----
Asgrow Mandeville	3	3	6	9	0	0	114.4	120.4
Atlas Fish Fertilizer	1	1	1	2	0	0	97.8	129.0
Baker Castor Oil	4	0	0	0	-	-	-----	-----
F. A. Bartlett Tree Expert	1	1	1	2	0	0	103.6	127.6
Black Leaf Products	1	1	2	3	0	0	97.3	107.4
Bonide Chemical	1	1	2	3	0	1	100.2	104.0
Bristol Nurseries	2	2	4	6	1	1	95.2	117.3
Brockville Chemical	5	5	0	5	0	-	101.7	-----
Brookside Nurseries	8	7	7	14	2	0	107.1	117.2
Cadwell and Jones	23	19	41	60	7	7	108.4	106.2
Cambridge Sales	1	1	2	3	1	1	94.7	127.3
Canadian Industries	1	0	1	1	-	0	-----	105.2
Peter Cascio Nursery	2	2	4	6	0	0	99.0	100.3
Chamberlain and Barclay	3	3	6	9	1	2	92.9	106.5
Chevron Chemical	20	20	39	59	0	2	105.9	115.9
Chilean Nitrate Sales	3	3	1	4	0	0	98.2	97.1
Clinton Nursery Products	3	3	6	9	0	0	124.0	123.7
Corenco Corporation	31	27	54	81	2	2	119.0	111.1
Ross Daniels	4	4	8	12	0	0	107.3	121.0
Davey Tree Expert	3	3	6	9	1	0	103.2	134.2

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Diamond Shamrock Chemical	3	3	6	9	1	0	99.3	125.8
The Dramm Company	1	1	2	3	0	0	114.3	130.7
E. I. duPont de Nemours	1	1	0	1	0	-	100.5	-----
Duval Sales	1	0	1	1	-	0	-----	102.6
Eastman Gelatine	1	0	1	1	-	0	-----	104.9
Elanco Products	6	6	12	18	0	2	104.8	116.5
The Espoma Company	12	12	24	36	1	0	119.3	118.9
Leon Ezzell	2	2	4	6	0	1	102.2	115.4
Faesy and Besthoff	10	9	16	25	0	1	142.1	128.0
Farmer's Chemical Association	1	1	0	1	0	-	100.6	-----
Farmingdale Garden Labs	1	1	2	3	0	0	98.1	125.8
Federal Chemical	7	7	14	21	2	1	102.7	104.7
The Fer-Mel Corporation	9	9	15	24	2	1	101.0	104.4
Fournier Nurseries	2	2	4	6	1	0	102.4	110.2
Garden Exchange of Trumbull	1	1	2	3	1	0	89.2	93.4
Glen Terrace Nurseries	1	1	2	3	1	0	85.1	105.0
Gold Star Distributing	1	1	2	3	0	0	144.0	163.0
W. R. Grace	2	0	2	2	-	0	-----	104.5
Grand Union	3	3	6	9	0	0	115.1	111.1
W. T. Grant	7	7	14	21	1	0	107.4	124.2
The Great Atlantic and Pacific Tea Company	9	9	18	27	0	0	123.8	137.2
Greenlife Products	2	2	4	6	2	4	43.3	52.1
Gro-Fast Fertilizer Associates	4	4	8	12	3	0	89.6	128.0
Halstead Distributing	2	2	4	6	0	0	108.2	106.6
Charles C. Hart Seed Company	5	5	10	15	0	2	114.1	107.8
Hercules, Incorporated	2	2	0	2	0	-	103.1	-----
Heritage House Products	9	9	18	27	0	0	109.9	113.2
A. H. Hoffman	12	12	21	33	1	1	120.1	112.5
The Hy-Trous Corporation	1	1	2	3	0	0	119.2	108.4

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
Independence Hall Seed	1	1	0	1	0	-	266.0	-----
International Minerals and Chemical	2	0	2	2	-	0	-----	427.9
Kelly Greens	1	1	2	3	1	0	90.6	107.2
Kennedy Nursery	1	1	2	3	0	1	121.0	119.9
Kerr-McGee Chemical	81	65	134	199	17	21	100.0	105.6
Korvette's	6	6	12	18	1	2	110.7	114.8
S. S. Kresge	1	1	2	3	0	0	102.0	102.7
Lebanon Chemical	6	6	12	18	0	1	110.6	105.8
Lewis International	1	1	2	3	0	0	136.0	174.0
Liberty Fertilizer Group	1	1	2	3	0	2	107.2	46.7
Loft's Pedigreed Seed	2	2	4	6	1	0	102.3	103.8
Louisville Fertilizer and Gin	1	1	0	1	0	-	102.7	-----
Luzerne Fertilizer	7	7	14	21	2	0	106.1	109.6
Milwaukee Sewerage Commission	2	2	2	4	0	0	103.4	137.7
Nassau Gardens	18	18	35	53	1	1	112.9	112.5
Natural Development	1	1	2	3	0	0	126.7	112.3
The Nestle Company	1	0	0	0	-	-	-----	-----
Old Deerfield Fertilizer	4	4	8	12	2	2	88.0	107.9
Old Fox Chemical	34	31	63	94	7	15	107.0	109.3
Olin Corporation	4	4	2	6	0	0	102.4	112.9
Organic Compost of Pennsylvania	4	4	8	12	0	0	144.5	160.3
Pennsylvania Dutch Fertilizer	6	6	11	17	0	0	124.2	109.1
Perk-Up Products	5	5	10	15	3	0	92.4	114.7

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Robert B. Peters	1	1	2	3	0	0	103.2	101.0
Plantabbs Corporation	1	1	2	3	0	0	104.9	106.8
Frank S. Platt	1	1	2	3	1	0	60.8	182.2
Frank Policastro and Sons	1	1	2	3	1	0	83.2	119.1
B. G. Pratt Division, Gabril Chemicals	1	1	2	3	0	0	118.8	108.9
Premier Peat Moss	1	1	2	3	0	0	285.0	197.0
Professional Turf Products	6	6	10	16	2	1	109.2	171.8
Ra-Pid Gro Corporation	1	1	2	3	0	0	98.6	102.9
Relko	2	2	4	6	0	0	129.8	126.0
Rockland Chemical	2	2	4	6	0	0	109.4	125.2
O. M. Scott and Sons	16	16	32	48	0	2	121.0	108.1
S and D Products	1	1	2	3	0	0	117.4	118.4
Sears, Roebuck	19	18	37	55	1	3	113.0	110.3
Smith Douglass Division, Borden Chemical	7	5	10	15	0	3	127.3	95.8
Stern's Garden Products	3	3	6	9	0	0	103.7	110.4
Stokle	4	4	8	12	0	0	141.8	157.3
Sudbury Laboratory	1	1	0	1	0	-	104.5	-----
Swift Agricultural Chemicals	6	6	10	16	1	1	120.6	138.1
Swiss Farms	3	3	6	9	0	0	107.1	102.8
Thirteen Corporation of Nebraska	1	1	2	3	0	0	100.0	94.5
Thompson Sales	2	0	2	2	-	0	-----	245.3
Universal Chemical	1	1	2	3	0	0	100.6	105.7
USS Agri-Chemicals	24	24	45	69	3	2	102.1	108.9
Vigoro	7	7	14	21	0	2	109.5	100.9
Vornado	2	2	4	6	0	0	129.0	156.5
Walgren Tree Experts	1	1	2	3	0	0	92.8	156.2
Walker-Gordon Laboratory	3	3	6	9	0	0	129.5	127.2
Warren's Turf Nursery	2	2	4	6	0	0	102.8	102.8
Wilson and George Myer	1	1	0	1	0	-	98.7	-----
F. W. Woolworth	3	3	6	9	1	2	117.7	94.6

Commercial Fertilizers

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SECONDARY AND MINOR ELEMENTS

	No. of Samples	Element Guaranteed	No. of Guarantees	Guarantees Deficient	Average % of Claims
Agrico Chemical	16	Boron	3	1	81
		Calcium	4	0	172
		Iron	5	0	221
		Magnesium	10	0	181
		Manganese	2	0	117
		Sulfur	6	0	211
		Zinc	2	1	82
Agway	24	Boron	20	2	183
		Iron	3	0	183
		Magnesium	6	1	255
		Zinc	2	1	79
Chamberlain and Barclay	1	Magnesium	1	0	234
Chevron Chemical	11	Boron	5	1	88
		Calcium	5	1	95
		Copper	1	0	100
		Iron	11	0	257
		Magnesium	1	1	60
		Manganese	5	0	136
		Sulfur	7	1	172
		Zinc	5	1	97
Chilean Nitrate Sales	2	Sodium	2	0	102
Corenco	3	Iron	1	0	177
		Magnesium	2	0	115
Diamond Shamrock Chemical	2	Boron	1	0	110
		Copper	1	0	80
The Damm Company	1	Iron	2	0	120
		Manganese	1	0	120
		Zinc	1	0	140
Encap Products	1	Calcium	1	0	122
		Iron	1	0	112
		Sulfur	1	0	137
The Espoma Company	1	Iron	1	0	820
Faesy and Besthoff	4	Iron	4	1	138
Federal Chemical	3	Magnesium	3	0	296
The Great Atlantic and Pacific Tea Company	3	Boron	2	1	75
		Calcium	2	0	130
		Copper	2	0	157
		Iron	3	0	142
		Manganese	2	0	260
		Sulfur	2	0	140
		Zinc	2	0	690
Heritage House Products	9	Boron	2	0	107
		Copper	7	0	129
		Iron	8	0	186
		Magnesium	3	0	123
		Manganese	7	0	156
		Sulfur	5	0	124
		Zinc	7	0	158
A. H. Hoffman	6	Boron	1	0	104
		Copper	1	0	96
		Iron	6	0	132
		Magnesium	1	1	53
		Manganese	1	0	140
		Zinc	1	0	96

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	No. of Samples	Element Guaranteed	No. of Guarantees	Guarantees Deficient	Average % of Claims
Kerr-McGee Chemical	4	Aluminum	1	0	196
		Boron	1	0	92
		Magnesium	2	0	146
Lebanon Chemical	1	Iron	1	0	2307
Milwaukee Sewerage Commission	2	Iron	2	0	178
Nassau Gardens	11	Boron	3	1	102
		Calcium	2	0	199
		Copper	3	1	240
		Iron	9	0	830
		Magnesium	1	0	162
		Manganese	3	0	86
		Sulfur	2	0	342
		Zinc	3	1	82
Old Fox Chemical	4	Magnesium	4	0	382
Professional Turf Products	3	Iron	3	2	75
		Magnesium	2	0	315
O. M. Scott and Sons	3	Boron	1	0	87
		Calcium	1	0	155
		Copper	1	0	142
		Iron	2	0	789
		Magnesium	1	1	19
		Manganese	1	0	130
		Molybdenum	1	0	1300
		Zinc	1	0	84
Sears, Roebuck	5	Boron	2	2	69
		Calcium	1	0	105
		Copper	2	0	800

		Iron	5	2	110
		Manganese	2	1	239
		Sulfur	1	1	56
		Zinc	2	1	216
Swift Agricultural Chemicals	1	Iron	1	0	147
USS Agri-Chemicals	2	Calcium	1	0	156
		Copper	1	0	94
		Iron	1	0	410
		Magnesium	2	0	185
		Zinc	1	0	840
Vigoro	1	Iron	1	1	45

TONNAGES OF FERTILIZER MATERIALS AND MIXED
FERTILIZERS PURCHASED DURING THE PERIOD
OF JULY 1, 1971 - JUNE 30, 1972

I. Chemical Nitrogen		
Ammonia, anhydrous	2	
Ammonia, aqua	1024	
Ammonium nitrate	303	
Ammonium sulfate	3	
Calcium nitrate	33	
Nitrate of soda	67	
Urea	3000	
Ureaform	27	
		4459
II. Organics		
Castor pomace	85	
Cottonseed meal	7119	
Linseed meal	360	
Soybean meal	1244	
Dried blood	10	
Dried manures	4126	
Fish meal	282	
Sewage sludge	1060	
		14286
III. Phosphates		
Bonemeal	199	
Calcium phosphate	392	
Diammonium phosphate	11	
Superphosphate, 20%	693	
Superphosphate, 46%	1084	
		2379
IV. Potash		
Muriate of potash	2200	
Nitrate of soda - potash	15	
Sulfate of potash - magnesia	35	
Potassium nitrate	17	
		2267
V. Secondary and Micronutrients		
Borate	15	
Copper sulfate	1	
Magnesium sulfate	2	
Iron sulfate	1	
		19
VI. Mixed Fertilizers		
Commercial Mixtures	42066	
Special and Home Mixtures	4618	
		46684
TOTAL		70094

MIXED FERTILIZER DISTRIBUTION
JULY 1, 1971 - JUNE 30, 1972

<u>Grade</u>	<u>Tons</u>
0-10-30	147
0-15-30	410
0-20-20	119
5-10- 5	907
5-10-10	2620
6- 3- 6	1716
8- 6- 4	130
8-10-10	3347
10- 5- 5	382
10- 6- 4	3877
10-10-10	6466
10-20-10	442
10-20-20	588
12- 4- 8	116
15-10-10	2272
15-15-15	496
16-16-16	143
20- 0-10	217
20- 5-10	186
20-10- 5	216
20-10-10	194
20-12- 8	53
23- 7- 7	2012
Miscellaneous*	15010
Total	42066

*Small amounts or reported by less than three manufacturers.

THE CONNECTICUT
AGRICULTURAL EXPERIMENT STATION
NEW HAVEN, CONNECTICUT 06504

Paul E. Waggoner
Director

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