

COMMERCIAL FERTILIZERS

Inspection report

1973

J. GORDON HANNA

BULLETIN 742

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COMMERCIAL FERTILIZERS
INSPECTION REPORT

1973

J. Gordon Hanna, Chief Chemist

Listed in this report for 1973 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 764 samples of fertilizer produced by 108 manufacturers are summarized. A table of the tonnage sold during the period between July 1, 1972 and June 30, 1973 is included.

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

COMPLIANCE OF 1973 FERTILIZER SAMPLES WITH GUARANTEES

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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	30	28	53	81	1	6	112.7	117.8
Agricultural Products	7	7	14	21	0	0	107.5	111.7
Agway	38	31	62	93	0	3	119.1	114.7
Asgrow Mandeville	5	5	10	15	0	0	111.5	118.1
Atlas Fish Fertilizer	1	1	1	2	0	0	104.8	110.0
Baker Castor Oil	3	2	0	2	0	-	123.1	-
F.A. Bartlett Tree Expert	2	2	3	5	0	0	102.0	96.8
Boyle-Midway	1	1	2	3	0	0	108.7	104.7
Bristol Nurseries	2	2	4	6	0	1	104.5	107.2
Broadway Supply	1	1	2	3	0	0	104.0	143.5
Brockville Chemical	2	2	0	2	0	-	101.6	-
Brookside Nurseries	4	4	7	11	1	1	108.7	105.6
Buckeye Cotton Oil	1	1	0	1	0	-	99.4	-
By-Products	1	1	0	1	0	-	99.4	-
Cadwell and Jones	31	26	51	77	4	5	102.6	106.6
Canadian Industries	1	1	0	1	0	-	101.2	-
Peter Cascio Nursery	3	3	6	9	0	0	111.3	109.6
Chamberlin and Barclay	13	10	20	30	1	2	120.9	113.0
Chevron	20	18	37	55	0	0	106.0	119.6

Chilean Nitrate Sales	4	4	1	5	0	0	98.0	100.0
Clinton Nursery Products	4	4	8	12	0	1	107.0	114.5
Corenco	33	29	58	87	2	2	106.6	113.0
Country Squire Fertilizers	2	2	4	6	0	0	102.5	110.3
Ross Daniels	6	6	12	18	0	0	121.9	115.8
Davey Tree Expert	3	3	6	9	0	0	102.7	120.4
Dramm Company	1	1	2	3	0	0	105.8	105.8
E.I. duPont de Nemours	1	1	0	1	0	-	100.1	-
Duval Sales	1	0	1	1	-	0	-	104.5
Eastman Gelatine	1	0	1	1	-	0	-	102.2
Ecology, Inc.	2	2	4	6	0	0	109.7	109.9
Elanco Products	9	9	18	27	0	1	108.2	111.6
Espoma Company	10	10	20	30	0	2	124.5	109.5
Leon Ezzell	1	1	2	3	0	0	104.4	100.4
Faesy and Besthoff	12	11	18	29	0	1	118.0	137.2
Farmingdale Garden Labs.	1	1	2	3	0	0	102.8	118.3
Federal Chemical	6	6	12	18	2	1	98.6	111.1
Fer-Mel Corporation	10	10	17	27	1	3	108.0	103.2
Ford Motor	1	1	1	2	0	0	110.2	100.8
Fournier Nurseries	1	1	2	3	1	0	86.5	106.2
Free Flow Fertilizer	4	4	8	12	1	0	109.9	108.3
Garden Exchange of Trumbull	1	1	2	3	0	1	122.4	96.2
Glen Terrace Nurseries	1	1	2	3	1	0	92.0	114.8
Gold Star Nursery	1	1	2	3	0	0	118.0	143.0
W. R. Grace	1	1	2	3	0	0	101.7	103.0
Grand Union	3	3	6	9	0	0	105.5	113.2

Commercial Fertilizers 5

Manufacturer	No. of Samples	No. of Guarantees			Samples Deficient		Average % of Claims		6 Connecticut Experiment Station Bulletin 742
		N	P2O5		N	P2O5 +K2O	N	P2O5 +K2O	
			+K2O	Total					
W. T. Grant	14	14	28	42	2	3	131.3	135.4	
Great Atlantic and Pacific Tea Company	7	7	14	21	0	0	109.0	131.1	
Greenlife Products	1	1	2	3	1	1	44.0	53.0	
Green Ribbon Products	3	3	6	9	1	0	108.0	107.6	
Halstead Distributing	2	2	4	6	0	0	109.9	106.8	
Charles C. Hart Seed	4	4	8	12	1	0	103.6	111.8	
Hercules	1	1	0	1	0	-	99.7	-	
Heritage House Products	10	10	20	30	0	4	114.7	117.1	
A. H. Hoffman	12	12	20	32	0	1	126.3	145.0	
Hy-Trous	2	2	4	6	0	0	114.2	130.0	
International Minerals and Chemical	1	0	1	1	-	0	-	258.3	
Kalium Chemical	1	0	1	1	-	0	-	101.6	
Kelly Greens	1	1	2	3	1	0	89.6	111.6	
Kerr-McGee	84	68	134	202	16	12	105.5	104.6	
E. J. Korvette	1	1	2	3	0	0	106.9	106.0	
Lebanon Chemical	12	11	22	33	0	2	106.7	111.4	
Leisure Group	2	2	4	6	0	0	105.4	152.9	
Leslie-Agriform	1	1	2	3	0	0	101.6	113.9	

Loft's Pedigreed Seed	1	1	0	1	0	-	216.0	-	7 Commercial Fertilizers
Luzerne Fertilizer	6	6	12	18	1	2	100.2	109.0	
3M	1	1	2	3	0	1	100.0	58.6	
Maxton Oil and Fertilizer	3	3	0	3	1	-	104.8	-	
McCardles Seed	1	1	2	3	0	0	106.4	106.0	
Miller Chemical and Fertilizer	1	1	2	3	0	0	104.8	103.1	
Milwaukee Sewerage Commission	2	2	2	4	0	0	103.3	90.7	
Monarch	1	1	2	3	0	0	114.0	144.5	
Wilson and George Myer	2	2	0	2	0	-	98.9	-	
Nassau Garden	17	16	31	47	1	2	110.4	109.4	
Natural Development	1	1	2	3	0	1	112.4	112.2	
New Plant Life Division	1	1	2	3	0	0	129.5	130.5	
Old Fox Chemical	29	29	57	86	10	14	97.4	113.3	
Olin	3	3	2	5	0	0	100.1	104.7	
Organic Compost	6	6	12	18	0	0	136.8	155.6	
Patco Products	1	1	2	3	0	0	120.0	107.6	
Pennsylvania Dutch Fertilizer	7	7	14	21	0	0	112.4	111.1	
Perk-Up Products	3	3	6	9	1	1	102.3	103.8	
Robert B. Peters	6	6	12	18	0	0	109.7	112.6	
Plantabbs	2	2	4	6	0	0	105.4	105.8	
Frank Policastro and Sons	1	1	2	3	0	0	97.6	100.8	
B. G. Pratt Division	1	1	2	3	0	0	111.1	107.1	
Professional Turf Products	3	3	6	9	0	0	146.9	200.6	

Manufacturer	No. of Samples	No. of Guarantees			Samples Deficient		Average % of Claims	
		N	P2O5 +K2O	Total	N	P2O5 +K2O	N	P2O5 +K2O
Ra-pid Gro	1	1	2	3	0	0	98	107.5
Relko	3	3	6	9	0	2	153.7	170.3
Rockland Chemical	2	2	4	6	0	2	101.6	97.7
Science Products	1	1	2	3	0	0	96.8	103.3
O. M. Scott and Sons	16	16	32	48	0	1	103.7	109.8
S and D Products	1	1	2	3	0	0	116.5	137.2
Sears, Roebuck	15	13	27	40	1	0	115.2	125.4
Smith-Douglass Division	1	1	2	3	0	0	109.7	103.1
Spartans Industries	5	5	10	15	0	0	109.7	118.0
Stern's Nurseries	4	4	8	12	0	0	105.7	108.3
Swift Agricultural Chemicals	16	16	32	48	3	3	108.5	123.6
Swiss Farms	3	3	6	9	0	0	110.1	105.6
Universal Chemical	1	1	2	3	0	0	113.6	112.0
USS Agri-Chemicals	29	27	52	79	5	4	102.6	108.6
Vicksburg Chemical	1	1	1	2	0	0	105.8	103.4
Vornado	1	1	2	3	0	0	136.0	159.5
Walgren Tree Expert	1	1	2	3	0	0	96.5	159.0
Walker-Gordon Laboratory	1	1	2	3	0	0	115.0	96.0
Warren's Turf Nursery	1	1	2	3	0	0	100.0	210.0
F. W. Woolworth	2	2	4	6	0	0	110.0	123.9

SECONDARY AND MINOR ELEMENTS

	No. of Samples	Element Guaranteed	No. of Guarantees	Guarantees Deficient	Average % of Claims
Agrico Chemical	11	Calcium	4	2	101
		Iron	8	0	198
		Magnesium	6	0	140
		Sulfur	5	0	139
		Zinc	1	0	230
Agway	17	Boron	10	1	208
		Iron	6	0	753
		Magnesium	4	0	262
		Zinc	1	0	90
Peter Cascio Nursery	1	Calcium	1	0	173
		Iron	1	0	160
		Sulfur	1	0	186
Chamberlin and Barclay	1	Magnesium	1	0	125
Chevron	14	Boron	6	0	94
		Calcium	6	1	108
		Copper	1	0	100
		Iron	14	2	236
		Magnesium	4	0	121
		Manganese	6	0	1431
		Sulfur	9	3	91
		Zinc	8	0	104

Chilean Nitrate Sales	4	Sodium	4	0	102
Corenco	5	Boron	1	0	102
		Iron	2	0	101
		Magnesium	2	0	101
Ross Daniels	2	Iron	2	0	130
Duval Sales	1	Magnesium	1	0	105
Ecology	2	Calcium	2	0	206
		Iron	2	2	44
		Sulfur	2	0	177
Encap Products	1	Iron	1	0	119
Faesy and Besthoff	4	Iron	4	1	93
W. R. Grace	1	Magnesium	1	0	107
Great Atlantic and Pacific Tea Company	1	Iron	1	1	28
Heritage House Products	7	Boron	3	0	140
		Copper	5	0	116
		Iron	7	0	290
		Magnesium	2	0	150
		Manganese	5	0	134
		Sulfur	2	0	153
		Zinc	5	0	135

	No. of Samples	Element Guaranteed	No. of Guarantees	Guarantees Deficient	Average % of Claims
A. H. Hoffman	5	Boron	1	0	129
		Copper	1	0	118
		Iron	5	0	112
		Magnesium	1	1	55
		Manganese	1	0	148
		Zinc	1	0	116
Kerr-McGee	1	Aluminum	1	0	104
Lebanon Chemical	3	Iron	1	0	107
		Magnesium	3	0	506
Leslie-Agriform	1	Calcium	1	0	157
		Iron	1	0	174
		Sulfur	1	0	201
Milwaukee Sewerage Commission	2	Iron	2	0	93
		Sulfur	2	2	50
		Zinc	2	0	140
Nassau Gardens	8	Boron	3	1	83
		Calcium	2	0	450
		Copper	3	0	103
		Iron	6	0	506

Nassau Gardens (Cont.)		Magnesium	2	0	105
		Manganese	3	0	110
		Sulfur	2	0	271
		Zinc	2	0	124
Old Fox Chemical	3	Magnesium	3	0	188
Patco Products	1	Iron	1	0	98
Professional Turf Products	1	Iron	1	1	67
O. M. Scott and Sons	3	Boron	1	1	83
		Chlorine	1	0	113
		Copper	1	0	96
		Iron	2	0	200
		Manganese	1	0	132
		Magnesium	1	0	472
		Sulfur	1	1	84
		Zinc	1	0	92
Sears, Roebuck	6	Boron	5	2	80
		Chlorine	2	0	125
		Copper	5	2	106
		Iron	6	0	197
		Magnesium	3	0	304
		Manganese	5	2	170
		Sulfur	2	0	138
		Zinc	5	1	80
Swift Agricultural Chemicals	4	Iron	4	0	212

	No. of Samples	Element Guaranteed	No. of Guarantees	Guarantees Deficient	Average % of Claims
United States Gypsum	1	Calcium	1	0	101
		Sulfur	1	0	108
USS-Agri-Chemicals	4	Boron	3	0	432
		Calcium	1	0	143
		Copper	1	0	92
		Iron	1	0	320
		Magnesium	1	0	175
		Manganese	3	0	158
		Sulfur	1	0	138
		Zinc	4	0	143

TONNAGES OF FERTILIZER MATERIALS AND MIXED
FERTILIZERS PURCHASED DURING THE PERIOD
OF JULY 1, 1972 - JUNE 30, 1973

I. Chemical Nitrogen	
Ammonium nitrate	706
Ammonium sulfate	2
Calcium nitrate	238
Nitrate of soda	239
Urea	<u>3,723</u>
	4,908
II. Organics	
Castor pomace	291
Cottonseed meal	32
Dried blood	9
Dried manures	2,200
Fish meal	2
Sewage sludge	<u>505</u>
	3,039
III. Phosphates	
Bonemeal	184
Calcium phosphate	603
Diammonium phosphate	10
Superphosphate, 20%	580
Superphosphate, 46%	<u>1,080</u>
	2,457
IV. Potash	
Cotton hull ash	97
Muriate of potash	2,732
Nitrate of soda-potash	3
Potassium nitrate	<u>54</u>
	2,886
V. Secondary and Micronutrients	
Boron	21
Magnesium	3
Iron	<u>2</u>
	26
VI. Mixed Fertilizers	
Commercial mixtures	52,128
Special and home mixtures	<u>1,897</u>
	54,025
TOTAL	67,341

MIXED FERTILIZER DISTRIBUTION
JULY 1, 1972 - JUNE 30, 1973

<u>Grade</u>	<u>Tons</u>
0-15-30	569
4-10-6	25
5-10-5	1,030
5-10-10	3,340
6-3-6	1,482
6-10-4	259
6-24-24	46
7-7-7	44
8-8-8	51
8-10-10	3,375
8-16-16	121
10-6-4	3,384
10-10-10	6,792
10-20-10	570
10-20-20	729
12-4-8	134
15-10-10	4,025
15-15-15	747
16-8-8	32
16-16-16	194
20-10-5	276
20-10-10	714
20-12-8	162
20-20-20	17
23-3-7	90
23-7-7	2,193
24-4-8	456
24-12-18	421
30-10-10	26
Miscellaneous*	<u>20,824</u>
Total	42,066

*Small amounts or reported by less than three manufacturers.

THE CONNECTICUT
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Paul E. Waggoner
Director

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