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# Commercial FERTILIZERS

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**Report for 1965**

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Part I: Compliance with Guaranties

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**H. J. FISHER**  
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**Chief Chemist**

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Circular 228

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April 1966



REPORT ON INSPECTION AND ANALYSIS OF  
COMMERCIAL FERTILIZERS

1965

Part I: Compliance With Guaranties

H. J. Fisher, Chief Chemist

Last year for the first time the annual fertilizer report<sup>1</sup> was issued in two sections, of which the first part listed only the manufacturers' names, the number of samples of the products of each manufacturer taken, the number of these samples found deficient, and the ratios (expressed as percentages) of the amounts of nitrogen, phosphoric acid and potash found to the amounts guaranteed. This new form of report followed a suggestion of the Station biometrician, Dr. C.I. Bliss, and was based on the assumptions that the interests of the State's farmers would be best served by a report that could be delivered to them promptly and that would be designed to facilitate comparisons between the relative reliabilities of the different manufacturers.

The present circular follows the same pattern as that for 1964. In both cases guaranties for nitrogen are separated from the combined phosphoric acid and potash guaranties because the nitrogenous ingredient of a mixed fertilizer is the most valuable. The circular summarizes the results on 735 samples of fertilizer produced by 127 manufacturers. It must be borne in mind in making comparisons on the basis of the average per cent of claims "figure" in this circular that 94 manufacturers are represented by fewer than five samples each. Percentages based on such few samples are obviously less reliable than those calculated from more numerous samples.

Inspection of the table shows that nearly all of the manufacturers are putting more of the three major components into their mixed fertilizers than they are guaranteeing. For a detailed statistical discussion of this and other points the reader is referred to Dr. Bliss's paper issued as Bulletin 674 of this Station in September 1965.

Part II of the 1965 Report, which will appear shortly as a separate bulletin, will list all registered brands, tonnage figures, and individual sample analyses.

<sup>1</sup> Conn. Agr. Expt. Sta. Circ. 226 (1965).

COMPLIANCE OF 1965 FERTILIZER SAMPLES WITH GUARANTIES

Manufacturer	No. of samples		No. of guaranties		Samples deficient		Average % of claims	
	N	P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O total	N	P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O
Agricultural Products Co., Inc.	7	14	7	14	0	5	112.7	108.4
Agricultural Supply Co.	1	2	1	2	0	0	105.5	122.0
Agway, Inc.	32	55	25	80	2	10	101.7	101.9
Allied Chemical Corp.	4	1	3	4	0	1	101.0	94.2
American Agr. Chemical Co.	41	75	34	109	4	16	103.6	103.3
American Cyanamid Co.	4	0	4	4	1	0	101.2	-----
American Fertilizer Co.	2	4	2	4	1	0	100.0	115.5
Armour Agr. Chemical Co.	18	35	18	53	4	3	109.9	113.9
Asgrow Seed Co.	6	12	6	18	2	1	102.7	111.7
Atlantic Seed Co.	1	2	1	3	1	0	84.0	104.8
Atlas Fish Fertilizer Co.	1	2	1	3	0	0	112.0	102.0
Baker Castor Oil Co.	5	0	0	0	---	---	---	---
F. A. Bartlett Tree Expert Co.	1	2	1	3	0	0	98.3	110.8
Baugh Chemical Co.	2	2	1	3	0	0	152.0	105.7
Black Magic, Inc.	1	2	1	3	0	0	110.0	104.1
Blackstone Guano Co., Inc.	15	30	15	45	5	8	98.7	100.1
Bonide Chemical Co., Inc.	4	8	4	12	0	0	116.4	120.9
Breck's Div., Asgrow Seed Co.	2	3	2	5	0	0	110.0	132.3
Brookside Nurseries, Inc.	5	7	4	11	0	1	111.4	111.5
W. Atlee Burpee Co.	1	2	1	3	0	1	110.4	104.9
Cadwell & Jones, Inc.	21	19	20	39	4	1	100.6	106.4
California Chemical Co., Ortho Div.	7	14	7	21	0	0	105.0	105.9
Canada Linseed Oil Mills, Ltd.	3	0	3	3	0	0	104.9	-----

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		N	P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O	total	N	P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O
Peter Cascio Nursery, Inc.	4	4	6	10	1	1	111.6	107.2
Chemagro Corp.	1	1	2	3	0	0	104.0	109.8
Chilean Nitrate Sales Corp.	4	4	1	5	0	1	100.3	96.6
Clinton Nursery Products, Inc.	4	4	8	12	0	0	115.3	120.0
Cocke & Co.	3	3	0	3	0	0	100.5	-----
Comark Corp.	15	15	27	42	0	0	131.1	127.6
Consolidated Rendering Co.	47	40	79	119	7	14	105.2	109.2
Consortio Pesquero	3	0	0	0	---	---	-----	-----
Crouch Potting Soil & Products Co.	1	1	2	3	0	0	103.0	102.5
Danbury Garden Center	1	1	2	3	0	0	100.0	111.7
Davey Tree Expert Co.	3	3	6	9	1	0	113.7	142.3
Deane Seed Co.	1	1	2	3	0	0	101.6	100.1
Delphos Soya Products Co.	3	3	0	3	0	0	103.2	-----
E.I. du Pont de Nemours & Co.	7	7	6	13	0	0	102.2	109.3
Eastern Dehydrating Co.	4	4	8	12	1	0	101.0	121.3
Eastman Gelatine Corp.	4	0	4	4	---	0	-----	101.3
Elanco Products Co.	6	6	12	18	1	0	105.7	113.3
John W. Eshelman & Sons	1	1	0	1	1	---	88.4	-----
Espoma Co.	7	7	14	21	0	0	131.3	117.0
Leon Ezzel, Inc.	2	2	4	6	1	0	109.6	116.9
Faesy & Besthoff, Inc.	7	7	13	20	0	1	105.4	132.3
Farmer's Organic Corp., N.C.	2	2	4	6	0	0	192.0	582.5

Connecticut Experiment Station

Circular 228

Farmer's Organic Corp., N.Y.	1	1	2	3	0	0	112.0	123.5
Farmingdale Garden Labs., Inc.	3	3	6	9	2	0	108.7	109.4
Federal Chemical Co.	9	9	17	26	1	2	111.5	109.0
First National Stores, Inc.	5	5	10	15	1	3	107.4	104.2
G.P.G. Grain Corp.	1	1	1	2	0	0	128.0	108.2
Garden Exchange, Inc.	1	1	2	3	1	0	96.8	108.1
Glen Terrace Nurseries, Inc.	1	1	2	3	0	0	100.8	104.2
Godfrey's Garden Shop	2	2	4	6	1	0	83.4	111.2
Goulard & Olena, Inc.	15	13	22	35	1	2	100.4	130.9
Grand Union Co.	4	4	8	12	3	0	93.1	105.3
W.R. Grace & Co.	12	9	9	18	1	4	101.6	104.7
Greenlife Products Co., Inc.	3	3	6	9	1	1	105.2	103.4
Green Ribbon Products Co.	3	3	6	9	1	0	102.9	111.8
Gro-Fast Fertilizer Associates	2	2	4	6	0	0	106.7	106.0
Halstead Distributing Corp.	2	2	4	6	0	0	103.2	107.8
Harrison Specialty Co., Inc.	1	1	2	3	0	0	100.8	101.3
Charles C. Hart Seed Co.	8	8	15	23	1	0	108.5	115.6
Hercules Powder Co., Inc.	1	1	0	1	0	---	100.2	-----
Heritage House Products, Inc.	2	2	4	6	0	2	110.0	99.6
A.H. Hoffman, Inc.	9	8	13	21	1	0	111.7	136.5
Holdridge Farm Nursery	1	1	2	3	1	1	88.8	94.9
Hoosier Soil Service, Inc.	10	10	20	30	0	6	104.9	103.3
Hubbard-Hall Chemical Co.	93	84	170	254	16	31	108.1	108.2
Hydroponic Chemical Co., Inc.	1	1	2	3	0	0	100.0	117.3
Hy-Trous Corp.	1	1	2	3	0	0	115.0	115.4
International Min. & Chem. Corp.	8	4	10	14	1	2	100.3	113.8
Kahn Bros. Co.	1	1	1	2	0	0	101.6	96.8
Kentucky Valley Farms	2	2	4	6	2	2	87.2	101.7

Commercial Fertilizers Part I

COMPLIANCE OF 1965 FERTILIZER SAMPLES WITH GUARANTIES

Manufacturer	No. of samples	No. of guaranties			Samples deficient		Average % of claims	
		N	P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O	total	N	P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O
N.S. Koos & Son Co.	4	4	8	12	1	1	130.3	115.3
Lawn-Tex, Inc.	1	1	1	2	0	0	105.2	141.8
Lebanon Chemical Corp.	3	3	5	8	0	1	115.7	129.0
Lewis Brothers, Inc.	1	1	2	3	0	0	100.8	105.3
Liberty Fertilizer Group	2	2	4	6	0	0	104.8	115.6
Loft's Pedigreed Seed, Inc.	4	4	6	10	1	0	158.8	108.8
Luzerne Fertilizer Co.	3	3	6	9	2	0	100.0	109.9
McArdle's Seed Co.	2	2	4	6	1	1	92.8	111.5
McNair Farms	1	1	2	3	0	0	102.0	196.8
R.H. Macy & Co., Inc.	1	1	2	3	0	1	104.8	100.3
Magovern Co., Inc.	1	1	2	3	1	1	99.5	97.4
Mamlon Co.	6	6	12	18	0	1	106.2	103.5
Mississippi Cottonseed Products Co.	4	4	0	4	4	---	95.6	----
Mr. Turf's	3	3	6	9	0	0	126.9	119.0
Natural Development Co.	3	3	6	9	2	3	87.1	86.1
Natural Plant Food Co., Inc.	2	2	4	6	1	2	93.0	83.3
New Plant Life	1	1	2	3	0	0	132.0	109.3
Old Deerfield Fertilizer Co.	3	3	6	9	1	1	106.7	107.0
Old Fox Agricultural Sales, Inc.	27	22	50	72	8	13	103.5	104.6
Olin Mathieson Chemical Corp.	4	4	6	10	0	1	101.7	104.0
Organic Compost Corp. of Pa.	7	7	14	21	0	1	245.1	203.0

Connecticut Experiment Station

Circular 228

Organic Growth Products Co.	1	1	2	3	0	0	100.0	130.7
Lee Patten Seed Co.	8	8	16	24	0	2	109.2	105.6
Pax Co.	1	1	2	3	0	0	108.0	1385.0
Pennsylvania Dutch Fertilizer Co.	2	2	4	6	1	1	99.2	100.8
Perk-Up Products Co.	4	4	8	12	1	0	101.5	110.2
Robert B. Peters Co., Inc.	5	4	9	13	0	1	104.3	102.5
Plant Products Corp.	1	1	2	3	1	1	97.4	96.6
Plantabbs Corp.	2	2	4	6	0	0	108.6	108.1
Frank S. Platt Co.	2	2	4	6	0	0	101.6	110.4
Frank Policastro & Sons, Inc.	1	1	2	3	0	0	100.0	104.1
Professional Turf Products Co.	1	1	2	3	0	0	106.3	108.7
Renzulli Brothers Garden Center	1	1	2	3	0	0	100.6	103.5
S. & D. Products, Inc.	1	1	2	3	0	0	112.5	121.6
O.M. Scott & Sons Co.	7	7	12	19	1	0	101.7	103.1
Seaboard Seed Co.	3	3	6	9	0	0	109.4	124.7
Sears, Roebuck & Co.	19	19	35	54	3	6	123.2	127.8
Sewerage Comm., City of Milwaukee	2	2	2	4	1	0	98.0	132.0
Sherwin-Williams Co.	2	2	1	3	0	0	100.4	161.0
Southern Cotton Oil Div., Hunt Foods	3	3	0	3	3	---	89.9	----
Southwest Potash Corp.	3	3	3	6	0	0	105.1	101.6
Specialty Products Co.	2	2	3	5	0	0	112.4	112.2
Stern's Garden Products, Inc.	2	2	4	6	0	0	104.6	103.7
Swift & Co., AgriChem Div.	22	22	40	62	3	6	102.7	119.4
Swiss Farms, Inc.	3	3	6	9	1	0	97.8	174.0
Thomason Ranch Div., Thomason Ind.	1	1	2	3	0	1	136.0	136.0
U.S. Borax & Chemical Corp.	1	0	0	0	---	---	----	----
Universal Chemical Co., Inc.	2	2	4	6	0	0	106.4	108.6

Commercial Fertilizers Part I

COMPLIANCE OF 1965 FERTILIZER SAMPLES WITH GUARANTIES

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		<u>N</u>	<u>P<sub>2</sub>O<sub>5</sub>+K<sub>2</sub>O</u>	<u>total</u>	<u>N</u>	<u>P<sub>2</sub>O<sub>5</sub>+K<sub>2</sub>O</u>	<u>N</u>	<u>P<sub>2</sub>O<sub>5</sub>+K<sub>2</sub>O</u>
Valley Feed & Supply Co., Inc.	1	1	2	3	0	0	116.0	219.0
Valu-Gro Corp.	3	3	6	9	0	2	104.4	103.6
Walker-Gordon Lab., Inc.	2	2	4	6	0	0	103.0	124.0
Western Auto Supply Co.	2	2	4	6	0	0	104.4	103.8
Garfield Williamson, Inc.	3	3	6	9	2	1	95.7	113.2
S.D. Woodruff & Sons of Wethersfield, Inc.	2	2	4	6	1	1	100.9	106.6

Analyses were made by Messrs. Richard A. Botsford, Sherman Squires, Werner Mueller, Charles Hahn and Miss Helen Kocaba; inspection and sampling by Mr. R. Richard Nichols. Credit for making the necessary calculations to compile this table should be given to Mrs. Sunrae McLean. Typing was by Mrs. Marilyn Fishbone.