CANADA—DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS
MINING, METALLURGICAL AND CHEMICAL BRANCH

THE FERTILIZER TRADE IN CANADA

July 1, 1926—June 30, 1927

Reprinted from the Monthly Bulletin of Agricultural Statistics, July, 1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1928

DOMINION BUREAU OF STATISTICS

R. H. COATS, B.A., F.S.S., (Hon.,) F.R.S.C., Dominion Statistician

THE FERTILIZER TRADE IN CANADA

July 1, 1926-June 30, 1927

Prepared by S. J. Cook, B.A., A.I.C., F.C.I.C., Chief of the Mining, Metallurgical and Chemical Branch.

Purpose and Scope of Present Report.—In previous years, fertilizer statistics for Canada have been confined to data on imports, home production, and exports. But many materials used as fertilizers are also used for other purposes and because of this fact it is difficult to allocate the imported materials according to the several purposes; for example, nitrate of soda is used as a fertilizer but it also finds extensive use as a material in the heavy chemical and explosives industries. To obtain some definite information, therefore, in respect to the quantities and values of fertilizers and fertilizer materials marketed in Canada, the *Bureau of Statistics* in co-operation with the *Markets and Fertilizer Division* of the *Seed Branch, Department of Agriculture,* made a survey of the *fertilizer trade* in Canada, selecting as the period for study, the twelve months beginning July 1, 1926, and ending June 30, 1927. This period coincides with the license period recognized by the *Department of Agriculture* as the "fertilizer year." Lists of concerns to whom licenses had been granted were furnished by the *Seed Branch,* and the work of collection and compilation was done by the Bureau.

An excellent response on the part of the traders in fertilizers enabled the Bureau to obtain practically complete returns in a reasonable time. Of 95 reporting firms, 8 replied that they had not been selling during the period; one sold to other manufacturers only; 5 sold only to other dealers for resale; and 13 were reported not operating; this left 68 plants engaged in marketing fertilizers or fertilizer materials directly to consumers. and in this report the tabular matter and reading references relate only to the data supplied by these 68 plants.

Products Marketed.—Fertilizers and fertilizer materials marketed by these 68 plants during the period July 1, 1926-June 30, 1927, reached a total of 254,639 tons, including 169,564 tons sold in the domestic market, and 85,075 tons sold for export from Canada. Mixed fertilizers for domestic trade at 64,423 tons constituted the bulk of the sales in this field; acid phosphate was next in quantity at 56,715 tons; basic slag sales totalled 12,919 tons while muriate of potash followed closely at 12,523 tons. Other fertilizer materials sold in considerable amounts for consumption in Canada were nitrate of soda at 9,066 tons; sulphate of ammonia, 6,909 tons; bone meal, 2,158 tons; tankage, 2,116 tons; and fish meal, 1,021 tons. Still other fertilizer materials sold in smaller quantities were cyanamide, sulphate of potash, dried blood, nitrate of lime, bone flour, whale meat and blood, natural rock phosphate, sheep manure, and urea.

Sales for export from Canada totalled 85,075 short tons and included cyanamide, sulphate of ammonia, acid phosphate, mixed fertilizer, tankage, muriate of potash, nitrate of soda, whale meat and blood, and bone meal.

It may be noted at this point that the area sown to field crops in Canada each year totals about 56 million acres. But as great tracts of land thus cropped are wonderfully fertile, and as the distribution of fertilizers, either by crops or by provincial areas, is not known, it is impossible to correlate the tonnage of fertilizers sold for use in Canada (169,564 tons) and the area of agricultural land under cultivation.

Distribution of Trade.—An analysis of the trade by the 68 concerns shows that 43 were engaged in manufacturing; of these 34 had their factories in Canada, 7 sold from plants located in the United States, 1 factory was located in England and 1 in Scotland.

Fifty-three concerns sold Canadian-made fertilizers or fertilizer materials for use in Canada, and 50 sold imported materials for the same purpose. In the export field, 14 sold Canadian-made products and 3 sold imported fertilizers.

Canada's fertilizer trade may be divided into two classes: *(a)* fertilizer materials; *(b)* mixed fertilizers.

Fertilizer Materials:—Regarding the sale of fertilizer materials, there remains little to be said. Such materials are either used singly by the farmer or are mixed by him according to a formula which he has decided will best serve his particular needs. At the experimental farms maintained by the provincial and federal governments, a great deal of investigational work is constantly being carried on and the results are published so that the individual user of fertilizers or of fertilizer materials may gain first-hand knowledge regarding the relative values of the several fertilizer materials on the market and may thus determine for himself the quantities and kinds of materials that are likely to give the best results in his particular crops.

Mixed Fertilizers.—It has been noted that mixed fertilizers are sold in greater tonnage for use in Canada than any single fertilizer material. Mixed fertilizers are those containing at least two, and usually three, of the primary fertilizer materials, namely, nitrogen, phosphoric acid and potash. Common practice permits the addition of inert material or filler in a mixed fertilizer so that the percentages of plant food may be controlled, and to improve the physical condition of the finished product so that it may be applied to the soil evenly.

Government Control.—Every manufacturer of mixed fertilizers in Canada is required by law to furnish the Dominion Government with the analysis of each brand he proposes to put on the market before he is given a license to sell his product. Every bag of mixed fertilizer is required to carry a label showing the name of the manufacturer or importer and the guaranteed analysis of the product. Rigid enforcement of these regulations provides an excellent safeguard for the consumer against the possibility of fraudulent practice on the part of manufacturers. Samples taken by government inspectors from the material offered for sale, are analyzed regularly and if any samples are found to be below the strength guaranteed on the tag, corrective action is immediately taken by the Department of Agriculture.

Classes of Mixed Fertilizer Sold.—Reports received by the Bureau in the course of the present survey, showed that 128 different "mixed fertilizers" were sold in the period under review.

These mixed fertilizers were of four classes according to their plant food content. The number in each class was as follows:—

Nitrogen-Phosphoric Acid mixtures	12
Phosphoric acid-Potash mixtures	17
Nitrogen-Potash mixtures	1
Nitrogen-Phosphoric acid-Potash mixtures	98
Total	128

Consideration of the analyses and tonnages of the entire lot of 128 mixed fertilizers revealed the fact that the total content of actual plant food in the 66,378 tons of fertilizers sold (including 1,955 tons for export) was 23,405,714 pounds (11,702 tons) or 17·63 p.c. For the total tonnage, the percentages of plant food were: nitrogen, 2·74 p.c.; phosphoric acid, 9·17 p.c.; and potash, 5·72 p.c.

Nitrogen contents ranged from zero to 15 p.c.; phosphoric acid from zero to 25 p.c.; potash, from zero to 16 p.c.

Again, the total quantity of nitrogen in the mixed fertilizers sold (including those for export) was 3,633,574 pounds. Phosphoric acid present amounted to 12,182,080 pounds, and potash, 7,590,060 pounds.

Of the 128 kinds under review, 111 contained nitrogen in some form; 127 contained phosphoric acid; and 116 contained potash.

Nitrogen.—Eighty-five products in this group, representing 95 p.c. of the total tonnage of nitrogen-bearing fertilizers had a nitrogen content of from 2 to 4 p.c. Twelve products showed 5 p.c. nitrogen and there were samples of nitrogen content of 6, 7, 9, 10, 11 and 15 p.c.

Phosphoric Acid was present in 127 out of the 128 mixed fertilizers reported, in amounts varying from 5 p.c. through 6, 8, 9, 10, 11, 12, 14, 16, 20 and 22 to 25 p.c. The average content of phosphoric acid in the 128 samples was 9·17 p.c. Phosphoric acid contents ranging from 8 to 12 p.c. were characteristic of 104 products or 85 p.c. of the total number of phosphoric-acid-bearing fertilizers, representing 96 p.c. of the tonnage sold in this class. A further analysis showed that more than 61 p.c. of these mixed fertilizers representing 81 p.c. of the total tonnage of this class contained from 8 to 10 p.c. phosphoric acid.

Potash was reported in 116 products in amounts ranging from 2 p.c. through 3, 4, 5, 6, 7, 8, 9, 10, 12, 13 and 15 p.c. to one sample showing about 16 p.c. About one-half of the samples showed a potash content of 4 to 6 p.c. Over 60 p.c. of these products representing about 70 p.c. of the tonnage of potash-bearing fertilizers sold, contained potash in amounts not exceeding 6 p.c. About 93 p.c. of the total number, or 108 products, representing 90 p.c. of the total tonnage, showed potash contents in varying proportions up to and including 10 p.c.

There are appended several tables showing in detail the analyses made of the data obtained in the present survey. A list of the reporting firms, showing the address of each company and the nature of the trade carried on during the period under review, has also been included.

Table 1.—Nature of Companies' Trade in Fertilizers during the period July 1, 1926 to June 30, 1927

Number of firms	Manufacturing fertilizers or fertilizer materials	Selling Canadian made fertilizers or fertilizer materials		Selling imported fertilizers or fertilizer materials	
		Domestic trade	Export trade	Domestic trade	Export trade
2	Yes	Yes	Yes	Yes	Yes
1	"	"	"	"	No
10	"	"	"	No	"
6	"	"	No	"	"
15	"	"	"	Yes	"
9*	"	No	"	"	"
16	No	Yes	"	"	"
2	"	"	"	No	"
6	"	No	"	Yes	"
1	"	Yes	Yes	"	Yes

* Factories not located in Canada.

SUMMARY

1. 68 firms reported.
2. Classification of the 68 firms according to the nature of their trade showed:—
   (a) Number of firms manufacturing fertilizers or fertilizer materials, 43.
   (b) Of those engaged in Domestic Trade—
      (1) 53 sold products made in Canada.
      (2) 50 sold imported products.
   (c) Of those engaged in Export Trade—
      (1) 14 sold products made in Canada.
      (2) 3 sold imported products.

Table 2.—Kinds and Amounts of Fertilizers Sold in Canada, except for Manufacturing Purposes, during the period July 1, 1926 to June 30, 1927

	Short tons
AMOUNTS SOLD IN THE DOMESTIC MARKET—	
Fertilizer Materials—	
Sulphate of ammonia	6,908·91
Nitrate of soda	9,065·75
Cyanamide	605·50
Acid phosphate	56,715·50
Natural rock phosphate	90·50
Basic slag	12,918·00
Muriate of potash	12,523·17
Sulphate of potash	305·14
Tankage	2,115·88
Dried blood	219·28
Bone meal	2,158·47
Bone flour	139·54
Whale meat and blood	111·50
Fish meal	1,021·25
Calcium nitrate	175·20
Sheep manure	42·00
Whale meat and bone	24·00
Urea	1·00
Total Fertilizer Materials	105,141·49
Mixed Fertilizer	64,422·83
Total	**169,564·32**
AMOUNTS SOLD FOR EXPORT FROM CANADA—	
Fertilizer Materials—	
(Mostly cyanamide, ammonium sulphate, acid phosphate and tankage)	83,119·88
Mixed Fertilizer	1,955·00
Total	**85,074·88**
TOTAL TRADE—	
Fertilizer Materials	188,261·37
Mixed Fertilizer	66,377·83
Total	**254,639·20**

Table 3.—Analysis of Mixed Fertilizers Containing only Nitrogen and Phosphoric Acid

(a) Arranged in order of Nitrogen Content

Number of Brands	Total tons sold	Fertilizer Ingredients					
		Nitrogen		Phosphoric acid		Total	
		lb.	p.c.*	lb.	p.c.	lb.	p.c.
1	60·00	2,400	2	30,000	25·00	32,400	27·00
2	111·70	6,702	3	44,008	19·70	50,710	22·70
2	80·00	6,400	4	22,800	14·25	29,200	18·25
2	189·04	18,824	5	44,173	11·68	62,997	16·66
3	5·81	895	6	1,029	8·86	1,724	14·84
1	173·00	24,220	7	27,680	8·00	51,900	15·00
1	103·16	18,404	9	10,316	5·00	28,720	13·92
12 Total	722·71	77,645	5·37	180,006	12·45	257,651	17·82

*Nearest whole number.

(b) Arranged in order of Phosphoric Acid Content

Number of Brands	Total tons sold	Fertilizer Ingredients					
		Nitrogen		Phosphoric acid		Total	
		lb.	p.c.	lb.	p.c.*	lb.	p.c.
1	103·16	18,404	8·92	10,316	5	28,720	13·92
4	192·32	26,136	6·79	30,854	8	56,990	14·81
1	2·49	299	6·00	498	10	797	16·00
2	198·74	18,846	4·74	47,698	12	66,544	16·74
1	70·00	5,600	4·00	19,600	14	25,200	18·00
1	10·00	800	4·00	3,200	16	4,000	20·00
1	86·00	5,160	3·00	37,840	22	43,000	25·00
1	60·00	2,400	2·00	30,000	25	32,400	27·00
12 Total	722·71	77,645	5·37	180,006	12·45	257,651	17·82

*Nearest whole number.

Table 4.—Analysis of Mixed Fertilizers Containing only Phosphoric Acid and Potash

(a) Arranged in order of Phosphoric Acid Content

Number of Brands	Total tons sold	Fertilizer Ingredients					
		Phosphoric acid		Potash		Total	
		lb.	p.c.*	lb.	p.c.	lb.	p.c.
1	225·00	22,500	5	31,500	7·00	54,000	12·00
1	35·00	4,200	6	7,000	10·00	11,200	16·00
2	134·00	21,440	8	12,400	4·63	33,840	12·63
1	50·00	9,000	9	8,000	8·00	17,000	17·00
5	1,101·64	220,328	10	131,056	5·95	351,384	10·95
6	5,224·78	1,253,948	12	710,892	6·8	1,964,840	18·80
1	0·5	140	14	40	4·00	180	18·00
17 Total	6,770·92	1,531,556	11·31	900,888	6·65	2,432,444	17·96

*Nearest whole number.

(b) Arranged in order of Potash Content

Number of Brands	Total tons sold	Fertilizer Ingredients					
		Phosphoric acid		Potash		Total	
		lb.	p.c.	lb.	p.c.*	lb.	p.c.
1	10·95	2,190	10·00	438	2	2,628	12·00
4	1,648·15	362,670	11·00	131,852	4	494,522	15·00
2	3,237·39	770,254	11·90	323,739	5	1,093,993	16·90
2	53·80	12,872	11·96	6,456	6	19,328	17·96
1	225·00	22,500	5·00	31,500	7	54,000	12·00
2	68·04	12,608	9·27	10,886	8	23,494	17·27
3	616·00	129,680	10·53	123,200	10	252,880	20·53
1	11·00	2,640	12·00	2,640	12	5,280	24·00
1	900·59	216,142	12·00	270,177	15	486,319	27·00
17 Total	6,770·92	1,531,556	11·31	900,888	6·65	2,432,444	17·96

*Nearest whole number.

Table 5.—Analysis of Mixed Fertilizers Containing only Nitrogen and Potash

Number of Brands	Total tons sold	Fertilizer Ingredients					
		Nitrogen		Potash		Total	
		lb.	p.c.	lb.	p.c.	lb.	p.c.
1	0·40	36	4·5	64	8	100	12·5

Table 6.—Analysis of Mixed Fertilizers Containing Nitrogen, Phosphoric Acid and Potash

(a) Arranged in order of Nitrogen Content

Number of Brands	Total tons sold	Fertilizer Ingredients							
		Nitrogen		Phosphoric acid		Potash		Total	
		lb.	p.c.*	lb.	p.c.	lb.	p.c.	lb.	p.c.
17	6,770·92	–	–	1,531,556	11·31	900,888	6·65	2,432,444	17·96
28	22,429·10	916,981	2	4,303,186	9·59	1,830,546	4·08	7,050,713	15·71
32	19,675·73	1,209,938	3	3,405,768	8·65	2,176,341	5·53	6,792,047	17·25
25	14,375·23	1,179,677	4	2,381,393	8·28	2,286,091	7·95	5,847,161	20·33
12	2,551·58	247,202	5	464,715	9·11	347,122	6·80	1,059,039	20·75
9	284·01	34,029	6	56,659	9·97	48,220	8·49	138,908	24·45
1	173·00	24,220	7	27,680	8·00	–	–	51,900	15·00
1	103·16	18,404	9	10,316	5·00	–	–	28,720	13·92
1	13·47	2,694	10	539	2·00	539	2·00	3,772	14·00
1	0·75	165	11	180	12·00	225	15·00	570	38·00
1	0·88	264	15	88	5·00	88	5·00	440	25·00
128 Total	**66,377·83**	**3,633,574**	**2·74**	**12,182,080**	**9·17**	**7,590,060**	**5·72**	**23,405,714**	**17·63**

*Nearest whole number.

(b) Arranged in order of Phosphoric Acid Content

Number of Brands	Total tons sold	Fertilizer Ingredients							
		Nitrogen		Phosphoric Acid		Potash		Total	
		lb.	p.c.	lb.	p.c.*	lb.	p.c.	lb.	p.c.
1	0·40	36	4·50	–	–	64	8·00	100	12·50
1	13·47	2,694	10·00	539	2	539	2·00	3,772	14·00
4	410·04	21,908	2·67	41,004	5	41,308	5·04	104,220	12·71
10	1,807·45	116,116	3·21	216,804	6	346,952	9·60	679,962	18·81
44	29,460·40	1,955,675	3·32	4,713,747	8	3,721,711	6·32	10,391,133	17·64
9	8,344·05	547,050	3·28	1,492,017	9	926,668	5·55	2,965,735	17·77
25	16,076·85	744,610	2·32	3,215,370	10	1,554,264	4·83	5,514,244	17·15
2	5·68	632	5·56	1,200	11	509	4·48	2,341	20·60
24	10,012·80	229,482	1·14	2,403,073	12	996,967	4·98	3,629,522	18·12
2	70·50	5,600	3·97	10,740	14	40	0·03	25,380	18·00
3	17·75	1,340	3·77	5,680	16	540	1·52	7,560	21·29
1	12·44	871	3·50	4,976	20	498	2·00	6,345	25·50
1	86·00	5,160	3·00	37,840	22	–	–	43,000	25·00
1	60·00	2,400	2·00	30,000	25	–	–	32,400	27·00
128 Total	**66,377·83**	**3,633,574**	**2·74**	**12,182,080**	**9·17**	**7,590,060**	**5·72**	**23,405,714**	**17·63**

*Nearest whole number.

(c) Arranged in order of Potash Content

Number of Brands	Total tons sold	Fertilizer Ingredients							
		Nitrogen		Phosphoric acid		Potash		Total	
		lb.	p.c.	lb.	p.c.	lb.	p.c.*	lb.	p.c.
12	722·71	77,645	5·37	180,006	12·45	–	–	257,651	17·82
14	5,745·60	234,409	2·04	1,206,864	10·50	229,825	2	1,671,098	14·54
5	296·26	14,689	2·48	47,412	8·00	17,776	3	79,877	13·48
25	23,630·69	1,150,607	2·43	4,286,876	9·07	1,890,455	4	7,327,938	15·50
15	12,036·38	537,714	2·23	2,359,830	9·80	1,198,138	5	4,095,682	17·01
13	4,695·25	319,930	3·41	811,212	8·64	563,430	6	1,694,572	18·05
7	7,129·89	501,617	3·52	1,257,842	8·82	998,185	7	2,757,644	19·34
12	2,099·32	175,172	4·17	371,604	8·85	335,891	8	882,667	21·02
1	25·00	2,500	5·00	3,000	6·00	4,500	9	10,000	20·00
16	4,567·29	257,819	2·82	714,896	7·83	913,188	10	1,885,903	20·64
3	576·72	22,629	1·98	93,955	8·14	138,413	12	254,997	22·10
1	3,909·58	337,006	4·31	625,533	8·00	1,016,491	13	1,979,030	25·31
3	901·84	185	0·01	216,442	12·00	270,552	15	487,179	27·01
1	41·30	1,652	2·00	6,608	8·00	13,216	16	21,476	26·00
128 Total	**66,377·83**	**3,633,574**	**2·74**	**12,182,080**	**9·17**	**7,590,060**	**5·72**	**23,405,714**	**17·63**

*Nearest whole number.

Table 7.—Summary of Analysis of Mixed Fertilizer

Number of brands—128

—	Pounds	Per cent of total fertilizer sold
Nitrogen	3,633,574	2·74
Phosphoric acid	12,182,080	9·17
Potash	7,590,060	5·72
Total fertilizing ingredients	**23,405,714**	**17·63**
Total mixed fertilizer sold	**132,755,660**	**100·00**

Reporting Companies

Nature of trade*	Name	Address
a, b, c	Algoma Steel Corporation, Ltd	Sault. Ste. Marie, Ont.
a, b, c	American Cyanamid Co	Niagara Falls, Ont.
b, d	Andrewes, Mountain Seed Co., Ltd	133 King St. E., Toronto, Ont.
b	Anthony & Eckbrecht	Little River P.O., Saint John, N.B.
a, d	Armour Fertilizer Works	Sandusky, Ohio, U.S.A.
a, b, d	Beaty, W. R., and Co., Ltd	325 Howe St., Vancouver, B.C.
b, d	Bernier, J. E., Ltd	Kamouraska, P.Q.
b, d	Black, C. H	208 Victoria St., Amherst, N.S.
a, d	Bon Arbor Chemical Co	390–2 Straight St., Paterson, N.J., U.S.A.
b, d	Brand, Jas. and Co	723 Robson St., Vancouver, B.C.
a, b	British Canadian Packing Co., Ltd	Saint John, N.B.
a, d	Burlington Rendering Co	North Ave., Burlington, Vt., U.S.A.
a, b, c a, b, d	Burns, P. and Co	Calgary, Alta. Vancouver, B.C.
a, b, c, d, e	Canadian Fertilizer Co., Ltd	Chatham, Ont.
a, b	Canadian Packing Co., Ltd	Toronto, Ont.
a, b, c, d	City Rendrers, Ltd	Mill and Oak Sts., Montreal, P.Q.
a, b, d	Colonial Fertilizer Co	Windsor, N.S.
a, b, c	Consolidated Whaling Corporation, Ltd	Victoria, B.C.
b, d	Co-Operative Federation of Quebec	Ste. Rosalie Jct., P.Q.
a, b	Cross Fertilizers, Ltd	Prince St., Sydney, N.S.
a, b, c	Dominion Iron & Steel Co., Ltd	Sydney, N.S.
b, d	Dupuy & Ferguson Reg'd	183 Jacques Cartier Sq., Montreal, P.Q.
a, d	Earp-Thomas Cultures Corp	Nelson Ave. and Hill St., Long Island City, N.Y. U.S.A.
a, b	Fearman, F. W. Co., Ltd	Hamilton, Ont.
b, d	Fertilizers and Feeds, Ltd	2980 Dundas St. W., Toronto 9, Ont.
b, d	Fowler Bros. Grain Co., Ltd	2307 Royal Oak Ave., Burnaby, B.C.
a, b	Fraser River Oilery	Box 10, Ladner, B.C.
a, b, d	Globe Fertilizer Co	Camphell Road, South Vancouver, B.C.
b, d	Gregory, F. R	Learnington, Ont.
a, b, d	Gunns, Ltd	West Toronto 9, Ont.
a, b, c	Hamilton By-Product Coke Ovens, Ltd	15 Main St., Hamilton, Ont.
b, d	Hantsport Fruit Co., Ltd	Hantsport, N.S.
a, b, c	Harris, W., and Co., Ltd	200 Keating St., Toronto, Ont.
b, d	Home Mixed Fertilizers, Ltd	Hartland, N.B.
a, b	Humber Fishing and Fish Manure Co., Ltd	Winchester Chambers, Stoneferry, Hull, England.
a, d	International Agricultural Corporation	Buffalo, N.Y., U.S.A.
b, d	Jack Fertilizer Co	Royal Bank Bldg., Halifax, N.S.
d	Kuttroff, Pickhardt & Co., Inc	128 Duane St., New York City, U.S.A.
a, b, d	Lavigueur, Arthur	1772 Amherst St., Montreal, P.Q.
b, d	Legare, P. T., Co., Ltd	273 St. Paul St., Quebec, P.Q.
d	Lyon, Walter H	9 Richmond St. E., Toronto, Ont.
a, d	Miller Fertilizer Co	Garrett Bldg., Baltimore, Md., U.S.A.
a, b, c	Montreal Light, Heat and Power Consolidated	Montreal, P.Q.
a, b, d	National Fertilizers, Ltd	2896 Dundas St. W., Toronto 9, Ont.
d	Niagara Brand Spray Co., Ltd	Burlington, Ont.
a, b, d	Nova Scotia Fertilizer Co., Ltd	Dennis Bldg., Halifax, N.S.
b, d	Oliver Chemical Co., Ltd	Penticton, B.C.
a, b, d	Ontario Fertilizers, Ltd	West Toronto, Ont.
d	P.E.I. Potato Growers Ass'n	Charlottetown, P.E.I.
d	Prudhomme Od. Enrg. (in liquidation)	37 de la Couronne, Quebec, P.Q.
b	Rideau Specialty Co	19 Main St. E., Smiths Falls, Ont.
b, d	Ritchie Bros. & Co	841 Granville St., Vancouver, B.C.
a, b, d	Saint John Fertilizer Co	Chesley St., Saint John, N.B.
a, b, d	Sayer & Co	624 Main St., Vancouver, B.C.
a, b, d	Scottish Fertilizers, Ltd	Welland, Ont.
a, b, c	Steel Company of Canada, Ltd	Hamilton, Ont.
a, d	Swift & Co	Hammond, Indiana, U.S.A.
a, b	Tanguay, Ltd	54 St. Andre St., Quebec, P.Q.
a, d	Thomson, Wm. and Sons, Ltd	Tweed Vineyards, Clovenfords, Scotland.
a, b, c, d, e	Triangle Chemical Co., Ltd	Box 1011, New Westminster, B.C.
d	United Farmers Co-Operative Co., Ltd	28 Duke St., Toronto, Ont.
b, d	United Fruit Companies of N.S., Ltd	Kentville, N.S.
a, b, d	Vancouver Milling and Grain Co., Ltd	Vancouver, B.C.
a, b, d	Webb, Edward & Sons (Stourbridge), Ltd	Stourbridge, England.
a, b, c	Wight, W. & Co., Ltd	60 Paton Rd., Toronto, Ont.
b, c, d, e	Wilson, Paterson, Gifford, Ltd	89 Water St., Saint John, N.B.
a, b, d	Witts Fertilizer Works	Norwich, Ont.

*a—Manufacturing fertilizers or fertilizer materials.
b—Selling Canadian-made fertilizers or fertilizer materials for domestic trade.
c—Selling Canadian-made fertilizers or fertilizer materials for export trade.
d—Selling imported fertilizers or fertilizer materials for domestic trade.
e—Selling imported fertilizers or fertilizer materials for export trade.