

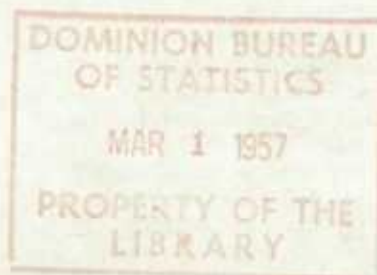
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CANADA

THE FERTILIZERS INDUSTRY

1955



Published by Authority of
The Right Honourable C. D. Howe, Minister of Trade and Commerce

DOMINION BUREAU OF STATISTICS
Industry and Merchandising Division
Metal and Chemical Products Section

6512-607-125

Price: 25 cents

Vol. 2—Part XVIII—C-1

105-24

NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 3 volumes, as follows: **Volume I** - The Primary Industries, including mining, forestry and fisheries; **Volume II** - Manufacturing; **Volume III** - Merchandising and Services. The volumes are made up of parts, and the parts in turn are subdivided according to the industries or provinces which they comprise.

Volume II consists of the following parts, the first two of which deal with manufacturing as a whole and the balance with the major manufacturing groups.

- I - General Review of the Manufacturing Industries, \$1.50
- II - The Manufacturing Industries of Canada, (7 sections, as follows:)
 - Section A. Summary for Canada, 25¢
 - Section B. Atlantic Provinces, 50¢
 - Section C. Quebec, 25¢
 - Section D. Ontario, 25¢
 - Section E. Prairie Provinces, 40¢
 - Section F. British Columbia, 25¢
 - Section G. The Manufacturing Industries of Canada, Regional Distribution, 75¢
- III - Foods and Beverages
- IV - Tobacco and Tobacco Products
- V - Rubber Products
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- X - Wood and Paper Products
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- XII - Iron and Steel Products
- XIII - Transportation Equipment
- XIV - Non-ferrous Metal Products
- XV - Electrical Apparatus and Supplies
- XVI - Non-metallic Mineral Products
- XVII - Products of Petroleum and Coal
- XVIII - Chemicals and Allied Products
- XIX - Miscellaneous Manufactures

The present report belongs in Part XVIII, Chemicals and Allied Products. It is punched to permit of filing in a ring binder along with others of the group. The reports in this group are:

- A - General Review, 25¢
- B - The Acids, Alkalies and Salts Industry, 25¢
- C - The Fertilizers Industry, 25¢
- D - The Fertilizer Trade in Canada, 25¢
- E - The Medicinal and Pharmaceutical Preparations Industry, 25¢
- F - The Paints, Varnishes and Lacquers Industry, 25¢
- G - The Primary Plastics Industry, 25¢
- H - The Soaps, Washing Compounds and Cleaning Preparations Industry, 25¢
- I - The Toilet Preparations Industry, 25¢
- J - The Vegetable Oils Industry, 25¢
- K - The Inks Industry, 25¢
- L - The Adhesives Industry, 25¢
- M - The Polishes and Dressings Industry, 25¢
- N - The Compressed Gases Industry, 25¢
- O - The Coal Tar Distillation Industry, 25¢
- P - The Miscellaneous Chemical Products Industry, 25¢

THE FERTILIZERS INDUSTRY 1955

Factory shipments by factories in Canada which were engaged principally in the manufacture of fertilizers were valued at \$92,498,839 in 1955 compared with \$78,149,303 in 1954. In addition, there was a production of 196,255 tons of cyanamid (excluding cyanamid for non-agricultural purposes), ammonium sulphate, mixed fertilizers and fish fertilizers valued at \$8,755,646 by establishments which were classified to other industrial groups. The quantity of fish used as fertilizer in 1955 amounted to 21,290 barrels valued at \$29,000.

Thirty-nine plants were occupied chiefly in the manufacture of fertilizers in 1955, there being 18 in Ontario, 7 in Quebec, 5 in British Columbia, 3 in New Brunswick, 3 in Nova Scotia, 2 in Prince Edward Island and 1 in Alberta. Workers in these establishments declined from 3,049 in 1954 to 2,935 in 1955 and salaries and wages declined from \$11,603,480 in 1954 to \$11,542,380 in 1955.

Factory shipments of mixed fertilizers in 1955, from all industries, amounted to 685,696 tons worth \$33,111,970 and included 680,931 tons at \$32,773,476 made by plants in the fertilizer manufacturing industry and 4,765 tons at \$338,494 made in the meat packing and oils and fats industries. In 1954 the corresponding total was 668,200 tons at \$32,120,000 and in 1953 it was 694,600 tons at \$32,751,000.

Superphosphate was manufactured in 1955 by Canadian Industries Limited with plants at McMasterville, Quebec, and Hamilton, Ontario; Green Valley Fertilizer and Chemical Co. Ltd. at New Westminster, British Columbia, and Elmira Fertilizers Limited at Elmira, Ontario. Ammonium nitrate (fertilizer grade) was manufactured in 1955 by North American Cyanamid Limited, (Welland Works) at Niagara Falls in Ontario, and by Consolidated Mining and Smelting Company of Canada Limited at Trail, British Columbia, and at Calgary, Alberta. The output figures are not published separately since there were only two producers of ammonium nitrate and one major producer of superphosphate.

Ammonium sulphate was made by the Consolidated Mining and Smelting Company of Canada, Limited at Trail, British Columbia, and also by the following coke manufacturers: Algoma Steel Corporation at Sault Ste. Marie, Ontario; Dominion Iron and Steel Ltd. at Sydney, Nova Scotia; Montreal Coke and Manufacturing Company at Montreal, Quebec, and the Steel Company of Canada, Limited at Hamilton, Ontario. Another firm, Sherritt-Gordon Mines Limited at Fort Saskatchewan, Alberta, recovered ammonium sulphate as a by-product in connection with a special process used for refining nickel. Factory shipments during the calendar year 1955 amounted to 311,371 tons and imports totalled 7,029 tons. Ammonium phosphate was made only by the Consolidated Mining and Smelting Company of Canada, Limited at Trail, British Columbia, and Kimberley, British Columbia.

A special survey of the fertilizer trade in Canada during the fertilizer year ended June, 1956, has been completed by the Dominion Bureau of Statistics and the results have been published in a special report. Summary figures on the sales of fertilizers have been reprinted in Tables 11-15 of this bulletin. A total of 800,680 tons of mixtures and materials was sold in Canada during the year ended June 30, 1956, compared with 790,774 tons during the preceding twelve-month period.

Note: Figures for value added by manufacture, shown in Table 1, prior to 1952 were obtained by subtracting the cost of materials used, including fuel and electricity, from the value of production. In 1952, the gross value of production was replaced by value of factory shipments, f.o.b. plant. As no information on inventory change is available for 1952 and 1953, value added figures for these years were obtained by subtracting from the value of shipments the cost of materials, fuel and electricity. In 1954 and 1955 information on the value of year-end inventory holdings at plant and plant warehouses was collected as part of the annual Census of Industry and information thus made available was taken into account in calculating the value added figures for 1954 and 1955.

TABLE 1. Principal Statistics of the Fertilizers Industry, Significant Years 1929-55, and by Provinces, 1954 and 1955

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost at plant of materials used	Value added by manufacture ¹	Gross selling value of products ¹
	No.	No.	\$	\$	\$	\$	\$
1929	12	251	265,650	17,386	1,450,253	791,141	2,258,780
1933	20	667	776,647	322,849	2,796,726	1,166,476	4,286,051
1937	20	1,023	1,447,625	506,965	6,693,841	3,066,147	10,266,953
1939	27	1,211	1,819,612	706,003	8,140,498	4,318,663	13,165,164
1945	26	2,146	4,418,916	1,116,081	18,708,175	14,681,500	34,505,756
1946	29	2,805	5,929,796	3,232,099	22,865,328	23,895,016	49,992,443
1949	32	3,269	9,004,943	1,772,400	31,671,468	33,984,199	67,428,067
1951	39	3,218	10,310,069	1,766,565	35,294,282	37,427,873	74,488,720
1952	39	3,205	11,325,300	1,887,038	38,450,277	38,406,176	78,743,491
1953	40	3,199	11,511,643	1,948,620	39,310,484	43,095,265	84,354,369
1954							
Prince Edward Island	2	92	227,281	16,507	2,505,554	933,902	3,488,440
Nova Scotia	3						
New Brunswick	3	128	375,222	48,899	2,746,755	876,869	3,735,485
Quebec	7	349	1,179,108	62,620	4,845,248	2,398,897	7,154,508
Ontario	17	949	3,223,786	799,100	16,808,135	10,249,134	27,367,450
Alberta	1	1,531	6,598,083	2,065,214	14,369,524	25,195,939	36,403,420
British Columbia	5						
Canada	38	3,049	11,603,480	2,992,340	41,275,216	39,654,741	78,149,303
1955							
Prince Edward Island	2	97	253,011	20,310	2,566,351	865,299	3,548,260
Nova Scotia	3						
New Brunswick	3	114	390,724	52,248	3,049,236	927,041	3,919,357
Quebec	7	321	1,136,293	59,239	4,375,241	2,153,531	6,904,861
Ontario	18	816	2,998,922	825,835	17,352,453	11,315,410	29,745,056
Alberta	1	1,587	6,763,430	1,684,238	14,053,647	30,633,764	48,381,305
British Columbia	5						
Canada	39	2,935	11,542,380	2,641,870	41,396,928	45,895,045	92,498,839

Note: Profits or losses cannot be calculated from above figures as data are not available for general expense items, such as interest, rent, depreciation, taxes, insurance, advertising, etc.

1. See footnote to Text.

TABLE 2. Inventories¹, 1955

Province	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	\$	\$	\$	\$
Opening:				
Prince Edward Island and Nova Scotia	479,877	333,182	389,915	1,202,974
New Brunswick	425,130	694,335	275,152	1,394,617
Quebec	915,809	1,441,172	1,338,086	3,695,067
Ontario	2,307,749	4,137,232	1,313,845	7,758,826
Alberta and British Columbia	2,129,632	239,259	7,887,513	10,256,404
Canada	6,258,197	6,845,180	11,204,511	24,307,888
Closing:				
Prince Edward Island and Nova Scotia	384,610	418,477	293,615	1,096,702
New Brunswick	441,599	723,550	384,320	1,549,469
Quebec	1,195,461	1,339,789	1,021,236	3,556,486
Ontario	1,886,688	4,648,408	1,062,487	7,597,583
Alberta and British Columbia	4,951,930	247,674	5,877,857	11,077,461
Canada	8,860,288	7,377,898	8,639,515	24,877,701

1. (a) Book value of all manufacturing inventories owned and held at plant and plant warehouses.

(b) Beginning with 1954, information on the value of year-end inventory holdings at plant and plant warehouses is being collected as part of the annual Census of Industry. These data were formerly collected by a separate survey. The summarized results for the Fertilizers Industry for the year under review are shown in the above table.

TABLE 3. Products of the Fertilizers Industry, Calendar Years, 1954 and 1955

Product	1954		1955	
	Quantity	Value of factory shipments	Quantity	Value of factory shipments
	Tons	\$	Tons	\$
Mixed fertilizers.....	663,678	31,798,442	680,931	32,773,476
Superphosphate, ammonium nitrate (fertilizer grade), ammonium phosphate and ammonium sulphate (completely manufactured).....	800,618	43,830,400	1,028,844	55,461,633
Superphosphate, milled and screened only:				
16-18% P ₂ O ₅	1,024	37,279	1,327	47,048
20% P ₂ O ₅	12,171	421,647	11,996	429,014
Ammonium sulphate, milled and screened only.....	945	57,536	630	40,807
Muriate of potash, milled and screened only:				
50% K ₂ O.....	71	3,645	1,067	61,001
60% K ₂ O.....	1,675	91,097	2,157	120,108
All other products.....	-	1,909,257	-	3,565,752
Total for fertilizers industry.....	-	78,149,303	-	92,496,839
Fertilizers made in other industries (cyanamid, ammonium sulphate, mixtures, etc.).....	-	7,138,249	-	8,755,846
Total value of all fertilizers produced².....	-	85,287,552	-	101,254,485

1. Production of these items was accounted for mainly by only one or two firms in this industry, hence the production figures cannot be shown separately.

2. Excludes value of calcium cyanamid produced for non-agricultural purposes, since 1953.

Note. The Fertilizers Industry includes only the concerns which are engaged chiefly in the manufacture of fertilizers. Some fertilizers are made also in the other industries; for example, ammonium sulphate is produced as a by-product in coke plants, cyanamid is made by a firm which is classified to the heavy chemicals industry and a small amount of mixed fertilizer is made in the slaughtering and meat-packing industry. For the total production of mixed fertilizers, see Table 5.

TABLE 4. Materials Used in the Fertilizers Industry, 1954 and 1955

Material	1954		1955	
	Quantity	Cost at works	Quantity	Cost at works
	Short tons	\$	Short tons	\$
Ammonia, anhydrous.....	79,049	3,509,023	83,600	3,387,398
Ammonium nitrate.....	4,712	385,860	3,156	261,285
Ammonium phosphate:				
11-48-0.....	4,440	465,784	4,246	431,491
16-20-0.....	1,101	87,904	762	56,156
Ammonium sulphate (sulphate of ammonia).....	40,232	1,928,001	38,988	1,791,112
Bone meal and bone flour.....	37	2,903	66	5,164
Borax.....	168	15,506	242	20,085
Calcium cyanamide (cyanamid).....	1,756	112,644	1,275	83,368
Coke (except for fuel).....	78,823	1,414,398	81,908	1,437,183
Diatomaceous earth.....	9,384	448,533	9,166	429,149
Dried blood and blood meal.....	42	4,124	76	7,298
Limestone.....	27,070	114,501	22,284	100,174
Line or land plaster.....	1,169	26,755	70	1,726
Magnesium oxide (all forms, including brucite, mag 70, etc.).....	1,536	71,276	1,497	62,614
Magnesium sulphate.....	21	1,565	30	2,297
Nitrogen solutions.....	27,522	2,145,409	36,160	2,521,849
Phosphate rock.....	506,241	7,105,626	465,129	6,336,505
Potassium chloride (muriate of potash):				
50% K ₂ O.....	437	11,670	1,846	68,413
60% K ₂ O.....	111,028	3,945,603	119,809	4,219,410
Potassium nitrate (nitrate of potash).....	8	2,177	38	6,077
Potassium sulphate (sulphate of potash).....	12,952	695,186	12,127	584,850
Potassium magnesium sulphate (sulphate of potash magnesia).....	1,968	60,012	1,919	57,841
Sand.....	36,852	94,555	35,614	85,317
Sodium nitrate (nitrate of soda).....	351	20,403	159	9,438
Sulphuric acid, 100%.....	603,221	3,971,985	577,063	3,335,142
Superphosphate:				
16-18% P ₂ O ₅	30,255	628,700	29,148	633,006
20% P ₂ O ₅	285,869	7,192,723	284,031	6,921,746
38-48% P ₂ O ₅	15,814	944,561	33,236	1,983,500
Ammoniated 3-18-0.....	240	12,833	549	20,185
Tunkage.....	169	9,121	279	12,718
Urea.....	367	29,388	272	35,511
All other materials.....	-	1,451,579	-	1,727,612
Containers and shipping materials.....	-	4,364,908	-	4,761,308
Total.....	-	41,275,216	-	41,396,926

TABLE 5. Total Production¹ of Mixed Fertilizers, from All Industrial Groups, Calendar Years, 1946-1955

Year	Quantity	Selling value at works	Year	Quantity	Selling value at works
	Tons	\$		Tons	\$
1946.....	597,900	17,956,000	1951.....	696,600	29,193,000
1947.....	673,800	21,998,000	1952.....	648,800	30,364,000
1948.....	650,200	22,738,000	1953.....	694,600	32,751,000
1949.....	661,100	24,794,000	1954.....	668,200	32,120,000
1950.....	669,900	26,519,000	1955.....	685,700	33,112,000

1. Factory shipments since 1952.

Note. Figures in this table represent the total Canadian production of mixed fertilizers regardless of the industries in which produced.

TABLE 6. Principal Statistics of the Fertilizers Industry in Canada, Classified According to Type of Ownership, 1954 and 1955

Type	Estab-lish-ments	Employees	Salaries and Wages	Cost at plant of materials used	Selling value of factory shipments
	No.	No.	\$	\$	\$
1954					
Co-operatives.....	1	3,049	11,603,480	41,275,216	78,149,303
Incorporated companies.....	37				
Total	38	3,049	11,603,480	41,275,216	78,149,303
1955					
Individual.....	1	2,935	11,542,380	41,396,928	92,498,839
Co-operatives.....	37				
Incorporated companies.....	1				
Total	39	2,935	11,542,380	41,396,928	92,498,839

TABLE 7. Principal Statistics of the Fertilizers Industry in Canada, Grouped According to Size of Establishment, 1954 and 1955

Establishments having a production of	Estab-lish-ments	Employees	Salaries and Wages	Cost at plant of materials used	Selling value of factory shipments
	No.	No.	\$	\$	\$
1954					
Under \$25,000.....	1	27	70,846	178,131	378,271
\$50,000 to \$99,999.....	1				
\$100,000 to \$199,999.....	2				
\$200,000 to \$499,999.....	7				
\$500,000 to \$999,999.....	13	304	978,353	6,948,508	10,002,660
\$1,000,000 to \$4,999,999.....	10	781	2,663,442	15,204,223	20,334,028
\$5,000,000 and over.....	4	1,771	7,242,734	17,010,655	44,963,169
Head offices.....	—	72	375,102	—	—
Total	38	3,049	11,603,480	41,275,216	78,149,303
1955					
Under \$25,000.....	1	35	86,669	294,563	478,285
\$25,000 to \$49,999.....	1				
\$100,000 to \$199,999.....	3				
\$200,000 to \$499,999.....	6				
\$500,000 to \$999,999.....	13	291	231,657	1,610,261	2,338,956
\$1,000,000 to \$4,999,999.....	10	537	904,308	6,781,414	9,595,124
\$5,000,000 and over.....	5	1,935	1,813,819	13,803,916	19,187,912
Head offices.....	—	58	315,278	—	—
Total	39	2,935	11,542,380	41,396,928	92,498,839

TABLE 8. Capital and Repair Expenditures in the Fertilizers Industry, 1951-1955

Year	Capital expenditures		Sub-total	Repair and maintenance expenditures		Sub-total	Total capital and repair expenditures
	Construction	Machinery and equipment		Construction	Machinery and equipment		
	\$'000						
1951	1,403	1,737	3,140	311	3,490	3,801	6,941
1952	2,477	4,891	7,368	370	3,011	3,381	10,749
1953	1,914	3,718	5,632	319	2,545	2,864	8,496
1954	484	1,201	1,685	284	3,266	3,550	5,235
1955 ¹	6,610	1,679	8,289	299	3,079	3,378	11,667

1. Preliminary.

TABLE 9. Employees and Their Earnings, by Provinces, 1954 and 1955

Province	Number of employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
						\$	\$	\$
1954								
New Brunswick	13	6	109	—	128	71,319	303,903	375,222
Quebec	101	36	212	—	349	672,511	506,597	1,179,108
Ontario	221	64	659	5	949	1,082,545	2,141,241	3,223,786
British Columbia	294	25	903	3	1,225	1,515,256	3,828,384	5,343,640
Other provinces	81	15	296	6	398	446,498	1,035,226	1,481,724
Canada	710	146	2,179	14	3,049	3,788,129	7,815,351	11,603,480
1955								
New Brunswick	15	6	93	—	114	91,281	299,443	390,724
Quebec	93	28	200	—	321	616,252	518,041	1,136,293
Ontario	159	74	583	—	816	930,415	2,068,507	2,998,922
British Columbia	289	27	983	3	1,282	1,551,601	3,907,304	5,458,905
Other provinces	81	20	296	5	402	450,907	1,106,629	1,557,536
Canada	637	155	2,135	8	2,935	3,642,456	7,899,924	11,542,380

TABLE 10. Production Workers, by Months, 1954 and 1955

Month	1954			1955		
	Male	Female	Total	Male	Female	Total
	Number					
January	2,160	14	2,174	2,198	8	2,206
February	2,201	14	2,215	2,176	8	2,184
March	2,215	14	2,229	2,182	8	2,190
April	2,422	16	2,438	2,335	8	2,343
May	2,530	17	2,547	2,507	8	2,515
June	2,118	14	2,132	2,065	8	2,073
July	2,015	14	2,029	1,955	8	1,963
August	2,080	16	2,096	2,065	8	2,073
September	2,127	15	2,142	2,092	8	2,100
October	2,107	13	2,120	2,027	8	2,035
November	2,098	13	2,111	2,002	8	2,010
December	2,089	12	2,101	2,010	8	2,018
Average	2,179	14	2,193	2,135	8	2,143

TABLE 11. Sales of Fertilizers, Except for Manufacturing Purposes, During the Year Ended June 30, 1956

Kind	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total sold in Canada
Fertilizer materials											
Anhydrous ammonia	-	-	-	-	-	914	84	199	241	25	1,463
Nitrate of soda	268	2	9	4	69	390	-	-	-	5	747
Sulphate of ammonia	6	65	84	29	268	899	110	181	1,772	2,683	6,097
Cyanamide	-	35	36	3	31	2,356	-	-	-	165	2,626
Ammonium nitrate	97	107	627	158	747	16,616	165	457	2,512	2,810	24,316
Ammonium phosphate - 11-48-0	-	-	-	-	3	1,810	10,307	14,625	18,272	942	45,959
16-20-0	-	-	-	-	-	78	3,916	2,185	5,533	3,002	14,714
Superphosphate - 20% P ₂ O ₅	77	153	774	306	7,026	17,578	-	-	15	1,743	27,672
45% P ₂ O ₅	-	-	-	-	6	500	-	-	-	139	645
Natural phosphate rock	-	1	330	145	3,869	262	-	-	-	9	4,616
Basic slag	-	-	-	-	749	-	-	-	-	-	749
Bone meal, bone flour, etc.	3	2	53	10	117	746	27	3	55	789	1,805
Muriate of potash - 50% K ₂ O	-	-	-	-	-	27	-	-	-	-	27
60% K ₂ O	1	21	47	19	228	4,026	9	-	6	794	5,151
Sulphate of potash	126	-	12	-	5	337	1	2	1	158	642
Tankage	-	-	-	-	-	6	-	-	-	236	242
Animal manure	-	-	82	21	554	830	-	-	-	145	1,632
Dried blood	-	-	-	-	1	14	-	-	-	60	75
Sewage sludge	-	-	26	-	389	5,839	-	-	-	252	6,506
Other fertilizer materials ¹	2	-	47	8	33	1,036	141	248	750	88	2,353
Total materials	580	386	2,127	703	14,095	54,264	14,780	17,900	29,157	14,045	148,037
Mixed fertilizers	4,764	49,022	24,158	61,604	121,412	375,185	680	68	126	15,624	652,643
Total - 1955-1956	5,344	49,408	26,285	62,307	135,507	429,449	15,460	17,968	29,283	29,669	800,680
Total - 1954-1955	5,324	49,666	28,950	62,337	130,057	428,752	14,616	15,951	24,313	30,808	790,774

1. Lime has not been included.

TABLE 12. Mixed Fertilizers Sold During the Year Ended June 30, 1956

Analysis	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba, Saskatchewan and Alberta	British Columbia	Total sold in Canada	Exported from Canada
N P O₅ K O										
0 5 15	-	-	-	-	629	485	-	-	1,114	-
0 12 12	-	-	1	-	-	438	-	-	439	-
0 12 20	-	-	-	-	230	7,628	-	356	8,214	-
0 14 14	-	-	-	-	407	1,662	-	-	2,069	11
0 15 15	-	5	-	-	-	663	-	-	668	-
0 15 30	-	-	-	-	12	-	-	-	12	212
0 16 8	-	-	-	-	3,056	554	-	-	3,610	-
0 20 10	-	-	-	-	-	2,223	-	-	2,223	5
0 20 20	-	45	595	105	270	4,414	-	-	5,429	722
2 8 16	-	-	-	-	2,816	42	-	-	2,858	-
2 10 15	-	-	-	-	1	4,871	-	-	4,872	-
2 12 10	-	-	-	-	30,392	127,795	-	8	158,195	-
2 12 16	-	-	-	-	-	4,402	-	-	4,402	11
2 12 20	-	-	-	-	-	10,868	-	-	10,868	-
2 14 8	-	-	-	-	2,760	1,379	-	-	4,139	-
2 15 15	-	-	-	-	75	-	-	1,168	1,243	55
2 16 6	-	-	-	6	19,629	10,465	-	239	30,339	55
2 18 18	-	-	-	-	88	7,939	-	-	8,027	-
3 12 12	-	-	-	-	754	4,473	-	-	5,227	88
3 12 16	-	-	-	-	-	1,403	-	-	1,403	-
3 15 6	1,058	5,589	9,838	7,157	-	-	-	-	23,642	27
3 15 10	-	-	-	-	-	5,543	-	-	5,543	-
3 18 9	-	-	-	-	12	19,925	-	-	19,937	165
3 18 15	-	-	-	-	499	4,444	-	-	4,943	-
4 8 12	-	-	-	-	-	639	-	-	839	22

TABLE 12. Mixed Fertilizers Sold During the Year Ended June 30, 1956 - Concluded

Analysis	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba, Saskatchewan and Alberta	British Columbia	Total sold in Canada	Exported from Canada
(short tons)										
N P ₂ O ₅ K ₂ O										
4 10 7	-	-	-	-	-	-	-	192	192	-
4 10 8	11	2	56	11	142	249	-	-	471	1
4 10 10	-	-	-	-	-	4,094	-	3,995	8,089	-
4 12 6	-	3	-	-	1,690	641	-	25	2,359	1
4 12 10	-	-	1	-	12	25,638	-	-	25,651	3
4 12 16	-	-	-	-	-	700	-	-	700	-
4 24 12	-	-	-	86	103	24,964	2	-	25,155	-
4 24 20	-	-	-	-	323	19,085	-	-	19,408	-
4 40 0	-	-	-	-	-	177	-	-	177	-
5 8 10	-	-	-	-	2,533	9	-	-	2,542	2
5 10 10	2,207	2,739	2,300	18,112	14,968	236	-	-	40,562	3,259
5 10 13	123	28,552	2,350	6,210	35,500	34,822	20	-	107,577	-
5 10 15	-	-	-	-	-	1,992	-	5	1,997	5
5 20 0	-	-	-	-	-	103	-	-	103	-
5 20 20	-	-	-	-	-	1,041	-	-	1,041	-
6 8 6	-	-	-	-	-	-	-	2,870	2,870	-
6 9 9	-	-	-	166	-	-	-	-	166	689
6 9 12	-	-	1	5,169	-	-	-	-	5,170	8,930
6 10 4	-	-	-	-	714	2,235	335	70	3,354	-
6 10 10	-	-	-	-	-	-	-	310	310	-
6 12 6	393	-	1,863	1,283	2	-	-	-	3,541	297
6 12 12	750	11,783	6,245	22,559	965	2,186	-	-	44,488	61
6 18 15	-	-	-	-	-	357	-	-	357	-
6 27 25	-	-	-	-	-	-	-	112	112	-
6 28 25	-	-	-	-	-	-	-	167	167	-
6 30 15	-	-	-	-	-	-	-	1,417	1,417	-
6 36 0	-	-	-	-	-	178	-	-	178	2
7 6 7	-	-	-	-	-	143	-	-	143	-
7 7 7	118	-	-	-	208	990	-	-	1,316	374
7 11 0	-	-	-	-	-	-	-	121	121	-
8 9 10	-	-	-	-	-	-	-	-	-	173
8 10 5	-	-	-	-	-	-	-	1,449	1,449	-
8 12 12	-	230	-	263	-	-	-	-	493	11,591
8 12 16	-	-	-	-	-	-	-	-	-	3,411
8 16 16	-	-	-	-	160	23	-	-	183	2,109
8 24 20	-	-	-	-	-	640	-	-	640	-
9 5 7	-	2	-	169	1,538	86	-	-	1,795	-
9 9 7	5	9	868	60	-	-	-	-	942	2
10 5 10	-	-	-	-	31	1,824	-	-	1,855	-
10 6 4	5	-	12	47	297	756	-	66	1,183	42
10 10 10	94	1	2	120	513	28,380	-	-	29,110	3,591
10 15 15	-	-	-	-	-	-	-	-	-	953
10 20 10	-	-	-	-	-	309	-	2,326	2,635	38
10 24 12	-	-	-	-	-	272	-	-	272	-
10 32 10	-	-	-	-	-	-	476	26	502	470
10 52 17	-	-	2	-	16	131	-	-	149	-
11 24 20	-	-	-	-	-	182	-	-	182	-
13 10 10	-	-	-	-	-	-	-	146	146	-
13 16 10	-	-	-	-	-	-	-	133	133	-
14 6 8	-	-	-	-	-	-	-	-	-	170
Miscellaneous other mixtures	-	62	24	81	67	287	41	423	985	799
Total	4,764	49,022	24,158	61,604	121,412	375,185	874	15,624	652,643	38,346

Note: Figures in this table include tobacco fertilizers and fertilizers containing boron and magnesium oxide.

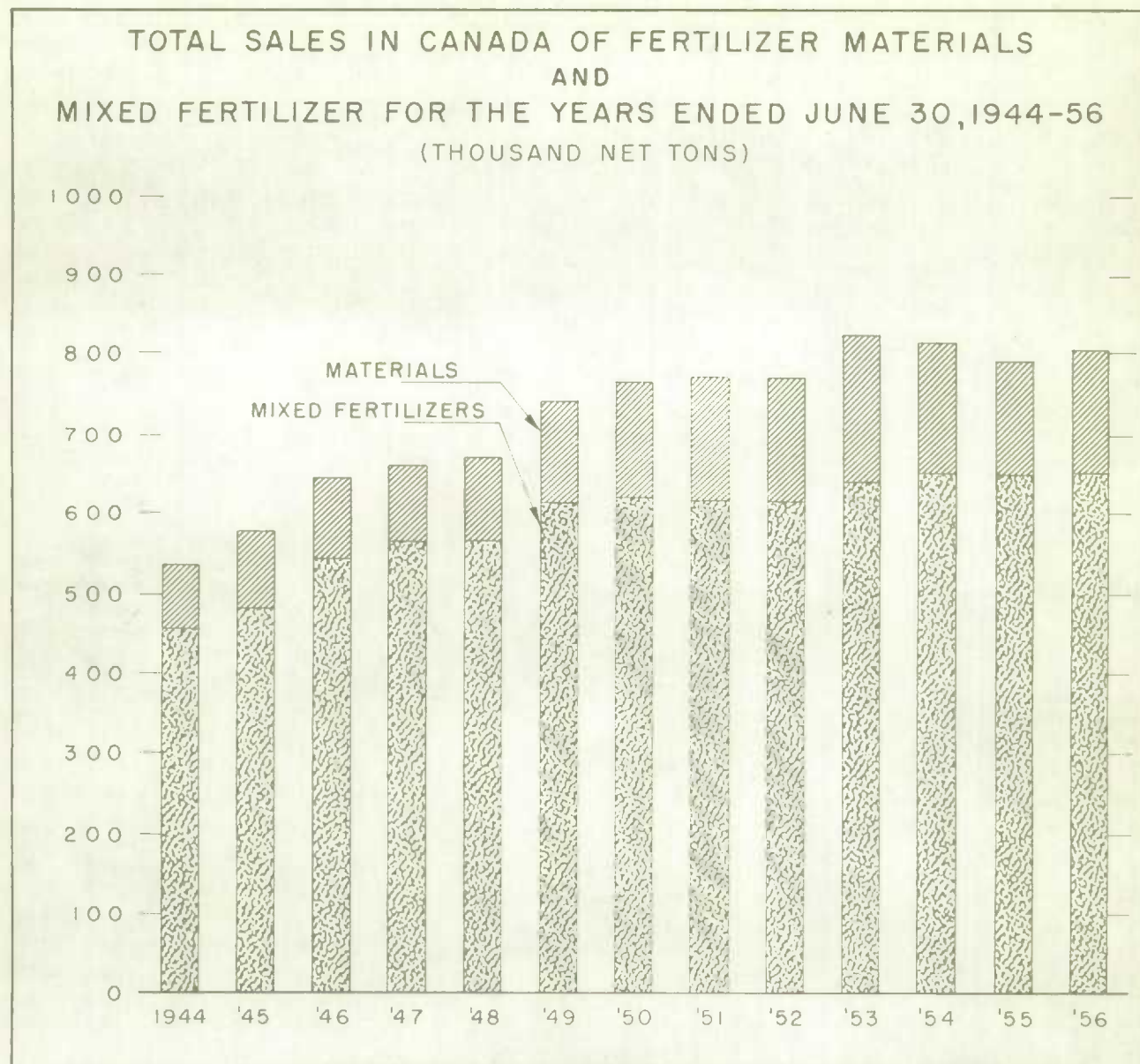


TABLE 13. Nitrogen, Phosphoric Acid and Potash Contained in Fertilizers Sold in Canada During the Year Ended June 30, 1956

Province	In materials			In mixtures			Total		
	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
	Short tons								
Newfoundland	76	16	61	236	548	433	312	564	494
Prince Edward Island	56	31	13	2,461	5,429	5,780	2,517	5,460	5,793
Nova Scotia	238	281	36	1,097	3,122	2,176	1,335	3,403	2,212
New Brunswick	60	113	12	3,247	6,966	6,566	3,307	7,079	6,578
Quebec	356	2,870	150	4,250	14,234	12,509	4,606	17,104	12,659
Ontario	7,906	5,011	2,634	13,043	52,042	44,404	20,949	57,053	47,038
Manitoba	1,951	5,757	6	55	149	51	2,006	5,906	57
Saskatchewan	2,376	7,492	1	5	11	5	2,381	7,503	6
Alberta	4,496	9,984	4	12	33	11	4,508	10,017	15
British Columbia	2,172	1,674	555	918	2,168	1,537	3,090	3,842	2,098
Total Canada	19,687	33,229	3,472	25,324	84,702	73,472	45,011	117,931	76,944

TABLE 14. Total Sales¹ in Canada of Fertilizer Materials and Mixed Fertilizers, for the Years Ended June 30, 1947-1956

Year ended June 30	Fertilizer materials	Mixed fertilizers	Total sold in Canada
1947	95,870	564,851	660,721
1948	107,299	564,872	672,171
1949	129,968	611,758	741,726
1950	145,972	618,609	764,581
1951	153,933	616,574	770,507
1952	156,049	612,496	768,545
1953	179,600	640,203	819,803
1954	160,481	651,160	811,641
1955	139,301	651,473	790,774
1956	148,037	652,643	800,680

1. Except for manufacturing purposes.

TABLE 15. Nitrogen, Phosphoric Acid and Potash Contained in Fertilizers Sold During the Years Ended June 30, 1947-1956

Year ended June 30	In materials			In mixtures			Total		
	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Short tons									
1947	8,923	26,231	2,216	16,821	59,021	44,913	25,744	85,252	47,129
1948	10,693	30,149	2,738	17,153	59,388	47,342	27,846	89,537	50,080
1949	12,001	37,789	2,749	18,340	67,221	52,312	30,341	105,010	55,061
1950	14,533	47,151	1,924	18,820	70,840	54,063	33,353	117,991	55,987
1951	16,167	48,745	2,181	18,328	73,142	53,949	34,495	121,887	56,130
1952	17,357	46,413	2,594	19,213	72,951	55,423	36,570	119,364	58,017
1953	20,956	52,829	2,838	22,933	79,873	64,749	43,889	132,702	67,587
1954	18,213	42,108	3,327	23,812	80,239	66,641	42,025	122,347	69,968
1955	17,422	32,872	3,120	25,410	82,032	71,219	42,832	114,704	74,339
1956	19,687	33,229	3,472	25,324	84,702	73,472	45,011	117,931	76,944

TABLE 16. Production¹, Imports and Exports of Ammonium Sulphate, 1946-1955

Year	Production	Imports	Exports
1946	197,103	63	155,466
1947	196,825	124	158,975
1948	215,109	130	146,379
1949	225,949	140	167,147
1950	211,534	103	209,106
1951	209,159	314	145,724
1952	226,664	845	199,681
1953	186,540	21,254	147,371
1954	174,967	14,101	154,760
1955	311,371	7,029	N.A.

1. Factory shipments since 1952.



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TABLE 17. Imports and Exports of Fertilizers, 1954 and 1955

Item	1954		1955	
	Quantity	Value	Quantity	Value
		\$		\$
Imports				
Ammonia, sulphate of	tons 14,101	601,620	7,029	311,212
Potash, muriate of	" 115,288	2,695,617	138,492	3,230,564
Potash, sulphate of	" 12,790	452,480	13,957	458,683
Nitrate of soda or cubic nitre	" 17,969	795,395	21,426	927,976
Nitrogen solution	" 37,401	2,275,640	36,233	2,178,081
Nitrogen fertilizer, n.o.p.	" 1,066	59,962	374	19,856
Triple superphosphate	" 19,901	903,349	35,324	1,606,817
Superphosphate, n.o.p.	" 180,255	3,432,394	175,944	3,263,012
Phosphate fertilizer, n.o.p.	" 5,227	103,467	2,654	159,603
Sulphate of potash magnesia	" 1,778	24,296	1,986	28,255
Potash fertilizers, n.o.p.	" 19	2,358	—	—
Mixed fertilizers	" 3,629	289,893	1,541	310,681
Fertilizer materials, n.o.p.	" 4,038	243,926	5,868	200,520
Exports				
Ammonium sulphate	tons 154,760	6,934,552	—	10,978,475
Nitrogen fertilizer	" 315,153	19,939,942	—	25,354,694
Phosphate (fertilizer)	" 192,083	13,228,606	—	17,408,564
Fertilizers, manufactured, n.o.p.	" 39,669	2,060,922	43,594	2,408,222
Fertilizer materials, n.o.p.	" 12,462	148,372	6,116	146,209

Note. In each case, the period covered in the above table refers to the "calendar" year.

List of Firms in the Fertilizers Industry, 1955

Name of firm	Location of plant
Prince Edward Island:	
Island Fertilizer Inc.	Charlottetown
Canada Packers Limited	Summerside
Nova Scotia:	
Canadian Industries Limited	Pier 9, Halifax
Canada Packers Limited	Port Williams
Colonial Fertilizer Co. Ltd.	Nesbit St., Windsor
New Brunswick:	
Canada Packers Limited (Fertilizer Division)	Bayside Drive, East Saint John
International Fertilizers Limited	East Saint John
Summers Fertilizers Co. Inc.	Prince William St., St. Stephen
Quebec:	
Agricultural Chemicals Ltd.	Chambly Canton
Canada Packers Limited	6000 St. Patrick St., Montreal
Canada Packers Limited	Ste. Foy
Canadian Industries Limited	1490 Marlborough St., Montreal
Canadian Industries Limited	McMasterville
Itoude, William, Limited	La Prairie
International Fertilizers Limited	Wolfe's Cove, Quebec
Ontario:	
Agricultural Chemicals Ltd.	Marsh St., Port Hope
Bradford Fertilizer & Chemical Co.	Bradford
Canada Packers Limited	Chatham
Canada Packers Limited	2200 St. Clair Ave. W., Toronto
Canada Packers Limited	Welland
Canadian Industries Limited	King St. E., Chatham
Canadian Industries Limited	Burlington St. E., Hamilton
Elmira Fertilizers Ltd.	Union St., Elmira
Huy-Trous Co. of Canada Ltd.	Box 1296, Cornwall
Misner Fertilizer Limited	Port Dover
"Na-Churs" Plant Food Co. (Canada) Ltd.	2 Langarth St. W., London
North American Cyanamid Limited, Welland Works	Garner Rd., Niagara Falls
Nutrex Fertilizer & Chemical Co. Ltd.	430 Talbot St., London
Ontario Plant Foods Ltd.	Delhi
Stone, William, Sons Ltd.	Ingersoll
Swift Canadian Co. Limited	1400 The Queensway, Etobicoke
United Co-operatives of Ontario	4004 Dundas St. W., Toronto
Witts Fertilizer Works Ltd.	Norwich
Alberta:	
Consolidated Mining and Smelting Co. of Canada Limited	Calgary
British Columbia:	
Consolidated Mining and Smelting Co. of Canada Limited	Kimberly
Consolidated Mining and Smelting Co. of Canada Limited	Trail
Globe Fertilizer Co. Ltd.	Foot Crompton Road, Vancouver
Green Valley Fertilizer & Chemical Co. Ltd.	16th St. & 5th Ave., New Westminster
Vitalerth Products Limited	1741 West 4th Ave., Vancouver