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THE FERTILIZERS INDUSTRY

1956



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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

VI - Leather Products

VII - Textile Mills

VIII - Knitting Mills

IX - ClothingX - Wood and Paper Products

XI - Printing Trades

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 1956

Factory shipments by factories in Canada which were engaged principally in the manufacture of fertilizers were valued at \$83,399,218 in 1956 compared with \$92,498,839 in 1955. In addition, there was a production of 185,985 tons of cyanamid (excluding cyanamid for non-agricultural purposes) ammonium sulphate, mixed fertilizers and fish fertilizers valued at \$7,168,742 by establishments which were classified to other industrial groups.

Forty-five plants were occupied chiefly in the manufacture of fertilizers in 1956, there being 23 in Ontario, 7 in Quebec, 5 in British Columbia, 3 in New Brunswick, 3 in Nova Scotia, 2 in Prince Edward Island and 2 in Alberta. Workers in these establishments increased from 2,935 in 1955 to 2,958 in 1956 and salaries and wages increased from \$11,542,380 in 1955 to \$11,757,117 in 1956.

Factory shipments of mixed fertilizers in 1956, from all industries, amounted to 703,200 tons worth \$34,408,000 and included 697,336 tons at \$34,042,219 made by plants in the fertilizer manufacturing industry and 5,864 tons at \$366,000 made in the meat packing and oils and fats industries. In 1955 the corresponding totals were 685,696 tons at \$33,111,970 and in 1954 they were 668,200 tons at \$32,120,000.

Superphosphate was manufactured in 1956 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 1956 by North American Cyanamid (Welland Works) at Niagara Falls in Ontario, by Consolidated Mining and Smelting Company of Canada, Limited at Trail, British Columbia and at Calgary, Alberta, and by Northwest Nitro-Chemicals Ltd. at Medicine Hat, Alberta. The output figures are not published separately since there were only two major 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 Sherrit-Gordon Mines Limited at Fort Saskatchewan, Alberta, recovered ammonium sulphate as a byproduct in connection with a special process used for refining nickel. Factory shipments during the calendar year 1956 amounted to 339,510 tons and imports totalled 3,144 tons. Ammonium phosphate was made by the Consolidated Mining and Smelting Company of Canada, Limited at Trail, British Columbia, and Kimberley, British Columbia, and by Northwest Nitro-Chemicals Ltd. at Medicine Hat, Alberta.

A special survey of the fertilizer trade in Canada during the fertilizer year ended June, 1957 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 808,251 tons of mixtures and materials was sold in Canada during the year ended June 30, 1957 compared with 800,680 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 later years information on the value of year-end inventory holdings at plant and plant warehouses was collected as part of the annual Commus of Industry and information thus made available was taken into account in calculating the value account figures.

TABLE 1, Principal Statistics of the Fertilizers Industry, Significant Years 1929-56, and by Provinces, 1955 and 1956

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.	8	\$	\$	\$	\$
1929	12	251	255,650	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, 525	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, 371, 468	33, 984, 199	67, 428, 067
1952	39	3, 205	11, 325, 300	1,887,038	38, 450, 277	38, 405, 176	78, 743, 491
1953,	40	3, 199	11, 511, 643	1,948,620	39, 310, 484	43,095,265	84, 354, 369
1954	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
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 British Columbia	1 5	1,587	6,763,430	1,684,238	14,053,647	30,633,764	48, 381, 305
		0.005	11 540 000	2 041 070	44 200 000	41 00 04	00 400 000
Canada	39	2, 935	11,542,380	2, 641, 870	41, 396, 928	43, 895, 045	92, 498, 839
1956					14.75		
Prince Edward Island	2	97	247, 308	20,842	2, 649, 203	755, 740	3, 563, 079
Nova Scotia	3	,					
New Brunswick	3	125	402, 338	68,774	3, 023, 879	786, 954	4,042,169
Que bec ,	7	294	1,074,008	71,845	4, 958, 736	2,795,809	7, 674, 370
Ontario	23	822	3, 088, 080	919,516	17,888,675	9, 524, 225	27, 700, 432
Alberta British Columbia	2 5	1,620	6,945,363	1,619,420	14,774,850	23, 481, 115	40,419,168
Canada	45	2, 958	11, 757, 117	2, 700, 397	43, 295, 343	37, 343, 843	83, 399, 218

1. See footnote to Text.

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.

TABLE 2. Inventories 1, 1956

Province	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	\$	\$	\$	\$
Opening:				
Prince Edward Island and Nova Scotia New Brunswick Quebec Ontario Alberta and British Columbia Canada	384,610 441,599 1,195,461 1,894,749 4,951,930 8,868,349	418, 477 723, 550 1, 339, 789 4, 650, 248 247, 674 7, 379, 738	293, 615 384, 320 1,021, 236 1,062, 487 5, 206, 857 7, 968, 515	1, 096, 702 1, 549, 469 3, 556, 486 7, 607, 484 10, 406, 451 24, 216, 602
Closing:				
Prince Edward Island and Nova Scotia New Brunswick Que oec Ontario Alberta and British Columbia	445, 983 521, 045 1, 017, 274 1, 927, 478 4, 880, 572	262, 665 607, 862 1, 205, 730 4, 657, 263 1, 150, 653	312,133 337,446 1,307,315 1,687,456 3,760,095	1,020,781 1,466,353 3,530,319 8,272,197 9,791,320
Canada	8, 792, 352	7, 884, 173	7, 404, 445	24,080,970

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

(b) deginning 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 Fertillizers Industry for the year under review are shown in the above table.

(c) The opening inventory for the current year may not necessarily agree with the closing inventory published the previous year because of changes in the composition of the industry, such as: the addition of new establishments, the disappearance of old ones, or the transfer of establishments to other industries for statistical purposes. The figure for value added by manufacture for the previous year does not need to be altered because of such changes in the composition of the industry.

TABLE 3. Products of the Fertilizers Industry, Calendar Years, 1955 and 1956

	195	5	195	6
Product	Quantity	Value of factory shipments	Quantity	Value of factory shipments
	Tons	s	Tons	\$
Mixed fertilizers	680.931	32,773,476	697,336	34,042,219
Superphosphate, ammonium nitrate (fertilizer grade), ammonium phosphate and ammonium sulphate (completely manufactured)	1,028,844	55, 461, 633	919, 892	42, 653, 684
Superphosphate, milled and screened only:				
16%-18% P ₂ O ₅	1,327	47,048	10 000	001 805
20% P 20 5	11,996	429,014	16, 541	601.785
Ammonium sulphate, milled and screened only	639	40,807	265	13,892
Muriate of potash, milled and screened only:				
50% K , O	1,057	81,001	0.505	141,253
60% K 20	2,157	120, 108	2,535	141,200
All other products	-	3,565,752	-	5,946,385
Total for fertilizers industry	-	92, 498, 839	-	83, 399, 218
Fertilizers made in other industries (cyanamid, ammonium sulphate, mixtures, etc	-	8,755,646		7. 163. 742
Total value of all fertilizers produced ²	****	101, 254, 485	-	90, 567, 960

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.

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, armonium 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, 1955 and 1956

Material	19:	55	195	66
waretrar	Quantity	Cost at works	Quantity	Cost at works
	Short tons	\$	Short tons	\$
Ammonia, anhydrous	83, 600	3,387,398	87,738	3,764,892
Ammonium nitrate	3, 156	261, 285	3,476	261,874
11-48-0	4,246	431,491	5,880	567, 713
16-20-0	762	56,156	750	48,989
Ammonium sulphate (sulphate of ammonia)	38,988	1,791,112	36, 283	1,543,053
Bone meal and bone flour	66	5, 164	1	1
Borax	242	20,085	288	22,942
Calcium cyanamide (cyanamid)	1,275	83,368	1,093	70,535
Coke (except for fuel)	81,908	1, 437, 183	48,534	882, 889
Diatomaceous earth	9, 166	429,149	8,648	427,684
Dried blood and blood meal	76	7, 298	1	1
Limestone	22, 284	100, 174	20,570	82,090
Line or land plaster	70	1,726	1,208	9,808
Wagnesium oxide (all forms, including brucite, mag 70, etc.)	1,497	62, 614	1,468	57, 815
Wagnesium sulphate	30	2,297	43	3, 391
Vitrogen solutions	36, 160	2,521,849	40,724	2,417,156
Phosphate rock	465, 129	6, 336, 505	417,910	5, 737, 023
Potassium chloride (muriate of potash):				
50% K 20	1,846	68,413	1,961	74, 735
60% K 2 O	118,809	4,219,410	123, 493	4,544,228
Potassium nitrate (nitrate of potash)	38	6,077	25	4,394
Potassium sulphate (sulphate of potash)	12,127	584,350	13.265	650, 259
Potassium magnesium sulphate (sulphate of potash magnesia)	1,919	57,841	1,810	56, 975
and	35, 614	85, 317	41,893	105, 974
Sodium nitrate (nitrate of soda)	159	9,438	270	13, 169
Sulphuric acid, 100%	577,063	3,335,142	558, 632	3, 149, 123
Superphosphate				
16-18% P ₂ O ₅	29, 148	633,006	41,076	932, 611
20% P O 5 38-48% P O 5	284,031	6,921,746	258, 939	6,430,075
38-48% P 2 O 5	33, 236	1,983,500	41,316	2, 129, 510
Ammoniated -3-18-0	549	20, 185	3,648	101,459
Cankage	279	12,718	1	1
Jrea	272	35, 511	925	69,723
All other materials		1,727,612	-	3,564,304
Containers and shipping materials		4,761,308	-	5, 565, 950
Total	~	41, 396, 928		43,295,343

^{1.} Not separately specified in 1956.

TABLE 5. Total Production 1 of Mixed Fertilizers, from All Industrial Groups, Calendar Years, 1947-1956

Year	Quantity Selling val		Year	Quantity	Selling value at works
	Tons	\$		Tons	\$
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
1951	696, 800	29, 193, 000	1956	703, 200	34, 408, 000

TABLE 6. Principal Statistics of the Fertilizers Industry in Canada, Classified According to Type of Ownership, 1955 and 1956

Туре	Estab- lish- nents	Enployees	Salaries and Wages	Cost at plant of materials Used	Seiling value of factory snipments
	No.	No.	\$	\$	\$
1955				10.00	
Individual	1	1			
Co-operatives	37	2,935	11, 542, 380	41, 396, 928	92, 498, 839
Incorporated companies	1			12,000,020	02, 100, 000
Total	39	2,935	11, 342, 380	41, 396, 928	92, 498, 839
1956		15-1-1-1			
ndividual	2	1			
Co-operatives	3	2,958	11, 757, 117	43, 295, 343	83, 399, 218
ncorporated companies	40			24, 200, 010	00,000,210
Total	45	2, 958	11, 757, 117	43, 295, 343	83, 399, 218

TABLE 7. Principal Statistics of the Fertilizers Industry in Canada, Grouped According to Selling Value of Factory Shipments 1955 and 1956

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.	\$	\$	\$	
1955				100		
Under \$25,000	1	1				
\$50,000 to \$99,999	1	35	86, 669	294, 563	478, 285	
\$100,000 to \$199,999	3	1			210, 200	
\$200,000 to \$499,999	6	79	231, 657	1, 510, 261	2, 338, 956	
\$500,000 to \$999,999	13	291	904, 308	6, 781, 414	9, 596, 124	
\$1,000,000 to \$4,999,999	10	537	1,813,819	13, 803, 916	19, 187, 912	
\$5,000,000 and over	5	1, 935	8, 190, 649	18, 906, 774	60, 897, 562	
Head offices	_	58	315, 278	_	_	
Total	39	2, 935	11,542,380	41, 396, 928	92, 498, 839	
1956						
Under \$25,000	3	1				
\$25,000 to \$99,999	2	21	35, 573	164,320	235, 230	
\$100,000 to \$199,999	5	186	516, 861	602,005	692, 561	
\$200,000 to \$499,999	4	40	108, 474	884, 583	1, 189, 665	
\$500,000 to \$999,999	16	333	1,034,087	8, 664, 121	11. 884. 435	
\$1,000,000 to \$4,999,999	10	533	1,839,715	13, 689, 065	18, 929, 958	
55,000,000 and over	5	1, 783	7,947,407	19, 291, 249	50, 467, 369	
lead offices	-	57	275, 000	-	_	
Total	45	2, 958	11, 757, 117	43, 295, 343	83, 399, 218	

^{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 8. Capital and Repair Expenditures in the Fertilizers Industry, 1952-1956

	Capital ex	penditures		Repai maintenance			Total				
Year	Construction	Construction Machinery and equipment		Construction	Machinery and equipment	Sub-total	capital and repair expenditures				
	\$'000										
952	2,477	4,891	7,368	370	3,011	3, 381	10,74				
953	1,914	3.718	5, 632	319	2.545	2, 864	8,49				
954	484	1,201	1,685	284	3,266	3,550	5, 23				
955	3,512	1,594	5,106	260	3,183	3,443	8, 54				
9561	10,608	4,669	15,277	279	3,051	3,330	18,60				

^{1.} Preliminary.

TABLE 9. Employees and Their Earnings, by Provinces, 1955 and 1956

		N umbe	er of emplo	yees			Earnings		
Province	Supervisory and office		Production workers		Total	Supervisory	Production	Total	
	Male	Female	Male	Female		and office	workers	20441	
						\$	\$	\$	
1955									
New Brunswick	15	6	93		114	91, 281	299,443	390,724	
Quebec	93	28	200		321	618, 252	518,041	1,136,293	
Ontario	159	74	583		816	930,415	2,068,507	2,998,922	
British Columbia	289	27	963	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	
1956									
New Brunswick	19	6	99	1	125	90,279	312.059	402, 338	
Quebec	81	33	180	***	294	551.861	522, 147	1,074,008	
Ontario	173	60	586	3	822	939.504	2,148,576	3,088,080	
British Columbia	250	25	900	4	1, 179	1,481,711	3, 735, 523	5, 217, 234	
Other provinces	151	32	351	4	538	679,094	1, 296, 363	1,975,457	
Canada	674	156	2, 116	12	2, 958	3, 742, 449	8, 014, 668	11, 757, 117	

TABLE 10. Production Workers, by Months, 1955 and 1956

Month		1955		1956						
month	Male	Female	Total	Male	Female	le Total				
	Number									
January	2, 198	8	2, 206	2,093	13	2, 106				
February	2,176	8	2, 184	2, 113	13	2, 126				
March	2, 182	8	2, 190	2, 141	13	2, 154				
April	2, 335	8	2,343	2,395	13	2,408				
May	2,507	8	2, 515	2,536	13	2,549				
June	2,065	8	2,073	1,946	13	1,959				
July	1,955	. 8	1,963	1,779	10	1.789				
August	2,065	8	2,073	1,846	10	1,856				
September	2,092	8	2, 100	2,067	11	2,078				
October	2.027	8	2,035	2, 174	11	2,185				
November	2,002	8	2,010	2,209	11	2, 220				
December	2,010	8	2,018	2,110	11	2,121				
Average	2, 135	8	2, 143	2, 116	12	2,125				

TABLE 11. Sales of Fertilizers, Except for Manufacturing Purposes, During the Year Ended June 30, 1957

Kind	New- found- land	Prince Edward Island	Nova Scotia	New Bruns- wick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Total sold in Canada
						Short to	ns				-
Fertilizer materials									1		1
Anhydrous ammonia	_	-	_	-	_	1,630	116	286	426	50	2, 508
Nitrate of soda	254	_	16	1	63	479	1	_		6	3 20
Sulphate of ammonia	6	33	75	27	199	670	122	98	1,525	1;802	4, 557
Cyanamide	-	2	36	20	47	1,860				185	2, 150
Ammonium nitrate	73	207	712	177	759	16, 203	314	1, 299	4, 110	2,665	26, 519
Ammonium Phosphate - 11-48-0	_	-	_	1	64	1,284	9,362	15,756	21,616	1,022	49, 105
16-20-0	-	-	-	_	-	58	4, 286	2,427	8, 509	2, 543	17,823
Superphosphate - 20% P ₂ O ₅	31	147	738	302	7,337	14, 315	1	-	45	1,460	24, 376
45% P ₂ O ₅	_	-	-	-	2	806	-	_	-	148	956
Natural phosphate rock	-	20	-	126	4,053	123	- 1	_	-	6	4, 328
Basic stag	-		_	_	706	2		-	-	_	708
Bone meal, bone flour, etc.	4	1	52	30	64	973	32	1	42	853	2,052
Muriate of potash - 50% K 20	-	_	-	_	4	_	3	3	30		40
60% K ₂ O	4	16	52	17	203	3,619	4	1	5	673	4,674
Sulphate of potash	-	-	3	-	67	636	-	-	- 1	142	8 48
Tankage	_	-	-		-	2	_	-	-	341	343
Animal manure	-	-	56	20	496	798	-	_	_	142	1, 512
Dried blood	-	_	2	_	2	39	-	_	_	94	137
Sewage sludge	-	-	20	9	236	5,369	-	1	-	475	6,110
Other fertilizer materials 1	1	6	146	5	46	2,618	669	836	1,857	747	6,931
Total materials	373	432	1,908	735	14, 428	51, 484	14, 910	20, 708	38, 165	13, 354	156, 497
Mixed fertilizers	4. 410	52,867	24, 450	60,280	127, 546	364, 502	754	77	172	16,696	651, 754
Total - 1956-1957	4, 783	53, 299	26, 358	61,015	141, 974	415, 986	15, 664	20, 785	38, 337	30,050	808, 251
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

^{1.} Lime has not been included.

TABLE 12. Mixed Fertilizers Sold During the Year Ended June 30, 1957

_			New-	Prince		New			Manitoba,		Total	Exported
		Analysis	found- land	Edward Island	Nova Scotia	Bruns- wick	Quebec	Ontario	Saskatchewan and Alberta	British Columbia	sold in Canada	from Canada
							Short t	ons				
N I	0,9	K ₂ O										1
0	5	15	-	13	_	_	669	5	-	_	687	10
0	12	20	_	_	_		278	7, 480	_	186	152 7, 944	
0	14	14		_	_		518	1, 181	_	100	1,699	
0	15	15	-	-	-	-	-	1,064	-	45	1, 109	-
0	15	30	_	_		_	4	_		_	4	306
0	16	8	_	_	_	-	3,057	126	_	-	3, 183	_
0	20	20	-,	- 20	700		73	1,646	_	-	1,719	
0 2	8	16	1	30	722	203	620 2, 637	7. 208	_	_	8, 784 2, 671	836
~		20					2,00.	3.			2,011	
2	10	15	_	_	_	_	286	5, 234	_	_	5,520	-
2	12	10	-	_	_	_	31,176	110, 566	-	-	141,742	-
2 2	12	20	_		_	_	III 5	4,525 9,681	_	_	4, 525 9, 681	_
2	14	8					2,318	913	_	_	3, 231	
_							2,020				0,201	
2	15	15	-	_	_		-		_	1, 213	1,213	_
2 2	16	6	-		_	_	18, 515 91	7, 179 9, 954	_	70	25,764 10,045	_
2	20	18				Ξ	91	120	_		120	_
2	20	20	-	-	-	_	-	223	_	_	223	_
2	0	7.5						001	4.5		00.	
3	8	15	_			_		1, 130			1, 130	
3	12	12	-	_	-	-	830	4, 165		_	4, 995	_
3	12	16						2,397	-	-	2,397	_
3	15	6	805	4,704	9, 293	6, 336	16	_	_	_	21, 154	21
3	15	10	-	_	-	-	_	5, 900	-	_	5, 900	-
3	18	9		50	-	_	20	16 011	_	_	50	-
3	18	15	-		_		20 661	16, 911 4, 596	-	7	16, 931 5, 257	
4	9	10	_	85	-	_	-	-	_	_	85	

TABLE 12. Mixed Fertilizers Sold During the Year Ended June 30, 1957 - Concluded

		TABL	E 16. MIX	ea Fertui	zers Sold	During tr	ie rear E	naea June	30, 1957 - 0	Concluded		
		Analysis	New- found- land	Prince Edward Island	Nova Scotia	New Bruns- wick	Quebec	Ontario	Manitoba, Saskatchewan and Alberta	British Columbia	Total sold in Canada	Exported from Canada
				Short tons								
4 4	10 10 10 10 12 12	K ₂ O 7 8 10 6 10	9 - 11	1111	20	- 6 - 50	1,400	61 744 24, 110		144 4, 137	144 108 4, 137 2, 230 24, 110	2
4	12 16 24 24 8	16		-	= = = = = = = = = = = = = = = = = = = =	1111	503 1, 490 2, 164	891 970 22, 984 28, 431		-	916 970 23, 489 29, 921 2, 169	- - - - 5
5 5 5	10 10 10 10 20	5	2, 230 127 —	1, 701 32, 142 —	1,900 2,018 —	17. 562 4. 624	15, 458 36, 718 10 84	537 33. 274 4, 027 615	16 -	10 - - - -	39.388 111,119 4,037 699	100 2, 765 3 —
5 6 6 6	20 8 9 9	20	_ _ 2 _	- 2 - 111	10 15	1, 273 5, 063	190	1, 414 5 152 —		3. 256	1, 414 3, 261 358 1, 273 5, 192	- - 363 3, 278
6 6	10 12 12 12 12 15	10	477 3 688	62 96 13, 746 15	1,829 18 7,268 85	1,003 6,801 16,519 5	1,586	3,968		287 	287 3, 375 6, 918 43, 775 105	283 27 —
6 6 6	18 18 24 27 30	6	-	= = =	-	-		239 281 — —		280 1,684	239 281 — 280 1, 684	5, 370 =
7 7 8	36 6 7 9	7 7 7 10 5	=			-	216 —	192 127 1, 586	=	1,626	192 127 1,802 1,628	63 2,053
8 8	10 12 12 16 24	10 12 16 20	-	-	=	257 42 12	16 277	39	=======================================	-	257 58 328 1,109	110 8, 963 2, 321 2, 753
8 9 9 9	32 5 9 9 5	16	-4-	2 35 	856 —	118 43 —	1, 376	71 36 546 662	= =	-	1.569 974 546 681	1.701
10 1	6 10 15 20 24	10	52 - - -	30 - -	6 1	84 50 - -	383 724 — —	939 29, 359 301 864	10 - - -	50 - 2, 419	1, 475 30, 216 2, 720 864	5, 715 1, 051 19
10 5 12 1 13 1	32 52 12 16 7	10 17 12 10 10	= = =	-	- 2 - -	= = = = = = = = = = = = = = = = = = = =	15	140 22 —	588	185 2 610 179	773 159 22 610 179	4, 869 6, 540
Misce	llan	ions other mixtures	-	41	407	27	1, 102	3, 180	362	311	5, 430	320
	Total		4, 410	52, 867	24, 450	90, 280	127, 546	364, 502	1,003	16. 696	651, 754	49, 728

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

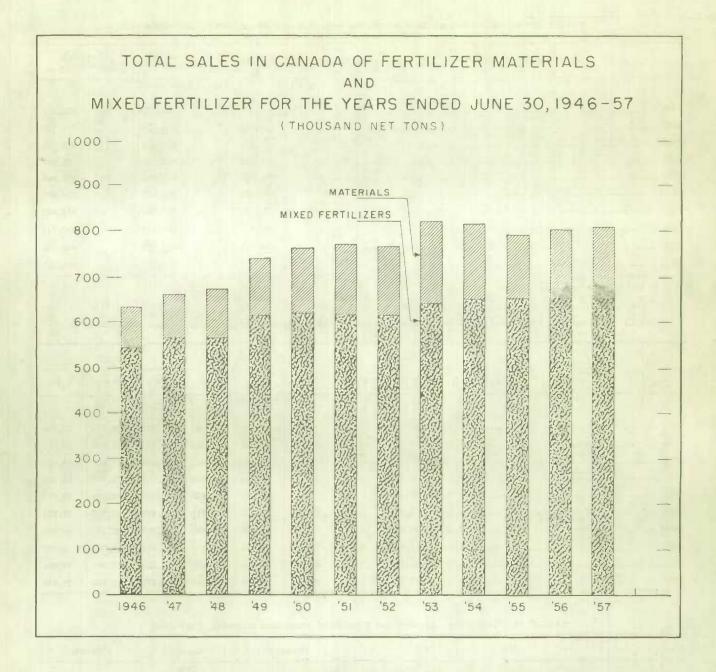


TABLE 13. Nitrogen, Phosphoric Acid and Potash Contained in Fertilizers Sold in Canada During the Year Ended June 30, 1957

		In materials			In mixtures				
Province	N	P2O5	K ₂ O	N	P205	K ₂ O	N	P2O5	K ₂ O
					Short tons				17 190
Newfoundland Prince Edward Island Nova Scotia New Brunswick Quebec Ontario Manitoba Saskatchewan Alberta British Columbia	66 77 310 68 355 8,716 2.121 3,031 6,251 2,067	7 36 173 111 3,006 4,328 5,452 8,165 12,357 1,749	2 10 34 10 214 2,522 3 2 18 475	219 2,689 1,145 3,204 4,555 13,661 61 7 16 1,054	504 5,812 3,128 6,787 15,084 51,959 167 20 40 2,305	407 6,337 2,217 6,178 13,477 44,757 57 6 15	285 2,766 1,455 3,272 4,910 22,377 2,182 3,038 6,267 3,121	511 5,848 3,301 6,898 18,090 56,287 5,619 8,185 12,397 4,054	409 6,347 2,251 6,188 13,691 47,279 60 8 33 2,108
Total Canada	23, 062	35,384	3, 290	26, 611	85,806	75,084	49,673	121, 190	78,374

TABLE 14. Total Sales 1 in Canada of Fertilizer Materials and Mixed Fertilizers, for the Years Ended June 30, 1948-1957

Year ended June 30	Fertilizer materials	Mixed fertilizers	Total sold in Canada	
		Tons of 2,000 pounds		
1948	107,299	564,872	672, 171	
1949	129,968	611,758	741, 726	
1950	145,972	618,609	764,581	
951	153,933	616,574	770,507	
952	150,049	612,496	768, 545	
953	179,600	640,203	819,803	
954	160,481	651,160	811,641	
955	139,301	651,473	790, 774	
956	148,037	652,643	800,680	
957	156,497	651,754	808, 251	

^{1.} Except for manufacturing purposes.

TABLE 15. Nitrogen, Phosphoric Acid and Potash Contained in Fertilizers Sold During the Years Ended June 30, 1948-1957

Year ended		In materials		1	ln mixtures			Total	
June 30	N	P205	K ₂ O	N	P205	K ₂ O	N	P ₂ O ₅	K ₂ O
					Short tons				
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	32,672	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
1957	23,062	35, 384	3,290	26,611	85,806	75,084	49,673	121,190	78,374

TABLE 16, Production¹, Imports and Exports of Ammonium Sulphate, 1947-1956

Year	Production	Imports	Exports
		Tons	
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	199,661
1953	166, 540	21, 254	147, 371
1954	174,967	14, 101	154,760
955	311,371	7,029	N. A.
1956	339,510	3, 144	N.A.

^{1.} Factory shipments since 1952.

TABLE 17. Imports and Exports of Fertilizers, 1955 and 1956

	1955		1956			
Ite m	Quantity Value		Quantity	Value		
		\$		\$		
Imports						
Ammonia, sulphate of tons	7,029	311, 212	3, 144	142, 789		
Potash, muriate of	138, 492	3, 230, 564	131, 293	3, 238, 761		
Potash, sulphate of	13, 957	458, 683	16, 152	584, 123		
Nitrate of soda or cubic nitre	21, 426	927,976	27, 529	1, 207, 988		
Nitrogen solution	36, 233	2, 178, 081	33, 222	1,971,028		
Nitrogen fertilizer, n.o.p.	374	19,856	227	12,660		
Triple superphosphate	35, 324	1, 606, 817	38, 487	1,741,268		
Superphosphate, n.o.p	175, 944	3, 263, 012	183, 991	3, 420, 818		
Phosphate fertilizer, n.o.p	2, 654	159, 603	1,764	138, 684		
Sulphate of potash magnesia	1, 986	28, 255	2, 338	37, 163		
Potash fertilizers, n.o.p.	_	-	20	2, 275		
Mixed fertilizers	1, 541	310, 681	2, 598	374, 564		
Fertilizer materials, n.o.p	5, 868	200, 520	6, 237	356, 727		
Exports						
Ammonium sulphate tons	_	10, 978, 475	_	12,072,905		
Nitrogen fertilizer	-	25, 354, 694	-	16, 866, 967		
Phosphate (fertilizer)	-	17, 408, 564	-	15, 508, 176		
Fertilizers, manufactured, n.o.p.	43, 594	2, 408, 222	73, 421	4,689,759		
Fertilizer materials, n.o.p	6, 116	146, 209	4, 667	72,792		

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

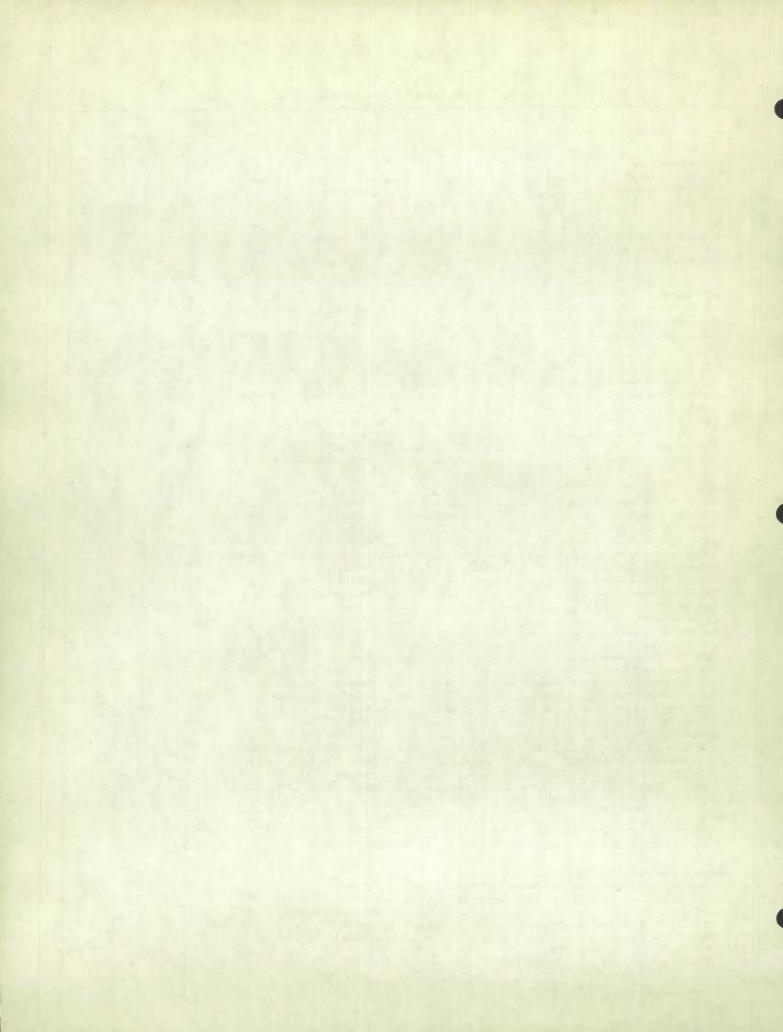
TABLE 18. Fuel and Electricity Used in the Fertilizers Industry, 19561

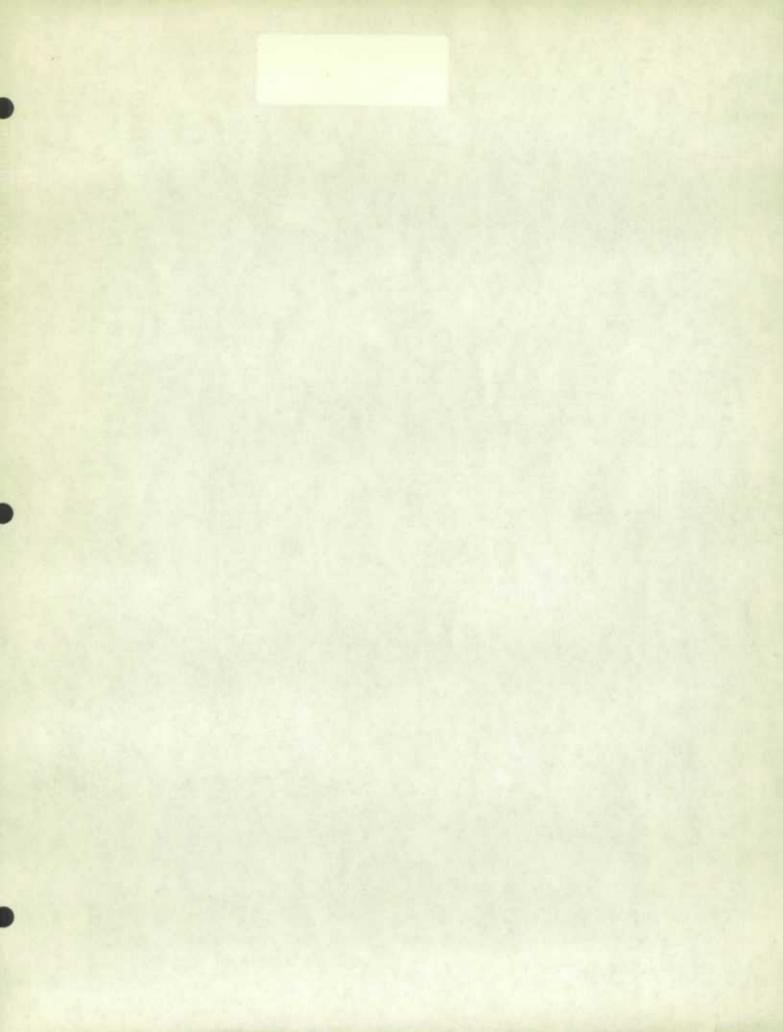
Kind	Unit of measure	Quantity	Cost at works
			\$
Bituminous coal — Canadian	tons	4,945	47, 219
- Imported	48	43, 532	401,446
Anthracite coal	9.8	49	1,019
Coke (for fuel only)	**	92	1,736
Gasoline (including gasoline used in cars and trucks)	imp. gals.	284, 193	92, 924
Fuel oil	0.0	611, 240	80,994
Gas - Liquified petroleum gases	4.0	90	29
- Other manufactured	1,000 cu. ft.	420	330
- Natura)	**	30,620	6, 128
Other fuel	-	-	12, 488
Electricity purchased ²	k.w.h.	1, 166, 783, 065	2, 056, 084
Total	-		2,700,397

^{1.} Last collected in 1953.
2. The bulk of the electricity shown here was generated by one of the reporting companies but was generated by off-plant equipment and therefore, for statistical purposes, this has been treated as purchased electricity.

List of Firms in the Fertilizers Industry, 1956

Name of firm	Location of plant
Prince Edward Island:	
Island Fertilizer Inc.	Charlottetown
Canada Packers Limited	Summerside
iova Scotia:	
Canadian Industries Limited	Pier 9, Halifax
Canada Packers Limited	Port Williams
Colonial Fertilizer Co. Ltd.	Nesbit St., Windsor
iew Burswick:	
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
	Trace amain se, se, securen
nebec:	
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
Houde, William, Limited	La Prairie
International Fertilizers Limited	Wolfe's Cove, Quebec
entario:	
Agricultural Chemicals Ltd.	Marsh St., Port Hope
Biorganic Fertilizers Ltd.	Maidstone
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
Canadian Industries Limited	Norwich
Elmira Fertilizers Ltd.	Union St., Elmira
Hy-Trous Co. of Canada Ltd.	Box 1296, Cornwall
Manchester Products	dalt
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
Rainbow Chemicals Ltd.	Tiloury
Stone, William, Sons Ltd.	Ingersoll
Swift Canadian Co. Limited	1400 The Queensway, Etobicoke
United Co-operatives of Ontario	4004 Dundas St. W., Toronto
United Co-operatives of Ontario	Stratford
United Co-operatives of Ontario	Thamesville
lberta:	
Consolidated Mining and Smelting Co. of Canada Limited	Calgary
North-West Nitro Chemicals Ltd.	Medicine Hat
Pritish Columbia	
witish Columbia:	Kimberly
Cancelldated Mining and Smolting Co. of Canada Limited	trainments.
Consolidated Mining and Smelting Co. of Canada Limited	Trail
Consolidated Mining and Smelting Co. of Canada Limited	Trail Foot Crompton Road, Vancouver
	Trail Foot Crompton Road, Vancouver 16th St. % 5th Ave., New Westminster





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