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# THE FERTILIZERS INDUSTRY 1954





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NOTICE

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The annual reports prepared by the Industry and Merchandising Division of the Eureau 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, 25¢

Section C. Quebec, 25¢

Section D. Ontario, 25¢

Section E. Prairie Provinces, 25¢

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 - Clothing

X - 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

## 1954

Factory shipments by factories in Canada which were engaged principally in the manufacture of fertilizers were valued at \$78,149,303 in 1954 compared with \$84,354,369 in 1953. In addition, there was a production of 141,461 tons of cyanamid (excluding cyanamid for non-agricultural purposes), ammonium sulphate, mixed fertilizers and fish fertilizers valued at \$7,138,249 by establishments which were classified to other industrial groups. The quantity of fish used as a fertilizer in 1954 amounted to 25,435 barrels valued at \$43,280.

Thirty-eight plants were occupied chiefly in the manufacture of fertilizers in 1954, there being 17 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 3,199 in 1953 to 3,049 in 1954 although salaries and wages increased from \$11,511,643 to \$11,603,480.

Factory shipments of mixed fertilizers in 1954, from all industries, amounted to 668,200 tons worth \$32,120,000 and included 663,700 tons at \$31,798,000 made by plants in the fertilizer manufacturing industry and 4,500 tons at \$322,000 made in the meatpacking and oils and fats industries. In 1953 the corresponding total was 694,600 tons at \$32,751,000 and in 1952 it was 648,800 tons at \$30,364,000.

Superphosphate was manufactured in 1954 by Canadian Industries (1954) Limited with plants at McMasterville, Quebec, and Hamilton, Ontario; Green Valley Fertilizer & Chemical Co. Ltd. at New Westminster, British Columbia, and Read Brothers Fertilizers, Limited at Elmira, Ontario. Ammonium nitrate (fertilizer grade) was manufactured in 1954 by the 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 Limited at Sault Ste. Marie, Ontario; Dominion Iron and Steel Ltd. at Sydney, Nova Scotia; Hamilton By-Product Coke Ovens Limited at Hamilton, Ontario; 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, was added to the list of ammonium sulphate producers in 1954. This firm recovered ammonium sulphate as a by-product in connection with a special process used for refining nickel. Factory shipments during the calendar year 1954 amounted to 174,967 tons; imports totalled 14,101 tons and exports amounted to 154,760 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 fertilizer trade in Canada during the fertilizer year ended June 30, 1955, 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 790,774 tons of mixtures and materials was sold in Canada during the year ended June 30, 1955, compared with 811,641 tons during the preceding twelve-month period.

Note: Figures for value added by manufacture shown in Table 1 prior to 1952 were obtained by substracting 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 substracting from the value of shipments the cost of materials, fuel and electricity. In 1954, 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 figure for 1954.

TABLE 1. Principal Statistics of the Fertilizers Industry, Significant Years 1929-54, and by Provinces, 1953 and 1954

Year and province	Estab- lish- ments	Em- ployees	Earnings	Cost of fuel and electricity at works	Cost at plant of materials used	Value added by manufacture 1	Gross selling value of products
	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
1950	36	3, 253	9,422,571	1,996,118	33, 349, 706	33,650,995	68,996,819
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							
Prince Edward Island	2	93	233, 315	19,594	2, 555, 501	1, 259, 762	2 004 055
Nova Scotia	3		233, 313	15, 354	2, 333, 301	1, 239, 102	3,834,857
New Brunswick	3	133	402,736	46,768	3.864,728	1,544,016	5,455,512
Que bec	7	409	1,394,902	67,645	4,352,707	2, 757, 649	7, 178, 001
Ontario	18	970	3, 193, 258	886, 147	16,410,611	9,106,035	26, 402, 793
Alberta	1	]					
British Columbia	6	1,594	6, 287, 432	928,466	12, 126, 937	28, 427, 803	41, 483, 206
Canada	40	3, 199	11,511,643	1,948,620	39, 310, 484	43, 095, 265	84, 354, 369
1954							
Prince Edward Island	2	1					
Nova Scotia	3	92	227, 281	16,507	2,505,554	933,902	3, 488, 440
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						
British Columbia	5	1,531	6,598,083	2,065,214	14,369,524	25, 195, 939	36, 403, 420
Canada	38	3,049	11, 603, 480	2,992,340	41, 275, 216	39, 654, 741	78, 149, 303

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. Inventories 1, 1954

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	569,728 549,005 855,325 2,664,685 2,917,169	224, 119 802, 198 1, 314, 169 4, 105, 017 204, 994	422, 392 338, 114 1, 185, 829 824, 926 2, 660, 256	1, 216, 239 1, 689, 317 3, 355, 323 7, 594, 628 5, 782, 419
Canada	7, 555, 912	6, 650, 497	5,431,517	19, 637, 926
Closing:				
Prince Edward Island and Nova Scotia New Brunswick Quebec Ontario Alberta and British Columbia	479,877 425,130 915,809 2,307,749 2,129,632	333, 182 694, 335 1, 441, 172 4, 137, 232 239, 259	389.915 275.152 1.338.086 1.313.845 7.887.513	1, 202, 974 1, 394, 617 3, 695, 067 7, 758, 826 10, 256, 404
Canada	6, 258, 197	6,845,180	11, 204, 511	24, 307, 88

1. (a) Book value of all manufacturing inventories 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 formely 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, 1953 and 1954

	19	53	195	54
Product	Quantity	Value of factory shipments	Quantity	Value of factory shipments
	Tons	\$	Tons	\$
lixed fertilizers	687,569	32, 324, 090	663, 678	31,798,442
sulphate (completely manufactured)	861,525	48,865,589	800,618	43,830,400
16%-18% P <sub>2</sub> O <sub>5</sub> 20% P <sub>2</sub> O <sub>5</sub> numnonium sulphate, milled and screened only	1,035 13,438 574	35, 874 484, 539 38, 173	1,024 12,171 945	37, 279 421, 647 57, 536
uriate of potash, milled and screened only:  50% K 20	262 1,288	14,564 70,366 2,521,174	7 i 1, 675	3,645 91,097 1,909,257
Total for fertilizers industry	-	84, 354, 369	-	78, 149, 303
ertilizers made in other industries (cyanamid, ammonium sulphate, mixtures, etc.)	-	7, 287, 809	-	7, 138, 249
Total value of all fertilizers produced 2	-	91, 642, 178	and a	85, 287, 552

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, 1953 and 1954

Atotogia)	195	3	195	4
Material	Quantity	Cost at works	Quantity	Cost at works
	Short tons	\$	Short tons	\$
nmonia, anhydrous	61, 166	3,041,857	79.049	3,509,02
mmonia liquor		1,589,738	1	
mmonium nitrate	7, 199	595, 314	4,712	385,86
11-48-0	5, 137	510.311	4, 440	465.78
16-20-0	1, 695	96, 755	1, 101	87.90
mmonium sulphate (sulphate of ammonia)	42, 332	2, 055, 856	40, 232	1, 928, 00
one meal and bone flour	55	4, 167	37	2, 90
	173	15,008	168	15.5
Drax	2, 141	143, 238	1.756	112.6
alcium cyanamide (cyanamid)	80, 538	1, 451, 952	78,823	1,414,3
oke (except for fuel)			9, 384	448.5
atomaceous earth	8,643	427,881		
led blood and blood meal	62	6, 202	42	4, 1
mestone	21, 438	89, 431	27,070	114.5
me or land plaster	1, 153	21,505	1, 169	26,7
gnesium oxide (all forms, including brucite, mag 70, etc.)	2,011	104,912	1,536	71.2
gnesium sulphate	471	17,023	21	1,5
trogen solutions	2	2	27,522	2, 145, 4
osphate rock	416,714	6,063,341	506, 241	7, 105, 6
tassium chloride (muriate of potash):				
50% K <sub>2</sub> O	15,723	429,634	437	11,6
60% K 0	95, 669	3, 470, 118	111,028	3,945,6
stassium nitrate (nitrate of potash)	6	1.441	В	2, 1
tassium sulphate (sulphate of potash)	9,668	483.702	12.952	695.1
tassium magnesium suiphate (sulphate of potash magnesia)	1,550	45, 144	1.968	60.0
nd	38, 698	98, 849	38, 852	94.5
ium nitrate (nitrate of soda)	110	7, 424	351	20, 4
Iphuric acid, 100%	485, 601	2, 913, 624	603, 221	3,971,9
perphosphate:	100,002	2, 525, 57.2	000,001	0,012,0
16-18% P <sub>2</sub> O <sub>4</sub>	44.518	1,080,208	30, 255	628.7
20% P <sub>2</sub> O <sub>5</sub>	284, 209	7,018,598	285, 869	7, 192, 7
	15, 850	960, 594	15, 814	944. 5
38-48% P <sub>2</sub> O <sub>5</sub>	356	13.028	240	12.8
Ammoni afed -3-18-0	58	3,605	169	9. 1
nkage	628	49,921	367	29. 3
E8	020	2,073,877	361	1,451,5
other materials			170	4, 364, 9
ontainers and shipping materials	-	4, 426, 229		4, 304, 9
Total		39, 310, 484	_	41, 275, 2

This item replaced by "Nitrogen solutions" in 1954. Not available separately.

TABLE 5. Total Production 1 of Mixed Fertilizers, from All Industrial Groups, Calendar Years, 1945 - 1954

Year	Quantity	Selling value at works	Year	Quantity	Selling value at works
	Tons	\$		Tons	\$
1945	539,500	16, 256, 000	1950	669,900	26, 519, 000
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

<sup>1.</sup> 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, 1953 and 1954

Туре	Estab- lish- ments	Employees	Earnings	Cost at plant of materials used	Selling value of factory shipments
	No.	No.	\$	\$	\$
1953					
Co-operatives	1 39	3, 199	11,511,643	39, 310, 484	84, 354, 369
Total	40	3, 199	11,511,643	39, 310, 484	84, 354, 369
1954					
Co-operatives	1 37	3,049	11,603,480	41, 275, 216	78, 149, 303
Total	38	3,049	11, 603, 480	41, 275, 216	78, 149, 303

TABLE 7. Principal Statistics of the Fertilizers Industry in Canada, Grouped According to Size of Establishment, 1953 and 1954

Establishments having a production of	Estab- lish- ments	Employees	Earnings	Cost at plant of materials used	Selling value of factory shipments
	No.	No.	\$	\$	\$
1953					
Jnder \$25,000	2				
\$25,000 to \$49,999	1	181	479,676	469,500	428, 336
\$50,000 to \$99,999	1	.0.	210,010	,	
\$100,000 to \$199,999	2				
\$200,000 to \$499,999	7	80	215,303	1,676,637	2, 307, 764
\$500,000 to \$999,999	13	275	832, 135	6, 191, 426	9,651,429
1,000,000 to \$4,999,999	10	515	1,655,992	13,763,765	19,639,099
5,000,000 and over	4	1,968	7,645,127	17, 209, 156	52, 327, 741
ead offices	_	180	683, 410		_
Total	40	3, 199	11,511,643	39, 310, 484	84, 354, 369
1954					
nder \$25,000	1				
\$50,000 to \$99,999	1	27	70,846	178, 131	378, 27
\$100,000 to \$199,999	2				
\$200,000 to \$499,999	7	94	273,003	1,933,699	2, 47 1, 17
\$500,000 to \$999,999	13	304	978, 353	6,948,508	10,002,660
,000,000 to \$4,999,999	10	781	2,663,442	15, 204, 223	20, 334, 02
5,000,000 and over	4	1,771	7, 242, 734	17,010,655	44, 963, 169
ead offices	-	72	375, 102	-	
Total	38	3,049	11,603,480	41, 275, 216	78, 149, 303

TABLE 8. Capital and Repair Expenditures in the Fertilizers Industry, 1950-1954

	Capital ex	penditures		Repair maintenance	and expenditures		Total			
Year	Construction	Machinery and equipment	Sub-total	total Mach Construction and equi		Sub-total	capital and repair expenditure			
	\$'000									
950	1, 274	738	2,012	1,255	2,603	3,858	5,870			
951	1,403	1,737	3, 140	311	3,490	3,801	6,941			
152	2,477	4,891	7,368	370	3.011	3,381	10,749			
953	1,914	3,718	5,632	319	2,545	2,864	8.496			
954 1	278	969	1,247	256	2,803	3,059	4, 306			

<sup>1.</sup> Preliminary.

TABLE 9. Employees and Their Earnings, by Provinces, 1953 and 1954

		Numb	er of emplo	yees			Earnings		
Province	Super and o	visory office	Production workers		Total	Supervisory	Production	Total	
	Male	Female	Male	Female		and office	workers		
						\$	\$	\$	
1953									
New Brunswick	15	6	112	_	133	83,324	319,412	402,736	
quebec	152	88	169	-	409	919,319	475, 583	1,394,902	
ntario	211	70	685	4	970	1,007.470	2, 185, 788	3, 193, 258	
British Columbia	290	24	949	8	1, 271	1,440,061	3,559,951	5,000,012	
Other provinces	84	20	304	8	416	460,819	1,059,916	1,520,735	
Canada	752	208	2, 219	20	3, 199	3, 910, 993	7,600,650	11,511,643	
1954							V 10.11		
New Brunswick	13	6	109	_	128	71,319	303,903	375, 222	
Quebec	101	36	212		349	672, 511	506, 597	1, 179, 108	
ntario	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	
ther 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	

TABLE 10. Production Workers, by Months, 1953 and 1954

100		1953			1954	
Month	Male	Female	Total	Male	Female	Total
			Numi	per		
January	2,298	19	2, 317	2, 160	14	2, 174
February	2, 187	18	2, 205	2, 201	14	2, 215
March	2, 208	20	2, 228	2, 215	14	2, 229
April	2, 401	20	2,421	2,422	16	2, 438
May	2,310	20	2,330	2,530	17	2,547
June	2,069	19	2,088	2, 118	14	2, 132
July	2.058	20	2,078	2,015	14	2,029
lugust	2, 145	21	2, 166	2,080	16	2.096
Suptember	2, 306	21	2,327	2,127	15	2, 143
october	2, 274	21	2, 295	2, 107	13	2, 120
Savember	2, 200	19	2, 219	2,098	13	2,111
Pacember	2, 178	19	2, 197	2,089	12	2, 101
Average	2, 219	20	72, 239	2,179	14	2, 193

TABLE 11. Sales of Fertilizers, Except for Manufacturing Purposes, During the Year Ended June 30, 1955

Kind	New- found- land	Prince Edward Island	Nova Scotia	New Bruns- wick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Total sold in Canada
						hort tons					
Fertilizer materials		1				1				1 1	
Nitrate of soda	325 6 - 96	42 1 269	145 39 804	31 4 203	103 108 549 988	521 557 2, 375 14, 428	89 75	62	803 L 968	2, 147 188 3, 293	959 3, 990 3, 156 22, 298
Ammonium nitrate	-	203	27 1	62	23	1, 429	10,778	14, 219	17, 865	1,084 3,259	45, 73: 10, 956
Superphosphate - 20% P <sub>2</sub> O <sub>5</sub>	24	243	757	301	7,043	15, 287 184	_	_	10	1,906	25, 57
Natural phosphate rock Basic slag Bone meal, bone flour, etc.	=	=	103	34	6,951 634 98	348 496	22	- 60	- 82	742	7, 525 63 1, 53
Muriate of potash - 50% K <sub>2</sub> O	- 2	28	84	37	273	3, 469	12	3	19	688	4,61
Sulphate of potash Tankage Sheep manure	103	10 May .	- 54	_	533	371 861	6	_	6 98	146 254 121	65 35 1,56
Dried blood	_		-	_	60	18 5,743 2,234	_	_	40	111	6,000
Other fertilizer materials 1	egan		35	2	501		-	176	122	204	3, 27
Total materials	556	583	2, 324	681	17, 910	48, 517	14, 118	15, 874	24, 208	14,530	139, 30
Mixed fertilizers (see Table 12)	4,768	49,083	26,626	61,656	112, 147	380, 235	498	77	105	16, 278	651,47
Total - 1954-1955	5, 324	49, 666	28, 950	62, 337	130,057	428, 752	14,616	15, 951	24, 313	30, 808	790,77
Total - 1953-1954 - Materials Mixtures	405 4, 944	1,017 42,447	2, 176 25, 947	714 63, 534		50, 938 375, 673	21,593 470	24, 556 83	28, 284 136	14, 415 15, 998	160, 48 651, 16
Total	4, 449	43, 464	28, 123	64, 248	139, 211	426, 611	22,063	24, 639	28, 420	30, 413	811,64

<sup>1.</sup> Lime has not been included.

TABLE 12, Mixed Fertifizers Sold During the Year Ended June 30, 1955

		Analysis	New- found- land	Prince Edward Island	Nova Scotia	New Bruns- wick	Quebec	Ontario	Manitoba, Saskatchewan	British	Total sold in	Exported from Canada
			,				Short	tons				
N	P 20 5	K <sub>2</sub> O			1							
0	5	15		-		_	862	-	-	-1	863	300
0	8	36	_	-	-	-	****	122	-		122	_
0	12	12		_	-	-	6	6,590	_	-	6,596	_
0	12	20	-	***	-	-	142	7,240	_	317	7,699	990
0	14	14		-		-	243	891	-	-	1, 134	50
0	16	8	romp.	_		***	2, 586	3, 416	_	-	6,002	2
0	20	10		-	_	-	-	592			592	9910
0	20	20	3	58	5 28	87	97	2, 224	_	-	2,997	540
2	8	16	-	_			2,664	31	-		2,695	
2	10	8		-	-			212	_	-	212	-
2	10	15		_	-	-	_	3, 307		-	3,307	
2	12	10	_	_			26,592	134, 119		6	160,717	ı
2	12	16		_	-	-	4	4, 844	_	_	4,848	_
2	12	20	_	_	-		3	9,913	-	-	9,916	_
2	14	8 ,	_	_	_	-	2, 251	1,823	_	_	4,074	_
2	15	15	-	_		-			_	1, 333	1,333	_
2	16	6					18,023	12,584	-	277	30,884	2
2	18	18		_			-	5,621			5,621	-
3	12	12	_			-	497	4, 485	_	_	4,982	3
3	12	16	-	_	_	_	1	1, 289		_	1, 290	_
2	15	6	901	5, 375	9,610	6,582			-		22, 468	23
3	15	10	-	-	-	-,002	_	4, 157	_	_	4, 157	-
3	18	0	-	_	no.		8	247	_	_	255	_
3	18	9	_	_	_		13	20,738	num.	_	20,751	4
3	18	15	_	-	-		141	3, 327		_	3, 468	***
4	8			_	-		_	1, 296		-	1, 296	67
A	10	7						., 250		278	278	-
4	10	8	17	_	31	17	1.27	185	39	270	416	-
4	10	10			-	a I	1	_	_	4,828	4, 829	Per Per
4	12	6 .,			19	1	1, 407	1,874	5	_	3, 306	3

TABLE 12. Mixed Fertilizers Sold During the Year Ended June 30, 1955 - 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
							Sho	rt tons			THE S	UV
V P	205	K <sub>2</sub> O										
4	12	8	-			15	2	125			140	
	12	10					2	125		_	142	
	12	16				_	13	32,780 834	_		32,793	_
	24	12				_	153		_		836	
	24	20				_	150	23, 676 9, 669	4	-	23, 833	
2 1	60 E	455 ***********************************					130	9,009		_	9,819	
5	8	7	_	-	-	_	_	_		-	_	14
5	8	10	- main	-	_	_	3, 232	5	-		3, 237	
5 1	10	5	-	- Calle	-	_	332	602	_	1	934	19
5 1	10	10	2, 645	5,604	5,506	19, 483	15, 330	535	1	- Carlo	49, 104	3, 32
5	10	13	95	26,072	1,734	7,970	33, 346	36,846	27	-	106,090	
5 1	LO	15	_					4 740				
	20	0			_		_	1,512	-	_	1,512	
6	8			-	_		-	170	-	_	170	-
6	9	6	_	-	_	-		_	_	2, 367	2, 367	
6	9	9		20	- Carlo	236	_		_		256	1,05
0	9	12	data	220	-	4, 408	_		_	-	4,628	13, 42
3 1	10	4	_		_		124	1, 508	27 1	25	1, 928	
3 1	10	10	_		_	_	-	_	_	436	436	
3 1	12	6	913	37	2, 211	1, 056	4	-	-	_	4, 221	41
1	2	12	165	10,668	5, 435	21, 202	1,065	1,083	_		39,638	2
5 1	18	15	-	-	-	_	_	291	-	_	29 i	_
. 9	28	25	_							100	100	
	10	15	_				040			190	1.90	
	7	7	_	_			195	907		1, 353	1, 353	400
	9	10	_	_		000	- 190	901	_	78	ι, 180	49
	.0	5		_	_					1,732	1,732	20
	.0	10	-	_	-	-	-	-	-	-	-	11
3 1	.2	12	-	2	-	340	-	-	-	_	342	4, 34
	.2	18	-	-	-	-	-	-	-		-	4,54
1	6	10,	-	-	-	Code.	-	-	non.	100	100	-
1	6	16				-	70	15	7 - 1 - 1	-	85	2, 20
2	14	20	_		_			447			448	
	5	7	8			126				-	447	_
	9			10	1 510		1, 778	113	_		2,023	
	5	7	17	17	1,510	68	0.5	2 006		_	1,612	2
	6	4			7	61	95 237	3, 665 620	-		3,760	
		A 10015181510016040707070707070			*	01	231	020	6	77	1,009	
L		10	-	-	11	-	212	32, 292	- 1	52	32, 567	3,42
U		15	-	-	-	-	-	-		-	-	91
2		10	-	-	-	-	-	504	-	2,031	2,535	_
3		10	-	-	-	-	-	-	285	1	288	_
5		17	-	****	- main	-	f0	99	-	-	1 10	_
2	4	20	-		-	-	-	138	-	_	138	-
scel	lanec	ous other mixtures	6	1,009	23	4	109	672	42	797	2, 662	429
T	otal	*****************************	4,768	49,083	26, 626	61, 656	112, 147	380, 235	680	16,278	651,473	36,01

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

i., Selatah Columbia salas for inte grass includes with "Miscotténeous seles mistares".

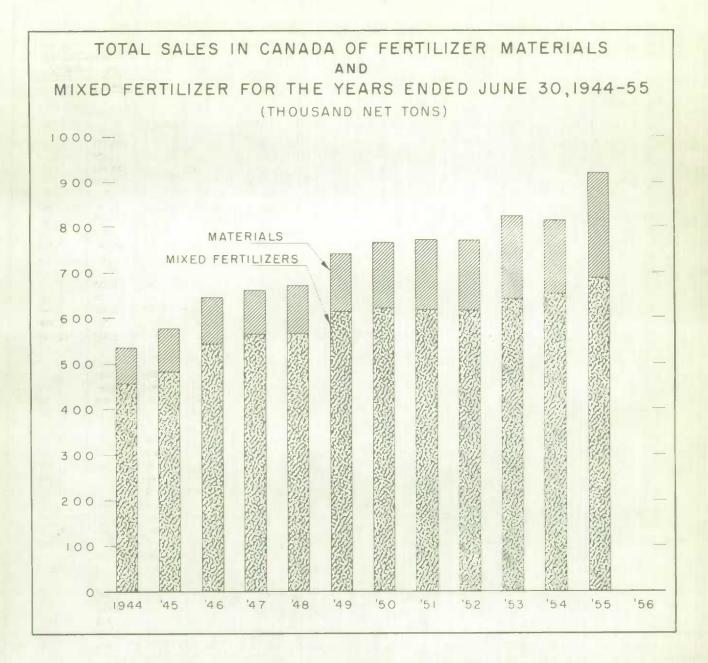


TABLE 13. Nitrogen, Phosphoric Acid and Potash Contained in Fertilizers Sold in Canada During the Year Ended June 30, 1955

Province	In materials			In mixtures			Total		
Piovince	N	P 0 5	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P205	K <sub>2</sub> O
				6	Short tons				
Newfoundland Prince Edward Island Nova Scotia New Brunswick Quebec Ontario Manitoba Saskatchewan Alberta British Columbia	85 97 334 81 499 6,959 1,730 1,969 3,402 2,266	5 49 323 103 3.913 4.330 5.805 7.075 9,243 1.826	51 17 53 22 184 2. 282 10 2 14 485	231 2,404 1,250 3,237 4,008 13,330 38 5 9	544 5, 295 3, 335 6, 900 12, 954 50, 724 99 9 22 2, 150	409 5,597 2,357 6,614 11,540 43,074 37 4 8 1,579	316 2,501 1,584 3,318 4,507 20,289 1,768 1,974 3,411 3,164	549 5, 344 3, 658 7,003 16, 867 55, 054 5, 904 7, 084 9, 265 3, 976	460 5, 614 2, 410 6, 636 11, 724 45, 356 47 6 22 2, 064
Total Canada	17,422	32,672	3, 120	25,410	82,032	71,219	42, 832	114, 704	74, 339

FABLE 14. Total Sales<sup>1</sup> in Canada of Fertilizer Materials and Mixed Fertilizers, for the Years Ended June 30, 1946-1955

Year ended June 30	Fertilizer materials	Mixed fertilizers	Total sold in Canada	
	Tons of 2,000 pounds			
1946	102,639	543, 406	646,045	
1947	95,870	564,851	660,72	
1948	107, 299	564,872	672, 171	
1949	129,968	611,758	741, 726	
1950	145,972	618,609	764, 58	
1951	153,933	616, 574	770, 507	
1952	156,049	612, 496	768, 545	
1953	179,600	640,203	819, 80	
1954	160,481	651, 160	811,641	
1955	139.301	651,473	790, 774	

<sup>1.</sup> Except for manufacturing purposes.

TABLE 15. Nigrogen, Phosphoric Acid and Potash Contained in Fertilizers Sold During the Years Ended June 30, 1946-1955

Year ended	In materials			In mixtures			Total		
June 30	N	P2O5	K 20	N	P 205	K <sub>2</sub> O	N	P205	K <sub>2</sub> O
	Short tons								
1946	7,834	21,424	2,241	16,519	57, 171	43, 224	24,353	78,595	45, 465
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	55,06
1950	14,533	47, 151	1,924	18,820	70,840	54,063	33,353	117,991	55,98
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	58,01
1953	20,956	52.829	2,838	22,933	79,873	64,749	43,889	132,702	67, 58
1954	18, 213	42, 108	3,327	23,812	80,239	66, 641	42,025	122,347	69,96
1955	17,422	32,672	3, 120	25, 410	82,032	71, 219	42,832	114,704	74, 339

TABLE 16. Production<sup>1</sup>, Imports and Exports of Ammonium Sulphate, 1945-1954

	Year	Production	Imports	Exports
			Tons	
1945		221, 499	105	181, 189
1946		197, 103	63	155, 446
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	\$1,000,000 \$1010;000,000,000,000;000;000;000;000;000	174,967	14, 101	154, 760

<sup>1.</sup> Factory shipments since 1952.



#### TABLE 17. Imports and Exports of Fertilizers, 1953 and 1954

Item	1953		1954		
nem	Quantity	Value	Quantity	Value	
Imports		\$		\$	
Ammonia, sulphate of tons Potash manure salts '' Potash, muriate of '' Potash, sulphate of '' Potash, sulphate of '' Potash, sulphate of '' Potash, sulphate of '' Nitrate of soda or cubic nitre '' Fertilizers, superphosphate or acid phosphate of lime '' Fertilizers, compounded or manufactured, n.o.p. '' Fertilizers, unmanufactured, n.o.p. '' Nitrogen solution '' Nitrogen fertilizer, n.o.p. '' Triple superphosphate '' Superphosphate n.o.p. '' Superphosphate n.o.p. '' Superphosphate for n.o.p. '' Sulphate of potash magnesia '' Potash fertilizers n.o.p. '' Mixed fertilizers n.o.p. '' Mixed fertilizers n.o.p. '' Fertilizer materials, n.o.p. ''  **  **  **  **  **  **  **  **  **	21, 254 1, 375 120, 773 12, 798 20, 072 204, 588 5, 215 40, 067 1 1 1 1	925, 636 18, 999 2, 913, 693 457, 935 1, 044, 181 4, 186, 284 379, 246 1, 852, 030 1	14, 101  2	601, 620 2, 695, 617 452, 480 795, 395 2 2, 275, 640 59, 962 903, 349 3, 432, 394 103, 467 24, 296 2, 358 288, 893 243, 926	
Exports					
Ammonium sulphate tons Nitrogen fertilizer '' Phos phate (fertilizer) '' Fertilizers, manufactured, n.o.p. '' Fertilizer materials, n.o.p. ''	147, 371 340, 739 176, 944 46, 724	6, 492, 953 21, 787, 314 11, 921, 565 2, 431, 022	154, 760 315, 153 192, 083 39, 669 12, 462	6, 964, 552 19, 939, 942 13, 228, 606 2, 060, 922 148, 372	

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

Not available separately.
 These items discontinued -see new classifications listed for 1954.

#### List of Firms in the Fertilizers Industry, 1954

Name of firm	Location of plant			
Prince Edward Island:				
The Island Fertilizer Co. Ltd. Canada Packers Limited				
Nova Scotia:				
Canadian Industries (1954) Limited				
Coloniai Fertilizer Co. Ltd.				
New Brunswick:				
Canada Packers Limited (Fertilizer Division)				
International Fertilizers Limited				
	righte william be, be breparen			
Quebec: Agricultural Chemicals Ltd,				
Canada Packers Limited				
Canada Packers Limited Canadian Industries (1954) Limited				
Canadian Industries (1954) Limited				
Houde, William, Limited				
International Fertilizers Limited	Wolfe's Cove, Quebec			
Ontario:				
Agricultural Chemicals Ltd.				
Canada Packers Limited				
Canada Packers Limited  Canada Packers Limited				
Canadian Industries (1954) Limited				
Canadian Industries (1954) Limited				
Hy-Trous Co. of Canada Ltd.				
Misner Seeds & Fertilizer Limited	Port Dover			
"Na-Churs" Plant Food Co. (Canada) Ltd. North American Cyanamid Limited, Welland Works				
Nutrex Fertilizer & Chemical Co. Ltd.				
Ontario Plant Foods Ltd.				
Read Brothers Fertilizers, Limited	Union St., Elmira			
Stone, William, Sons Ltd.				
Swift Canadian Co, Limited				
United Co-Operatives of Ontario				
Mberta:				
Consolidated Mining and Smelting Co. of Canada Limited	Calgary			
hitish Columbia:				
Consolidated Mining and Smelting Co. of Canada Limited	Kimberle 1			
Consolidated Mining and Smelting Co. of Canada Limited Globe Fertilizer Co. Ltd.	Trail Foot Cresisten Read, Vancouver			
Green Valley Fertilizer & Chemical Co. Ltd.	. 16th St. & 5th Ave., New Westminster			
Vitalerth Products Limited	1741 West 4th Ave., Vancouver			