

Japan's Chemical Industry

Fertilizers, Nitrogen Fixation, Chemicals, Drugs, Camphor, etc.

Artificial fertilizers imported into Japan during 1927 totaled 2,153,025 tons, valued at yen 163,303,982, representing a remarkable drop of 2,121,412 tons and yen 36,556,484 from 1926.

Unprecedented financial panic and the ebbing purchasing power of farmers resulting from the drop of prices of cocoons and rice were assigned as causes for the depression. The whole year imports are itemized as follows:

	Tons	Yen
Nitric soda	52,239	6,391,765
Sulphuric chloride	31,001	4,187,502
Ammonium sulfate	217,594	32,682,883
Phosphatic ores	403,999	10,933,970
Animals' bones	31,233	2,856,959
Bone dust	37,302	3,454,831
Bean cake	1,175,976	88,433,694
Cotton seed cake	59,782	4,785,918
Rapeseed cake	64,285	4,435,003
Fish guano	1,523	163,736
Other cakes	16,460	1,236,674
Other fertilizers	81,616	3,862,447
Total	2,153,025	163,303,982

Both bean cake and sulphate of ammonia which are the largest imports experienced decided drops. The former declined 70,596 tons and yen 21,340,355 and the latter 39,478 tons and yen 11,232,143 from 1926. Except phosphatic ores which gained 451 tons and yen 1,614,503 and sulphuric chloride also gained 4,536 tons and yen 901,440, all others went off. Drop of Manchurian bean cake has been a general tendency since a few years ago, mainly due to an active demand aroused for such chemical fertilizers as sulfate of ammonia and superphosphatic fertilizers in Japan.

Leading bean mills in Dairen last year adopted the entire suspension of operation for two months to counteract the situation without success. Continued surplus of supply at home consequent upon the extension of plants and production capacity accounted for the decrease of imports last year. Japan Nitrogen Fertilizer Co., the Electro-Chemical Co. and others expanded their capacity.

Home production last year was 160,000 tons, a gain of about 20,000 tons. Last year's supply was 38,600 tons more than 1926. A 25,000 ton capacity plant of ammonia has been erected at Toyama by the Dai Nippon Artificial Fertilizer Co. and during next month it will be worked to capacity. Gradual elimination of British and German sulphate of ammonia by the increased production in Japan means a severe blow to Brunner, Mond & Co. and Arhens & Co., both heavily interested in Japan.

A decided gain was made in import of phosphatic ores last year. Superphosphatic fertilizer is taking the place of bean cake, as the Government has decided to take protective policies for the industry. Last year's production was 685,000 tons, a gain of 50,000 tons over 1926. This year's import of ores will be about 420,000 tons, a little more than last year's and the import price yen 23.50 per ton, the same as last year.

This year's outlook is uncertain for Chilean nitrate of soda. The Japanese importers, the Mitsui, Mitsubishi and Asano which have mapped out for eight large sales agents in Japan their fields of operation. But it is doubted the price will revive, due to considerable stocks held by men other than these agents.

Fish guano, the only import of nitrogen fertilizer made from fish has sharply declined in demand. It dropped 18,020 tons and ¥2,572,000. Demand, however, is coming from the United States for the fertilizer. C. C. Gross & Co., San Francisco, is one asking for direct transaction of fish guano with Japanese exporters.

Production and sales amount of superphosphate of lime and those of compound fertilizers in Japan for 1927 were as follows:

	Superphosphate (In ton)	Compound fertilizer
Production	685,000	178,100
Sales	700,700	234,000

Production and sales of superphosphate of lime by six leading fertilizers companies for 1927 follow;

	Production (In ton)	Sales
Japan Artificial Fertilizer	288,000	277,000
Sumitomo Fertilizer	106,000	78,000
Lasa Phosphatic	61,000	94,000
Soda Nitro Sulphuric	25,000	33,000
Teikoku Fertilizer	38,000	34,000
Kamishima Fertilizer	32,000	37,000

Bumper rice crop and the consequent cheap price were the most important factors that affected the fertilizer market of Japan for 1927. These seriously interfered with the purchasing power of farmers for fertilizers and placed the fertilizer business in a predicament. Soya bean cake, superphosphatic acid and sulfate of ammonia are the largest fertilizers for Japan. While their prices were low in the early part of the year, they began to improve affected by the rise of rice price after March to the end of May. The year's peaks for these commodities were recorded in May. Sharp decline of rice heavily told on them after May. Poor cocoon business in summer and autumn meant a drop of income to the extent of yen 100,000,000 to farming classes and this, coupled with the cheap rice price, resulted in a considerable fall of fertilizer consumption by about 20 per cent of 1926. A miserable condition ensued in the fertilizer business. Importers withheld from entering into large contracts and producers here carried out restriction on production to meet the situation. Stocks decreased and, consequently, the price improvement began to be noted toward the latter part of the year. Farmers were inclined to lay in stock more fertilizers for next spring to make good poor fertilizer during last autumn.

Bean cake price in the closing month of 1927 was a drop of 12 per cent, price of sulphate of ammonia 26 per cent and superphosphatic acid 21 per cent from May and June quotations. Firmness in bean cake was due to a sharp drop of imports, resulting from the suspension of operation of more than half of 82 mills in Dairen. Imports for the latter half of 1927 totaled 2,214,532 pieces, a drop of 37 per cent or 1,310,000 pieces from the year before.

Consumption of ammonium sulphate for the first half of 1927 was bad, due to the spring panic. The demand increased suddenly after the moratorium but this soon gave to depression affected by the drop of silk and rice prices. A drop of about 20,000 tons was made in the consumption for 1927. Import of German sulphate of ammonia still oppressed Japanese market and this is expected to continue this year. The first import from Germany was made