

Chapter II.

II. NATURAL RESOURCES OF MANCHURIA

(1) AGRICULTURE

The Garden of China--"Manchuria," says the Encyclopedia Americana (1921), "has one of the richest soils in the world, and, with the development of the soya bean industry, has grown more rapidly than any other Chinese province. In the summer the southern part looks to an American much like Illinois, and one may find on its northern hills lilies-of-the-valley, pink peonies, white and yellow daisies and the fragile dog roses, as in Wisconsin and Minnesota. With the exception of the four icelocked months, its fields are luxuriant with wheat, barley and millet, so that it has come to be called the "Garden of China."

The "Economic History of Manchuria," published by the Bank of Chosen (an interesting and valuable contribution to the growing literature of Manchuria) states: "Manchuria is yet the most favored spot for agriculture in the Far East, and its opportunities may well be termed "immense". That great mass of level land, extending over the whole of Central Manchuria and comprising the basins of the Liao, Sungari, Nenni and Hulan, the productivity of which can compare favorably with any part of Japan or Korea, is by itself large as the whole of the Chinese Peninsula* or of the mainland of Japan, and, to those who know how little of level land there is in these two countries that is really arable and actually under cultivation, it will not be all difficult to imagine the wonder in which the two peoples look upon this apparently boundless extension of rich field. An American gentleman with whom the author had the honor of traveling in Manchuria ejaculated, as the train was drawing near to Mukden, 'This is exactly what we see in America,' as though relieved at seeing something homelike after a long journey through apparently endless chains of rugged mountains in Japan and Chosen."

Area under cultivation--The aggregate area under cultivation in Manchuria and Eastern Inner Mongolia is about 30,000,000 acres. The arable land awaiting development is estimated at 34,000,000 acres. The land being reclaimed is estimated at about a million acres a year.

Railways stimulating agricultural production--Until quite recently the crops were transported through inadequate waterways and by primitive Manchurian carts, but the establishment of railways and the highly efficient port of Dairen has made a radical improvement in transportation methods. The Chinese Eastern Railway, the South Manchuria Railway, and the Peking-Mukden Line of the Chinese Government Railways are now carrying annually large numbers of immigrants and great stocks of agricultural produce.

Methods of cultivation--Agricultural methods in many parts of Asia have changed little in centuries. But in Manchuria a great change has taken place since the South Manchuria Railway inaugurated its program of economic development work. Modern methods are taught the native farmers; the fertility of the soil has been increased; the yield and quality of the great staple crops have been improved; and new plants and trees have been introduced.

For this reorganization of Manchurian farming, the Agricultural Experiment Stations instituted by the railway are primarily responsible. These stations, similar in many respects to those in the United States, seek to bring to Manchuria the latest world knowledge of scientific agriculture.

At Kungchuling (in the heart of Manchuria, 400 miles north of Dairen) is the main experiment station. Here are being carried on important experiments in animal breeding. Merinos from the United States have been bred with the native sheep, increasing the quality and yield of wool, and thus giving great impetus to the export trade.

Much has been done to increase the oil content of Manchuria's Chief

product, the soya bean, and better cultural methods have been taught the farmer. Sugar beets are being grown extensively, and beet sugar manufacture has become one of the important new industries of Manchuria.

The arboriculture work at the Hsiungyaocheng experiment station has been productive of most important results in reforestation and afforestation. Much of this country was barren of trees. But now big orchards dot the southern part of Manchuria; American apples and grapes have been successfully introduced and the fragrant perfume of acacia and pear blossoms fills the air in springtime. In Northern Manchuria there have been planted many Chinese poplars, from the wood of which match stems and pulp are made.

Experiments are going forward at Hsiungyaocheng for the improvement of the cultivation of tussah, or wild silk, from which pongee is made. Wild silk is one of the principal exports.

Agricultural products --The chief agricultural products of Manchuria are soya beans, kaoliang (a sort of sorghum), millet, maize and wheat.

The output of the leading crop in 1923 was as follows (in tons), though it should be mentioned that yields were somewhat below the average on account of unfavorable weather:

	Kaoliang	Millet	Soya Beans	Corn	Barley	Wheat
Fengtser Province....	2,032,500	832,600	1,152,920	627,100	72,120	105,400
Kirin Province.....	1,213,820	318,260	1,066,870	571,120	105,140	255,200
Heilungkiang Province	475,490	159,500	525,440	121,610	77,460	209,700
Eastern Inner Mongolia	349,140	220,500	100,030	29,420	14,100	28,100

Soya beans--The United States Department of Agriculture, in a recent report, made this statement: "The rapid rise of the soya bean to a crop of special importance in the world's commerce in the past few years is one of the most remarkable agricultural developments of recent times."

The soya bean has been an important product of food and general utility in China for 5,000 years, but it is only during the last few years that America and Europe have learned of the importance of this staple of the soil of Manchuria. The Japanese firm of Mitsui & Company made the first shipments abroad in 1908, when 100 tons were exported to England. Huge quantities of soya bean oil were exported to the United States during the World War to supply essential raw materials.

The development of a world market for Manchuria's chief trade product has resulted from the activities of the South Manchuria Railway Company in improving the quality of the soya bean and exploiting new uses for it through its agricultural research laboratories, and in systematizing the transportation and merchandizing of the crop. The growth of the industry has provided employment for hundreds of thousands of Chinese, who have been attracted to Manchuria from the neighboring provinces, chiefly from Shantung.

With its very high content of protein (40%), the soya bean has been characterized as a "modern manna." Among its many uses the Department of Agriculture has listed these:

Plants.	(Manure	(Hay.	(Breakfast foods.	(Bread.
	(Forage.	(Ensilage	(Diabetic foods.	(Cakes
	(Pasture.	(Soiling	(Flour	(Muffins
		(Human food.....	(Infant foods.	(Biscuit
	(Meal.....	(Stock feed.	(Macaroni	
	(	(Fertilizer.	(Creackers	
	(		(Milk	
	(	(Glycerin		
	(	(Explosives		
	(	(Enamels		
Seeds.	(	(Varnish	(Butter substitute	
	(	(Food products.....	(Lard substitutes	
	(	(Waterproof goods	(Edible oils	
	(Oil.....	(Linoleum	(Salad oils	
	(	(Paints		
	(	(Soap stock.....	(Soft soaps	
	(	(Celluloid	(Hard soaps	
	(	(Rubber substitute		
	(	(Printing inks	(Soy sauce	
	(	(Lighting	(Boiled beans	
	(	(Lubricating	(Baked beans	
	(		(Soups	(Fresh
	(	(Dried beans.....	(Coffee substitute	(Dried
	(		(Roasted beans	(Chese (Smoked
	(		(Vegetable milk ...	(Fermente
	(Food....		(Breakfast foods	
	(			(Condensed milk
	(		(Green vegetables	(Fresh milk
	(	(Green beans.....	(Canned	(Confections
	(		(Salads	(Casein

From the busy port of Dairen, the gateway to Manchuria and the southern terminus of the railway, merchant ships of many nations now carry great cargoes of soya beans and bean oil to leading ports all over the world. Beans are exported mostly to China and Japan, bean cake to Japan, and bean oil mostly to Europe and America.

In South Manchuria there are about 200 large bean mills, using various methods of oil expression, from the primitive hand press to motor power. Dairen, the chief center of this industry, has 82 mills. A new process to extract oil by means of chemical action was adopted at an experimental bean mill built by the South Manchuria Railway Company in 1915, and in pursuance of the company's policy, when the superiority of the process had been established, it was turned over to private management to develop commercially. Another development in the bean-oil industry is also due to an invention made at the company's laboratory for the hardening of bean oil and the manufacture of stearin, olein, glycerine, etc., which led to the establishment of a private company for its special exploitation.

Soya beans of Manchuria are divided into four classes, according to color--yellow, white eyebrow, green and black. The chemical composition of soya beans, according to analyses made in the Dairen Central Laboratory, is as follows (the figure showing percentages):

	Moisture	Albumi- noids	Fat	Carbo- hydrates	Fiber	Ash
	%	%	%	%	%	%
Yellow Bean.....	9.11	39.90	17.59	24.27	4.92	4.21
White Eyebrow.....	12.34	37.35	17.37	23.36	5.12	4.36
Green Bean	12.64	36.47	16.23	25.08	4.89	4.69
Black Bean	10.74	35.32	15.80	24.43	5.96	4.00

Kaoliang (a sort of sorghum)--The staple food of the native population is kaoliang, and it is also the principal grain food of the numerous animals kept for farm work and the carrying trade of the three provinces.

Before soya beans attained their present importance, half the total area of the cultivated land in Manchuria was devoted to kaoliang, and a large amount of it was exported to other provinces of China. Recently the cultivation of kaoliang has given place to that of beans in many places. In Manchuria approximately 26% of the cultivated area is devoted to kaoliang, 20% to beans, 20% to millet, 14% to corn, 8.5% to wheat and 11.5% to other crops. The acreage of corn runs higher than this average in South Manchuria, and that of wheat higher in North Manchuria.

The average annual production of kaoliang in Manchuria is estimated at about 220,000,000 bushels. It is not only used as a foodstuff for man and beast, but the native spirituous drink is also made out of it. Nor are the grains the only useful part of it; the stalks play a very important role. The outer leaf layers are woven into mats, so much required in the trade of the country, for roofing ricks and packing loads of grains and beans, and for numerous other purposes. The stalks are also utilized for fencing, bridging and housebuilding, and for fuel and pump. Kaoliang spirit, extensively used in both Manchuria and Mongolia, is colorless and transparent, and possesses a strong flavor, which peculiarly appeals to the taste of the natives.

Millet--As a staple food of the native population, millet ranks next to kaoliang, and in North Manchuria, where kaoliang does not thrive so well, it is the main food of the inhabitants. It is also important as material for distilling huangchu (yellow drink), while its straw is universally used for fodder. Millet is cultivated throughout Manchuria, but more largely in the north than in the south. The annual production is about 160,000,000 bushels. Its importance as an article of trade is growing.

Maise--Maize, or Indian corn, is grown in Manchuria in the same way as kaoliang. It is divided into three kinds--yellow, red and a native breed called laolaichou. It is grown in the southern part South Manchuria and also in a part of North Manchuria, and also forms an important article of food. In North Manchuria, an intoxicant is brewed from it. The stalks are used as fuel, while the dry blades are good for fodder. The crop is about 60,000,000 bushels.

Wheat--North Manchuria is an ideal wheat field, and this cereal is there grown in considerable quantities. The best wheat fields are around Ningan, Petuna and Harbin, along the right bank of the Sungari, and in the country around Suiwha. In South Manchuria wheat fields are mostly around Hsifeng and Hailung, and the country lying to the west of the Liao, while Tiehling has one of the largest flour mills in Manchuria. Wheat has been cultivated in Manchuria from very early times, but only recently has the production been sufficient to encourage export. Manchurian wheat has begun to take its place in world trade. In 1920, as the result of an unusually good crop and a keen demand in Europe, 444,000 tons were exported through the port of Dairen. In 1922, however, only about 10,000 tons were so exported. Manchuria imports large quantities of wheat flour.

Barley--The cultivation of barley in large quantities dates from the Russo-Japanese War, when the Japanese army in Manchuria created a demand for it as the grain food for horses. It is now cultivated in considerable quantities around Changchun, Kungchuling, Liaoyang and Haicheng. It is used by the natives as food and as feed for their animals. It is also used in the distillation of a native drink. Its annual production is estimated at 30,000,000 bushels, in round numbers.

Buckwheat--Buckwheat is an autumn crop which requires only two and a half months to ripen, being sown in July and harvested in September. It is often sown after wheat, or takes the place of other crops when these fail on account of drought or excessive rainfall, so that one harvest at least may be obtained from the soil. It is ground into flour and made into a kind of macaroni, baked into cakes, or boiled to make gruel.

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抜粹

第ニ章

二 滿洲の天然の資源

支那の花園―アメリカ百科事典(一九二一

年版)は「滿洲は世界の最も豊饒

な土地の中にあり、大空を

の發展にまで支那のいつれの地方より

速かに發展を遂げた。夏及冬季、南

部地方の風景は、アメリカ人の目は

宛然として、^州を想はせしものがある。

又北部の山々には鈴ヶ園あり、くれなる

TRANSLATION BY Shizume COMPLETED

CHECKED BY Katamura COMPLETE

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~~Auto~~ Mar. 23 '47

Mar. 24 '47

Rice-- Rice in Manchuria is not extensively cultivated in paddy fields, but it is grown on dry land like other cereals. The production has never been very large, for the Chinese in Manchuria do not care much for it. The demand is now fast growing owing to the entry of the Japanese into Manchuria. Just as the Russian entry into the north stimulated the cultivation of wheat, that of the Japanese in the south is encouraging rice cultivation there. The cultivation of lowland rice was first undertaken by the Korean immigrants, then it was followed by the Chinese, and today many Japanese are engaged in the cultivation of it along the railway lines.

Hemp and jute-- Hemp is grown in all the three provinces of Manchuria, about three-fourths of the total production being in the southern part. Jute is grown along the Liao, Nonni, Sungari and Fumen Rivers. About three-quarters of this crop is produced in North Manchuria. A large part of the hemp and jute is consumed where it is grown, but there is some surplus for export. Foreign shipments of hemp, jute and ramie at Dairen in some years have amounted to more than 2,000,000 pounds. Hemp plants cultivated for seed are not as a rule utilized for fiber, or, if they are, the yield is of a very poor quality. The best hemp, white and tenacious, is produced in Fengtien Province, and is generally woven into cloth, while the next quality is produced in Kirin Province, and is generally made into thread. A more ordinary quality is made into nets and ropes, and the poorest is used for paper-making. Jute is less flexible than hemp, but because of its waterproof nature is used in the making of bags, ropes, nets and string, and various shipping and fishing tackles. In 1916 a company was formed in Dairen to manufacture hemp bags, using Manchurian hemp and Indian jute.

Tobacco-- Tobacco is one of the staple products of Manchuria. The best leaf is raised around Kirin. It is blended with foreign leaf in making cigarettes. The British American Tobacco Company has a factory at Mukden, and the East Asia Tobacco Company and the Tea Tobacco Company have factories at Yingkou. The export of the native leaf is increasing.

Cotton-- Cotton is grown only in the region lying to the south of a line drawn between Tichling and Kangping. Cotton in Manchuria was originally cultivated on a very small scale by the farmer for the use of his own household, and it was only around Liaoyang and Chihhsien that cotton was brought to the market as an article of trade.

Wild silk--The cultivation of wild silk was begun in China some 1,800 years ago and was introduced into the Manchurian provinces by immigrants from Shantung Province about a century ago. Wild, or tussah, silk is used in the manufacture of pongee. The industry developed year by year, taking into the silk region district after district, until it now comprises almost the whole country, including in the south the leased Territory of Kwantung and, further north, the towns of Kaiyuan, Changtu, Hailung, Tinghwa, etc; in short, nearly all South Manchuria. Antung and Kaiping are the principal centers of this silk trade. More than \$9,000,000 worth of wild silk was exported from South Manchuria in 1922.

Sugar beets--The soil is adapted to the sugar beet, and especially around Mukden are large tracts under cultivation for the South Manchuria Sugar Refining Company. The development of the beet sugar industry has been stimulated by experiments conducted at the Agricultural Experiment Station since 1914. The average percentage of sugar in beets is 15.34%

Other crops--Manchuria has great possibilities as a fruit-growing country, and it is quite possible that it may develop into a great wine-producing region, owing to its natural fitness for the cultivation of the vine. In the belt from Kwantung north to Mukden, the orchard industry grapes, etc., are now being grown.

Manchurian farms also produce potatoes, oats, red and kidney beans, etc.

Stock raising--Before the immigration of the Chinese from the south, the chief occupation of the original Manchus was the raising of stock. With the entry of the Chinese, the rich pastoral grounds which then covered the greater part of the country were converted one after the other into grain fields. Thus agriculture rose but stock-farming waned. A shadow of the old pastoral age is still visible on the Mongolian frontier and in the western part of Heilungkiang Province, where the inhabitants are engaged in the breeding of cattle. Besides, the Manchurian farmers generally keep large numbers of horses, mules, donkeys, oxen and pigs.

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The Chinese have always been skillful in using domestic animals on the farm. Five or six head of cattle, horses, mules or donkeys are often hitched at random to a heavily loaded cart, and this motley team is managed with admirable dexterity by a Chinese driver. Sheep and goats are plentiful, especially in Mongolia, where the inhabitants depend largely upon them for meat, milk and cheese.

Recent estimates of the live stock in Manchuria and Eastern Mongolia gave the following figures: horses, 2,500,000; mules, 600,000; donkeys, 600,000; cattle, 2,200,000; sheep and goats, 2,600,000, and swine 6,300,000. Nearly every farmer keeps a few domestic fowls. The total number was estimated at about 9,000,000 a few years ago, but it is impossible to give such figures with much exactness.

The horses are principally of Mongolian breeds, rather undersized, but with great endurance. Mules, unknown in Japan, have long been bred in China. They command higher prices than horses. The donkeys are used in farming and hauling.

The cattle are of Korean, Shantung, Manchurian and Mongolian breeds. The Chinese keep cattle as draft animals, and the Mongolians for the milk they yield, the beef being regarded as a by-product. The cattle in South Manchuria and Inner Mongolia have not been properly bred, and there is a great opportunity for improving the different breeds by the mixture of foreign stock. The same is true of sheep and pigs. The native sheep give only about three pounds of wool. With the recent development of the woolen industry in Japan, both wool and goats' hair have been exported in considerable quantities. In south Manchuria goat raising takes the place of sheep raising among the Chinese. Pigs' bristles are exported for brushes. The South Manchuria Railway Company, through its agricultural experiment stations, is importing American and British stock, and in time Manchuria may be expected to develop into one of the finest grazing countries of the world. Crossing the native sheep with Merinos has increased the output of wool of two-year-old mixed sheep from 3.4 to 6.2 pounds. The second breeding with Merinos trebled the output of wool. Bred with Southdown sheep, the output of wool was increased to 4.5 pounds and, with Shropshire, to 5.9 pounds.

The export trade in animals and animal products is bound to grow rapidly as modern breeding methods become more widely practiced. According to statistics compiled by the Research Office of the South Manchuria Railway Company, the principal exports of these products from the three ports of South Manchuria in 1922 were as follows:

Cattle (number)	2,330
Wool, hair and feathers (lbs.).....	4,555,000
Bristles (lbs).....	798,000
Leather, hides and skins (value).....	\$ 317,060
Horns and teeth (lbs.).....	106,400
Bones (tons).....	9,000
Poultry (number).....	127,900
Eggs (dozen).....	141,500

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(2) FORESTRY

Distribution of forests--In South Manchuria, the foot of the Changpai Mountains, along the upper reaches of the Sungari, the Mutan and the Tumen rivers and also the upper parts of the Yalu and the Hun are densely wooded; while in North Manchuria, the districts about Hailin on the Eastern Section (between Harbin and Pogranichnaya) of the Chinese Eastern Railway and about Sansing in Kirin Province are the principal forest lands. Mongolia is a vast plain consisting of level land grown with grass and dotted with dunes. Nothing like a forest can be seen.

The forest areas are estimated as follows:

a. On the right bank of the Yalu and along the Hun River--1,600,000 acres with 6,900,000,000 cubic feet of timber.

b. On the upper parts of the Sungari, the Mutan and the Tumen--4,800,000

acres with 26,000,000,000 cubic feet of timber.

- c. In the Eastern Section (between Harbin and Pogradichnaya)--6,000,000 acres with 18,500,000,000 cubic feet of timber.
- d. In Sansing district--13,000,000 acres with fifty-two billion cubic feet.
- e. As to the forests in and about the Hingan Mountains, no data can be obtained, except that in the districts within a radius of about 30 miles around Horgo and Hingan Stations, the average timber asset is put at about 1,300 cubic feet to the acre.

Forest conservation--Manchuria needs afforesting in many places. Hills and mountains now barren but capable of being covered with fine forests for the benefit of the people, both from an economic and hygienic point of view, are visible everywhere. This is especially true in Kwantung, which is mountainous, yet with few trees on the mountains. The only trees in that region, when the administration was handed over to Japan, were a few willows and elms near villages and tombs. Nursery gardens were established at Port Anthur, Chinchow and Dairen, to supply saplings for afforestation undertaken by the Government. Several million young trees have been planted annually for the last several years.

The Fushun Colliery has instituted a very extensive program of afforestation to provide timber for the mines. It is estimated that 54,000 acres must be planted with 110,000,000 trees, and the program calls for the completion of this plan in a period of thirty years. In the first year, 1919, an area of 980 acres was planted with 2,000,000 young trees, and at the same time 44,000,000 sprouts were started in the nursery fields.

Also, to encourage the general public in this useful undertaking, forest lands are rented free of charge to those desiring to afforest them, and seeds and young plants are supplied to them. Regulations have also been published for the protection of forests. These measures have had the desired effect, and, with the increase in the interest taken by the public in the matter of afforestation, many nursery gardens owned by villages have been formed.

Varieties of trees--About 3000 kinds of trees are known in Manchuria, but the principal varieties number about 20. About 40 percent of the forests are conifers, and 60 per cent broad-leaved trees. Korean pines are the most common conifers. They are frequently from four to five feet in diameter, reaching a height of more than one hundred feet. Oaks, elms and poplars are the most common broad-leaved trees.

Timber industry--As timber markets, Kirin and Antung come foremost, followed by such consuming centers as Harbin, Changchun, Mukden and Dairen. ~~Kirin and Antung come foremost, followed by such consuming centers as Harbin, Changchun, Mukden and Dairen.~~ Kirin has long been a timber center. Along the eastern section of the Chinese Eastern Railway, the railway management and Russians and Chinese have had railway sidings built to their lumber yards and are operating saw mills. Both Kirin and Yalu timber is carried down the rivers

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(3) FISHERIES

Salt water fisheries--With the Yellow Sea to the east and Gulf of Pechili to the west, and a coast line of 500 miles, the Leased Territory of Kwantung offers an ideal field for the fishing industry. The annual catch is placed at about 25,000 tons, valued at some \$600,000. The catch includes tai, cod, swordfish, guchi, sawara, sole, flounders, suzuki (bass), shark, nibe, sardines, shirasu, cuttlefish, octopi, sea-slug, oysters, earfish, prawns, lobster, crabs, whales, seals, etc.

The whale-fishery about Haiyangtao Island, near which the naval battle took place in the Chinese-Japanese War, is undertaken almost exclusively by the Oriental Whale Fishery Company. The catches are forwarded to Shimonoseki. Seals are captured on the ice-floes in the north of the Yellow Sea and also in the north of the Gulf of Pechili when the ice in the coast-waters breaks up on the return of spring.

Encouragement of fisheries--For the benefit of the fishing community the Kwantung Government established an experimental station for fishery products

in 1908 at Rokotan, about a mile south of Dairen. The station is provided with factories, fishing gear, store rooms, warehouses and drying chambers, and also with boats to undertake experimental fishing and explore the adjacent seas. There is also an association organized to protect and develop the common interests of the fishing community.

Fresh water fisheries--Fresh water fisheries are extensively conducted in all large rivers, notably in the Liao and Yalu in the south, and the lower reaches of the Sungari and its tributary, the Murka. The fish consist mostly of salmon, salmon trout, carp, eels, etc. The Sungari also produces pearls. At one time no fewer than 7,000 to 8,000 pearls annually are said to have been taken from that river in the neighborhood of Kirin.

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(4) MINING

Development of mining--Mining in South Manchuria is of remote origin. Local tradition declares that the coal mine at Fushun was worked as early as the twelfth century, but its working was prohibited by the founder of the Manchu Dynasty from a superstitious belief in fengshui (Spirit of Nature). There were evidently some other mines once worked. But, except for some conspicuous ones, traces of their working have been entirely effaced by the elements, particularly by the landslides caused by the indiscriminate felling of trees. It seems that most old mines were discovered during the course of this general deforestation, but this same action doomed the fate of the mines thus discovered, since it deprived them of the wood indispensable in mining. Even after the removal of the prohibitory law, every possible obstacle was laid wittingly or unwittingly in the way of mining exploitation.

Mining in the modern sense was first introduced into the country by the Russians when they, jointly with the Chinese, undertook to work the Fushun coal mine. But real progress in the industry began with Japan's succeeding to the Russian privileges and handing them over to the South Manchuria Railway Company to be worked.

Principal Mines--Chinese authorities have listed some 600 places where minerals are located in Fengtien and Kirin Provinces, of which 213 are coal, 26 iron, 234 gold, and the remainder silver, copper and lead.

Gold--Before the introduction of foreign capital for the development of Manchuria's mineral resources, gold was the only metal extensively mined. Manchurian gold is mostly alluvial, and so can be mined with a very small capital. Naturally, all the river beds containing gold dust have been ravaged by gold hunters, and in South Manchuria it is only in these worked-out beds that alluvial gold is now collected. Extensive traces of such mining are found in and around the regions of Hsingking, Tunghua and Huanjen. It is asserted by experts that the alluvial gold of these regions came from gneiss, which is abundant everywhere in Manchuria, and which always contains some gold. Beaten by the weather, the gneiss disintegrated little by little, freeing the gold it contained, which, washed by the rain, deposited itself in the river beds. The most extensive alluvial gold deposits in South Manchuria are found in the tributaries of the Yalu and the upper reaches of the Sungari. In Heilungkian Province there are many gold fields where ore is still obtained in considerable quantities. Chiapikou in Kirin Province was famous for its gold sands years ago and it is believed that there are still rich veins to be mined.

Iron--Next to coal, iron is the most important mineral product of Manchuria. It exists mostly in veins in metamorphic rocks, and the best veins are generally found in northeastern Manchuria along the Yalu. These were worked by the natives on a very small scale. The ores are generally hematite, and though the percentage of iron they contain is not large, being generally about 40 per cent, they are sufficiently rich to be worked with advantage. Two mines stand out prominently, Penhsihu and Anshan. The latter, with 200,000,000 tons of ore reserves, is being developed by the South Manchuria Railway Company in conjunction with its new Anshan Steel Works.

米：満洲に於ける米は水田に広く栽培されて居るが他の穀物と同様に乾いた土地に栽培されて居る。今まで生産量はあまり多くなかったといふのは満洲の支那人はあまり氣をつけたかた~~かた~~併し^{併し}今は日本人の満洲移入の爲需要は速かに増してゐる。口や人の北部へり移入が小麥の栽培を削減したと同様に日本人の南部へり移入が同地の米の栽培を取長してゐる。

低地の米の栽培は最初朝鮮人移民によつて始められ支那人に引継がれ今日多し日本人が鉄道に沿つてその栽培に従事してゐるのである。

大麻及び黄麻：大麻は満洲の三地方すべしに栽培され全産額の約四分の三は南部に於て産する。黄麻は遼河、嫩江、松花江、洮儿河、諾川の流域に栽培されてゐる。その收穫の約四分の三は北満洲に産する。大麻及び黄麻の大部分は栽培地に於て消費されるが輸出用に幾らかの余剰がある。

大麻、黄麻(及びラミー)の外国への船積は大連に於て数年間に二百万ポンド以上を算してゐる。種子用に栽培され大麻黄麻は概して繊維用に利用されてゐない。若し他用されるその産物は極めて質の貧弱なものである。白く強靱な最良の大麻は奉天省に産し大抵布に織られる。次の素質のものもは吉林省に産し大抵綿に織られ更に並のものは綱、綱に作られ最も質のわるいものは製綿に用

ひられる。黄麻の大麻ほど柔軟ではないがその耐水性の故に袋、綱、綱糸及び各種の船具、漁具の製造に用ひられる。一九二五年に大連に満洲大麻と

印度黄麻を用ひて麻袋を作る会社~~が~~起された。

煙草、煙草は滿洲の主要産物の一つである。最良の葉は吉林周辺で栽培され、捲煙草を作る時に外國の葉と混ぜられる。英米煙草会社は奉天に工場を有し、東亞煙草会社は遼寧に工場を有してゐる。國産の葉の輸出は増加してゐる。

棉花、棉花は鉄嶺、康平間に引かれた線の南方の地帯にのみ栽培されて居る。滿洲の棉花は元來百姓の自家用として小規模に栽培されたもので遼陽、固辺（於て）にのみ棉花は交易品として市場に運ばれたのである。
ケンチュウ

山繭、山繭の栽培は支那に於て約千八百年の昔から約百年前山東省より移民により滿洲にもたらされた。山繭は繭糸の製造に用ひられる。ケンチュウは年々發展し、絹生産地は漸次拡大し、今や南部に於ては南東州租借地より北には南原、通化等の諸都市、そして今南滿洲を合してゐる。安東、蓋平は絹の取引の主要な中心である。一九二三年に南滿洲から九百万ドル以上の額の繭は山繭が輸出された。

甜菜、土壤は甜菜に適し、特に奉天周辺には南滿洲精糖会社用の広大な耕作地がある。甜菜糖製造業の發達は一九四年以來農事試験場によつて行はれた。甜菜中の砂糖の平均割合は一五三四パーセントである。

その他の作物、満洲は果樹栽培国として大きな可能性を有してゐる。
 満洲が、その葡萄栽培の自然的適合性^{を有してゐる}のため大葡萄産地^{を有してゐる}と
 地と成る事は極めて可能性がある。遼東州から奉天に至る地帯には
 葡萄その他の果樹園業が今や起りつつある。

満洲の農園は又馬鈴薯、燕麥、大豆、隱元豆等を産す。

牧畜業、南部より支那人の移住以前は満洲原住民の

主な職業は家畜の飼育であつた。支那人の移入と共に当時國の

大部分を占めてゐた豊富な放牧地は次第と穀物畑に変へられた。

かくして農業は興つたが牧畜業は衰微した。昔の牧畜時代、^蹄蹄影は

尚、蒙古より國境、黑龍江の西部に見られる。其地では住民は家畜の

飼育に従事してゐる。満洲人の農民は大抵多數の馬、驢馬

驢馬、牡牛、豚を飼つてゐる。尙ほ

支那人は常に農地^をに於ける家畜の^{飼育}使用は巧みである。五、六頭の^牛牛、

馬、^{驢馬}驢馬、^馬馬が屢々手漕^の漕、^重重の荷を積んだ一輛の車につなかれ

^{使役}使役せられてゐる。羊及び山羊は特に蒙古に於て多く、同地では住民は

肉、乳、チーズ等の^の羊、山羊は非常に依存してゐる。^の羊、山羊

満洲及び東蒙古に於ける家畜の^数数は次の如き^数数である。

馬一、二百五十万、驢馬六十万、驢馬六十万、牛二百二十万、羊及び山羊

二百五十万

豚之百三十万である。殆どすべての農家は二三の家畜を有してゐる。二三年
前の總数は約九千と見積られるが、その合計数を非常に正確に示す
事は不可能である。

馬は主に蒙古種で少し丈加低り、非常に忍耐がある。日本には知ら
れてお存の驃馬は永く向支那で飼育されて居り馬よりも高い値で賣買さ
る。

驃馬は耕作と運搬に使用されてゐる。

牛は朝鮮、山東、滿洲、蒙古種である。支那人は牛を牽引用に飼ひ

蒙古人は乳用に飼ひ居り、牛肉は副産物と見做されてゐる。

南滿洲及び内蒙古では牛は適当に飼育されて居り、外國種が混ぜる事

により他種を改良する大なる余地がある。同じ事が羊及び豚につり

ても適用される。國産の羊は僅か約三ホンドの羊毛しか産しない。

最近の日本に於ける羊毛工業の發達と共に羊毛一、羊毛二百万共

相当量輸出されてゐる。南滿洲に於ては山羊の飼育は支那人の

内に於て羊にとつて代りつゝある。豚の剛毛は刷毛用として輸出さ

れてゐる。南滿洲鐵道はその農事試験場を通じて英米種を

輸入してゐる。やがて滿洲は世界に於ける最良の牧畜國の一つ

に發見するたらうと期待されてゐる。

土地の羊とメリノ種の羊の交配は雜種の羊の二歳仔の羊毛の産出

三四ホンドから六ホンドに増加してゐる。メリノ種との交配は羊毛の

産出を三倍にしてゐる。サウスダウン羊との雜種は羊毛の産出高は

四五ポイントに増加して居り、ヨーロッパとつは五、九ポイントに上つてゐる。

動物及び動物性生産物の輸出貿易は近代的飼育方法がより多く
實施せられたと共に確實に連かに發展する。南滿洲鉄道会社の研究

所 ~~の~~ 編輯 ~~の~~ 統計によれば一九二二年に於ける南滿洲の三港から

の三等産物の主な輸出品は以下の如くである。

牛(數) 二千三百三十

羊毛・獸毛・羽毛(ポイント) 四百五十五万

剛毛 (ポイント) 七十九万八千

鞣皮・獸皮・皮製品(價格) 三十一万七千六十弗

角及び齒(ポイント) 十万六千四百

骨 (トン) 九千

雞 (數) 十二万七千九百

卵 (ケース) 十四万四千五百

二 森林地

森林の分布 南滿洲に於ては長白山脈麓、松花江、牡丹江、

圖們江の上流沿岸、又鴨綠江及び琿河の上部は稠密に

樹木が生えてゐる。一方北滿洲に於ては東支鐵道の東部

(ハルビン・ホクラニチヤ間)及び吉林省の山姓附近は主なる森林地

である。蒙古は草か生え砂丘の點在する平地かうなる一大平原であり
森林の如きもくは全く見られぬ。

森林地帯は次の如く算せられる。

a. 鴨綠江の右岸及び琿河の沿岸……六十九億立方呎の木材を
有する百六十万エーカー。

b. 松花江、牡丹江、圖們江の上流……二百六十億立方呎の木材を
有する四百八十万エーカー。

c. (ハルビン・ホクラニチヤ間)東部……百八十五億立方呎の木材を有
する二百五十万エーカー。

d. 山姓地区……五百二十億立方呎の木材を有する千三百万
エーカー。

e. 興安山脈中及びその附近に於ける森林に空しては米ルゴリ
及び興安駅周辺……約三十哩の距離内の地域では木材の
平均算定額がエーカーにつき千三百立方呎とされてある事を除く
ては資料を得る事が出来ぬ。

森林の保存……滿洲は諸所に於て植林を必要とする。

経済的・衛生的西見地より、國民の利益の爲に、
現存は不毛であるが

森林の覆ふ事が可能な丘や山が各所に見られる。之は特に東東州

於て然りである。同地は山がちであるが、しかも山々には鹿かっ木しかない。
樹

支那の行政権が日本の手に渡つた時、同地方にあった木は村々墓の近くに
樹

柳の木が二三本あるだけであつた。

政府により企てられた植林のなりの苗木を供給するために苗圃が旅順、

錦州及び大連に設立された。数百万の苗木が最近数年間に
樹

植林の計画に着手した。一億一千万本の木が五千四百五十万カリーの
土地に植ゑられなければならない。この見積りには、而して用計は

三十年の期間にこの計画の完成する事を要求する。亦一年即ち
一九一九年に九百八十萬カリーの土地に二百万本の苗木が植ゑられ、同時に

四千四百万の苗木が茶芽させられた。又この有益な企ては

一般公衆の注意を引くため、植林を希望する者に無料で森林地が

貸与され、種子と苗木の供給された。森林保護の爲に又

規則が公布された。この規則は苗木の生産し、植林に要する

材の所有を多量の苗圃が作られる。

公衆の興味は増して、材の所有を多量の苗圃が作られる。

樹の種類は約三千である。森林の約四十パーセントは針葉樹であり、

約五十パーセントは闊葉樹である。朝鮮松は層々直径四一五呎

高さ百呎以上に達する。カシ、榆、ホドラは最も普通な闊葉樹である。

二見られる。

満洲には樹がある。

製材業、木材市場としてはハルビン、長春、奉天、大連

の如き消費中心地を擁する吉林、安東が主位を占め、吉林

は長年木材の中心である。東支鉄道東部の沿線には、鉄道

管理局、シヤ人及び支那人の木材置場に、鉄道の引込線

を設けて製材場を経営してゐる。吉林、安東の木材は共に

鴨緑江に運ばれる。

三、漁業

海水漁業、東に黄海、西に渤海を控え、五百哩の海岸

線を有する遼東州租借地は漁業に理想的な舞台を擁

してゐる。年々の漁獲高は約二万五千トンとみられ、約五十万ドルと

評價されてゐる。その魚獲は鯛、鰹、サマラ、シタヒラメ、

ヒラメ、スズキ、鰈、ニハ、鰻、シラス、マイカ、蛸、ナマコ、牡蠣、ナマコ、

車海老、伊勢蝦、蟹、鮭、オットセイ等である。

日露戦争中、海戦のあった海洋島附近の捕鯨は東洋

捕鯨会社によって殆ど独占的に行はれてゐる。獲物は下関に運ばれる。

オットセイは黄海北部の浮氷の上で、春が立ちかゝり海岸の氷が崩

解する時、湾の北部でも捕へられる。

都督府

漁業の奨励、漁業団体の利益のために遼東州政廳は一九〇八年

大連の南一哩の老虎灘に水産實驗所を設立した。同實驗所

は工場、漁具、貯藏室、倉庫、乾燥室、更に實驗的漁獲を行ひ

又近海を調査するたぬりの船が備置されてゐた。又漁業團體の利益を保護し、發展させるために組織された組合がある。

淡水漁業！淡水漁業は、この大きな河、特に、南部の遼河

及び鴨綠江又松花江とその支流ハルカ河の下流に亘る行はれてゐる。

魚は主に鮭、鱒、鯉、鰻等である。松花江は又真珠を産する。

一時は吉林の附近に於て同江から年々七八千を下ろぬ真珠が得られたと云はれる。

四、鉱業

鉱業の發達！南滿洲に於ける鉱業は古り起原を有する。地方の口碑は撫順に於ける石炭の採掘が夙に十二世紀から為されてゐた事を述べてゐる。しかしその作業は滿洲王朝の創始者により

風水(自然の精)に於ける迷信から禁せられた。嘗て仕事をした

鉱山か他にも幾つか明かされた。採掘の痕跡は

幾つか著しいものがあるにはあるが、自然力殊に厚い木伐採

のために起つた地滑りの為に完全に拭き去られてゐる。

最古の鉱山はこの一般的な森林伐採の間に發見されたものゝやうに

思はれる。この同じ行為が鉱山から不可缺の木材を奪つたため

かく發見された鉱山の運命を盡きさせ禁止法が除かれ

有意識的の又は無意識的の多のくの10

た後でせへも、~~ある~~ ~~また~~ ~~の~~ 障得が、~~金山採掘の前途に感ずる~~ 近代の觀念に於ける金業

は撫順炭坑の経営をロシア人が支那人と協同して着手した時

この國にもたらされたのである。併し、~~銀業の~~ 實の進歩は

日本が口々の特権の継承、その経営、満鉄への移讓、~~並~~ 始

主要鉱物、支那当局は奉天、吉林、両省内で、~~銀、銅、鉛~~ 採し得

られた約六百の場所を目錄に記入してある。その中二百十三は石炭、

ニテスは鉄、二百三十四が~~金~~ ^{銀、銅、鉛} であつた。

金、満洲の鉱物資源の開発に~~對~~ ^對して、外國資本が~~導入~~ ^{輸入}

される以前、~~金は~~ ^{金は} ~~ほとんど~~ ^{ほとんど} 採掘されておた唯一の~~金~~ ^金 屈であつた。満洲

の金は強と~~砂金~~ ^{砂金} ~~を~~ ^を ~~採~~ ^採 ~~取~~ ^取 ~~する~~ ^{する} 事が出来る。

た~~ため~~ ^{ため}、~~砂金~~ ^{砂金} ~~を~~ ^を ~~河床~~ ^{河床} ~~に~~ ^に ~~皆~~ ^皆 ~~金~~ ^金 ~~採~~ ^採 ~~り~~ ^り ~~屋~~ ^屋 ~~によ~~ ^{によ} ~~つて~~ ^{つて} ~~煮~~ ^煮 ~~され~~ ^{され} ~~て~~ ^て ~~しま~~ ^{しま} ~~つ~~ ^つ

た~~ため~~ ^{ため}、~~南~~ ^南 ~~滿洲~~ ^{滿洲} ~~に~~ ^に ~~於~~ ^て ~~て~~ ~~今~~ ^今 ~~日~~ ^日 ~~砂~~ ^砂 ~~金~~ ^金 ~~が~~ ^が ~~採~~ ^採 ~~取~~ ^取 ~~され~~ ^れ ~~る~~ ^る のは、~~三等~~ ^{三等} ~~の~~ ^の ~~使~~ ^い ~~書~~ ^書

された河床かけである。この採な採掘の痕跡は興京、通化、~~及~~ ^及 ~~び~~ ^び ~~フ~~ ^フ ~~ア~~ ^ア ~~ン~~ ^ン ~~シ~~ ^シ ~~ヨ~~ ^ヨ ~~ン~~ ^ン

といふ事が専門家によつて主張されて居る。片麻岩はその含有する金を失ひ、~~片~~ ^片 ~~麻~~ ^麻 ~~岩~~ ^岩 ~~は~~ ^は ~~そ~~ ^の ~~の~~ ~~金~~ ^金 ~~を~~ ^を ~~失~~ ^ひ ~~つ~~ ^つ ~~て~~ ^て ~~徐~~ ^々 ~~に~~ ^に ~~分~~ ^解 ~~し~~ ^し、金は雨に洗はれて河床に堆積したためである。南滿洲に於ける最も云々の砂金の堆積は鴨綠江及び松花

江の上流にある。黒龍江省内には^も今方ほ金鉱が相当量得られる

千アピコ

金産地が多くなる。吉林省の~~東~~東滿は^も金の砂原で昔有名であった。そして尚採掘す^{べき}豊富な金脈があると信ぜられてゐる

鉄は石炭に次いで鉄は滿洲の最も重要な産物である。鉄は

大抵変成岩中の鉄脈中であり、最良の鉄脈は大抵滿洲北

東部の鴨綠江沿岸に産見される。之等は原住民によつて極く

小規模に經營されてきた。鉄石は多く赤鉄鉱でその鉄の含量は

あまり多くなく大抵約四十パーセントであるが、有利に採鉄するには^元

分^りである。本溪湖及び鞍山の二鉱山が特に目立っている。後者

は二億トンの原鉱を産し、滿鉄によつてその新しい鞍山製鉄

所と連絡して發展せられてゐる。

これは ~~...~~ アメリカの日常をさくさく

だ。と聲をあげて叫んだ。そのときの

様子か、日本や朝鮮の見る影

嵯峨たる山々の連うを眺めて長い旅

路を続けて来たあせで、何が故郷

を 懐 ぼしめるものを見つけてほっとんよ

うな風に見ええた。

曲農耕地 | 満洲並に東内蒙古

の曲農耕地の面積は約 三〇、〇〇〇、〇〇〇

エーカーであり、開拓を待つ曲農

適地は概ね 三七、〇〇〇、〇〇〇 エーカーと

見られて居る。また現在南紀土をこれつ

、ある土地は約百万エーカーある。

曲農と登之促進——了 鉄道——極

最近^子期で、收穫物は不便^便な水路

及び原始的な滿洲荷馬車によ

つて送り出されてゐたが、鉄道と極

めて高橋市下の大連港が出来

からは輸送方法に大改良が加え

られた。東支鉄道、南滿州鉄道

及支那官營鉄道、京奉線

は毎年穀物の移入と曲農~~作物~~^{作物}

を運入してゐる。

曲農耕方法——アジアカの多くの地方

の曲農耕方法は、何百年前^強と

進歩のあとを見ないが、^南満河に於

ては満河鉄道株式会社による

経済發展計劃を始め、以来

目醒しい進展が見られた。土着

住民に近代式の曲不耕法が教へ

られ、土地の生産力は増加し、^{重要}

産物の産額も品質も共に向上

した。^南満河曲不耕法の改革には

満河鉄道株式会社によりて後

進められた曲不耕法試験所が興つて

力加めた。この試験所は合衆國

の主要試験所と多量の土地に於て似連

つて居る。世界最取新の科學的

の由來其の知識を滿海に採入れよう
と四方のて居る。

北

公之山嶺(大連)の北を去り四百哩。

滿海の心臓部に位す(よは中央

試験所があつて、此系では家畜飼育

の重要なな実験が行はれて居る。右

衆國産メリノ種と滿海在來種

交配

との交配が行はれて羊毛の品質

並に生産高は共に向上し、輸出

貿易に拍車了まかけられて居る。

滿海の主要の産物 大豆の含油量

増加 (increase) 種々の手が施され、曲者草

者には改良せられた栽培法の指導す

き受けた。甜菜は廣地域に

亘って栽培され、甜菜糖の製造は

滿州の新興産業の産物となつてゐる。

熊岳城試治所における農樹事

業は植林及再植林方面に大々な

変化を齎らした。滿州の多くの地方

に於ては樹木はあまりなからぬが現

在では大々な果樹園が諸方に

點在する。アメリカ種の林檎

^{葡萄}の栽培に成功し、春にもなれば

アカシヤや梨木の花の芳小香が満ちて

来るのである。北部滿州に於ては

支那楊の植林が行はれ、それからマツの軸木~~は~~又~~は~~はパルプが~~出~~出~~来~~来~~る~~る。

熊岳城に於ては柞蚕即ち山繭

の改良試験が行はれてゐるがこれ

からは繭油が作られる。柞蚕は

主要輸出品に~~な~~数へ~~な~~な~~ら~~ら~~な~~な~~る~~る。

曲農作物—~~米~~米^川の主要農産物は

大豆、高粱(丁種~~の~~と~~う~~も~~ろ~~こ~~し~~)

黍、玉蜀黍、黍及小麦である。

の一種

~~大豆~~の主要穀類の生産高

は次の通りである(單位トン)。

年は氣候不順であるが、

額に稍劣るが、^年其

高粱 黍 大豆 玉蜀黍 大麦 小麦

奉天省 二〇三、五〇〇 八三、六〇〇 一五、三九〇 七二、一〇〇 一〇、四七

吉林省 一、三三八、三〇 三、八、二六〇 七〇、六八七〇 一〇、五、四〇 二、五、三、三二

黑龙江省 四七六、四九〇 一、三九、五〇〇 一、八、一、六〇 二〇九、七六

東内蒙自治 三四九、一四〇 二〇〇、五〇〇 二、九、四、三〇 一、四、一、〇〇 二八、一一

大豆

合衆國由來穀類者は最近の報告に次

の如く表をみる。この数字は ~~報告~~ 年

の中に多くは大豆か世界貿易の品目中

特に重要なる穀類にあらんことは、近

年に行けり、曲尼等の日照も著しく佳

なりしつた。

大豆は支那に於ては五千年來の重要の

料で、且又種の効用の多くなるものな

る物であつたが、アメリカやヨーロッパに

於て、~~この~~満洲の特の地には

産物の重要地位が認められ、

この数年のことである。日本の三井

物産株式会社が一九〇八年には

(大豆)の輸出が、これは英國向百

トンの大豆であった。世界大戦中に

は甚大な穀物の豆油の需

料を補つるに合衆國の輸出

された。

滿洲の主要の貿易品^品に對する世界各
路の擴張とこれ^のは滿洲鐵

道株式會社がその法體として、その
由來と研究を爲す於て大なる果實を
改良とする。新しき利用の道を拓き

又輸送方法を組織化して^其産物
の物品化を圖つた結果である。

る。産物の發達は何十^{にも達する}万の支那人
人が備へられた。永年支那人

は隣接の地方特に山東省から
滿洲に移^{住し}つた者であつた。よゝ大豆は

類似の自由貿易(四〇名)の含有量
が頗る高率なもので二十世紀の「マナ」

と謂はれてゐる。その用途として

由农产物及次の... 園子 ~~~

肥料
稻种
牧草
(TN.?)

乾草
新鲜保花饲料
肥料土

食药用

人、食糧
家畜、飼料
肥料 (TN.?)

種子

油

食用家畜	食用家畜	ハラス代用子
防水用製剤	シロシロ	ラート代用子
塗料	シロシロ	食用油
石鹼材料	セメント	質 軟質石鹼 硬質石鹼
セメント	石灰	
印刷インキ		
燈用		
滑油		

食料品

乾燥した豆

醬油 豆

燻 豆

2-70 用
3-11-1 代用子

炒 豆

野菜乳
(T.N.?)

生 豆

某 蔬

罐 蔬

チ 豆

4-2

生 豆
燻 豆
乾燥 豆
燻 豆
燻 豆
燻 豆

煉乳

新鮮 豆

菓子

乾燥 豆

朝食用 食料子

満洲の肉門、^{満洲}南鉄道の南の終点

ある殷賑を大連港からは現在各

國のよる船が世界の主要港に向けて

量

穀物の大豆と豆油とを運ん

で、豆類は多く日本と支那に

豆粉は日本に、豆油は多くヨーロッパ

及アメリカに向け、輸出されてゐる。

南滿洲には約二〇〇の油房があり、是

等は搾油にあたりて原始的な手

搾りかゝ動力使用の搾油に動いて

下搾り方法がとられてゐる。この製衣

油業の中心地たる大連に於ては

八十の油房が建てられ、一九一五

年からは滿鐵道株式会社を経て

の製衣油試験所が於て化學的方法

に
新しい ~~擦~~油法抽が採用されたが、

より優劣性が認められ、た、えれ~~ば~~ 高

業的に費展させ、るに民間経済界に

採られた。更に豆油糖業に於て

一進展を著したのは 而満洲鉄道

会社の研究所が豆油の固形化及ステアリン

オレイン、ゲリセリン等の製造に一大段

明を成遂げ、る、る特殊物

開費のに ~~は~~ の の 會社が設立

とれたに到った。

満洲の大豆は四種類色別によるになる。即ち

黄色、薄褐色、~~赤~~緑色、及黒色の四種類

大連中央研究所の分析による大豆
 の他の成分を分析し次の通り
 である。

大豆色黄

大豆色褐薄

大豆色綠

大豆色黑

水分 九、二 一三、三四 一六、六四 一〇、七四

類似蛋白質 三九、九〇 三七、三五 三六、四七 三五、三二

脂肪 一七、五九 一七、三七 一六、三三 一五、八〇

食水 二四、二七 二三、三六 二五、〇八 二四、四三
 生灰 二〇、二七 二〇、二七 二〇、二七 二〇、二七

纖維質 四、九二 五、一三 四、八九 五、九六

灰分 四、二一 四、三六 四、六九 四、〇〇

高粱(「とうもろこし」の一種)——土著

住民の主食は高粱である。これは又

藁又は

由農耕~~に使用せられ~~、東三省の運輸

業に使用せられ、動物の主な食用

穀物である。

大豆が現在の採に必要なるものに

なり、以前^前に於ては満洲の由農耕

地の^中半は高粱栽培のなであった。

その

中^中のようであるが、~~平~~支那の

他

~~平~~有に輸出せられたのであった。

日附近に

於ては各地にも高粱と栽培して

る土地は大豆の栽培は行はれ

もつた。満洲では凡そ曲名耕地の凡そ

二六〇名か高粱、^{二〇名か豆}二〇名か黍、一四〇名か

玉蜀黍、八五〇名か小麦、一一五名か

他の穀類とゆゑになつてゐる。南

満洲に於ては、玉蜀黍の栽培地域

か^{二〇}平均率より廣く、北満に於

ては小麦の栽培地域が^{二〇}平均率

よりは広くなつてゐる。満洲の高梁

の毎年平均産出額は二二〇、〇〇〇、〇〇〇

ブツと見積られらる。高粱は

人及家畜の食料として用ゐられ

ばかうて、^二地方の酒精飲料

の原料となつてゐる。高粱はその

種子ほかりが有用な部分であるのはなく、

その茎が中々大きな役割を持って

いる。高粱の外側の葉は編んた

竹延はとれは満洲の農業上却々

需要の多いもので、屋根を草草くお

にも用いられ、或は穀粒穀粒又は豆類

の包紙衣用、草草種々の用に供せられ

茎は垣根や、橋梁家屋の建に採用に

又は燃料、パルプ等に利用せられ、

広く満洲で用いられる。

高粱酒は無色透明で強い香

加して特に、土著住民の嗜好に適す

ものである。

黍——土著人の主要な食料として

黍は高^高粱より次にある。北滿^部海に於

ては高粱はよく出来ないので、黍が

後々の主食となる。黍は又

黄酒(黄色酒)の蒸餾原料として

重要である。黍^{その}黍がらは広く糶と

して広く用いられている。黍は全滿

洲に亘って栽培されているが、南部

よりは北部に多く栽培されている。

年額は約一六〇〇〇、〇〇〇ブツェル。現

在商品として重要を増している

ある。

玉蜀黍——玉蜀黍は滿洲に於

ては高粱と同じ様に栽培されて

いる。これには三種ある。黄種

毒種及ラオライチユ(TN?)とゆう在来種

のものである。森林は南滿洲の南部

及北滿洲の一部に於て栽培せられ

るものが多い材料とせらるる。北滿

に於ては一種の酒かこれか^酒とせられ、
蘭

茎は燃料となり乾燥した葉は

種^よになり、額^七は六〇、〇〇〇、〇〇〇ブツレニ

である。

小麦——北滿は小麦は理想的な

土地であつてその地方は小麦が多い

と思ふに^三度出せられ、小麦の最盛地

は寧安、伯都納及ハルビン附近

松花江の右岸及綏化の週辺に

ある。南滿の小麦畑は多く、西房、

(NT.?)

東海竜及遼河西方地域にあり。

鉄嶺には滿洲の大製粉工場の

一つがある。小麦は滿洲に於て古

くから栽培せられて来たものであり、

その生産が輸出(出)程になつたのは

歴にお近年來のことである。滿洲

の小麦は世界貿易に一切歩をた

めようとしてゐる。一九二〇年には未だ

舊の曲作とヨーロッパの需而むか

川常ん多うかゝる。大連からの輸出

か、四四四、〇〇〇トンに及んだ。か一九二二年

は度々かに^約一〇、〇〇〇トンの輸出をいん
たのみちあつた。満洲は多くの小麦
粉が輸出されてゐる。

大麦—大麦の大量消費が始つたの
は日露戦争後のおであつて、日本の

満洲派遣軍は馬の飼用

穀類として大麦をも西の國で

あつた。現在^{大麦は}長春、公主嶺、遼

陽及海城附近に多量に

生産されてゐる。大麦は住民の

飼料及家畜の飼料に用い

れてゐる。又土著住民の飲料蒸酒

のにも用いられてゐる。^其年^産額^は

TRANSLATION BY Kitaji Fujiwara COMPLETED March 24, 1947

CHECKED BY _____ COMPLETED _____

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