Export Markets for Ginseng Products

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Abstract The current size, characteristics, and channels of distribution of the offshore export (non North American) market for ginseng products are described. The apparent size of the world export market for ginseng products in 1987 is 3,363 tonnes. The major export markets for ginseng are Hong Kong (1,972.4 tonnes) and Japan (840.9 tonnes). The volume of ginseng imported into Hong Kong has doubled over the past five years from 976.3 tonnes in 1983 to 1,972.4 tonnes in 1987. This increase is reflective of an expanding Chinese market. In terms of products forms, the vast majority of ginseng imported into China is in root form, while Japan imports both red and white ginseng as well as ginseng beverages and medical products. Hong Kong is the destination of over 86% of the volume of North American ginseng exported between 1983 and 1987. North American ginseng products are distributed by ginseng brokers or importers/exporters.

Overview of the Export Market

1. China

China is the world's leading producer, exporter, and consumer of ginseng. Based on the official trade statistics, we have estimated that the consumption of ginseng in China is 1,370 tonnes. However, there is a major unofficial trade in ginseng with Hong Kong as well as with Singapore and Macau. When the unofficial trade is taken into consideration, we estimate the annual consumption of ginseng in China to be approximately 2,170 tonnes.

Based upon interviews with Hong Kong importers and exporters, it appears that the consumption of ginseng in China has increased dramatically in recent years. As indicated below, including the unofficial trade, we estimate that the consumption of ginseng in China has increased from 1,310 tonnes in 1983 to 2,170 tonnes in 1987:

This increase in consumption represents somewhat of a recovery for ginseng in the Chinese mar-

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Estimated consumption of ginseng in China, 1983-1987 (tonnes)

Year	Consumption
1983	1,310
1984	1,400
1985	1,520
1986	1,970
1987	2,170

ket. Under the communist government, the use of ginseng has been discouraged because its alleged sexual properties which were considered inappropriate given the goal of limited population growth and because its high cost and history of use by the upper classes led to it being perceived as a luxury item.

The primary reasons for the increase in ginseng consumption are believed to be increases in per capita income brought about by recent economic reforms and a lower level of resistance to ginseng from the government. Although ginseng consumption is increasing, the estimated per capita consumption of ginseng in China still lags significantly behind that of Hong Kong, South Korea, Japan, Taiwan, and Malaysia as shown in the following table:

Estimated per capita consumpition of ginseng in selected countries

Country	Estimated Consumption (tonnes)	Population (millions)	Per Capita Consumption (grams)	
China	2,170	1,085.0	2.0	
Hong Kong	425	5.7	74.6	
South Korea	910	42.7	21.3	
Japan	518	122.0	4.2	
Taiwan	177	19.3	9.2	
Malaysia	86	16.3	5.3	

If per capita consumption in China were to increase to the level achieved in, for example, Taiwan, total consumption would increase by more than a factor of four to approximately 10,000 tonnes.

The vast majority of ginseng imported into China is in root form. Prior to being imported, the ginseng roots are usually treated, clarified, and sorted based upon colour, texture, shape, taste, and age into about a dozen groups. People in southern China appear to prefer the short, stocky, thick root while people in northern China prefer the longer root.

2. Hong Kong

Hong Kong can be viewed as the distribution centre of the ginseng industry. Hong Kong is the leading importer and, when the unofficial trade is included, the leading exporter of ginseng. Hong Kong has developed its unique position as a distributor for a number of reasons. First, Hong Kong borders and shares many cultural ties with China. China traditionally has been and is again the largest market for ginseng. In 1948, when many countries including Canada and the United States suspended trade relations with China, much of the ginseng volume was redirected to Hong Kong. Second, Hong Kong utilized its position to establish a major trading centre. Hong Kong's experienced network of herb dealers have developed an extensive distribution network and sophisticated system for processing and grading ginseng. In addition, they are backed by a strong financial and communication system. Third, Hong Kong operates as a free port with no import tax. Fourth, South Korea and China do not deal directly and consequently Hong Kong dealers have been able to to position themselves as intermediaries importing South Korean ginseng

Table 1. Hong Kong imports of ginseng, 1983 to 1987 (tonnes)

Country	1983	1984	1985	1986	1987
China	322.3	491.0	422.0	630.3	750.0
United States	313.9	230.7	420.0	460.2	685.6
Japan	163.1	138.8	147.4	180.3	170.2
South Korea	98.9	69.5	44.9	113.0	156.4
Canada	33.5	34.0	65.8	70.9	101.8
Singapore	31.9	38.6	32.5	40.4	89.1
North Korea	8.3	19.3	13.2	7.2	13.9
Other	4.4	6.5	6.4	7.1	5.4
Total	976.3	1,028.4	1,152.2	1,509.4	1,972.4

Source: Imports into Hong Kong

Table 2. Hong Kong exports of ginseng, 1983 to 1987 (tonnes)

Country	1983	1984	1985	1986	1987
Taiwan	37.1	34.3	50.3	43.8	205.8
Japan	44.5	156.4	120.7	115.0	186.0
China	102.4	125.6	167.0	133.9	144.8
Singapore	56.3	50.9	68.4	105.9	87.0
Malaysia	29.3	25.1	27.0	30.9	47.5
United States	13.2	9.8	21.5	20.7	31.9
Phillipines	0.0	0.1	0.1	5.2	15.5
Germany	1.7	6.2	3.5	5.4	11.6
Canada	1.3	1.8	2.6	2.4	6.6
France	0.7	1.8	1.0	1.3	3.8
Italy	4.0	0.0	6.3	1.0	0.0
Other	6.4	5.8	4.1	4.2	7.1
Total	296.9	417.9	472.5	469.5	746.8

Source: Re-exports Fron Hong Kong

for export to China.

As indicated in Table 1, the volume of ginseng imported into Hong Kong has doubled over the past five years from 976.3 tonnes in 1983 to 1,972.4 tonnes in 1987. This increase is reflective of an expanding Chinese market. The two major suppliers to Hong Kong are China and the United States. Most of the imports from North America, Japan, and South Korea are exported to China, while the imports from China are redirected to Japan, Singapore, Taiwan, Malaysia, and the United States. As indicated in Table 2, the official volume of ginseng exported from Hong Kong has increased from 296.9 tonnes in 1983 to 746.8 tonnes in 1987.

Table 3. Average Hong Kong import and export ginseng prices, 1983-1987(\$ Canadian/kg) Average import prices

Source									
Year	Canada	U.S.	S. Korea	China	Japan	N. Korea	Average		
1983	\$ 126.14	\$ 167.18	\$ 251.30	\$ 77.52	\$ 147.81	\$ 343.19	\$ 140.52		
1984	139.61	151.03	197.38	76.60	169.82	352.76	122.71		
1985	107.44	100.59	229.91	72.26	157.37	412.87	108.76		
1986	83.84	80.17	243.07	69.25	186.83	334.99	108.30		
1987	106.75	77.59	226.17	57.73	222.35	249.71	106.12		

Average export prices

	Destination								
Year	Canada	U.S.	China	Japan	Taiwan	Singapore	Average		
1983	\$ 145.92	\$ 144.90	\$ 127.12	\$ 46.43	\$ 114.42	\$ 209.55	\$ 140.15		
1984	217.91	163.59	119.68	70.99	110.00	202.54	118.76		
1985	181.63	156.63	119.22	67.00	146.10	173.93	123.61		
1986	224.10	156.82	114.78	66.80	118.38	111.36	108.15		
1987	152.32	113.58	95.83	54.13	59.85	132.75	81.36		

Source: Hong Kong Trade Statistics

Table 3 summarizes the average Hong Kong import price for ginseng by major source. China is the lowest cost supplier, while North Korea and South Korea are the highest cost suppliers. The average cost of ginseng imported from Japan has increased substantially over the past five years largely because of changes in the exchange rate. Similarly, the average price of U.S. ginseng has declined significantly from \$167.18 Canadian per kilogram in 1983 to \$77.59 per kilogram in 1987. The average price of all imports has declined from \$140.52 per kilogram in 1983 to \$106.12 in 1987.

Table 3 also summarizes the average Hong Kong export price for ginseng by major destination. As indicated, the lowest average price is for exports to Japan indicating that the majority of the products exported are Chinese ginseng which has been processed into advanced forms. The average price of all exports has declined from \$140.15 per kilogram in 1983 to \$81.36 in 1987.

It is estimated that approximately 25% of the ginseng imported into Hong Kong is consumed in the country. Within Hong Kong, ginseng is primarily consumed by the older members of society. While traditional medicine tends to be less accepted by younger, more educated members of the popula-

tion, it is still a fundamental part of the culture. A recent study indicated that while western medicine is available, approximately 50% of population would choose to take Chinese medicine as an alternative. Chinese ginseng is being used as a general health supplement, while North American ginseng is more likely to be used for specific purposes such as treating stress or as an aphrodisiac.

3. South Korea

Although South Koreans are major consumers of ginseng, the country imports very little ginseng from outside the country. Given that South Korean ginseng is perceived to be superior to all other forms and that there is an abundance of white ginseng available locally, there is little need for imports. There were no exports of North American ginseng to South Korea before 1987. In 1987, however, a total of 6 tonnes were imported from the United States. It in not considered likely that a significant market for North American ginseng could be developed in South Korea.

4. Japan

Japan has become a major growth market for ginseng in recent years. As indicated below, apparent consumption of ginseng in Japan has increased from 326 tonnes in 1983 to 847 tonnes in 1987, equivalent to an annual growth rate of 27%:

Apparent consumption of ginseng in Japan, 1983 to 1987(tonnes)

1983 1984				
	120	370	164	326
	120	656	141	635
1985	120	582	136	566
1986	120	752	149	723
1987	120	841	114	847

^{*} Includes red and white ginseng, beverages, and medicinal products. Source: JETRO

Reasons for this high rate of growth include the following:

A significant increase in the value of the Japanese Yen: The value of the yen expressed in terms of the U.S. dollar has increased from 249 Yen per dollar in 1983 to 126 Yen per dollar in 1988.

A boom in the sales of health foods in Japan: Sales of all health foods in Japan have increased dramatically over the past ten years. According to JETRO, the Japanese Trade Office, the increased interest in health foods can be attributed to increases in the standard of living and increases in the incidence of adult and geriatric diseases in an aging population. The current size of the market for health foods in Japan is estimated to be about \$5 billion Canadian. Research performed by the Yano Research Institute identified the size of the market sub-segments to be as follows:

Japanese health food market, estimated sales by subsegment

Sub-segment	Share	Estimated Sales (\$ Cdn million)		
Nutritional Drinks	30%	\$ 1,500		
Strict Health Foods	30	1,500		
Natural/Organic Foods	20	1,000		
Other Products	20	1,000		
		\$ 5,000		

Source: JETRO

Ginseng is classified as a strict health food with other products such a royal jelly, chlorella, chlorophyll, enzymes, garlic, extracts, prunes, and spirurina. Bases on estimated sales in 1987 of \$75 million, ginseng has a market share of approximately 5% of strict health foods. The size of the health foods industry is expected to continue to increase as the channels of distribution expand. Until recently, the majority of sales have been generated out of store through door to door and mail order sales. However, the large department stores and supermarkets are now aggressively expanding into the market.

Renewed interest in traditional Chinese medicine: Prior to the Meiji Restoration of 1868, medical practice in Japan was patterned on Chinese medicine which was called Kampoyaku in Japan. After 1868, western medicine was adopted as the standard and traditional Chinese medicine was officially rejected, being relegated to the status of folk medicine. However, in recent years there has been a renewed interest in Chinese medicine, not only amongst traditionlists but also among the younger generation and health enthusiasts. This has led to about 200 traditional medicinal plants, including Panax ginseng, being listed in the Pharmacopoeia of Japan since 1976 and thereby becoming eligible for prescription under the health insurance program. Few doctors prescribed traditional remedies when they first became eligible under the health plan in 1976, but the number of prescriptions has been increasing steadily since then as concerns over the negative side effects of western medicines have increased and as the products forms associated with Chinese medicines have become more convenient. Chinese medicines are now usually processed into capsules, tablets, or extracts,

Japan's annual consumption of medicinal plants is estimated to be about 50,000 tons. Therefore, ginseng would comprise approximately 1.7% of the medicinal plant market. In addition to their use in medicines, medicinal plants are also often used as raw materials for food processing, condiments, flavorings, and fragrances.

North American ginseng is not elighible for prescription under the Japanese health insurance program. The Japanese Ministry of Health and Welfare is responsible for administering the Pharmaceutical

Table 4. Japanese imports of ginseng by product from, 1983 to 1987(tonnes)

Form	1983	1984	1985	1986	1987
White Ginseng	159.2	294.9	203.1	326.3	375.6
Red Ginseng	74.6	188.9	158.5	183.6	204.4
Sugared Beverage	0.6	0.3	5.5	0.8	7.2
Other Processed	43.7	38.5	61.0	76.3	95.2
Beverage					
Processed Medical	88.5	102.2	94.7	127.8	82.0
Products					
Other	4.0	30.6	59.1	37.5	76.5
Total	370.6	656.4	581.9	752.3	840.9

Source: JETRO Trade Statistics

Affairs Law. Before the Ministry is willing to declare North American ginseng or any other product eligible for prescription, it requires scientific evidence that the product is safe and medically effective. Often the case in favour of approving specific products is put forth by the Foundation of Japan Health Foods, a private sector association, which was organized in 1985 for the purposes of researching, studying, collecting, and disseminating reference information on health foods.

There are no restrictions concerning the use of North American ginseng as a food product or a food additive. Even so, the level of market penetration by North American ginseng has been very limited to date. According to sources contacted in Tokyo, Japanese importers and distributors are simply not interested in North American ginseng at this time. In fact, according to Japanese Trade Statistics, the only imports of North American ginseng over the past five years have been the purchase of white ginseng totalling 846 kilograms in 1983 and 802 kilograms in 1985.

In terms of product forms, Japan imports both red and white ginseng as well as ginseng beverages and medical products as indicated in Table 4. The vast majority of red ginseng is purchased from China while the majority of white ginseng and beverages as well as all medical products (ginseng in tablet and capsule form) are imported from South Korea. In 1987, South Korea was the source of 55% of Japan's ginseng imports by volume and

Table 5. Taiwan imports of ginseng, 1983 to 1987(tonnes)

1983	1984	1985	1986	1987
83.0	95.7	83.6	76.6	80.0
72.1	55.8	101.0	103.0	99.5
3.1	4.9	3.1	1.7	7.0
1.2	0.2	2.8	0.7	0.8
4.0	0.0	0.1	0.0	0.0
163.4	156.6	190.6	182.0	187.3
	83.0 72.1 3.1 1.2 4.0	83.0 95.7 72.1 55.8 3.1 4.9 1.2 0.2 4.0 0.0	83.0 95.7 83.6 72.1 55.8 101.0 3.1 4.9 3.1 1.2 0.2 2.8 4.0 0.0 0.1	83.0 95.7 83.6 76.6 72.1 55.8 101.0 103.0 3.1 4.9 3.1 1.7 1.2 0.2 2.8 0.7 4.0 0.0 0.1 0.0

Source: China External Trade Development Council

62% by value.

5. Taiwan

Unlike Hong Kong, Taiwan is not a distribution centre for ginseng as the country only imports sufficient ginseng to service its own market. As indicated in Table 5, the volume of ginseng imported into Taiwan has remained relatively constant over the past three years varying between 182.0 and 190. 6 tonnes.

The Taiwanese market is much more similar to the Chinese market than the Japanese market. First, Taiwan is very interested in the North American ginseng product. In fact, the United States has been the leading supplier of ginseng to Taiwan in each of the past three years. In an average year, approximately 50 tonnes of U.S. ginseng is purchased direct from the United States and approximately 50 tonnes are purchased through Hong Kong. Second, Taiwan prefers to purchase ginseng in root rather than advanced forms. This permits the buyers to examine the quality of the raw root. Taiwan importers typically purchase the roots ungraded and bulk packed in 100 pound drums. The drums are then unpacked, sorted, and repacked for distribution to retailers in Taiwan. The good roots are sold whole, while the lower quality roots are processed into teas or other products. There is a 35 percent ad valorem import duty on ginseng imported to Taiwan.

North American ginseng is positioned distinct from South Korean ginseng in Taiwan. While South Korean ginseng is marketed as herb medicine, North American ginseng is sold as a health food. The primary market for North American ginseng is the

Table 6. Malaysian imports of ginseng, 1983 to 1986 (tonnes)

Country	1983	1984	1985	1986
South Korea	25.3	30.7	36.9	29.0
United States	15.7	22.4	23.7	37.8
Canada	5.7	7.6	8.3	13.4
Other	9.2	6.5	6.7	4.2
Total	55.9	65.2	75.3	86.4

Source: Canadian High Commission, Kuala Lumpur

middle and upper class Taiwanese. Because the awareness of North American ginseng is high in Taiwan, there is very little advertising of the product. As long as the current exchange rate is maintained or improves, importers expect purchases of North American ginseng to increase in the future.

6. Malaysia

Malaysian imports of ginseng have increased form 55.9 tonnes in 1983 to 86.4 tonnes in 1986 (Table 6). The Malaysian market is similar to the Taiwanese market in that very little ginseng is reexported, the leading sources of supply are South Korea and the United States, and the majority of ginseng is purchased in root form. Approximately one-half of the volume imported is purchased direct from the producing nations, while the other half is purchased through dealers in Hong Kong. There is an import duty of \$24 per kilogram (Malaysia dollars or \$13 Canadian) on ginseng imported to Malaysia.

Distribution of Ginseng Produced in North America

Table 7 provides a summary of the destination of North American ginseng exports over the past five years. As indicated, Hong Kong is the primary market, being the destination of over 86% of the volume exported between 1983 and 1987. From Hong Kong, the majority of these exports are reexported to China with smaller volumes also being re-exported to Taiwan and Malaysia.

North American growers serving the export market typically distribute their product through ginseng brokers or direct to importers/exporters. These two channels of distribution of ginseng are

Table 7. Distribution of North American ginseng, 1983 to 1986(tonnes)

Country	1983	1984	1985	1986	1987
Hong Kong	336	261	487	452	572
Taiwan	39	69	59	52	31
China	2	2	2	15	26
Singapore	12	14	15	12	20
Japan	2	1	0	6	16
Malaysia	1	1	1	4	7
South Korea	0	0	0	0	6
European Community	3	1	0	0	0
Other	1	7	2	1	2
Total	397	356	565	443	680

described below:

1. Ginseng Brokers

Ginseng brokers are compaines that serve as middlemen between growers and importers/exporters in return for a commission on the value of product sold. The most significant brokerage operation to date has been the Karlin Ginseng Company of Wisconsin. One source contacted during the study reported that as a result of the Karlin family's role in acting as a broker for Sun Ming Hong based in Hong Kong, that company was able to source large volumes of ginseng and become a major dealer in a relatively short time. During the 1970's the Karlin Ginseng Company was the largest distributor of ginseng in the U.S. The Karlin family is well known and respected in Wausau and many growers were willing to sell their entire crops through the Karlin Ginseng Company because of the ease in purchase transaction and receiving payment. In return, the company received a commission of 3% of sales. While the brokerage is still in operation, it no longer has the commands the same share of the market because of an increase in direct sales to importers/exporters and because a number of new brokerages have been established.

The Karlin Ginseng Company started the company, Ginseng U.S.A., in 1980 to auction ginseng in Wausau. Ginseng U.S.A. is now owned by Robert Corr and managed by John Rastl. Ginseng U.S.A. is a private company that accepts ginseng on consignment from growers. In the fall, growers bring samples of their crop for display at Ginseng U.S.A.

and indicate their asking prices. Buyers visit the Ginseng U.S.A. facility to view the various crops and make offers on the samples that they like. John Rastl or his assistants then contact the growers and negotiate an acceptable price for both the growers and buyers. Arrangements are made to air freight the ginseng at a specified date and payment is made thereafter. For its service, Ginseng U.S.A. receives a commission of 1% of sales. In 1987, Ginseng U.S.A. handled an estimated one third of the production in Wisconsin which is equal to approximately 180 tonnes. Growers tend to use Ginseng U.S.A. more when the price of ginseng is low, tending to sell direct when the price is high. A low ginseng price reflects a weak market of large quantities available or poor crop quality, whereas a high price reflects a strong market of insufficient quantities available or high crop quality. In addition to its brokerage operation, Ginseng U.S.A. also buys limited volumes of ginseng which is graded and then distributed to Chinatown communities and the ginseng processors. In addition to John Rastl, Ginseng U.S.A. employs two full-time secretaries as well as three to four assistants during the fall buying season. Ginseng U.S.A. does very little promotion and relies primarily on word-of-mouth among existing users. It does not promote itself to buyers but undertakes minor sales promotion activities like distributing hats to growers and running small contests. Senior ginseng buyers did not like the inception of Ginseng U.S.A. as this type of brokerage operation eliminated their competivite edge of having become acquainted with numerous growers over the years. With Ginseng U.S.A. in operation, new buyers can have quick and easy access to many growers.

Another important broker in Wausau, Wisconsin is Paul Hsu. Hsu Ginseng Enterprises Inc. is involved in a variety of functions including growing ginseng, the sale of seed, root, and capsules, and brokerage. According to one source, Paul Hsu buys considerable volumes of ginseng on behalf of Taiwan businesses.

2. Importers/Exporters

The majority of the ginseng destined for the export market is now purchased direct from the gro-

wer by importers/exporters. The export companies for the most part are based in the Chinatowns of New York, San Francisco, Los Angeles, Toronto, and Vancouver and often operate retail stores in addition to the trading company. The importers/exporters operate both as offices for sourcing products from North America as well as distribution outlets for products imported from the Orient and handle other Oriental herbs and remedies in addition to ginseng.

The importers/exporters usually approach the growers well before harvest and, based upon a review of the crop and the grower's operation as well as their experiences with the grower in the past, will make a preliminary offer to purchase some or all of the crop. After the harvest, the roots are dried in ovens for a period of ten to twenty days. The ovens may be located on or off-farm. Assuming that an agreement has been reached, the dried roots are then packaged into 100 pound drums for delivery to the trading company. Very little of the ginseng is processed prior to being exported (only 3% in 1987) which is not surprising given that purchasers in the major markets of China, Taiwan, and Malaysia, want to verify the authenticity of the product firsthand by inspecting its size, shape, colour, smell, and taste. High quality ginseng root has many wrinkles to show its age, is yellowish in colour with black wrinkles, and has a bitter taste. In addition, the more resemblance the root has to the shape of a man, the higher will be the price for the product.

The price obtained by a grower for the crop is determined by the interaction of numerous factors. They include the total amount of ginseng available during that period, the quality of the roots, the perceived demand by the major dealers of their markets in the Orient, and the results of recent auctions in Hong Kong. It should be noted that by controlling the volume of ginseng in inventory, the 5 or 10 major importers/exporters in Hong Kong are able to exert a significant impact on prices even at the grower level. Dealers use these auctions prices plus market intelligence like the stock positions of competitors and jobbers to speculate on future prices. Such market intelligence are telephoned in

Table 8. Leading importers/exporters of ginseng in North American

Company	Estimated Volume Handled (tonnes)
Sun Ming Hong	175
Pao Fung Trading	110
Hang Cheong Tai	120
Tat Tai Medicine & Drug	g 50
Raymond Chao	20
Eric Yang	20
Bert Chong	15
Total	510

from Hong Kong and agents are instructed to buy at certain prices. Final purchase prices are then determined through negotiations between growers and agents/brokers. In the ginseng industry, pricing at different distribution levels is based more on replacement costs or current market costs than on percentage mark-ups. Notwithstanding this, the price at which ginseng is imported in Hong Kong is often twice the price paid to the grower and the price paid by the ultimate consumer is customarily four to ten times that of the price paid to the grower.

The roots are usually not graded prior to export. Once landed overseas, the roots will be sold directly to wholesalers or retailers (approximately 60% of sales) or through the auctions in Hong Kong. Approximately 90% of the North American ginseng purchased by the trading companies is exported; the remaining 10% will be distributed to the Chinatown in various communities across North America.

The importers/exporter trade is highly concentrated in North America. According to sources contacted during the study, the volume of ginseng handled by the top four importers/exporters is estimated to account for 70-80% of total production in North America. The estimated volumes handled by the leading importers/exporters are summarized in Table 8. The top nine companies are described below:

Sun Ming Hong: This company handles an estimated volume of 150 to 200 tonnes of ginseng per year. Sun Ming Hong sells ginseng mostly through

the auctions in Hong Kong and relies heavily on buying and selling in large volumes. It is regarded by competitors to be a speculator in the ginseng business. Sun Ming Hong is owned by Clifford Chen and the buyers include David Law, Joe Sit, and Lawrence Chen.

Pao Fung Trading Ltd: This company handles a volume in excess of 110 tonnes per year. Pao Fung appears to concentrate more on selling through wholesale distributors than through the Hong Kong auctions. The company is a leading exporter of ginseng to China. Pao Fung Trading is associated with Hung Fung Tai in Hong Kong, Teck Choon Ginseng Hong Import & Export Sdn. Bhd. in Malaysia and is owned by Ho Man Hing. The nephew of Ho Man Hing, Chong Ho, buys ginseng for the company.

Hang Cheong Tai: This company handles an estimated volume of 110 to 130 tonnes per year. Hang Cheong Tai is part of a family business that includes Lee Yuen Fung in New York, Kiu Shun in Vancouver, and Wong Lee Ying Co. in Hong Kong. This group operates two auctions in Hong Kong and also wholesales ginseng to other wholesalers in Hong Kong, Taiwan, Singapore, Malaysia, Indonesia, and the Philippines. These companies are owned by Fok Chung Kit and his family.

Tat Tai Medicine & Drug: This company handles an estimated volume of 45 to 55 tonnes of ginseng per year. Tat Tai Medicine & Drug sells through the auction, wholesale, and retail levels and is a leading exporter to Singapore and Malaysia. The company is represented by Dennis Chan in Toronto and Tak Kong in New York.

Raymond Chao: Raymond Chao's business handles an estimated volume of 20 tonnes per year. This company has a retail outlet in San Francisco and sells wholesale to other Chinatown herb stores. Raymond Chao also exports ginseng to be auctioned in Hong Kong.

Eric Yang: Eric Yang handles an estimated volume of 20 tonnes per year and is associated with Tai Yau in Hong Kong.

Bert Chong: Bert Chong handles an estimated volume of 10 to 15 tonnes of North American ginseng per year. He owns Superior Trading Co. in

San Francisco which wholesales American and Oriental ginseng. Bert Chong also exports ginseng to be auctioned in Hong Kong.

Chester Chan: Chester Chan is new to the industry and is currently endeavouring to secure sources of supply. According to one of his competitors, Chester Chan is aggressively pursuing the market, offering slightly higher prices to buy ginseng in order to quickly develop a high profile among the growers.

Chin Lin: Chin Lin operates a wholesale and retail business in San Francisco's Chinatown and also exports ginseng to the auction in Hong Kong. He prefers to sell to the domestic Chinatown market as prices tend to be more stable than prices obtained through the Hong Kong auctions.

Garwin Enterprise Corporation: This company handles an estimated volume of 18 tonnes per year and is one of the major ginseng importers in Taiwan. Garwin Enterprise Corporation is represented by James Hsu.

As indicated above, the majority of importers/exporters sell at least some ginseng through the auctions in Hong Kong. The auctions are important not only in that they are a point of distribution for 30% to 40% of the volume exported into Hong Kong, but also because importers in Hong Kong use the prices of different grades of ginseng obtained at the auctions as guidelines to set wholesale prices and future purchase prices from growers. In Hong Kong, there are several companies that operate auctions, with the major ones being Sun Ming Hong, Hang Cheong Tai, Wong Lee Ying, and Tat Tai. These companies buy ginseng through their agents or through brokers in North America between September and January but will spread out the auctions throughout the year. The ginseng auction business is dominated by large diversified companies who are able to incur the associated carrying costs and absorb the price fluctuations of the market. The ginseng market is similar to the commodity markets in that importers have to speculate on the future price of ginseng and the level of risk is significant.

Before the roots arrive in Hong Kong, importers obtain import permits from the Department of Agriculture. Some companies like Hang Cheong Tai may grade the roots before auctioning them while most, like Sun Ming Hong will not. Roots to be sorted are taken to workshops where they are graded using a 10 point system. The best roots are graded 1 and the lowest quality roots are graded 10.

The ginseng compaines then plan on the appropriate time to hold an auction. The timing is based on an assessment of the market. If the market is soft, companies will hold off and wait for the market to strengthen. However, if the market remains soft, companies will cut their losses and sell their products. When an auction is held, a company has to estimate the stock position of the jobbers to decide on volume and grade of ginseng to sell. Invitations are then sent to the jobbers and the lots of ginseng to be auctioned will be assigned identification numbers. An agenda of auction will then be printed.

On arrival at the auction, each jobber will receive an agenda of the identification numbers of the lots of ginseng. A sample drum of ginseng from each lot will be presented for inspection. The roots from the sample drum will be dumped on rattan mattresses for the jobbers to inspect. Some jobbers may want to gather the roots on rattan travs for a closer examination. Jobbers will decide the price and write their bids on a piece of paper. These bids are gathered and opened in a separate room. If the highest bid is satisfactory, the jobber with that bid will be announced. However, the importer reserves the right not to sell to the highest bidder if the price is not satisfactory. When a bid is successful, the drums will be sealed right away. While waiting for the announcement of winning bids, jobbers will inspect other lots. This process will continue until all the lots have been examined.

When the auction is over, the jobbers will leave instructions on when the drums should be delivered. Actual delivery may be several months after purchase and importers would have to bear the carrying costs. When the drums are delivered, payments will generally be received within a few days, but occasionally up to 30 days. Some companies, like Sun Ming Hong may provide longer credit te-

Table 9. Volume and value of ginseng exports for major ginseng producting countries, 1983-1987

China 510 790 710 1,040 1,3 South Korea 432 536 484 673 7 United States 357 318 481 502 5 Japan 164 141 136 149 1 Canada 44 44 492 75 1 Total 1,507 1,829 1,903 2,439 2,7 Producer 1983 1984 1985 1986 1 China \$32,237 \$55,785 \$53,236 \$65,796 \$69, South Korea 66,528 67,814 56,838 79,430 89, United States 44,957 42,192 41,741 37,068 48, Japan 22,755 23,188 20,458 22,445 20, Canada* 4,865 5,616 8,255 5,666 9, Total \$17,1342 \$194,595 \$180,528 \$210,405 \$237,	Producer	Volume (tonnes)						
South Korea 432 536 484 673 7 United States 357 318 481 502 5 Japan 164 141 136 149 1 Canada 44 44 492 75 1 Value (Canadian \$000's) Value (Canadian \$000's) Producer 1983 1984 1985 1986 1 China \$ 32,237 \$ 55,785 \$ 53,236 \$ 65,796 \$ 69, South Korea 66,528 67,814 56,838 79,430 89, United States 44,957 42,192 41,741 37,068 48, Japan 22,755 23,188 20,458 22,445 20, Canada* 4,865 5,616 8,255 5,666 9, Total \$ 171,342 \$ 194,595 \$ 180,528 \$ 210,405 \$ 237,6 China \$ 62,76 \$ 70,55 \$ 81,79 \$ 70,48 <		1983	1984	1985	1986	1987		
United States 357 318 481 502 5 Japan 164 141 136 149 1 Canada 44 44 492 75 1 Total 1,507 1,829 1,903 2,439 2,3 Value (Canadian \$000's) Value (Canadian \$000's) Value (Canadian \$000's) Producer 1983 1984 1985 1986 1 China \$32,237 \$55.785 \$53,236 \$65,796 \$69, South Korea 66,528 67,814 56,838 79,430 89, United States 44,957 42,192 41,741 37,068 48, Japan 22,755 23,188 20,458 22,445 20, Canada* 4,865 5,616 8,255 5,666 9, Total \$171,342 \$194,595 \$180,528 \$210,405 \$237,600 China \$62,76	China	510	790	710	1,040	1,320		
Japan 164 141 136 149 1 Canada 44 44 492 75 1 Total 1,507 1,829 1,903 2,439 2,4 Value (Canadian \$000's) Value (Canadian \$000's) Value (Canadian \$000's) Producer 1983 1984 1985 1986 1 China \$ 32,237 \$ 55,785 \$ 53,236 \$ 65,796 \$ 69, South Korea 66,528 67,814 56,838 79,430 89, United States 44,957 42,192 41,741 37,068 48, Japan 222,755 23,188 20,458 22,445 20, Canada* 4,865 5,616 8,255 5,666 9, Total \$171,342 \$ 194,595 \$ 180,528 \$ 210,405 \$ 237, Producer 1983 1984 1985 1986 1 China \$ 62,76 <t< td=""><td>South Korea</td><td>432</td><td>536</td><td>484</td><td>673</td><td>739</td></t<>	South Korea	432	536	484	673	739		
Canada 44 44 92 75 1 Total 1,507 1,829 1,903 2,439 2,7 Value (Canadian \$000's) Value (Canadian \$000's) Value (Canadian \$000's) China \$32,237 \$55,785 \$53,236 \$65,796 \$69, South Korea 66,528 67,814 56,838 79,430 89, United States 44,957 42,192 41,741 37,068 48, Japan 22,755 23,188 20,458 22,445 20, Canada* 4,865 5,616 8,255 5,666 9, Total \$171,342 \$194,595 \$180,528 \$210,405 \$237, Average Price (\$ Canadian) **	United States	357	318	481	502	598		
Total 1,507 1,829 1,903 2,439 2,7 Value (Canadian \$000's) Producer 1983 1984 1985 1986 1 China \$32,237 \$55,785 \$53,236 \$65,796 \$69, \$69, \$69, \$69, \$69, \$69, \$69, \$69,	Japan	164	141	136	149	114		
Producer 1983 1984 1985 1986 1 China \$ 32,237 \$ 55,785 \$ 53,236 \$ 65,796 \$ 69, 869, 869, 800th Korea 66,528 67,814 56,838 79,430 89, 89, 89, 89, 89, 89, 89, 89, 89, 89,	Canada	44	44	92	75	100*		
Producer 1983 1984 1985 1986 1 China \$ 32,237 \$ 55.785 \$ 53,236 \$ 65,796 \$ 69, South Korea 66,528 67,814 56,838 79,430 89, United States 44,957 42,192 41,741 37,068 48, 48, 48, 48, 48, 48, 48, 48, 48, 48,	Total	1,507	1,829	1,903	2,439	2,871		
China \$ 32,237 \$ 55.785 \$ 53,236 \$ 65,796 \$ 69, South Korea 66,528 67,814 56,838 79,430 89, United States 44,957 42,192 41,741 37,068 48, 48, 48, 48, 48, 48, 48, 48, 49, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48		Value (Canadian \$000's)						
South Korea 66,528 67,814 56,838 79,430 89, United States 44,957 42,192 41,741 37,068 48, Japan 22,755 23,188 20,458 22,445 20, Canada* 4,865 5,616 8,255 5,666 9, Total \$171,342 \$194,595 \$180,528 \$210,405 \$237,60 Average Price (\$ Canadian) Producer 1983 1984 1985 1986 1 China \$62.76 \$70.55 \$81.79 \$70.48 \$58 South Korea 153.96 126.45 117.39 117.86 121 United States 125.93 132.68 86.78 73.84 81 Japan 137.61 164.18 150.13 150.53 176 Canada 110.57 127.64 89.73 75.54 96	Producer	1983	1984	1985	1986	1987		
United States 44,957 42,192 41,741 37,068 48, 48, Japan Lapan 22,755 23,188 20,458 22,445 20, Canada* 4,865 5,616 8,255 5,666 9, Section States Total \$171,342 \$194,595 \$180,528 \$210,405 \$237,400 Average Price (\$ Canadian) Canadian Average Price (\$ Canadian) Canadian 1983 1984 1985 1986 1 China \$62.76 \$70.55 \$81.79 \$70.48 \$58 South Korea 153.96 126.45 117.39 117.86 123 United States 125.93 132.68 86.78 73.84 81 Japan 137.61 164.18 150.13 150.53 176 Canada 110.57 127.64 89.73 75.54 96	China	\$ 32,237	\$ 55.785	\$ 53,236	\$ 65,796	\$ 69,993		
Japan 22,755 23,188 20,458 22,445 20, Canada* 4,865 5,616 8,255 5,666 9, Total \$ 171,342 \$ 194,595 \$ 180,528 \$ 210,405 \$ 237,400 Average Price (\$ Canadian) Producer 1983 1984 1985 1986 1 China \$ 62.76 \$ 70.55 \$ 81.79 \$ 70.48 \$ 58 South Korea 153.96 126.45 117.39 117.86 123 United States 125.93 132.68 86.78 73.84 81 Japan 137.61 164.18 150.13 150.53 176 Canada 110.57 127.64 89.73 75.54 96	South Korea	66,528	67,814	56,838	79,430	89,438		
Canada* 4,865 5,616 8,255 5,666 9, Total \$ 171,342 \$ 194,595 \$ 180,528 \$ 210,405 \$ 237,405 Average Price (\$ Canadian) Producer 1983 1984 1985 1986 1 China \$ 62,76 \$ 70,55 \$ 81,79 \$ 70,48 \$ 58 South Korea 153,96 126,45 117,39 117,86 123 United States 125,93 132,68 86,78 73,84 81 Japan 137,61 164,18 150,13 150,53 176 Canada 110,57 127,64 89,73 75,54 96	United States	44,957	42,192	41,741	37,068	48,599		
Total \$ 171,342 \$ 194,595 \$ 180,528 \$ 210,405 \$ 237,405 Average Price (\$ Canadian) Producer 1983 1984 1985 1986 1 China \$ 62,76 \$ 70,55 \$ 81,79 \$ 70,48 \$ 58 South Korea 153,96 126,45 117,39 117,86 121 United States 125,93 132,68 86,78 73,84 81 Japan 137,61 164,18 150,13 150,53 176 Canada 110,57 127,64 89,73 75,54 96	Japan	22,755	23,188	20,458	22,445	20,148		
Average Price (\$ Canadian) Producer 1983 1984 1985 1986 1 China \$ 62.76 \$ 70.55 \$ 81.79 \$ 70.48 \$ 58 South Korea 153.96 126.45 117.39 117.86 123 United States 125.93 132.68 86.78 73.84 81 Japan 137.61 164.18 150.13 150.53 176 Canada 110.57 127.64 89.73 75.54 96	Canada*	4,865	5,616	8,255	5,666	9,655		
Producer 1983 1984 1985 1986 1 China \$ 62.76 \$ 70.55 \$ 81.79 \$ 70.48 \$ 58 South Korea 153.96 126.45 117.39 117.86 121 United States 125.93 132.68 86.78 73.84 81 Japan 137.61 164.18 150.13 150.53 176 Canada 110.57 127.64 89.73 75.54 96	Total	\$ 171,342	\$ 194,595	\$ 180,528	\$ 210,405	\$ 237,833		
China \$ 62.76 \$ 70.55 \$ 81.79 \$ 70.48 \$ 58 South Korea 153.96 126.45 117.39 117.86 121 United States 125.93 132.68 86.78 73.84 81 Japan 137.61 164.18 150.13 150.53 176 Canada 110.57 127.64 89.73 75.54 96		Average Price (\$ Canadian)						
South Korea 153.96 126.45 117.39 117.86 123 United States 125.93 132.68 86.78 73.84 81 Japan 137.61 164.18 150.13 150.53 176 Canada 110.57 127.64 89.73 75.54 96	Producer	1983	1984	1985	1986	1987		
United States 125.93 132.68 86.78 73.84 81 Japan 137.61 164.18 150.13 150.53 176 Canada 110.57 127.64 89.73 75.54 96	China	\$ 62.76	\$ 70.55	\$ 81.79	\$ 70.48	\$ 58.98		
Japan 137.61 164.18 150.13 150.53 176 Canada 110.57 127.64 89.73 75.54 96	South Korea	153.96	126.45	117.39	117.86	121.04		
Canada 110.57 127.64 89.73 75.54 96	United States	125.93	132.68	86.78	73.84	81.27		
	Japan	137.61	164.18	150.13	150.53	176.56		
Total \$113.68 \$106.39 \$94.87 \$86.27 \$82	Canada	110.57	127.64	89.73	75.54	96.55		
	Total	\$ 113.68	\$ 106.39	\$ 94.87	\$ 86.27	\$ 82.84		

Source: Trade Statistics of Canada, U.S., Japan, South Korea, Malaysia, and Hong Kong.

rms to established customers.

Most of the jobbers who buy ginseng at the auctions are herb wholesalers and big retailers in Hong Kong. There may also be representatives from other countries including Taiwan, Malaysia, and Indonesia. A list of the leading importers/exporters from these countries is provided below:

Taiwan

Shin Liang Enterprise Co.

Ta Ying Trading Co.

Lung Shen Enterprise Co.

Garwin Enterprise Corp.

Malaysia

Yong Fong Thai Sdn. Bhd.

Chinese Patent Medicines & Medicated Liquours

Centre

Sinma Medical Products (M) Sdn. Bhd. Poon Keong Medical Hall

Teck Choon Ginseng Hong Import

Indonesia

Cahaya Harapan CV

Determinants of Price

Table 9 presents the the volume and value of exports for each of the major exporting nations over the past five years. As indicated, the aggregate volume of exports has increased from 1,507 tonnes in 1983 to 2,871 tonnes in 1987 equivalent to an average annual increase of 17.5%. Over this same period, the value of exports has only increased by an annual average of 8.5% resulting in a decrease in the average export price per kilogram from

^{*} estimate

\$113.68 in 1983 to \$82.84 in 1987. Some of the decline in average price can be attributed to the increased share of the world market held by China; the share of the export market held by China, which is the lowest cost producer of ginseng, has increased from 34% in 1983 to 46% in 1987.

The price obtained by exporters and in turn by growers for ginseng is determined by the interaction of numerous factors. These include:

1. Supply of Ginseng

The world price is related to the volume of ginseng available. As an illustration, over the past three years when the volume of ginseng exported from China increased from 710 tonnes in 1985 to 1,320 tonnes to 1,320 tonnes in 1987, the average price per kilogram declined from \$81.79 to \$58.98. It should be noted that increasing export volumes is not the sole reason for the decline in price; other reasons include a decline in the exchange rate caused by a foreign exchange crisis in China and a movement towards greater processing of products destined for the Japanese market.

2. Exchange Rates

Exchange rates have a major impact upon the prices paid to growers. As an illustration, the average price per kilogram of Japanese ginseng exports as expressed in Canadian dollars increased from \$137.61 in 1983 to \$176.56 per kilogram in 1987. However, because of the increased value of the yen, the price of ginseng exports as expressed in Japanese yen actually declined over this period from 29,342 yen in 1983 to 19,945 yen in 1987.

3. Actions of Major Importers/Exporters

The ginseng industry is highly concentrated and consequently does not operate as a truly competitive market. To illustrate the level of concentration, Hong Kong ginseng imports, expressed as a percentage of major producing countries' exports, have increased from 64.8% in 1983 to 68.7% in 1987. The five major Hong Kong importers and exporters, by controlling the majority of this trade, are able to significantly influence prices at all levels of distribution. The major importers and exporters exercise their influence by controlling the volume of ginseng in inventory, the flow of goods to market, and the timing of auctions. Dealers use auctions

prices and market intelligence such as the stock positions of competitors and jobbers to speculate on future prices. The information as well as instructions to buy at certain prices is passed on by the importers/exporters to their network of agents in North America. It should be noted that the ability of the importers/exporters to influence the price of unprocessed white ginseng, including North American in root form, as compared to red ginseng is more limited because of the shorter shelf-life of white ginseng.

The South Korean Office of the Monopoly also uses its position to significantly influence the price for its product. For example, the Monopoly limited red ginseng exports to 99 tonnes in 1984 when the price had declined to \$248.59. In 1985, when the price rebounded to \$275.98, exports increased to 170 tonnes.

4. Market Development Activities

The price of ginseng is also a function of the extent to which importers and exporters have been able to stimulate demand and further develop markets for the product. The average price of ginseng exported from China has been supported by the ability of Chinese distributors to importers/exporters have proved successful in expanding markets in China, Taiwan, and Japan.

5. Product Characteristics

Lastly, the characteristics of the roots are a major determinant of price. The salient characteristics include incidence of disease, age, size, shape, condition, and method of cultivation. The price of U.S. produced ginseng declined strongly in 1985 because of a high incidence of disease which lowered the value of four year-old roots and necessitated the early harvesting of many three year-old roots. In general, older and larger roots obtain a higher price as do roots shaped like a man. Wild ginseng commands a substantial premium over cultivated ginseng, and ginseng cultivated under natural shade (woods grown) commands a small premium over ginseng cultivated under artificial shade ginseng. Other factors such as use of pesticides and the timing of the harvest during the year do not appear to have a significant impact upon price at this time.