USDA Foreign Agricultural Service
GAIN Report
Global Agriculture Information Network
Template Version 2.09

Required Report - public distribution

Date: 11/30/2007

GAIN Report Number: CH7091

China, Peoples Republic of

Planting Seeds

Annual

2007

Approved by:
William Westman
AgBeijing

Prepared by:
Jorge Sanchez and Wu Xinping

Report Highlights:
In MY07/08, China's planting seed supply for its main crops, including grain, oilseeds (soybeans, rapeseed and peanut) and cotton is expected to be sufficient with high surplus of hybrid corn and rice varieties. Imports of seeds for vegetables, turf grass, fruit/melon, and sunflower are expected to continue growing in MY07/08. Domestic seed marketing continues to be fragmented albeit the on-going reform and consolidations. The restrictive policy on seed trade, gentically engineered (GE) seeds, and foreign investment in the seed industry remains in place.

Includes PSD Changes: No
Includes Trade Matrix: Yes
Annual Report
Beijing [CH1]
[CH]

Table of Contents

Executive Summary

China's planting seed supply for its main crops, including grain, oilseeds (soybeans, rapeseed and peanut), and cotton in MY07/08 is expected to be sufficient with high surplus for hybrid corn and rice varieties. Imports of seeds for vegetables, turf grass, fruit/melon and sunflower are expected to continue growing in MY07/08. The constant increase in the turf grass imports is mainly driven by beautification programs in urban areas. Increasing imports of sunflower seed (for oil) indicate a diversified vegetable oil demand, while strong imports of vegetable, and fruit/melon seeds reflect increased domestic demand and strong export-oriented seed production. Exports of vegetable and hybrid rice seeds are also anticipated to increase in MY07/08. Domestic seed marketing continues to be fragmented notwithstanding ongoing consolidation in the most sectors of the seeds industry. It appears that the awareness for protection of new plant varieties was enhanced in the past two years, the enforcement of relevant laws and regulations, however, continues to be challenging to the relevant government agencies. Restrictive policies on seed trade, GOM seeds and foreign investment in the seed industry remain in place.

Production

General situation

China continues to be one of the world's largest seed producer: self-sufficient in planting seeds for its main crops, including grain, major oilseeds, and cotton. This trend is likely to continue throughout MY07/08 and well after. Although official seed production statistics are not available, industry sources estimate annual seed use at 12.5 MMT with total seed sales for MY06/07 grossing over $2.9 billion. Additionally, an official media source reported that, the total annual commercial seed production is estimated at more than 8.5 MMT, seed-processing capacity is estimated at 6.5 MMT of which more than 1.9 MMT were treated seeds. China is home to 815 advanced seed processing lines in operation. With a total of 56 state-level seed warehouses, the seed storage capacity stands at 4.3 MMT.

Seed self-sufficiency rates for rice, corn, wheat and soybeans are 100 percent, with cotton seeds at 85 percent (the rest are likely met by joint ventures in China) and vegetable and fruit/melon seeds at 95 percent. The traditional practice of farmer-saved seeds for major crops is declining. According to China's Ministry of Agriculture (MOA), in MY06/07, high quality seed varieties covered 95 percent of the market, and accounted for more than 36 percent of China's total agriculture production growth. China's low labor cost enables it to produce hybrid seeds for overseas markets at lower costs compared to other countries. In fact, China's seed exports for July 2006 to June 2007 marketing year (MY06/07) increased by 18 percent in value over MY05/06, with vegetable, rice and fruit/melon seed and hybrid rice leading the pack. Seed imports for MY06/07 also hit a record high of $122 million in value, up by 15 percent over the previous year. The import varieties mainly include vegetable, turf and forage and sunflower seeds.

Seed production and supply expected to be stable for MY07/08

Maintaining a stable supply of high quality seeds for major grain crops is a stated priority for China's relevant agencies. According to MOA, seed production for all major crops in MY06/07 met domestic demands with surplus for corn. Additionally, high quality seed varieties coverage exceeded 96 percent of the planted area. The latest MOA information showed that corn and rice seeds production for MY07/08 are expected to exceed demand due to better yields and overall improvements in quality as compared to the previous year. In an effort to improve seed production, in 2007, two more hybrid rice bases were constructed in Sichuan Province and two new hybrid corn bases were built in Gansu Province, respectively, with financial support of $2.5 million from MOA. Another 14 conventional grain seed producing bases in major grain provinces were constructed with MOA support of $1.25 million per base.

MOA conducts a quality sample survey for grain crop seeds each year. The results from the latest survey conducted in December of 2006 showed that seeds that met the national quality standard were 93 percent for hybrid corn and 100 percent for hybrid rice. This is a remarkable improvement compared to 86 and 95 percent, respectively for the previous year. Most notably, the "purity" and "germination percentage attributes" improved significantly. The survey collected 247 corn samples from 146 seed companies and 144 hybrid rice samples from 87 seed companies nationwide. Based on the survey results, however, one seed enterprise had its business license revoked because the seed quality could not meet the standards in the last two consecutive years, and three other enterprises were warned and are currently under strict supervision due to failure to provide samplings.

Rice--Rice seed supply for MY07/08 is expected to reach 320,000 MT with surplus estimated at 80,000 to 100,000 MT. The excessive supply is attributable to good harvest as well as high carry-in stocks in MY06/07. Prices are expected to remain stable. According to MOA, the 2007 breeding area for hybrid rice is 80,000 hectares (Ha), down from the 100,000 Ha in the previous years. Total production is estimated at over 220,000 MT, despite flood and drought conditions in some of the producing provinces. Hybrid rice seed breeding is conducted mainly in Hainan, Hunan, and Sichuan provinces. According to China's Ministry of Science and Technology (MOST), hybrid rice's planted area for 2007 is estimated at 1.6MHa, slightly expanded from the previous year and accounting for 55 percent of China's total rice area, as compared to the 51 percent in 2006.

Corn—Hybrid corn seed supply for MY07/08 is forecast to be 1.7MMT, outweighing the domestic demand with an estimated surplus of 600,000 MT. Prices are expected to be unaffected. According to MOA, the 2007 hybrid corn seed area is estimated at 230,000 Ha with production at 1MMT. Together with the 700,000 MT of carry-in stocks, total supply will likely reach 1.7 MMT during MY07/08. Higher production reflects increasing competition in the corn seed sector. Despite the surplus, MOA officials maintain that the market situation will remain stable because the leading seed companies' sales will likely increase due to strong demand for major varieties. Hybrid corn varieties dominate seed corn use. China's largest hybrid corn-breeding facility is located in Gansu Province, accounting for more than half of China's total production.

Wheat--The majority of wheat seeds are conventional varieties, most of which are produced in China's northern provinces. Industry sources reported that the high quality and specialized wheat varieties continued increasing, accounting for 61 percent of the planted area in 2007.

Cotton – Cotton seed breeding is increasingly industrialized and commercialized. Based on survey results of the China Cotton Research Institute, 68 percent of cotton farmers purchased seeds in 2006, up 5 percent over the previous year. Planted varieties increased to 456 in 2006, however, of which only 53 varieties' area coverage reached 0.5 percent or above with the highest at merely 6 percent. Although the number of new varieties surged, yields did not increase. In 2007, the planted area for biotech (BT) varieties is estimated at more than 3.6 MHa, out of the total 5.5 MHa of planted area. In the Yellow River region, BT varieties coverage reached 100 percent. Some industry sources estimate that the market share for domestic BT cotton varieties for 2006 continued to dominate at 75 percent although no official data is available. Some Chinese sources claim that Chinese-produced BT cotton varieties are more suitable and tailored to the local environment and lower in price compared to imported varieties.

Other crops—Production of planting seeds for oilseeds including soybeans and rapeseed are expected to increase slightly in MY07/08 based on the decrease of soy bean planted area and

available seed stock in MY06/07. The demand for soybean and rapeseed planting seeds are expected to increase for MY07/08 because of the relatively higher profit received by farmers in 2007. Several conventional "high oil content" soybean varieties are being planted in China's four northeastern provinces. The "double low" (low erucic acid and glucosinolate content) rapeseed varieties account for over 70 percent of the planted area. In September 2006, the Oilseeds Research Institute of China's Academy of Agricultural Science (CAAS) reported that it had developed a new rapeseed variety with about 55 percent oil content. The Institute will be promoting rapeseed production in South and Central China for biofuel use, although the use of rapeseed for biofuel appears unlikely in the short term because of the strong domestic demand for edible vegetable oil.

It is expected that imports of sunflower planting seeds will remain strong in MY07/08 due to the high demand for better varieties for oils and snacks. Vegetable and fruit/melon seeds are produced throughout China, which enables them to be bred and marketed to suit local preferences and requirements. However, imports of seeds of various vegetables and fruit/melon are also expected to continue growing to meet the diversified demands of consumers. Export-oriented vegetable seed production is concentrated in the eastern China provinces, mainly Shandong. Seed breeding is being outsourced to China by foreign companies mainly from Japan, EU and US because of the relatively cheaper production cost.

Seed industry reform and consolidation continues

Seed production and marketing continues to be fragmented, but the trend for restructuring the sector is quickly accelerating. On May 19, 2006, China's State Council issued GuoFaBan (2006) No. 40 decree on "Recommendations on Expediting Seed Management Reform and Strengthening Marketing Supervision". The Decree stipulates that the "Complete Segregation of all Seed Trading Entities from the Agricultural Administrative Agencies" should be completed before the end of June 2007, as traditionally most seed trade are entities affiliated with the agriculture bureaus (more background provided in CH6104). On July 10, 2007, MOA issued Decree NongFa No.7 on "Review and Acceptance Measures of Seed Trade Entity's Reform" mainly focusing on the "Complete Segregation." Upon the pubilication of this Decree, MOA's "Review and Acceptance" teams began touring nationwide. The above mentioned "Complete Segregation" results are not yet available. Industry sources indicated that they expected the "Complete Segregation" to facilitate consolidation of the industry.

The fragmented seed market originates from China's old planned economy, which created a model of segregated research/development, breeding, and marketing. Better integration of variety research and development, seed breeding, and the distribution chain remains a goal for policy makers, industry associations, and research institutes. Although there has been some consolidation in the industry in recent years, it may take years before flagship enterprises replace the thousands of small players. Industry contacts estimate that the total number of "seed companies" is declining due to the restructuring of the industry. In November of 2006, MOA released the second listing of the 50 largest seed-producing enterprises based on their comprehensive strength and sales value in the past two years. Industry sources, however, reported that the largest annual seed sales value among the top-50 seed enterprises is still below $ 100 million for MY05/06. One MOA official reported that the market share of the "50 largest" increased to 30 percent in MY04/05, from 15 percent in MY00/01, hinting to a consolidation trend within the industry, albeit at a rather slow pace. A few of these companies have established comprehensive variety development, seed breeding, and marketing systems. Few, however, have their own research and development facilities. Some of these companies only engage in seed sales. The traditional seed breeding and distribution model still prevails. Developers are mostly state or provincial sponsored agricultural research institutes and universities, while seed companies are responsible for breeding and marketing seeds to farmers. It is worth noting that researchers and developers are increasingly involved in seed breeding and marketing through established

breeding enterprises. Some new seed companies also have set up independent research facilities, which enable them to develop their own new varieties and retain intellectual property rights.

In most cases, breeding enterprises may opt to purchase the new varieties directly from the developer. According to MOA, several seed companies purchased new crop varieties from agricultural research academies in the 3rd Agriculture New Varieties Show held in May 2007. Another serious problem is that there are too many varieties for each crop in the market (in particular for corn, rice, and cotton), while few of them show significant genetic advantage, therefore, the coverage of each variety is usually limited. This increases the difficulty and complexity in quality supervision and marketing of new varieties.

Agricultural Planted Area and Yields

Total sown area for all crops is generally stable at more than 150 million hectares. Grains and oilseeds take up the largest share, but the planted area for vegetable and other horticultural products is increasing. Multiple cropping, although declining, generates enormous year-round seed demand. It is estimated that the 2007 sown area for grain crops increased by 1 MHa relative to that for 2006 mainly due to government's efforts to increase the national grain production. Additionally, a decline in soybeans and rapeseed production, due to lower profit received by farmers in the previous season, also contributed to an increase in grain seed in China. Total sown area for all crops is unlikely to fluctuate dramatically because of the limited availability of arable land per capita. However, the planted area designated for individual crops may vary slightly from year to year in response to the market situation.

Agricultural Crop Sown Area in Million Hectares

Year/ Crop	Rice	Wheat	Corn	Soybeans	Cotton	Rapeseed	Tubers	Peanut	Vege-tables	Sun-flower
2002	28.2	23.9	24.6	9.6	4.2	8.5	9.9	5	17.4	NA
2003	26.5	22	24	9.5	5.1	8	9.7	5.4	18	1.2
2004	28.4	21.6	25.4	9.6	5.7	7.3	9.5	4.7	18.5	0.9
2005	28.8	22.8	26.4	9.6	5.1	7.3	9.5	4.7	17.7	1
2006	29.3	23	27	9.3	5.4	6.9	9.5	4.6	18.2	1
*2007	29.3	23	27.5	8.6	5.5	6.5	9.5	4.6	18.2	1
Source: State Statistics Bureau. *Estimates by USDA/FAS/China.										

Crop yields remain stable, despite new hybrids and innovations in the planting seed sector. Some experts suggest that as more farmers migrate to cities, the reduction of in-farm labor, coupled with inadequate rotation will inhibit genetic improvements and ultimately output. Still, China's cotton yield remains high and is likely to increase further along with the adoption of biotechnology. If the government is to achieve its concurrent goals of food self-reliance and rural development, then it must encourage development and planting of new high-yielding varieties that require fewer inputs.

Agricultural Crop Yields in Metric Ton per Hectare

Year/Crop	Rice	Wheat	Corn	Soybeans	Cotton	Rapeseed	Peanut
2002	6.2	3.8	4.9	1.7	1.2	1.5	3
2003	6.1	3.9	4.8	1.6	1	1.6	2.9
2004	6.3	4.3	5.1	1.8	1.1	1.8	3
2005	6.3	4.3	5.3	1.7	1.1	1.6	3
2006	6.2	4.55	5.4	1.7	1.25	1.8	3.2
*2007	6.2	4.6	5.4	1.6	1.25	1.7	3.2
Source: State Statistics Bureau. *Estimates by USDA and FAS/China.							

Trade

Seed imports are expected to increase in MY07/08

China's seed imports for MY07/08 are forecast to increase from the previous year. Imports of vegetable seeds and grass seeds are also forecast to grow. Seed import value for MY06/07 stood at $122 million, up 15 percent over MY05/06. Vegetable, grass/forage, and sunflower seeds continued to be the three largest categories, accounted for 43, 30, and 13 percent of the total value of seed imports, respectively. Increased grass/forage and sunflower seeds, vegetables seed, and sugar beet imports mainly supported the MY06/07 import growth. Industry sources explained that the government's financial support for the "Grain for Green[1]" program was highlighted in the 11th five-year period (2006-2010). In 2006, the Chinese government appropriated $125 million in grassland restoration in western provinces. Another $125 million was appropriated to reduce desertification in the northern area of Beijing and Tianjin. Some of these funds were used to purchase grass/forage seeds. In the longer term, most industry sources expect grass seed imports to increase because of pastureland restoration projects in the western provinces and landscaping in China's burgeoning cities continues. Increased vegetable seed imports reflect a more diversified demand for varieties by the consumers with increased disposable incomes. The trend is also driven by strong growth of vegetable product exports. According to MOA, as compared with the same period in the previous year, export of vegetable products in the first three quarters increased by 11 percent in volume and 15 percent in value, respectively. Japan, distantly followed by the United States, is the major destination for Chinese vegetable products. Thus, many industry experts believe vegetable seed imports will continue growing in next few years, especially the most popular varieties of onions, asparagus, squash, egg plant, and tomato. Meanwhile, the rapid growth of China's dairy and livestock sector (CH6074 and CH6100) is driving the demand for high quality forage seeds.

In MY07/08, seed imports from the United States are forecast to increase mainly because of the strong demand for grass and sunflower planting seeds. MY06/07 imports from the United States grew dramatically to $50.6 million in value, up 41 percent from the previous year. Most of this increase is attributed to increased vegetable, grass, and sunflower seed imports. According to industry sources, the growth in sunflower seed imports will continue in MY07/08, however, the growth rate is likely to level off in the next 2 to 3 years. Sunflower seed demand has grown because it can be used in almost any terrain and rising prices in soybeans and vegetable oils will increase demand for sunflower oil. Japan continued to be the largest supplier of vegetable seeds to China with a total export value of $15.6 million in MY06/07, up from $14 million in MY05/06, although Thailand has ranked as the highest in export volume to China for the past three years.

Demand for turf seeds and nursery seedlings remains strong

Imports of grass seeds for MY07/08 are expected to continue growing due to large scale beautification projects in cities and other public areas including green spaces for the massive residential construction projects, highways, and parks/golf courses. The allocation of government funds for grassland restoration in western provinces will also drive turf grass seed imports. MY06/07 imports of grass and forage seeds valued at $37 million, up from the $32 million for MY05/06. Planting of grass and nursery products in parks, zoos, and on roadsides has also grown sizably (see the following table). Although official data is not available, the sod demand remains strong by numerous new living quarters in cities mostly built with open green spaces and even sports facilities. Industry sources report China's total number of golf courses is estimated at more than 300 and expected to increase in the next few years. The long-term outlook for urban beautification/green space design includes planting more trees, shrubs, and grass, not only the largest metropolitan areas like Beijing,

[1] A program that pays farmers to plant trees or grasses instead of row crops.

Shanghai, Guangzhou, Qingdao and in Dalian, but also in central and western China. Based on the State Forestry Administration's (SFA) 11th Five-Year (2006-2010) Forestry Plan, China's cities' urban green space will reach 8 square meters per urban dweller by 2010, from the present 6.5.

Urban Green Space	2000	2003	2004	2005	2006*
Public Green Areas (10,000 Ha)**	86.5	121.2	132.2	146.8	132.1
Area of Parks and Zoos (10,000 Ha)	8.2	11.3	13.4	15.8	20.8
Number of Parks and Zoos (unit)	4455	5832	6427	7077	6908
*Source: NSB 2005 Yearbook Table 11-12; **before 2005 defined by NSB as "area of urban garden and green areas"					

The future of urban beautification landscaping and the nursery sector remains bright as Chinese cities clamor to host international events, e.g., the Beijing Olympics, the 2010 World Expo in Shanghai, and other events that draw international visitors and businesses. Additionally, many cities are spending more money on urban landscaping especially lawns. Constraints to expanding domestic floriculture and sod farms include inadequate water supply, rising water costs, poor soils, and competition with food crops (less marginal land planted with grass and nursery products). Nursery vendors remain optimistic at the growing interest in importing grass seed for direct planting and for sod, shrubs, and tree seedlings.

Nationwide Horticultural Planting Area (Ha)

	2000	2003	2004	2005	2006
Cut Flowers, Vines, and Potpourri	10,750	28,842	35,138	38,853	41603
Potted Plants	18,841	46,626	78,529	60,007	72799
Ornamental Trees	65,588	233,111	356,011	415,035	401639
Food and Medicinal Flowers	14,801	51,325	84,382	182,589	85325
Industrial Flowers	29,479	28,314	39,648	60,339	66473
Grass Sod	11,120	26,083	23,757	28,341	31025
Flower Seed	1,819	2,463	4,149	6,015	5061
Young Plants/Seedlings	2,824	9,415	10,705	14,391	14806
Flower Bulbs	1,281	3,936	3,685	4,609	3404
Source: Ministry of Agriculture Statistical Abstract					

Seed exports are expected to rise in MY07/08

Seed exports are forecast to continue growing in MY07/08 due mainly to China's low cost structure for seed breeding operations. Total seed exports for MY06/07 rose rapidly to $88.3 million from the $75.1 million for MY05/06. Vegetable, rice, and fruit/melon seed export values continue to rank the highest, accounting for 46, 22, and 10 percent, respectively. Hybrid rice seed exports, mainly to Vietnam and Bangladesh, remain unchanged. Industry contacts reported that hybrid rice seed exports to other Asian countries are likely to increase steadily in the foreseeable future due to China's technical advantages and the successful adaptability of China's hybrid rice to climate and the local environment. Vegetable seed exports also increased to $40 million from $37.8 million in MY05/06.

In MY06/07, the United States, Korea and the Netherlands were the three largest export markets for China's vegetable seeds in value. Korea, however, ranked first in volume. The value of vegetable seed exports to the United States reached $12.4 million from the $11.6 million for MY05/06. Strong exports reflect China's price advantage in seed breeding whether these are imported (for re-export) or new domestic varieties. According to MOA, contracted seed breeding by foreign seed trade companies is increasing along with the improved implementation of regulations on the "Protection of New Plant Varieties".

Marketing Entry and Promotion

China's onerous investment, import, and marketing laws and regulations for the planting seed sector remain unchanged. The country's policy on foreign investment in the seed sector (CH2012 and CH7048) still prevents any investment by foreign enterprises in genetically engineered planting seed sector, while investment for "main crop" varieties is limited to a minority share. Many foreign seed companies, however, have established representative offices in China. They normally work with a few importers, but establish vast networks and relationships with seed wholesalers and vendors in regions or markets with the best potential. When introducing new varieties to China, companies usually demonstrate seed quality in trial plots before they decide which varieties to market to farmers. Demonstration trials are the best way to showcase farmers the advantages of newly developed varieties. This is commonly done by domestic seed enterprises. Local officials/experts and farmers are usually invited and briefed, especially during harvest season. It is also effective to provide free seeds to farmers or farmer cooperatives for trial planting. For instance, seed traders in China's western provinces introduced several sunflower varieties from the United States and other countries for trial planting before they decided to select the varieties for import. In general, farmers purchase seeds from local county or village level seed stations. Seed vendors mainly promote the seeds that have the highest profit margins; therefore, it is important to note that price is an important concern when selling seeds to small-scale household farmers.

In recent years farmer cooperatives have facilitated the dissemination and trade of BT cotton seeds. A newly adopted legislation passed by the National People's Congress is expected to benefit farmer cooperatives on production and marketing. Cooperatives will also help farmers become more self-sufficient and market-oriented.

Trade shows are another way to expose farmers to new varieties. For example, China's National Agriculture Technology Extension Center/MOA and China Seed Association sponsor an annual national seed fair with support from the leading (mainly domestic) seed companies. The fair principally focuses on main crops but also includes vegetable and fruit seeds/varieties. The 2007 fair was held in Hefei, Anhui Province, in October. Over two thousand seed-related entities participated with more than 400 including thirty overseas entities from the United States, Demark, Israel, Korea and Japan exhibited products in the fair. Many regional (one or several provinces) or specialized (such as vegetable or oilseeds seed fairs) are held regularly such as "Seed Fairs" held in Guangzhou, Wuhan, Hefei, Beijing, Yangling and Harbin etc. There are also several new variety transfer fairs held regularly, which provide a platform for variety developers and seed companies to trade. The 3rd China New Plant Variety Show and Transfer Fair was held in Jiangsu Province in May 2007. The MOA sponsored event included 15 entities that were granted new plant varieties certificates. More information on the fair is available at: http://www.aweb.com.cn/, http://www.agri.gov.cn/ and http://www.seedchina.com.cn/

The 21st International Grassland Congress and the 8th International Rangeland Congress will be held in Hohhot, Inner Mongolia, China from June 29 to July5, 2008. The congress is expected to provide a platform for scientists and industry leaders on preservation and utilization of grassland and rangeland. For more information, please see: http://igc-irc2008.org/index.htm and link.

Policy Issues

No new amendments to China's Seed Law

In August 2004, China published changes to Articles 17 and 33 of its Seed Law (GAIN CH4063 and CH0031). The Seed Law Implementation Measures (CH1052) and the Interim

Articles from Crop Seed (seedling) Import and Export (CH4060) were not affected. Nevertheless, MOA said some problems surfaced along with the rapid development of the seed sector. Industry sources said the problems focus on "new variety approval structure", "market access mechanism" and "market management system". In response to some questions raised by the industry, on January 26, 2006, MOA issued a circular clarifying the definition and coverage of some articles of the Seed Law. There have been no reports on additional amendments to the Seed Law thereafter.

Industry sources report there is no significant improvement on the enforcement of the Seed Law and relevant rules and regulations. Official statistics are not available on IPR infringement and counterfeit cases for MY06/07. Industry sources reported that the low threshold for new variety review and approval provoked IPR infringement. Along with the increased applications for new varieties, more "new varieties" share similar characters and traits. According to MOA, as of the end of September 30, 2007, the total approved corn and rice varieties reached 537 and 456, respectively.

The Administrative Measures for Grass Seeds (CH6008) published by MOA took effect on March 1, 2006, but was not notified to the World Trade Organization (WTO). Post contacted the relevant Chinese authorities and requested that they comply with the WTO SPS notification requirements by notifying this decree. Incidentally, Post has received no complaints since the implementation of the Decree.

Labeling – China's National Standard "General Directive for Labeling of Agricultural Seeds" took effect on November 1, 2006. In general, the standard was a combination of the existing rules and regulations. As of this report, there have been no complaints by seed traders on the enforcement of the standard.

Agricultural commodity import regulations remain in place

China's Animal and Plant Quarantine Law (CH1051), its Implementation Regulations (CH3110), the Administrative Measures (CH2039), and the "items on Handling Review and Approval of Entry Animal and Plant Quarantine" (CH4020) establish procedures for importers wishing to purchase propagating material, including seed. Essentially, importers must apply for a Quarantine Import Permit (QIP) before signing any contract. Only with a QIP (valid for six months), is it permissible to sign a contract to import seeds.

Planting seed phytosanitary and licensing restrictions

Corn and soybean seeds imports from certain countries including the United States are still prohibited because of quarantine restrictions on "Stewart's Wilt" and "Phytophthera Megasperma". (Additionally, China has not yet approved any GE corn and soybean varieties for environmental release). As for other planting seeds, both the requirements for "main crops" variety approval, as well as licensing requirements for seed production and marketing, place arbitrary restrictions on the seed trade.

Industry sources indicate importers of certain seeds have been asked to submit an annual import plan to MOA and China's State Forestry Administration (SFA). A fee ranging from 0.5 to one percent of the import contract value is collected by the relevant government agencies. The statutory basis for this requirement, however, is unclear. Government offices reportedly use the information when deciding how to award VAT-free import approvals.

Exporters of U.S. planting seeds should contact the USDA Foreign Agriculture Service Planting Seeds Group (www.fas.usda.gov/cots/seeds.html), APHIS officers (www.aphis.usda.gov/is/tst/RegionThree.html), and the American Seed Trade Association (www.amseed.com/) and the Oregon Seed Council

(forages.oregonstate.edu/organizations/seed) to understand the process and regulations for planting seed exports to China. Exporters should be aware, however, that final import approval of any product is subject to the importing country's rules and regulations as interpreted by border officials at the time of product entry. Therefore, it is particularly valuable to ensure that importers are familiar not only with published rules but also the customary practices.

Seed tariffs and the value added tax (VAT)

China has tariff-rate quotas for seed wheat, rice, corn, and a few other non-grain commodities[1]. In-quota wheat, corn, and rice seed are subject to a 1 percent tariff, while all other planting seeds enter tariff-free. Out-of-quota tariffs for seed corn are 20 percent, while out-of-quota tariffs for wheat and rice are 65 percent (See CH6036).

The VAT-free policy on seed imports took effect in 2006, and will remain in place during China's "11th Five-Year Plan" (2006-2010) period. The VAT exemption procedure, however, lacks transparency and efficiency. Industry sources report that, in the current VAT-free regime, within each year of the plan, usually during April or May, the relevant government offices send circulars or other internal notices to customs officials confirming what products and companies have VAT-free status. There are also tedious procedures for a company to be registered in the importation of seeds. This confusing system leads to an unstable market because importers and the companies they represent cannot book seeds for shipment from the beginning of the year to the time the Customs Offices are notified by the above-mentioned VAT Exemption Circular/Notice.

Plant variety protection (PVP) background and development

China became the 141st member of International Plant Protection Commission (IPPC) on October 20, 2005. The official liaison office is affiliated with MOA. China has legally recognized the 1978 version of the International Convention for the Protection of New Varieties of Plants (UPOV) effective since October 1, 1997 (CH7023). MOA and SFA are responsible for reviewing PVP applications. China's UPOV membership obligates China to honor, sui generis, the breeders' rights for registered and approved novel, distinct, uniform and stable (DUS) seeds.

Government Offices Responsible for PVP Applications and Development	
Ministry of Agriculture PVP Office	State Forestry Administration's PVP Office
No. 11 Nongzhanguannanli	No. 18 Hepingli Dong Jie
Chaoyang District	Chaoyang District
Beijing, China 100026	Beijing, China 100714
Tel: 86-10 64193029/65927554	Tel: 86-10 84238883
Fax: 86-10 64194661 E-mail:chenhong@agri.gov.cn	Fax: 86-10 64213084 E-mail:webmaster@cnpvp.net
Web: www.cnpvp.cn	Web: www.cnpvp.net
Web2: www.stee.agri.gov.cn	

MOA reports that from the time it began accepting applications in 1999 through September 30, 2007, the PVP office received 4,367 applications for new PVP. At present, 1,303 applications have been completely reviewed and approved. The greatest number of applications and approvals are for major field crops including corn, rice, wheat, soybeans,

[1] This is allowed under China's WTO accession agreement.

and rapeseed in this order. The number of applications for corn, rice and wheat, as the top three, accounted for roughly 38, 32, and 10 percent, respectively. Interestingly, only a few applications for turf grass have been accepted: two for Rumex L and one for alfalfa. The total approved corn and rice varieties reached 993, accounting for 76 percent of the total approved plant varieties. Total applications for 2006 (as of September 30) are slightly lower than the same period in 2006. Agricultural research institutes and universities/colleges filed 58 percent of the applications as compared to the 38 percent by domestic seed enterprises and individuals. Additionally, 20 out of the 168 foreign applications received for new PVP were reviewed and approved. As of the end of October 2007, SFA also received about 480 applications, including 126 by foreign enterprises. As of the end of June 2007, a total of 140 applications had been reviewed and approved.

At present, there is one MOA distinctiveness, uniformity, and stability (DUS) testing center, 14 DUS sub-centers, and 21 SFA testing agencies around the country. According to MOA and SFA, more new testing laboratories will be established in the "11th Five-Year" period. To ensure scientific and authoritative determination of plant variety rights, China formulated guidelines for testing 80 new varieties of plants, including corn, rice, poplar and peony, of which 18 have been promulgated and implemented as the "national or industrial standards".

On January 18, 2006, the National Technical Committee for New Plant Variety Testing Standardization was established. The committee, affiliated to MOA but including experts from SFA and Ministry of Science and Technology (MOST), is aimed to lend technical support for PVP management practices.

On September 19, 2007, MOA published "Implementing Rules for the Regulations on Protection of New Plant Varieties/Agriculture Part" and the Rules will take effect beginning January 1, 2008. The Implementation Rules for the Regulations on the Protection of New Plant Varieties of the People's Republic of China (Agriculture Part) promulgated on June 16, 1996 will be simultaneously annulled. An unofficial translation of these Rules as a GAIN report will be published shortly. The trade impact of these rules is still not clear.

Intellectual property rights (IPR) issues for planting seed enterprises

Despite the implementation and enforcement of IPR laws and regulations, IPR infringement and counterfeit cases occur frequently. According to MOA, cumulatively IPR infringement and counterfeit cases reached 299 and 564 as of the end of 2004, respectively. Though no official statistics are available for MY06/07, industry sources said the situation had seen slight improvement in the past two years. It is increasingly popular for seed traders to purchase new varieties directly from the developers including research institutes and universities. China's Industry sources report that trademark or copyright registration will facilitate marketing and IPR protection.

Seeds sold in counterfeit packages identical to legitimate brand names are the most frequent problem for seed companies. Other IPR crimes include theft of seed/germplasm from production fields or facilities that are then bred and marketed by other companies. Seed companies also report demands for restitution for "inferior quality" seeds sold by counterfeiters.

GAIN report CH2049 provides information on how to access UNOFFICIAL English translations of China's Copyright Law, Trademark Law, and Patent Law along with the Implementation Regulations or Enforcement Measures for each of the aforementioned.

Biotechnology and planting seeds

China has a strong biotech research program and has committed $500 million in investment monies during the 11th Five-Year Plan (2006-2010). China has commercialized four GE plants since 1997, including cotton, tomatoes, sweet peppers, and petunias. Although there are no official statistics, some experts reported the development of over 100 transgenic crops with about 60 already in field trials, including rice, corn, wheat, soybeans, and peanut. Although biotech (BT) cotton has been widely planted, China has yet to approve any major food crop for environmental release. MOA has approved four GE cotton varieties for import and planting, and one GE soybean, seven GE canolas and nine GE corn varieties for import as processing material. MOA is drafting 51 transgenic crop testing and safety evaluation standards in anticipation of increased transgenic crop development. MOA also requires authorized domestic institutions to conduct environmental safety (field trials) and food safety (animal feeding) tests to verify data provided by the seed developer.

Transgenic crops and seeds need to be approved by the National Biosafety Committee (NBC) after environmental and food safety evaluations by MOA and government affiliated institutes. Once granted MOA safety approval, transgenic seeds must then undergo examination for distinctness, uniformity, and stability (DUS) by PVP examiners. China's PVP office drafted new DUS testing guidelines for corn and rice, thereby lending speculation that if transgenic corn and rice events receive safety approval, the process for PVP testing for those seeds can move forward quickly and transparently.

The approval process so far has proved cumbersome and lack transparency. China's biotechnology regulations require foreign introduced transgenic events to first receive approval abroad and then undergo subsequent evaluation in China. This is a painstaking process not only for commercial shipments containing transgenic commodities, but also for the adoption of future transgenic seeds in countries that export to China. The barriers include requirements 1) that product must be fully approved in the originating country before the application can be submitted for approval in China; 2) unprecedented testing for products already approved in other countries, a requirement that foreign seed developers provide viable seeds for developing detection methods; 3) the lack of specific regulatory guidelines to approve stacked events; 4) and holding only two windows a year for acceptance of applications.

Many scientists and economists recognize the potential benefits of commercializing transgenic planting seeds. Analysts point out that not only will state-sponsored research institutes benefit from licensing technology to seed companies, but farmers would also benefit from lower direct and indirect costs, increased yields, and lower pesticide applications. Official studies demonstrate both the economy and the environmental benefits, including the elimination of hundreds of accidental pesticide poisonings.

Trade Tables

Table 1 China's Imports from the World in Volume & Value

	MY(Jul-Jun)	Volume (KG)			Value (US$)		
HS Code	Planting Seeds	**MY04/05**	**MY05/06**	**MY06/07**	**MY04/05**	**MY05/06**	**MY06/07**
	Total	21,398,960	24,587,807		77,508,210	106,100,000	122,378,000
10019010	Wheat	1	0	0	1	0	0
10020010	Rye		0	0	0	0	0
10030010	Barley		0	0	0	0	0
10040010	Oats	49	0	0	438	0	0
100510	Corn	76,267	71,910	97,732	594,049	1,099,000	1,758,000
10061011	Rice,long grain		0	0	0	0	0
10061019	Rice, other	685	2,000	0	21,570	68,000	0
10070010	Sorghum	115	363	2,487	194	3,000	4000
10089010	Other cereals	0	0	0	0	0	0
12010010	Soybeans	40	1,047	135	376	8,000	1000
12021010	Peanuts	0	0	0	0	0	0
12051010	Rape/Colza,low erucic acid	0	0	0	0	0	0
12059010	Rape/Colza,nes	3	0	0	6	0	0
12060010	Sunflower	910,664	1,592,845	1,669,078	5,042,782	13,718,000	16,181,000
12072010	Cotton	1,906	1,530	9,280	10,655	7,000	23,000
12091000	Other sugar beet	389	1,003	235	14,010	4,000	4,000
120921	Alfalfa	766,770	129,506	65,005	1,477,675	418,000	258,000
120922	Clover	1,269,134	2,147,802	1,009,733	3,739,220	7,605,000	2,690,000
120923	Fescue	5,621,940	5,416,877	6,437,681	6,421,425	6,919,000	11,876,000
120924	Kentucky	1,739,080	2,026,502	3,427,141	4,749,913	5,211,000	8,256,000
120925	Rye grass	2,784,158	2,670,556	4,440,496	2,828,405	3,059,000	5,040,000
120930	Herbaceous	225,380	171,938	67,720	4,405,003	4,400,000	4,303,000
120926	Timothy	22,007	0	4,000	61,000	0	4,000
12092990	Other Forage	872,579	2,338,199	1,756,577	2,811,350	4,551,000	4,424,000
12092910	Sugar beet	420,361	341,250	894,949	2,359,938	3,026,000	8,483,000
120999	Fruit,Melon and Other	944,774	1,174,728	1,229,736	4,776,372	6,193,000	6,249,000
120991	Vegetable	5,742,658	6,499,751	5,501,908	38,193,828	49,811,000	52,824,000

Source: World Trade Atlas

Table 2 China's Imports from the U.S. in Volume & Value

		Volume (KG)			Value (US$)		
HS Code	Planting Seeds/MY(Jul-Jun)	MY04/05	MY05/06	MY06/07	MY04/05	MY05/06	MY06/07
	Total	11,357,704	11,542,168	14,416,547	26,957,979	35,857,000	50,653,000
10019010	Wheat	0	0	0	0	0	0
10020010	Rye	0	0	0	0	0	0
10030010	Barley		0	0	0	0	0
10040010	Oats	0	0	0	0	0	0
100510	Corn	4	0	0	6,096	0	0
10061011	Rice, long grain	0	0	0	0	0	0
10061019	Rice, other	0	0	0	0	0	0
10070010	Soghum	0	0	0	0	0	0
10089010	Other cereals	0	0	0	0	0	0
12010010	Soybean	0	0	0	0	0	0
12021010	Peanut	0	0	0	0	0	0
12051010	Rape/Colza,low erucic acid	0	0	0	0	0	0
12059010	Rape/Colza, nes	0	0	0	0	0	0
12060010	Sunflower	618,820	1,238,036	1,344,049	3,578,363	9,637,000	13,762,000
12072010	Cotton	1,881	0	0	10,449	0	0
12091000	Other sugar beet	0	0	205	41	0	3,000
120921	Alfalfa	62,504	15,000	5,000	202,961	84,000	23,000
120922	Clover	10,000	24,947	19,958	32,000	80,000	79,000
120923	Fescue	5,424,585	4,722,736	5,525,689	6,202,667	6,071,000	10,336,000
120924	Kentukey	1,615,980	1,804,908	2,791,115	4,492,683	4,777,000	7,137,000
120925	Rye grass	2,518,558	2,006,901	2,386,029	2,397,515	2,258,000	2,486,000
120930	Herbaceous	46,924	7,087	2,413	2,399,636	2,409,000	2,610,000
120926	Timothy	10,001	0	0	35,000	0	0
12092910	Sugar beet	0	0	200	0	0	20,000
12092990	Other forage	568,107	615,267	1,405,873	2,327,836	2,680,000	3,994,000
120999	Fruit, Melon & Other	138,731	627,722	484,585	874,885	2,994,000	2,676,000
120991	Vegetable	341,609	479,564	451,431	4,397,847	4,867,000	7,527,000

Source: World Trade Atlas

Table 3 China's Major Seed Imports and Major Countries of Origins

Clover Imports Volume and Major Origins (in KG)				
Country	**MY 03/04**	**MY04/05**	**MY05/06**	**MY06/07**
Australia	1219877	806984	1535800	377,400
New Zealand	149199	0	209259	0
Canada	151000	311650	148000	320,000
United States	22948	10000	24947	19,958
Others	293975	140500	229796	292,375
Total	1836999	1269134	2147802	1,009,733
Fescue Seeds Imports Volume and Major Origins (in KG)				
Country	**MY 03/04**	**MY04/05**	**MY05/06**	**MY06/07**
United States	6,325,012	5,424,585	4,722,736	5,525,689
Denmark	352,729	58,830	426,111	677,165
Canada	180,935	138,525	267,964	200,826
Total	6,898,855	5,621,940	5,416,877	6,437,681
Kentucky Seeds Import Volume and Major Origins (in KG)				
Country	**MY 03/04**	**MY04/05**	**MY05/06**	**MY06/07**
United States	2,030,153	1,615,980	1,804,908	2,791,115
Denmark	454,925	123,100	201,575	635,550
Total	2,601,294	1,739,080	2,026,502	3,427,141
Rye Grass Imports Volume and Major Origins (in KG)				
Country	**MY03/04**	**MY04/05**	**MY05/06**	**MY06/07**
United States	3,544,715	2,518,558	2,006,901	2,386,029
Denmark	349,900	158,000	264,725	643,828
Canada	2,041	0	175,946	1,256,563
Netherlands	40,000	60,000	75,975	134,051
Total	4,253,106	2,784,158	2,670,556	4,440,496
Herbaceous Imports Volume and Major Origins (in KG)				
Country	**MY03/04**	**MY04/05**	**MY05/06**	**MY06/07**
United Kingdom	289,285	18,166	99,395	100
Poland	0	0	44,000	354
Netherlands	3,768	3,041	12,996	63,498
United States	18,057	46,924	7,087	2,413
Total	419,201	225,380	171,938	67,720

Source: World Trade Atlas

Table 3 (Continued)

Other Forage Imports Volume and Major Origins (in KG)				
Country	MY03/04	MY04/05	MY05/06	MY06/07
United States	862,058	568,107	615,267	1,405,873
Canada	75,000	44,100	1,305,531	79,539
China	0	0	280,000	0
Denmark	71,065	61,985	125,894	30,000
Total	1,317,203	872,579	2,338,199	1,756,577
Sunflower Planting Seed Imports Volume and Major Origins (in KG)				
Country	**MY03/04**	**MY04/05**	**MY05/06**	**MY06/07**
United States	372,353	618,820	1,238,036	1,344,049
Australia	66,480	184,893	140,387	83,605
Israel	29,100	41,740	95,776	16
India	210	40,018	64,202	94,732
Total	470,345	910,664	1,592,845	1,669,078
Fruit, Melon and Other Import Volume and Major Origins (in KG)				
Country	**MY03/04**	**MY04/05**	**MY05/06**	**MY06/07**
United States	244,073	138,731	627,722	484,585
Taiwan	804,555	420,322	220,277	145,763
Thailand	185,179	205,368	78,463	51,729
Canada	67,542	339	73,097	43,577
Australia	54,622	54,154	68,151	147,230
Total	1,687,730	944,774	1,174,728	1,229,736
Vegetable Import Volume and Major Origins (in KG)				
Country	**MY03/04**	**MY04/05**	**MY05/06**	**MY06/07**
Thailand	2,227,317	2,216,903	2,399,937	1,638,425
Japan	770,377	757,396	791,999	923,490
Australia	1,225,818	797,161	783,013	660,814
United States	197,814	341,609	479,564	451,431
Germany	1,972	80,138	463,007	3,679
Denmark	406,795	359,204	421,522	718,067
Indonesia	177,260	556,424	404,223	284,793
New Zealand	211,704	115,957	256,979	128,701
Total	5,595,609	5,742,658	6,499,751	5,501,908

Source: World Trade Atlas

Table 4 China's Exports to the World in Volume & Value

	MY(Jul-Jun)	Volume(KG)			Value(US$)		
HS Code	Planting Seeds	MY04/05	MY05/06	MY06/07	MY04/05	MY05/06	MY06/07
	Total	26,441,290	30,548,936	33,257,466	60,503,914	75,131,000	88,257,000
10019010	Wheat	300,001	84	0	60,001	0	0
10020010	Rye	304,400	1,200	0	136,205	1,000	0
10030010	Barley	244,500	29,214	0	61,050	12,000	0
10040010	Oats	45,500	0	0	16,586	0	0
100510	Corn Seed	347,614	128,434	108,758	313,756	146,000	185,000
10061011	Rice Long Grain	10,867,943	11,200,613	14,846,429	9,381,635	10,690,000	15,676,000
10061019	Rice Other	2,107,649	1,835,045	1,872,141	3,238,256	2,462,000	3,329,000
10070010	Sorghum	9,257	6,580	15,410	15,872	10,000	22,000
10089010	Other Cereals	9,173	1,990	2,674	16,524	1,000	1,000
12010010	Soybeans	151,858	240,492	316,791	138,546	119,000	120,000
12021010	Peanuts	90,600	0	256,550	56,170	0	161,000
12051010	Rape/Colza, low erucic acid	0	1,740	7,128	0	3,000	10,000
12059010	Rape/Colza,nes	22,125	15,001	7,823	13,593	2,000	18,000
12060010	Sunflower Planting	81,345	102,055	84,749	244,307	236,000	77,000
12072010	Cotton Planting	171,268	224,181	484,592	427,666	897,000	1,637,000
12092910	Other Sugar Beet		0	440	0	0	2,000
120921	Alfalfa	2,936,865	3,864,435	4,650,825	3,821,498	4,326,000	6,724,000
120922	Clover	3,350	0	2,120	8,620	0	7,000
120923	Fescue	20,000	103,073	0	30,400	133,000	0
120925	Rye Grass	18,070	0	415	44,422	0	2,000
120930	Herbaceous	618,713	819,203	745,651	4,744,890	5,619,000	5,641,000
120926	Timothy	3,000	8,000	0	10,000	13,000	0
12091000	Sugar Beet	536	24,054	0	1,044	74,000	0
12092990	Other Forage	2,337,536	4,363,414	4,379,067	2,891,030	5,618,000	5,299,000
120999	Fruit,Melon and Other	1,147,914	1,030,052	975,105	6,028,404	6,989,000	9,209,000
120991	Vegetable	4,602,073	6,550,076	4,500,798	28,769,017	37,780,000	40,137,000

Source: World Trade Atlas

Table 5 China's Exports to the U.S. in Volume and Value

	MY(Jul-Jun)	Volume (KG)			Value (US$)		
HS Code	Planting Seeds	MY04/05	MY05/06	MY06/07	MY04/05	MY05/06	MY06/07
	Total	766,517	1,140,797	1,448,723	10,026,632	13,501,000	14,470,000
10019010	Wheat	0	0	0	0	0	0
10020010	Rye	0	0	0	0	0	0
10030010	Barley	0	0	0	0	0	0
10040010	Oats	0	0	0	0	0	0
100510	Corn	0	0	0	0	0	0
10061011	Rice Long Grain	0	0	0	0	0	0
10061019	Rice Other	0	0	0	0	0	0
10070010	Sorghum	0	0	0	0	0	0
10089010	Other Cereals	1,936	0	0	7,373	0	0
12010010	Soybeans	119,010	0	0	52,364	0	0
12021010	Peanuts	0	0	0	0	0	0
12051010	Rape/Colza, low erucic acid	0	0	0	0	0	0
12059010	Rape/Colza,nes	0	0	0	0	0	0
12060010	Sunflower	0	0	1,983	0	0	1,000
12072010	Cotton	14,846	96,102	15,655	37,105	384,000	39,000
12092910	Other Sugar Beet	0	0	0	0	0	0
120921	Alfalfa	20,175	93,500	118,150	19,973	35,000	288,000
120922	Clover	0	0	0	0	0	0
120923	Fescue	20,000	40,052	0	30,400	51,000	0
120925	Rye Grass	0	0	0	0	0	0
120930	Herbaceous	214,711	227,882	336,285	298,616	423,000	658,000
120930	Timothy	0	0	0	0	0	0
12091000	Sugar Beet	0	0	0	0	0	0
12092990	Other Forage	20,475	113,226	23,857	27,192	209,000	47,000
120999	Fruit,Melon and Other	35,945	36,866	35,622	826,440	762,000	1,052,000
120991	Vegetable Seeds	319,419	533,169	917,171	8,727,169	11,637,000	12,385,000

Source: World Trade Atlas

Table 6 China's Major Seed Exports and Major Countries of Origins

Other Forage Exports Volume and Major Destinations (in KG)			
Country	**MY04/05**	**MY05/06**	**MY06/07**
Korea, South	1,262,704	3,672,889	3,703,611
Japan	546,857	405,535	286,919
Germany	238,000	0	141,720
Taiwan	0	108,440	108,930
United States	20,475	113,226	23,857
Others	269,500	63,324	114,030
Total	2,337,536	4,363,414	4,379,067
Rice, Long Grain Exports Volume and Major Destinations (in KG)			
Country	**MY04/05**	**MY05/06**	**MY06/07**
Vietnam	10,149,905	9,608,941	10,571,987
Bangladesh	546,440	1,131,077	3,237,582
Pakistan	120,000	350,519	909,218
Indonesia	8,248	0	126,000
Philippines	2,150	2,076	1,300
Others	41,200	108,000	342
Total	10,867,943	11,200,613	14,846,429
Vegetable Seed Exports in Volume and Major Destinations (in KG)			
Country	**MY04/05**	**MY05/06**	**MY06/07**
Korea, South	1,267,537	1,935,511	1,493,564
United States	319,419	533,169	917,171
Netherlands	877,847	1,040,098	450,239
Japan	311,622	280,378	383,863
Taiwan	232,857	276,865	263,851
France	386,791	435,638	183,482
Thailand	218,683	294,524	137,283
Others	987,317	1,753,893	671,345
Total	4,602,073	6,550,076	4,500,798

Source: World Trade Atlas

Table 6 (continued)

Vegetable Seed Exports in Value and Major Destinations (in US$)			
Country	**MY04/05**	**MY05/06**	**MY06/07**
United States	8,727,169	11,637,313	12,385,374
Korea, South	4,570,454	5,606,431	7,982,574
Netherlands	4,492,026	6,267,241	5,725,368
Japan	2,232,132	2,589,800	4,062,361
Others	8,747,236	11,679,708	9,981,007
Total	28,769,017	37,780,493	40,136,684
Fruit, Melon & Other Exports in Volume and Major Destinations (in KG)			
Country	**MY04/05**	**MY05/06**	**MY06/07**
Korea, South	583,300	536,371	375,292
Japan	340,418	228,083	294,259
Netherlands	19,626	30,320	45,251
France	8,309	37,858	45,140
United States	35,945	36,866	35,622
Pakistan	10,734	12,506	32,135
Taiwan	49,536	35,582	28,002
Russia	103	462	26,126
Others	99,943	112,004	93,278
Total	1,147,914	1,030,052	975,105

Source: World Trade Atlas