Honey
Production and Trade Report

(USDA, Foreign Agricultural Service)

INTRODUCTION

There are no official extracted honey production figures. Total honey production figures reported by industry sources range from a low of 150,000 metric tons (MT) to a high of 200,000 MT. Industry sources feel that high figures reported in the press should be revised downward to accurately reflect what honey is made available to the market. Industry sources report stable production figures are between 170,000 to 180,000 MT for the past several years, yet this contradicts data recorded in the China Statistical Yearbook. China Statistical Yearbook reports that honey production of 230,000 MT. China Statistical Yearbook production is consistent with numbers published by the Ministry of Agriculture for previous years. In 1999, the Ministry of Agriculture didn’t publish honey production data. Ministry sources believe, however, that total extracted honey in 1999 was 180,000 MT, of which only 130,000 MT was available for market use.

All industry sources would like to see a repeat of last year’s production. Goals for 2001 total extracted honey production are 200,000 MT, with at least 150,000 MT being made available for commercial use by both individual consumers and industrial procurers. Other nationwide bee product estimates for 2000 are: 1500 MT royal jelly; 3000 MT to 3500 MT pollen; 2500 MT beeswax; 300 MT propolis. These numbers are attainable goals for 2001, as well. Many sources believe that natural resources are underutilized in several provinces.

Beekeepers migrate throughout the country to hit peak blooming times, thus leaving some areas without many bees during non-peak times. The first quarter of 2001 has seen good weather for honey production. The honey flow lasts about 8 months because of migratory beekeeping. Principal bee-keeping regions reported crops or floral sources blooming a week earlier in 2001.

There seems to be better bee disease prevention programs implemented and coordinated throughout China’s beekeeping and honey production provinces. The popularity of highly productive western style bees (Apis mellifera) among serious beekeepers is also on the rise. Beekeepers are using western bees (Apis cerana) to make more honey and royal jelly, but prefer Asian bees for pollinating crops. Theoretically, beekeepers are all registered in their hometown through beekeeping associations. Under this plan, beekeepers report their production at an annual beekeeper’s association meeting organized by officials from their county or township governments. In some instances data is reported by household, while in other instances several individuals within the family household register and report parts of shared data. Unfortunately, in practice, some beekeeping associations have ceased to function due to lack of funds, so local government authorities estimate data.

Additionaly, the beekeepers’ standard practice is to sell extracted honey to both individual consumers and industrial facilities during the 8 months of migratory honey production. Therefore, accurate records aren’t kept and some data is lost. Another problem is that some beekeepers retain extracted honey for their hives to use during the beekeeping season, yet report the numbers in total production. The number of beekeepers fluctuates, as prices rise or decrease, and some may not register or report any production data. In a single hive, the honey is double-counted if an industrial procurer and an individual beekeeper, who may report the data to another county association, claim it.

YIELDS

There are an estimated 6-7 million beehives in China. At least 10% of these hives are western honey bees (Apis mellifera) among serious beekeepers in China. There are roughly 20 million hives registered to 15,000 beekeepers in Zhejiang Province and 1.9 million hives registered to 10,000 households in Sichuan Province. These are the prominent honey-producing regions in China. Medium operations vary from province to province. In one area, medium-sized operations maintain 80-150 hives, but in another medium-sized operations maintain 300 hives. Commercial beekeeper load 200 hives onto a truck when migrating.

Yields also vary greatly among the beekeepers. Many of the skilled beekeepers report that an above-average hive can produce 150 kg of honey; 1.5-2.2 kg of royal jelly (with an upper limit of 4 to 5 kg). However, hives yield less. Government and beekeeping association officials report average yields between 50-100 kg of honey. Beekeepers have reported considerable growth in bee product yields with increases of 150-200% over the last four years. Heavier reliance on western honey bees (Apis mellifera) among serious beekeepers is also on the rise. Additionally, the beekeepers’ standard practice is to sell extracted honey to both individual consumers and industrial facilities during the 8 months of migratory honey production. Therefore, accurate records aren’t kept and some data is lost. Another problem is that some beekeepers retain extracted honey for their hives to use during the beekeeping season, yet report the numbers in total production. The number of beekeepers fluctuates, as prices rise or decrease, and some may not register or report any production data. In a single hive, the honey is double-counted if an industrial procurer and an individual beekeeper, who may report the data to another county association, claim it.

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squatter agreements with farmers and growers. A high-end average gross income for commercial beekeepers is between 30,000 to 50,000 RMB (approximately $3630-$6050). Migratory beekeepers pay an average of 20,000 RMB (approx. $2420) for yearly vehicle rental and moving costs, causing take home pay to be substantially less. There are also significant expenses accrued when purchasing sugar to feed colonies during non-honey production periods. Commercial beekeepers expect anywhere from 4-5 RMB per kilo for low quality honey and 7 RMB per kilo for good quality grade honey to industrial processors and processors. Prices for honey sold to individual consumers varies, according to haggling power.

**PRODUCTION POLICY**

Chinese government policy encourages beekeeping and honey production. Reportedly, the government, at both the central and local levels, has not financially supported honey producers since 1978. It has also been said that government financial support for producers of health care products that use honey and related items doesn't exist. The government is also paying more attention to the safety and quality of honey production. Laws are also being made that distinguish between honey-related health products and pharmaceutical products.

Support comes in the form of bee disease prevention, technology extension, and beekeeper education. There are small-scale area beekeeping management stations. There is government support and promotion that helps organize small-scale producers into larger collectives. Additionally, beekeepers' incomes from the sale of honey, honey products, and queen bees are tax-free.

The government is encouraging beekeepers to migrate less and more fully utilize natural resources. This plan would improve the quality of life for beekeepers. This plan may also spur the whole beekeeping industry as beekeepers start-up in areas that would be abandoned by the migratory beekeepers. The poverty alleviation program announced in 1997 to place 10 beehives in the hands of every mountainous poor person was an unrealized slogan. The abject poverty in those regions would never create a competitive market. Terrain also prohibits honey from being transported to areas where markets exist.

Beekeepers, beekeeping associations, beekeeping management stations, and honey and health care producers are eager to receive information and support across several fields. One hope is to improve upon current harvesting technology that relies heavily on manual collection. Sources feel this would allow for a greater number of hives per beehive. Next, sources want to open or explore new markets that use honey, so as to add value to raw materials. Third, sources want to improve honey quality. One example is that the Sichuan Provincial Beekeeping Management Station has just purchased 50 Australian queen bees. There is interest to import queen bees from the United States, as well. Finally, assistance is needed in honey packaging. Upon inspection, many beekeepers still use metal drums, but they know they should be using plastic totes or containers coated with biological paint.

**TRADE**

**Exports**—China exported 102,888 MT of honey in 2000, 15% greater than exports in 1999. There continues to be data gaps between what China reports it has exported and what other countries report as imports. Often, the export volume reported by China Customs is smaller than the volume importing countries report. Rather significant data gaps can be seen in trade data between China and Japan or China and Germany. Honey exports in the first two months of 2001 were 13,900 MT, an increase of 14% over the same period in 2000. Industry sources forecast that China's total honey exports in 2001 will reach at least 90,000 MT.

China's honey exports to the U.S. were 23,688 MT in 2000, an increase of 5.5% over 1999 exports. The rate of growth slowed remarkably, but it is important to note that 2000 exports show an increase of nearly 70% from levels attained in 1998.

According to Chinese sources, export prices to the U.S. are at a reference price three months prior to trading. Also factored into the agreement were expectations that the quantity of honey supplied to the U.S. and the export price of honey to the U.S. would remain stable. Post sources have said these agreement provisions were one reason that 2000 honey export prices to the U.S. fluctuated far less than export prices to Europe.

Chinese sources feel that their largest competitor for exporting honey worldwide is Argentina. Japan is still the largest export market for China's honey and bee products. As reported by China Customs, Japan held 29% of total exports in 1998, 36% in 1999 and 37% in 2000. Percentage of trade to Japan seems to be back to levels seen before the Asian financial crisis and Japanese Yen depreciation. Many Chinese feel that the greatest market opportunity for bee products in Japan is royal jelly. Trade data indicates that Japan accounts for over 70% of royal jelly trade volume. Germany was the second largest market for Chinese honey in 1997 and 1998. Volume was at a high of 19,916 MT in 1998, but fell sharply in 1999 to 8,105 MT. This was in large part due to German concerns for honey quality and pesticide contamination. Export volume to Germany has since been rising. Exports reached 11,935 MT in 2000.

Germany is currently China's fourth largest market for Chinese honey. This is behind Japan, the U.S. and the United Kingdom.

**Imports**—China's imports decreased 56 percent from 850 MT in 1999 to 372 MT in 2000. Imports of honey in 2001 will be even lower, despite the reported depletion of stocks. The first two months of 2001 show only 7.8 MT of honey imported. This is down significantly from the 150.2 MT of honey imported over the same period last year.

**Price**—China's honey export price is in a downward trend. Prices continued to drop during the first half of 2000 due to high production levels. Chinese production fell off, but international demand remained and honey exports regained some of their lost value in the last half of 2000. Industry sources feel that China's honey export price is also driven by the honey production of Argentina and Hungary. If honey production is up in these two countries, then supply for North and South America, along with Europe, is high and prices are down. Industry sources report export prices of white honey to Europe and the U.S. are moving closer together. U.S. importers of Chinese honey still pay more than Europeans. Shipping costs to the U.S. and Japan are higher. U.S. West Coast shipments are slightly higher than Europe and East Coast shipments are about 50 dollars per metric ton more than Europe. Local procurement prices for honey are expected to vary very little from 2000.

**Trade Policy**—Trade policy to the U.S. has remained unchanged since the Honey Suspension Agreement. Our sources have heard conflicting reports from industry sources regarding trade policy to other countries. Some sources report that honey exported to countries other than the U.S. is still regulated by a quota allocation system labeled “Regulation on Paying for Use of Quotas” enacted in April 1999. Under this regulation, trading companies that were granted permission to export honey may apply for a quota at a fixed fee established by the export industry. Others report that this trade quota was lifted at the Chinese Annual Honey Conference held at the beginning of March 2001. China's honey import tariff rate is set at 25%. China's imports of honey won't change much after WTO accession. Only China's small, but growing, middle and
upper class are able to afford foreign honey or honey products.

DOMESTIC CONSUMPTION

Honey and bee products are a health food in China. Reportedly, raw honey consumption is growing between 5-10% a year. Consumption of bee products like royal jelly is growing at about 20% a year. In the city of Chongqing, there has been amazing growth in the honey and bee product industry. In the 1970s there was just one wholesale honey trader and 10 retail traders. Now, there are over 30 specialty shops in the area plus department stores selling honey. Local honey packers or beekeepers run many of the specialty stores. Supermarkets and department stores dedicate shelf space for health products, including honey. As supermarkets grow in popularity, over meat and vegetable markets, one should expect a growth in sales opportunities for honey and bee products, as well.

Sources believe that the Chinese prefer good quality sweet-tasting and fragrant honey. Many Chinese prefer date honey, but preference tastes vary from region to region. Consumption of Longyan or dragon-eye honey and tree flower honey, like Acacia, is growing. Retail sales of honey are usually in 400g or 700g size glass jars. Growth in honey consumption is taking place within cities and middle-aged groups. Numbers are skewed due to China's enormous population, but sources report annual domestic honey consumption per capita is only 50 grams.

There seem to be few new industrial honey products entering the market. Honey is being used as a sweetener in some health drinks and carbonated drinks. Although, not new, honey is also used in the preparation of some foods like Beijing Roast Duck. Royal jelly has been introduced into some other beverages, as well. Beeswax is now being used as an alternative odorless fuel for the traditional Chinese dish called hot pot. Whatever name it goes by; whether propolis, bee's glue, or purple gold, this product is turning health industry heads, as well. Bee products as a health food are also in growing demand. Royal jelly products claim to improve the body's metabolism, improve general immunity, enhance brain activity and relieve tiredness. Bee products are also touted as effective for anemia, indigestion, and menopausal symptoms. Producers claim that pollen is useful for arthritis, hypotension, constipation, sexual dysfunction, prostate hypertrophy, liver malfunction, nocturia, obesity, skin disease, diabetes, and the common cold. As an affluent middle-aged Chinese public grows more aware of these problems and their possible cures, demand is expected to grow.

Marketing—It has been said that the government will continue to stress the quality of all honey products. This is also a concern for the beekeepers, beekeeping stations, and industrial users of honey or bee products. To this end, beekeeping associations arrange educational courses for beekeepers. Through these local associations beekeepers also share information with others at annual or twice annual meetings. There is also an annual national honey conference arranged for Chinese producers. This year it was held in Xian during the first part of March.

Some universities and the China Beekeeping Research Institute are carrying out research into bee breeding stock, bee feeding, bee cultivation, bee proteins, bee disease prevention and health products. Honey producers market their products to different age groups and gender groups. Honey, especially for women, elderly and children, is most visible on store shelves.