

## ANALYSIS ON THE STRUCTURE OF HONEY PRODUCTION AND TRADE IN THE WORLD

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### **Abstract**

*China, known as the largest honey producer and exporter in the world, plays an important role in world honey production and trade. The change of world honey production and trade affects the development of Chinese apiculture. Researchers on the structure of world honey production and trade might have significant realistic and theoretical value for improving the international competitive ability of Chinese honey and promoting the steady development of Chinese apiculture. This paper analysed positively on the distribution of honey producing regions in the world, the change of relative status of major honey producing countries and the trade structure of international honey market, compared the competitive ability of main honey export countries.*

**Key words:** World/ Honey/ Production/ Trade/ Structure

### **Introduction**

At present, China is the largest honey producer and exporter in the world. Honey production in 2000 totaled 253,691 t, 20.9% of world overall output. About 1/3 of its production is used for exportation. In 1999, 88,040 t honey has been exported, 25.9% of world total exports. Therefore, the change of world honey production and trade is surely affecting China's honey production and trade. Based on the statistics of world honey production and trade, this paper analysed positively on the distribution of honey producing regions in the world, the change of relative status of major honey producing countries and the trade structure of international honey markets. At last, there is compared the competitive ability of main honey exporting countries.

### **Distribution of world honey producing regions**

#### **• Change of world total honey output**

Since 1970's, world honey production has developed constantly. In 1970-1978, world honey yield increased slowly, from 833885 t to 966814 t. In 1979 and 1980, world honey production declined greatly, only 827964 in 1980, down 14.4% from 1978. Since 1981, honey production has showed an increase trend again. In 1985 world honey output exceeded 1 million t for the first time. It reached to 1.21 million t in 1990, top record of before. After 1990, world honey production maintained between 1.10 to 1.20 million t. Output in 1996 is the lowest, only 1.10 million t. From then on, honey production increased year after year. In 2000 it got to a high level of 1.22 million t.

#### **• Distribution of honeybee colonies in the world**

There are approximately 56.7 million colonies in the world now. Europe has more than 23 million hives, first of all the continents. Russia has 3.58 million. Spain, France, Italy and Germany have 1.90, 1.12, 1.00, 1.60 million hives separately. In Asia there are about 14.0 million hives. China has 6.51 million colonies, Turkey has 4.01 million. In Africa the number of all colonies reaches more than 13 million. Hives in North America are mainly distributed in America and Mexico, the number is 2.63 million and 2.00 million respectively. In South America, Argentina has 2.20 million colonies. The total amount of colonies in Australia and New Zealand, as well as in Oceania is near 1 million hives.

#### **• Distribution of honey producing areas in the world**

World honey production is mainly located in Asia, Europe and North America. Africa and South America also has some production. Output in Oceania is lower relatively. According to the statistics of FAO, we made a figure as below.

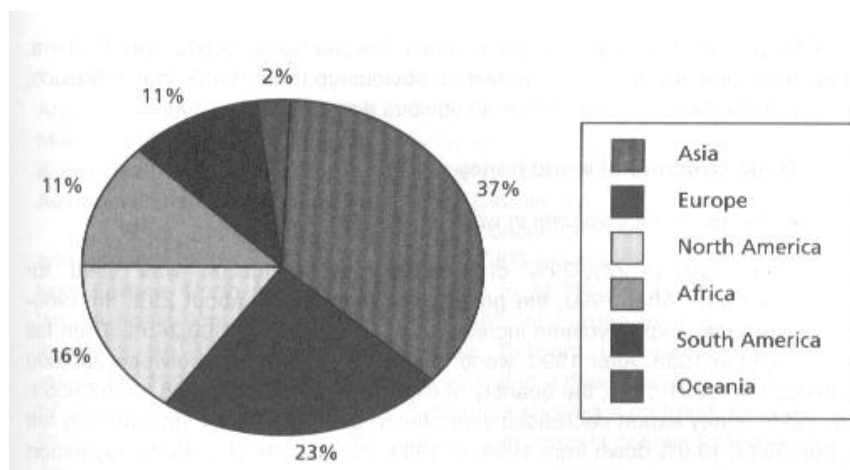


Figure 1 – Proportion in world honey production of each continent

In Asia honey producing areas are mostly distributed in China, Turkey and India. The honey yield of these three countries accounts for more than 85% of Asia total output. America, Mexico and Canada are the main honey producing countries in North America, over 90% proportion of total output. In Europe, Ukraine, Russia, Spain, France, Germany, Hungary, Greece and Italy etc. all have some honey production every year. In Africa, honey production is mainly located in Ethiopia, Kenya, Tanzania, Angola and Egypt. Argentina and Brazil shares over 70% of honey yield in South America. In Oceania, Australia and New Zealand occupied more than 95% of Oceanian honey output.

**Change of relative status of main honey producing countries**

Because of the different developing speed of apiculture, the relative status of each main honey producing country has changed continually. From table I we see, in the past thirty years the relative status in

Table I

**Honey production of top ten producing countries in the world**

unit: t

Rank	1970		1980		1990		2000	
	Country	Yield	Country	Yield	Country	Yield	Country	Yield
1	USSR	210000	USSR	189000	USSR	270000	China	253691
2	USA	106499	China	96300	China	193000	USA	101000
3	Mexico	38984	USA	90530	USA	84000	Argentina	91000
4	China	37000	Mexico	65245	Mexico	71114	Turkey	63500
5	India	35000	India	45000	India	50500	Mexico	56844
6	Argentina	25000	Argentina	37600	Turkey	40000	Ukraine	52000
7	Germany	23829	Canada	29235	Argentina	39000	India	51000
8	Canada	23152	Turkey	25170	Canada	33000	Russia	50000
9	Australia	22258	Australia	24954	Germany	32000	Canada	32000
10	Turkey	14889	Germany	14907	Australia	28200	Spain	32000

Source: FAO Production yearbook, www.fao.org

world honey production of China, Turkey, Argentina and Spain has shown an obvious up trend. While that of Mexico, Germany, India, Australia has shown an obvious down trend.

**Trade structure of world honey market**

• *Change of trade volume in world honey market*

From 1980's, 22%-29% of world honey production was used for international trade. After 1990, the production was keeping about 25%. In 1980-1986, world honey export volume increased from 211,434 t to 309,245 t. Then fall into 261,579 t in 1988. After 1990, world total export maintained between 280,000 to 300,000 t. In 1991-1994, the quantity of exports rised from 280,006 to 307,956 t. Since 1995, honey export

decreased year after year. Till 1997, the amount only left was 269,093 t, 13.0% down from 1994. In 1999, the quantity of world honey export reached a high level of 339,417 t, up 13.9% from a year earlier.

• *Change of trade structure of world honey market*

In early 1980's, world honey export mainly concentrated on North America, Asia and Europe. South America and Oceania are in the next place. The proportion in world honey export of these five continents is 33.9%, 24.1%, 11.6% and 6.4% in turn in 1980. After 1990, the status of North America went down constantly. Its export volume was exceeded by Asia, South America and Europe one after another. Now Asia has become the largest honey exporting continent. South America, Europe, North America and Oceania are the next. Their share in 1999 of world honey export are 31.4%, 31.1%, 19.1%, 14.6% and 3.7% respectively.

**Export statistics of major honey exporting countries in the world**

Table II

unit: t 1000 \$

	1980		1990		1998		1999	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
World	211434	253427	295376	325171	297928	443604	339417	424895
North America	71666	69644	68927	64845	57031	81575	49703	63101
Mexico	41790	31558	43767	37217	32441	41511	22477	25277
Canada	10894	13678	7770	10457	11481	19596	14717	20840
South America	24614	23953	45220	35768	77946	101262	105410	108905
Argentina	19638	19345	39685	30791	68301	88533	93103	95729
Asia	51050	61134	95069	89664	92064	110534	106598	107588
China	49296	55691	88150	77913	78787	87049	88040	79314
Europe	37922	68001	55296	97538	58141	128549	64801	123248
USSR	12507	13708	16686	20357				
Germany	8296	16361	13041	26222	13574	32899	17149	35418
Hungary	10336	14249	14594	18737	9262	19621	9889	15906
Spain	1928	4126	5028	9295	9708	20667	7019	14316
Oceania	13469	16553	13835	15012	12285	20284	12577	20839
Australia	11427	12891	12849	12753	10363	15695	10363	15695

Source: FAO Trade Yearbook, www.fao.org

The largest honey exporter in Asia is China, over 85% of Asia total export. Turkey, Cuba, Vietnam and Thailand also have some small export amount. Argentina is the largest exporter in South America, more than 85% of total export. Mexico and Canada are the major honey exporting country in North America, USA is the next. In Europe, Germany, Hungary, Spain are the major honey exporter. Australia is the largest honey exporter in Oceania, over 85% of total export.

World honey imports are mainly concentrated in Europe. North America and Asia are in the next place. In 1999, 57.8% of world honey import volume was from Europe. North America and Asia was in 24.7% and 16.3%. Germany is the largest honey importer in Europe, over 45% of Europe total import. Other main importers are Britain, France, Italy, Spain, Belgium, Luxemburg and Switzerland etc. Since 1990, honey imports in Asia indicated a down trend, 81, 168 t in 1990 to 57,144 t in 1999. While that of North America showed a up trend, from 36,281 t to 86,438 t. The reason is that USA increased its imports constantly these years, but Japan decreased its imports.

**Import statistics of major honey importing countries in the world**

Table III

unit: t 1000 \$

	1980		1990		1998		1999	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
World	196472	244693	293958	331538	322906	490998	349716	453794
North America	22797	22012	36281	35633	63297	85799	86438	96399
USA	22263	21095	34993	33455	60039	81020	82791	91685
Asia	28741	38019	81168	82365	53038	79696	57144	77686
Japan	20104	20435	69435	63882	29425	34597	34658	36248
Europe	142312	181905	172283	206149	202085	316797	202285	273535
Germany	65797	79875	79012	87317	93552	136481	89617	112473
Britain	17222	19948	26464	25773	24699	35682	22902	26634
France	6870	9439	7210	11363	12503	24374	15319	25711
Italy	8648	13137	11108	15387	12074	19364	12439	16672
Spain	4095	4415	1224	1640	10260	12932	13335	13910

Source: FAO Trade Yearbook, www.fao.org

### Competitive ability, comparison of major honey exporting countries

At present, China, Argentina and Mexico are the world's largest honey exporting countries, over 60% of world total export. In 1999 Argentina exported 93103 t honey, top of the world. China and Mexico ranked in the second and third, 87235 t and 22443 t respectively. As to the average honey export price, Argentine honey was the highest, 1028 \$/t. Chinese is the lowest, only 858 \$/t. Mexican honey was in the middle, 884 \$/t.

Then we see from the export market. In 1999 Argentina exported its honey mainly to USA, 44.3% of its total export. The largest honey exporting market for Mexico is Germany, 61.5% of overall export. Chinese honey is mainly exported to Japan, 36.3% of whole export. Germany, USA and Japan are the largest

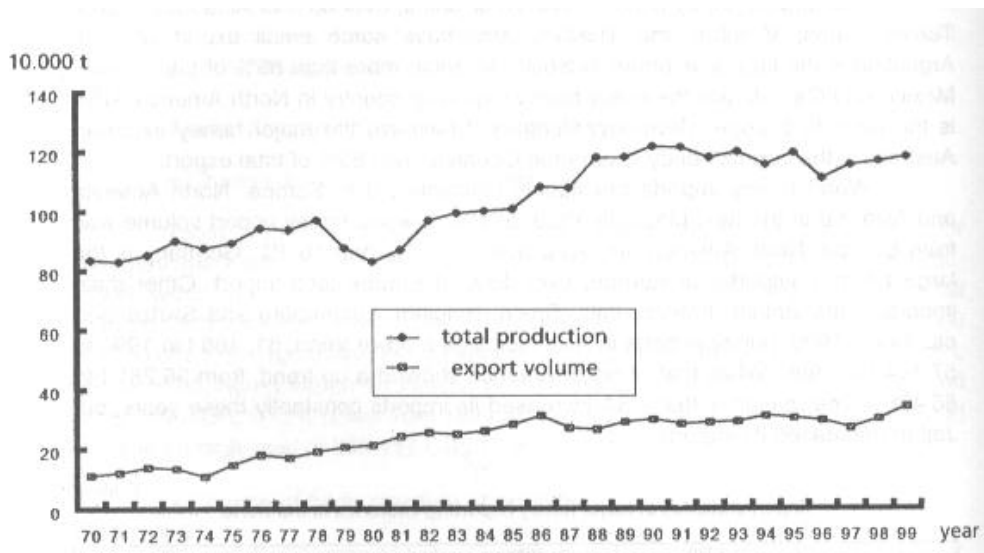


Fig. 2 – Change of world total honey production and export volume

importer in the world. On the German honey market 30.5% imported honey came from Argentina, 16.0% from Mexico and 14.2% from China in 1999. The imported price of Mexican honey was highest, 1260 \$/t. That of Chinese honey was lowest, 950 \$/t. USA imported honey mainly from Argentina, 51.3% of total import. China was the next, 28.7% of total. Mexico only obtained 3.8%. But in American market the price of imported Mexican honey reached 1100 \$/t, higher than the other two countries. That of Argentine honey and Chinese honey were 1020 \$/t and 1010 \$/t. In Japan, most of imported honey came from China, over 90% of total import. In 1998, Japan imported honey 29425 t, 92.8% from China, 2.4% from Argentina. However the average imported price of Chinese honey was lower than that of Argentine honey. On the whole, Argentina has the most powerful comprehensive competitive ability of these three countries. China occupied international honey market mainly by more quantity and lower price. So its competitive ability is relatively weak.

Table IV

#### Chinese honey exports by country of destination in 1999

Country of destination	Volume (MT)	Value (\$ 1,000)	FOB Price US\$ per ton	Percentage
Japan	31647	28723	908	36.3
United States	22437	20893	931	25.7
United Kingdom	9142	6500	711	10.5
Germany	8105	5706	704	9.3
Total	87235	74848	858	100

Source: www.beekeeping.com/databases/honey-market

Table V

#### Argentine honey exports by country of destination in 1999

Country of destination	Volume (MT)	Value (\$ 1,000)	FOB Price US\$ per ton	Percentage
United States	41224	40765	989	44.3
Germany	30131	31706	1052	32.4
Italy	6770	7099	1049	7.3
Total	93103	95729	1028	100

Source: www.beekeeping.com/databases/honey-market

**Mexican honey exports by country of destination in 1999**

Country of destination	Volume (MT)	Value (\$ 1,000)	FOB Price US\$ per ton	Percentage
Germany	13793	12037	873	61.5
United States	3033	2860	943	13.5
United Kingdom	2965	2899	978	13.2
Total	22443	19838	884	100

Source: Mexico honey report 2000 Foreign Agricultural Service USDA.