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National and International Panorama of Honey production in Mexico

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Abstract

In this paper, the contextual framework of beekeeping by reviewing levels of honey production through the panorama of national and international markets will be addressed. The importance of honey production in Mexico is that the main market of this is in export honey has no nationwide direct consumption and the price is high, it is important to mention that the honey produced in the country is very appreciated abroad. The global market for honey experienced strong growth in terms of value in 2013, reaching record highs in excess of two billion dollars in transactions. In this growth have been strong market adjustments, which include increased global demand, the emergence of new importing and exporting success stories of countries that have implemented differentiation strategies based on scientific assessment of attributes its offer of bee products.

The national beekeeping, Mexico is located between the fifth and sixth place worldwide as a producer of honey, generating 56,000 average 500 tonnes a year for the past eight years, and as the third largest exporter. A trend of exports of honey and the opening of new markets served on several continents, on average, annually 36,000 tons sold abroad in the last three years, were exported on average 123 million dollars annually honey but in Mexico beekeeping it has been presented as a relevant activity due primarily to an important source of employment in rural areas of the country and a major currency scavenging activities in the livestock subsector.

Production, world market, honey, beekeeping.

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Introduction

According to Sanchez, et al, (2013), beekeeping is considered of great importance for food security of countries, not only for the direct taking of products such as honey, pollen or royal jelly and others; most relevance lies in the effect on pollination of commercial crops; FAO estimates that of the nearly 100 crop species that provide 90% of food supplies for 146 countries, 71 are pollinated by bees. The function of these insect pollination is considered vital for the maintenance of natural ecosystems for which its use is associated with reforestation projects and are used as bioindicators.

According to the Codex Alimentarius (2005) is defined as honey, natural sweet substance produced by worker bees using the nectar of flowers or secretions of living parts of plants or excretions of plant sucking insects plant on the living parts of plants, which the bees collect, transform and combine with specific substances of their own and store and leave in the honey comb to ripen and mature. Honey consists essentially of different sugars, predominantly fructose and glucose. The color of honey varies from nearly colorless to dark brown. The consistency can be fluid, viscous or partly to entirely crystallized. The flavor and aroma vary, but owns the plant from which it comes.

In Mexico beekeeping belongs to an emerging sector with a large potential market, the sector has overcome gaps in areas such as production, technical, technological, regulatory and commercial.

To Cash et al, (2000), until recently the national beekeeping was directly influenced by the behavior of the international market for honey, with nearly 90% of domestic production is destined for export; however, the actions taken by producers and authorities have led to that today approximately 50% of national production is consumed at home, so the development of the national economy, specifically the consumer has increasing influence on beekeeping.

According Magaña et al., (2012), with respect to the internal marketing of honey, the beekeeper sells little to the final consumer, and the price received generally depends on the number and market power of those involved in the process . The largest commercial channel is including industry, which uses honey as an ingredient for the production of food such as cereals, yogurts, candies and breads; or as raw material for the tobacco and cosmetics industry, occupying more and more products such as pollen, propolis and royal jelly.

In Mexico several types of apiaries are identified, which can be grouped into three broad strata differentiated by the level of technology employed, with the tech and craft.

World I- Panorama of honey production

According to the information available to the FAO (2011), the Food and Agriculture Organization, indicates that in the last 25 years no substantial changes were recorded in the levels of world trade in honey, on average in the period 1990-1998 honey trade accounted for 26.6% of world production. Particularly in the year 1996 so as much honey imports was presented with a volume of 341.843 tons which represented 31.3% of world production. For 1998, exports registered sales amounted to 297.930 tons, involving 25.7% of world production for that year.

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As Campos (2006) cited by Blengino (2013), during the period 1990 to 2012 world production step 1.25 to 1.27 million tonnes mentioned, this implies that an average annual growth rate "MACT" item was held 0.1%. These figures therefore indicate which despite the reduced growth rates, there has been an increase in the total volume of this business, which is a positive indicator when compared with other sectors of world agriculture.

Honey production worldwide is characterized by its diversity, determined by geographical and climatic factors, as suggested Blengino (2013), China comprises about 35% of world production of honey. Followed by Turkey, Argentina, Ukraine, United States, Russia, India and Mexico, with shares of around 6% in total.

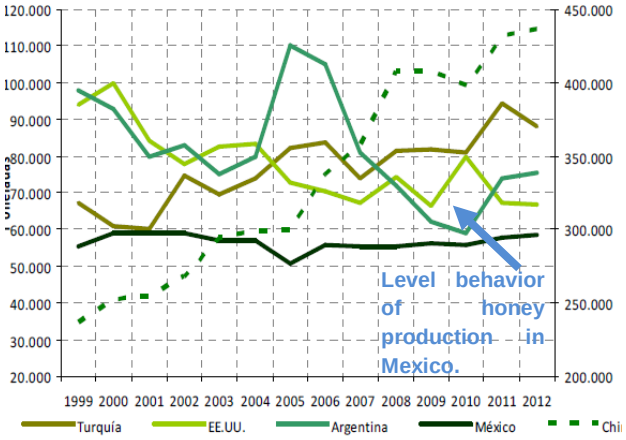
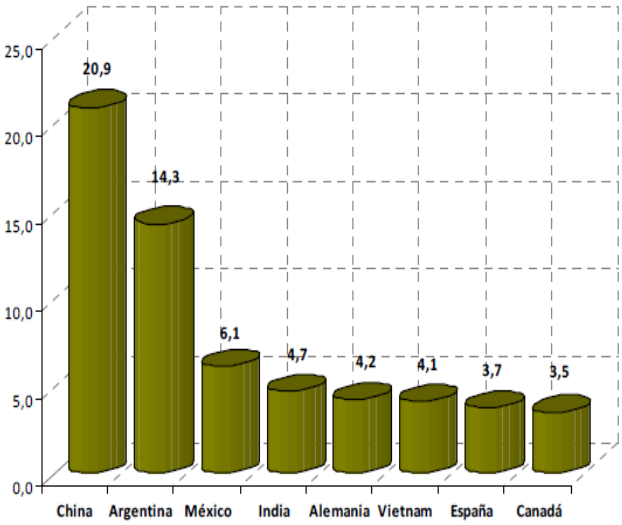


Figure 1 World production of natural honey

As shown in Figure 1, these production levels remained relatively constant over the last years. As you can see, in terms of producers, China is climbing maintaining its dominant position in the sector. In ten years the production of natural honey 65% increase while the United States has lost ground, with a reduction of 14% between 2002 and 2012. Both Mexico and Turkey have managed to maintain their market position over recent years, but without being able to increase their levels of honey production.

For the Food and Agriculture Organization FAO (2011), Mexico beekeeping production in the periods between the decade of the 90's, and the environment under which the activity and expectations developed. Both in 2008 and 2009 the volume of world production of natural honey reached 1.5 million tons. In 2009, 42.4% occurred in Asia, 23.5% in Europe, 21.0% in the Americas and the remaining 13.1% in Africa and Oceania. The indicated percentage corresponds to the participation of each country until 2012, Ministry of Economy (SE) and Bank of Mexico (BM). Based on data from SIAP-SAGARPA (Department of Agrifood and Fisheries Information) (Ministry of Rural and Agricultural Information Fisheries and Food), and National Institute of Statistics and Geography) INEGI.



Source: Agri based on Comtrade (2014).

Figure 2 Major Exporters of Honey in the World

The main South American producer in Argentina was consolidated in the last two years as second largest exporter and ranks among the top five producers in the world.

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Exporters	Exported value in 2009	Exported value in 2010	Exported value in 2011	Exported value in 2012	Exported value in 2013
China	125.697	182.513	201.375	215.051	246.550
Argentina	160.291	173.349	223.447	215.081	211.346
Nueva Zelandia	59.312	69.970	87.089	103.842	139.316
Alemania	110.016	109.864	120.716	127.246	134.316
México	81.739	84.743	90.359	101.497	112.352
Hungría	60.642	60.774	60.117	63.501	96.171
España	62.666	81.717	79.184	79.843	91.483
Vietnam	32.162	50.942	67.141	58.131	90.549
India	20.016	56.229	76.226	59.882	75.718
Otros	539.868	623.505	687.110	740.473	829.122
Mundo	1.251.909	1.493.773	1.692.870	1.764.663	2.028.214

Source: IFE - Exports Corrientes 2014.

Figure 3 Top 10 World Honey Sellers from 2009 to 2013, they are reported in thousands of dollars.

According to data provided by PASO (2014), almost a quarter of world production of honey produced in China and India, which is another important Asian country, occurred in 4.3% of the total. Among the major producers are also three European countries Turkey, Ukraine and Russia, which in 2009 participated with 5.4%, 4.9% and 3.7% respectively. In America the major producers are Argentina (5.4%); USA (4.3%) and Mexico (3.5%).

As the data shown by the IFE (2014), as shown in Figure 4, China and Argentina in the periods 2009 to 2013, they changed their positions between the first and second among the major exporting countries to different countries.

Mentions the organization PASO (2014), in 2013 Germany and Mexico were the fourth and fifth place, as can be seen the figure 3, with exports of 134 and 110 million dollars respectively. Overall, the rest of the exporting countries increased their market share, representing 58.3% worldwide, which represented an increase of 18.1% compared to 2012. These countries include Vietnam, Hungary, India, Belgium and Italy.

Importers	Imported Value 2009	Imported Value 2010	Imported Value 2011	Imported Value 2012	Imported Value 2013
USA	230.907	304.927	401.186	429.962	497.886
Alemania	256.093	289.073	277.955	279.468	322.004
Reino Unido	106.818	114.862	136.819	107.575	126.312
Japón	87.234	100.248	117.662	105.382	116.268
Francia	85.314	95.540	107.695	92.810	113.140
Italia	52.438	53.602	57.991	56.082	75.425
Bélgica	45.496	50.846	56.770	55.841	68.036
Arabia Saudita	29.482	48.332	52.443	62.016	57.235
España	36.928	38.042	43.559	48.292	53.047
Polonia	20.673	30.613	38.389	34.611	47.342
Otros	331.793	382.914	411.712	458.021	522.754
Total	1.283.176	1.508.999	1.702.181	1.730.060	1.999.449

Source: IFE expota Corrientes (2014).

Figure 4 Value of world imports, Honey, Country (millions of dollars).

To Blengino (2013), in 2013 Argentina is the largest exporter of honey in the world after China (21%), with a share of total world exports of around 14%, followed by Mexico, which is involved with 6% of the total. India, Germany and Vietnam follow them for stakes of 5% and 4% respectively.

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Regarding honey production as suggested by the Institute of Business Development IFE (2014), America's main supplier of honey to Argentina, exported worth $ 500,000 in 2013 well above the second salesman Vietnam is followed by India and Canada, ranking the United States imports, Brazil and Uruguay occupy the 5th and 6th place respectively.

According to IFE (2014) It can be seen in Figure 3, in the case of Argentina, exported worth $ 500,000 more in 2013 compared to 2012, well above the second vendor who is Vietnam followed by India and Canada, the largest importers of honey are: United States, Brazil and Uruguay occupy the 5th and 6th place respectively.

According to IFE (2014), Germany, this country is the second largest buyer of honey, with an annual consumption of almost 1kg., Annual honey per year, consumes about 88,000 tons of annual consumption in the market as from 40 years remains largely unchanged, where the average monthly expenditure on honey of a German household is 2.02 euros, being remarkable power in this market since 40 years remains largely unchanged domestic consumption of honey.

During 2013, total exports of beekeeping totaled $ 214 million, 2% less than in 2012. A much less were exported 65.165 tons per year (-14% annually) tons at a price per ton of 3,285 dollars per ton, which increased in 2013 (+ 14% annually).

One of the main importers of honey is Germany in recent years, also other importers are the United Kingdom, Saudi Arabia, United States, among other markets for Mexican producers could bring benefits to beekeeping to venture into these markets.

Mexico ranks third worldwide exporter of honey and is the fifth largest producer after China, Argentina, USA and Turkey. According to FAO (2014), production totaled 1,073,017 tons worldwide. To size the difficulties for export of honey from Mexico, it is necessary to emphasize the lack of competitiveness of beekeepers and the consequent decline in their share of world honey market. Particularly in the market in the United States, Canada and the European Union. Beekeeping is an activity that has represented and represents an important role in the agriculture of the country, thus creating jobs in rural areas, such as pickup establish itself as the third foreign exchange earner of the agricultural sector for their honey production levels .

The behavior in production levels as Agoaliments (2014), the fifth largest exporter of honey is Mexico has a high quality production, prized for its properties, as well as its aroma, flavor and color, in various countries of the Economic Community European and United States of America. It is highly appreciated internationally because of their aromatic qualities, taste and consistency. From the "creamy" Altiplane honey, harvested in autumn, orange blossom honey spring of Veracruz and Tamaulipas, honey bell Oaxaca, Puebla and Guerrero; until aromatic honeys of the peninsula as Haabín, tzitzilche, Xtabentun and Tajonal, without forgetting the honey mangrove different Mexican coast.

All Mexican Honey has a market may be national, but especially international, as it exports over 60% of national production. According to the data presented by SAGARPA (2012), in recent years there is no great trade with northern neighbors (US and Canada).

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Especially with regard to the US, which have not taken advantage of the closeness that has geographic and market size NAFTA (North American Free Trade Agreement) and the possibility that we have in the European market with the FTA (Free Trade Agreement between Mexico and the European Union). In the case of Mexican producers it is not taking advantage of agreements that need marketing.

The beekeeping industry has gained considerable importance in terms of production volumes and product quality. His leading role in the global market lies in the evolution of quality and reliability, requiring producers of honey, approval of increasingly demanding international standards.

Environment Context of Honey Production in Mexico

The honey is a very popular food sweet substance and is the main product of beekeeping, an activity that relates to the breeding and exploitation of the working bee Apis mellifera. To produce honey, bees collect nectar from flowers, transform and combine with their own substances and then store and leave to mature in hives. As Eagle et al (2008) mentions, beekeeping is an economic activity in the primary sector, the honey produced by bees is a delicacy of sweet taste.

Also they produce wax used in the manufacture of cosmetics, candles and waterproofing materials.

According to Gonzalez (2009), it is necessary to stop considering this agricultural branch as an activity of individual character, and start seeing bees and beekeeping as an indispensable heritage of society, because they ensure the pollination of many species plants that are part of the human food chain, agricultural contexts that still can not meet the growing demands.

Also according to Garcia and Ramirez (2012), this way the Mexican honey listed worldwide for its high quality, it deals in the top three places in the livestock sub-sector as a generator of foreign exchange through export.

Villanueva and Collí (1996), Munguia (1999), Zapata (2011), the national beekeeping is a productive activity that benefits the rural sector, especially the social type that is located in marginalized areas, where agriculture is not develops extensively, that takes advantage of the nectar of the main sources of pollen-bee resource areas of the country. And it has traditionally been a complementary activity of the peasant agricultural activities, particularly in the southeast region where it occurs more acutely. Mentioned Trevino (2014), beekeeping is an activity that has great socio-economic and ecological importance, since it is regarded as a major foreign exchange earner livestock activities. All products and byproducts obtained from beekeeping generate direct income and jobs for rural people, Mexico is recognized internationally for its production of honey of excellent quality and the variety of flora and climatic conditions that they support their potential.

According to research conducted Echazarreta (1999), quoted by and Guemes (2004), by the foregoing shows the social subsistence activity in the area, based on the immediate availability of the most and valuable resource that gives you even survive: family labor, seldom accounted for calculating production costs.

Its use is not a cost but responds to the logic of survival; the beekeeper is not only in production, has on average more than three family support, or the absence of them, seek the help of other beekeepers by lack of capital to hire more labor. So it is estimated that over 80,000 people are linked to beekeeping during the year.

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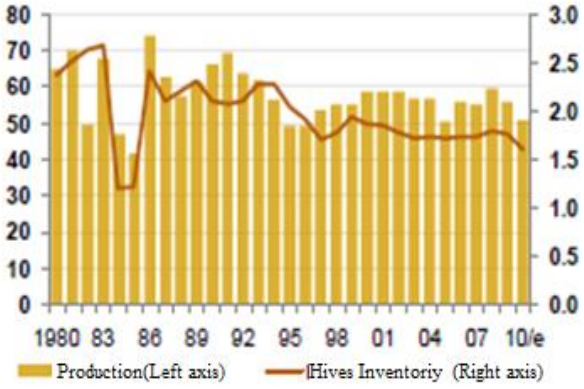
Until a few years ago in the early 90 national beekeeping it was directly influenced by the behavior of the international market for honey, with nearly 90% of Mexican production of this food was intended for export. Mexico exports four out of ten tons produced, which are obtained about 60 million dollars a year for this item.

Mexico plays an important role in international trade of honey, positioned as the third largest exporter; Mexico has gone to the international market for 47% of domestic production during the period 1995-2002 despite the ups and downs that can be found during the period. What is clear is that Mexico managed to keep export levels above 22,000 tons, even to exceed 30,000 as it was in 2002.

The main destination of Mexican exports as ASERCA (2004) of honey is primarily the European market, where Germany, the world's largest importer, absorbing 61% of the value of total exports during the period 1995-2002, while United Kingdom 10% and Belgium 1.2%.



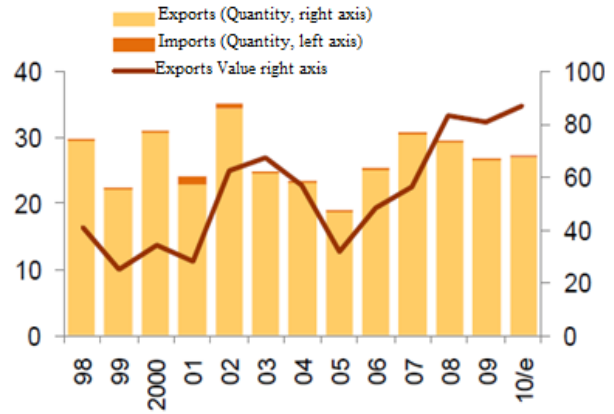
Source: SIAP-SAGARPA, FR (2011).
Executive Director of Industry Analysis.

Figure 5 Honey Production and Inventory Beehives in Mexico.

Mexican beekeeping according to Bancomext (2005), in the period 2000-2003 showed an increase, standing at 59.069 tons, indicating a positive average growth rate of about 0.4% were reported.

In the period 2000-2002, the value of honey production totaled 1,011,892 thousand pesos. These data are significant because they indicate that the participation of beekeeping in the livestock sub sector is growing. 82% of honey production is concentrated in 12 states, among which Yucatan with 14.7% of the total; Veracruz with 11.8%; Campeche with 11.24%; Jalisco 10.61%; Guerrero 7.5%; Chiapas 5.9%; Puebla and Quintana Roo 5.6%, with a share of 4.4 percent.

Mexico is exporting honey according to SAGARPA - FR (2011), Mexico is exporting honey, as shown in Figure 6, 2002 the maximum quantity exported, which amounted to 34,456 tons with a value of 63 is reached million, which decreased to 19 000 tonnes in 2005 with a value of $ 32 million, the fewest recorded between 1998 and 2009. Between 2005 and 2007 again recorded an increase in the amount of exports of 62% which decreased nearly 13% by 2009, to settle at 27,000 tonnes with a value of $ 81 million. In 2009, Mexican exports of honey were allocated 61.2% in the second largest importer, Germany.



Source: INEGI - SE (2011).

Figure 6 Exports and Imports of honey.

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12.7% goes to the United Kingdom, 7.6% in Switzerland, 6.6% in Saudi Arabia, the United States 6.1%, 3.1% to Belgium and the remaining 2.7% to countries like Japan, China, Spain, Venezuela, among others.

Sales of Mexican honey exports to be made through the customs agency in Mexico according Gurria (2015), totaled $ 147 million, not recorded in the last 20 years number.

Also, in the last three years were exported on average 123 million annual Honey dollars, the general coordinator of Livestock, the national beekeeping is located between the fifth and sixth place worldwide as a producer of honey reported, generating 56,500 average tonnes per year the last eight years, and as the third largest exporter, Germany tops the list of buyers of Mexican honey, and acquires 43% of production exported; United States, 25%, followed by Belgium with 12%, this country bought in 2014, 3,000 more than in 2013, he said, that in 2014 new export destinations such as Portugal, Colombia, Panama and Canada opened tonnes , which together account for 111.9 tons with a total value of $ 396.154.

It is currently engaged in beekeeping about 45,000 producers, distributed in all states of the country, who work with 1.9 million hives. But the amount of production is not increased by the lack of measures to potentiate this sector.

Depending on the level of technology that has the beekeeper will be the amount of honey to produce, according Echazarreta and Cash (2005), modernized 60-70 kg per hive, I semi technified 30-45 kg and not modernized of 25-30 kg of honey per hive the years.

According to FAOSTAT (2013), quoted by González (2014), Mexico ranks as the sixth largest producer in the world and the third largest exporter of honey.

For SAGARPA (2012), Mexico's status of being a producer of high quality honey, is the fundamental point that a high influx into question the foreign market to make sales, there arises the need for marketing own that international markets are made today, with the need to make beekeepers have instruments that allow them access to the demands and dynamics of the export market.

Despite the current position of the Mexican honey in international trade, it is essential to preserve and improve the quality of honey to satisfy a market every day stricter, more rigid standards that ensure quality are presented. Currently, the Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA), is responsible for issuing the exporters a Health Certificate Export this as an introduction to the international markets in order to maintain the reliability and presentation to international markets and thus to maintain the reliability of Mexican competitiveness.

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Num.	Entity	1991	%	Entity	2007	%
	Estados Unidos Mexicanos	106 802	100	Estados Unidos Mexicanos	33 981	100
	Península de Yucatán	19 065	17.9	Península de Yucatán	19 203	56.5
1	Yucatán	10 376	9.7	Yucatán	11 019	32.4
2	Michoacán de Ocampo	7 533	7.1	Campeche	5 067	14.9
3	Puebla	7 455	7.0	Quintana Roo	3 117	9.2
4	Jalisco	6 456	6.0	Chiapas	2 324	6.8
5	Veracruz Llave	6 217	5.8	Veracruz Llave	1 569	4.6
6	México	6 121	5.7	Puebla	1 440	4.2
7	Chiapas	5 859	5.5	Oaxaca	1 167	3.4
8	Zacatecas	5 570	5.2	Guerrero	961	2.8
9	Guanajuato	5 394	5.1	Jalisco	727	2.1
10	San Luis Potosí	5 271	4.9	México	688	2.0
11	Hidalgo	4 764	4.5	Michoacán de Ocampo	590	1.7
12	Oaxaca	4 537	4.2	Hidalgo	560	1.6
13	Campeche	4 404	4.1	San Luis Potosí	560	1.6
14	Quintana Roo	4 285	4.0	Guanajuato	538	1.6
15	Guerrero	2 907	2.7	Zacatecas	507	1.5
16	Durango	2 337	2.2	Chihuahua	326	1.0
17	Chihuahua	1 915	1.8	Sonora	318	0.9
18	Tamaulipas	1 876	1.8	Morelos	306	0.9
19	Querétaro	1 704	1.6	Sinaloa	301	0.9
20	Sinaloa	1 611	1.5	Tlaxcala	271	0.8
21	Nayarit	1 430	1.3	Durango	247	0.7
22	Nuevo León	1 309	1.2	Tabasco	228	0.7
23	Tabasco	1 292	1.2	Baja California	200	0.6
24	Tlaxcala	1 071	1.0	Tamaulipas	167	0.5
25	Morelos	958	0.9	Aguascalientes	162	0.5
26	Sonora	956	0.9	Querétaro	114	0.3
27	Aguascalientes	839	0.8	Baja California Sur	104	0.3
28	Baja California	723	0.7	Nayarit	103	0.3
29	Coahuila de Zaragoza	702	0.7	Distrito Federal	101	0.3
30	Distrito Federal	454	0.4	Nuevo León	77	0.2
31	Colima	266	0.2	Coahuila de Zaragoza	71	0.2
32	Baja California Sur	210	0.2	Colima	71	0.2

Source: INEGI (2011). Mexican United States.

Figure 7 Comparison of production units Stocks hives Entity Agricultural Census 1991 and 2007.

Because in Mexico the level of per capita consumption of honey is relatively low most of beekeeping production is intended for the international market, being even considered among the leading producers and exporters of high quality and worldwide, mainly in the European Union, where There is great demand for Mexican honey given its characteristics and quality properties.

The decrease in the census presented as the number of hives that are shown in Figure 7 between the two census events "INEGI" this decline may be due to lack of practice for control of the African bee and the varroa mite, a lack of strategies in government support, they have missed has to beekeeping in recent years, brought as a consequence that comes to low levels of honey, these factors have influenced the loss hives, consequently the actions that have been carried out have not been the most successful in recent years. However it has been showing increased demand for Mexican honey abroad, as well as weak demand in domestic consumption could be a point of opportunity.

Entity	Units of production	%	Hives content	%
Península de Yucatán	19 203	100.0	445 907	100.0
Campeche	5 067	26.4	135 767	30.4
Quintana Roo	3 117	16.2	54 174	12.2
Yucatán	11 019	57.4	255 966	57.4

Source: INEGI. (2011). Campeche. Quintana Roo. Yucatan.

Figure 8 Distribution Entity Production Units and Existence of beehives in the Yucatan Peninsula

As shown in Figure 8, according to INEGI (2011), of the entities that form the Peninsula, Yucatan is the one most stocks with 255,966 hives, spread over 11,019 production units representing 57.4% in both cases total mainland; next in importance Campeche with 135,767 hives in possession of 5067 units representing 30.4 and 26.4% respectively; Finally, there Quintana Roo 54,174 hives belonging to 3 117 units thus contributing 12.2 and 16.2%.

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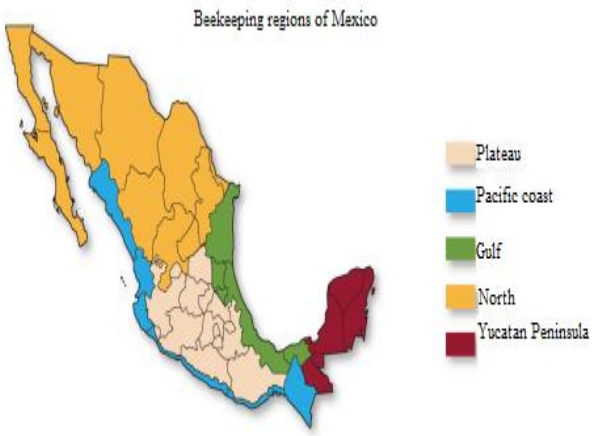
Also according to INEGI (2011), Tabasco production represents only 0.3%, well below the regional average. Honey of this area has great national and international prestige, as it is characterized by its origin in single blooms, as tzitzilche and Tajonal, targeting mainly the market of the European Union.

The cultivation of citrus is of great importance in Mexico, SAGARPA (2013), the largest producer is the state of Veracruz, although it can not fail to mention Puebla, San Luis Potosi, Tamaulipas and Nuevo Leon among others. Within the Mexican citrus industry is the production of orange, tangerine, lemon, grapefruit.

The species of citrus (Citrus sinensis, Citrus limon, Citrus maximum, Citrus nobilis etc.) are medium-sized trees that grow in tropical and subtropical areas, whose fruits are delicious to the palate as you can taste fresh, dried and processed (juices , jams). A parallel activity to the citrus industry is the beekeeping,



Source: SAGARPA F. R., (2012).

Figure 9 Geographical distribution of poultry production zones in Mexico.

Which takes advantage flowering large agricultural areas of different areas and therefore the large extraction, honey considered "Citrus spp honey". Harvesting Honey Citrus spp occurs during the months of March, April and May.

For Flores (2012), it is noteworthy that the price of honey shows wide fluctuations due to the country of origin, factors of production and type of honey, competition in the market for related products, direct or indirect imports, quality of honey , market segment to which it is addressed and the country of destination.

In the North: The trends of lower participation in beekeeping (12.4% between 2005 and 2010) due to ecological and climatic conditions are unfavorable, among which climate variability, high temperatures and little rain, Data provided by INEGI (2011).

North Region

State	Price
Baja California Sur	39.00
Baja California	39.00
Coahuila	39.00
Chihuahua	39.00
Durango	39.00
Nuevo León	39.00
Sonora	39.00
Zacatecas	39.00

GULF

State	Price
Tabasco	36.00
Tamaulipas	36.00
Veracruz	36.00

Source: SAGARPA (2014).

Figure 10 and 11 Kilogram price of honey in 2013 in the Northern Region and Gulf Region.

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The Northern Region is characterized by excellent honey produced mainly mesquite. The price of honey produced in this region is the highest paid despite low production levels. The main international honey market is North America.

In the center or Altiplano Zone: This area is distinguished by clear amber and amber honey and butter called, that your presentation is highly desired, targeting mostly for domestic consumption in the country.

Data provided by INEGI (2012). The Northern Region is characterized by excellent honey produced mainly mesquite. The price of honey produced in this region is the highest paid despite low production levels. The main international honey market is North America.

In the center or Altiplano Zone: This area is distinguished by clear amber and amber honey and butter called, that your presentation is highly desired, targeting mostly for domestic consumption in the country.

Data provided by INEGI (2012).

Plateau

State	Price
Aguascalientes	40.00
Distrito Federal	40.00
Guanajuato	40.00
Hidalgo	40.00
Jalisco	40.00
México	38.00
Morelos	39.00

Center

State	Price
Puebla	38.00
Querétaro	38.00
San Luis Potosí	38.00
Tlaxcala	38.00

Source: SAGARPA (2014)

Figure 12 and 13 Kilogram price of honey in 2013 in the Altiplano region and Central Region

It has to be the second most important area with 36.1% of national production. Their conditions for beekeeping are more favorable.

Importantly, the states of Jalisco, the third largest domestic producer with an average of 5,698 tons produced annually in the period 2005-2010 and 10.3% share, Veracruz with 4,112 tons and average 7.4% share, and Puebla with 2,943 ton and 5.3% average participation is important to note that the flowering citrus prevails in northern Veracruz state. Data provided by INEGI (2012).

Pacific

State	Price
Colima	36.00
Chiapas	36.00
Guerrero	36.00
Michoacán	36.00
Oaxaca	36.00
Nayarit	36.00
Sinaloa	36.00

Yucatan Peninsula

State	Price
Campeche	34.00
Yucatán	34.00
Quintana Roo	34.00

Source: SAGARPA (2014).

Figure 14 and 15 Kilogram of honey price in 2013 in the Pacific Region and the Yucatan Peninsula.

In the South Zone: have a stake in the main producing area. It contributes 51.5% of national production. Highlights include the states of Yucatan with average 8,388 tonnes in the given period, ie 15.0% stake, and for example in the case of Campeche with 7,179 tonnes, 12.9% stake. Other participants in the levels of production states are:

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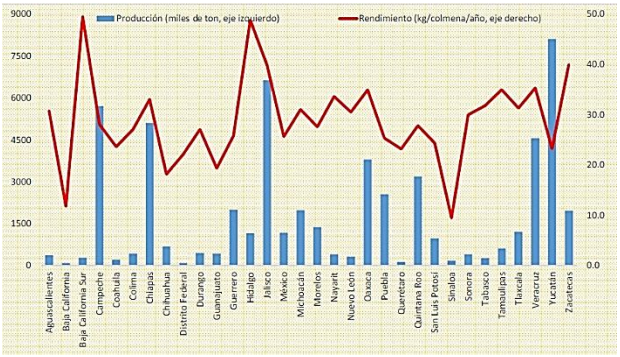
Guerrero, Chiapas, Oaxaca and Quintana Roo are also major producers and generated 7.3%, 6.5%, 5.4% and 4.0% respectively of honey production between 2005 and 2010. data provided by INEGI (2012).

Honey production in Mexico over the past four years Have Remained at around 56000 tonnes on average, giving it sixth place worldwide in honey production.



Source: Martinez SIACON data (2015).

Figure 16 Honey production in Mexico in 2014.

According to Martinez (2015), in terms of exports is concerned, Mexico is ranked fifth; during the last years and has averaged 26 thousand 600 tons, this means between 40% and 50% of total production that is aimed at countries like Germany, England and America, it generates annual revenues averaged 32.4 million dollars. Domestic production is concentrated in the Southeast entities as Campeche, Chiapas, Quintana Roo, Tabasco and Yucatan, the latter with the national leadership.

Producers nationwide are: Jalisco, Guerrero, Veracruz, Oaxaca, Puebla, Colima, Guanajuato, Hidalgo, Michoacan, Morelos, San Luis Potosi, Sinaloa and Zacatecas.

These 18 entities together account for about 90 percent of national production. In the case of the states of Morelos and Veracruz are rich in fruit trees (apple, peach, orange) and cazaguate flower, the latter very dear to give honey a special touch in its flavor and color.

Features of the Honey

Sainz et al., (2000), The flower honey is produced by bees from the nectar of flowers. Through its language, the nectar is swallowed and reaches the crop where it is mixed with saliva enzymes which, together with collecting the floral nectar, hydrolyzed sucrose nectar into fructose and glucose, the main sugars in honey. When the bee returns to the hive, the load of regurgitates nectar in areas close to the entrance of the hive cells.

Prost Jean-(2001). Where deposits and loses water through evaporation. After a few days, the nectar that has been deposited in the alveoli of the combs, is dehydrated to a water concentration of between 14 and 25%, while sugar concentration rises to 70-80% and its spectrum sugar is modified by enzymatic action. Finally, the cell lining bee honey and matured by a cover of wax.

Quality of Honey

As he mentioned in his work Soto (2005). Then mention of the importance of ensuring the quality of the raw material, ie, that honey is considered as a quality product is made, it must be within a range of 17 ° and 21 ° degrees of humidity, if exceeds 24 ° degrees, tend to decompose due to fermentation. The composition of honey depends on many factors harvested species, type of soil, geography, race of bees, physiological state of the colony.

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Average composition of honey	
Levulosa	40.50%
Glucose	34,02%
Saccharose	1, 90%
Dextrin and gum	1,51%
Ash	0,18%
Water	17,70%

Source: Biblioteca.universia

Figure 17 Media composition of the honey.

The great diversity of vegetation types and ecosystems found throughout the national territory, allows the beekeeper to have a wide variety of both flowering nectar and production seasons (monofloral). As a result of this diversity, natural resources determine the characteristics of both production systems and products that are obtained. It dominates the tropical rain forest and tropical deciduous forest and in addition there are extensive areas cultivated with citrus allowing the production of orange blossom honey characterized by their quality. This region in the north, crops are in a majority of oranges, tangerines and lemons.

Enciclopediagro (2012). Bee products are multiple products that are obtained from the tireless work of these admirable insects: Honey. It is obtained through the process of foraging (activity of the worker bees that involves collecting pollen and nectar bee flora of a particular geographical location). Because of its high sugar content, honey provides energy. Besides being an important source of vitamins and minerals, it contains a small amount of protein. Generally honey is consumed directly in food; also used in the production of syrups, candies, cookies, cakes, wine, etc. In cosmetology, it is an important ingredient of cold creams, masks, lotions, soaps and shampoos. Honey give stingless bees (Melipona) throughout Mexico have always been highly valued for its healing properties.

It is used, for example, against the discomfort of the flu and throat diseases of the eyes, bruises, pain during pregnancy and after childbirth general weakness. Among our Indians occupied an important place in pre-Conquest times: for the ills of the throat, honey hot applied snuff; epilepsy treated her with honey, and deafness with applications of warm honey with chili ears. The honey is sold mainly in the export market, consuming only 10% in the country.

Honey uses

MIFI (2009). Honey has its qualities recognized and used by humans since ancient times, as food and to sweeten naturally with power to sweeten twice that of cane sugar.

It is also used for therapeutic purposes because of its antimicrobial and antiseptic properties to help heal and prevent infection in wounds or superficial burns. In addition, it is used as raw material in cosmetic creams, cleansing facial masks, toners and other products due to its astringent and soothing qualities Nutritionally, honey is pure carbohydrates.

The most important nutritional property of honey is that it consists of simple sugars. These need not be digested sugars as they are directly assimilated by the body. This makes honey a quick energy source.

Honey is also rich in minerals such as Ca, Zn, which make it a highly desirable product in geriatric nutrition and school children. Most Common uses are:

I. Honey: It is used as food, medicine, cosmetics and toiletries, as well as to combine in industrialized corn flakes, cereals and other food products.
II. Beeswax: Used in cosmetics, toiletries, pharmaceuticals, polishes and candles.

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III. Propolis: is used as medicine and dietary supplement. It is sometimes known as 'bee glue'.
IV. Pollen: Pollen is used as a dietary supplement.
V. Royal Jelly: It is sometimes called 'bee milk'. It is used in cosmetics.
SAW. Poison: Poison is valued for its supposed medicinal qualities.

The predominant production system in beekeeping is extensive or craft, characterized by scattered producers, which have a small number of hives, which supply the regional market with a type of multiflora honey of different colors and qualities.

The traditional marketing channel used to carry your product from the farm to the consumer is the local direct selling, selling to middlemen and traders sale. The producer receives the largest share of the final price of the product, while traders higher marketing margins are awarded. Therefore for the small beekeeper may have more income will require increasing levels of beekeeping.

Conclusion

Currently the world honey production is around 1.1 million tons, where six countries; China, United States, Argentina, Mexico, Canada and Germany account for half of the total. In the last decade, world production and consumption grew strongly, a trend that is also reflected in international trade of honey.

According to data provided by the SER-SAGARPA Gurria (2015), In the last three years Mexico exported $ 123 million, annual average product; in 2014 were sold 147 million dollars, the general coordinator of Livestock reported. Currently they engaged in beekeeping about 45 thousand beekeepers, distributed in every state in the country, who work with 1.9 million hives.

Beekeeping in Mexico has a great economic importance, since it is regarded as major foreign exchange earner livestock activities.

All products and byproducts obtained from beekeeping generate direct income and are an important source of work for everyone involved in the chain of work, in addition, Mexico is recognized internationally for its production of excellent honey quality and favorable climatic conditions that support their potential beekeeping.

As for the fixed price per tonne of honey, this occurs at the lowest amount recorded in the last 10 years. Regardless of market growth honey, pricing of this product continues to take place based on the combination of the international price and parity that has the Mexican peso against the dollar, exports in recent years, mainly to the the countries of the European Union, USA, Saudi Arabia, and that can be increased by the high demand of these countries. Clearly, in the last two decades from 1990 to 2010, Mexican exports of honey have performed lower on the various factors discussed in this paper.

According to Bancomext (2010), Argentine honey exporters have shifted to Mexican exporters, the main markets for honey, beekeepers and exporters (gatherers product) compete with Mexican producers and those of Argentina China mainly. For a strategy of market diversification is necessary to increase and integrate systematically the exportable supply of Mexico, and to do so must confront and solve a series of challenges related to beekeeping, with measures that balance with the good practices production and do not interfere with the nutritional and health status of honey and other bee products generated by the properties.

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In order to generate more income for beekeepers, it should follow a strategy of increasing production and product diversification to achieve technical standardization of honey. Required by the market in the United States and the European Union.

According to SAGARPA (2013), to achieve a significant increase apiary management according to regulations factor is the dissemination of the programs and the dissemination and monitoring of the National Program for Food Safety and Quality Honey in Mexico, this program promotes the application of Good Manufacturing Practices and Good Management Practices and Packaging Honey, this can be achieved through coordination with producers and marketers of honey and traceability program, the which avoids deviations in the natural composition of honey. These programs can allow the beekeeper to provide certainty in marketing your product, provide certainty to honey both regionally and nationally and confidence in the international market.

According Rello (2001), the production strategy of rural families depends on the experiences, initiatives and capabilities that used to combine the assets they own, and obtain various incomes to improve their livelihoods.

It is noteworthy that to increase production levels is not enough to implement a product management as suggested by SAGARPA (2013). Rello (2001), Pat (1999), quoted by Delgadillo (2005), Caro, Leyva and Chi (2012), Barradas and Hernandez (2013), also require the integration of actions to potentiate the livestock industry.

The prevailing system of production in the country is small producer, the process of commercialization and economic impact of this activity is not very good for the small beekeeper, it is this job opportunity you have to dabble with good production levels exposed depending on the demand for this product.

References

Angeles Toriz Carlos, Román de Carlos Ana María (2010), La producción apícola en México, Seminario de Historia de la Medicina Veterinaria y Zootecnia.,Facultad de Medicina Veterinaria y Zootecnia UNAM, Quezada, J. y J. González, "A preliminay study of the development of colonies of Melipona beecheii in traditional and rational hives". Journal of Apicultural Research. 33(3): 167-170.

Brisa Ceccon R. (2008).,El Comercio Justo en América Latina: Perspectivas Desafios, Universidad Nacional Autónoma de México, Ciudad de México, CopItarXives 2008. Copyright© 2008 por Brisa Ceccon R.,Publicado 2008 por CopItarXives.

Bueno, E. (2000) "La dirección del conocimiento en el proceso estratégico de la empresa: información, complejidad e imaginación en el espiral del conocimiento", en Bueno, E. y Salmador M.P. (Eds.): Perspectivas sobre dirección del conocimiento y capital intelectual, I.U. Euroforum Escorial, pp.55-56.

Financiera Rural (2011), Dirección General Adjunta de Planeación Estratégica y Análisis Sectorial Enero 2011 Dirección Ejecutiva de Análisis Sectorial, 2011,
Fuentes: Codex Alimentarius para la miel CODEX STAN 12-1981.

ISSN-On line: 2414-4959

"La producción de Miel en México" (1993), "La Producción de Miel en México (2004), Modernidad y Tradición" (2005), "Programa Especial de Inocuidad de la Miel" (2010), "Producción de Miel en México, Modernidad y Tradición" y "Situación Actual y Perspectiva de la Apicultura en México" (2010), publicados en los números 4 (diciembre 1993), 128 (abril 2004), 137 (enero 2005) y 199 (marzo 2010), respectivamente, de la revista Claridades Agropecuarias de ASERCA,

Fuentes: Artículos "Programa Especial de Inocuidad de la Miel", "Producción de Miel en México, Modernidad y Tradición" y "Situación Actual y Perspectiva de la Apicultura en México", publicados en los 128 (abril 2004), 137 (enero 2005) y 199 (marzo 2010), respectivamente, de la revista Claridades Agropecuarias de ASERCA, Plan Rector del Sistema Producto Apícola (Distrito Federal).

Dirección General de Ganadería o del Centro de Estadística Agropecuaria (2011), Análisis Económico de la Producción de Miel Bajo Protocolo, Esta publicación puede ser obtenida electrónicamente a través de Internet, en los apartados de Publicaciones de la Dirección General de Ganadería o del Centro de Estadística Agropecuaria: Indicadores de actividad Económica No. 70: http://www.sagar.gob.mx .

García A., Notas Sobre la Teoría General de Sistemas [on line], España: Universidad Complutense de Madrid, 1995. Disponible en: http://revistas.ucm.es/byd/11321873/articulos/RGID9595120197A.PDF

Hernández S. R., Fernández C. C. y Baptista L. P.,(2011). Metodología de la Investigación, México: Mc. Graw Hill.

Monroy G. S., (1995). Una Introducción a la Metodología de Sistemas [on line], México: Centro de Estudios Superiores en Educación. Disponible en: http://www.cese.edu.mx/revista/metodologia_de_sistemas.htm

Parada P., (2011). Estilo de Referencias IEEE [on line], España: Universidad Carlos III de Madrid. Disponible en: http://www.giaa.inf.uc3m.es/docencia/ITIG/ReferenciaIEEE.pdf

Sitio oficial de la Organización Mundial del Comercio (OMC) (2007). Disponible en www.wto.org, consultado el 15 de marzo de 2007. Sitio oficial de Network of European Worldshops (NEWS). Disponible en: http://news.conaxis.de/index.php, consultado el 22 de abril de 2014.

Tamayo y Tamayo, (2003) El Proceso de la Investigación Científica, Editorial Limusa, S.A. de C.V.,Grupo Noriega Editores, Cuarta Edición, México.

UNIVERSIDAD DE OCCIDENTE,(2010). Centro de Asesoría en Negocios Internacionales, contacto: B. Juárez 435 Pte. Los Mochis, Sinaloa, México, Tel. 01 (68) 12-66-17.

Zamorano H.,(2001). Introducción a Conceptos Básicos de la Teoría General de Sistemas, [on line], Argentina: Facultad de Ciencias Económicas y Estadística de la Universidad Nacional de Rosario. Disponible en: http://www.galleanoyzamorano.com.ar/facultad/pp2-23.pdf

ISSN-On line: 2414-4959

www.nexoveracruz.com/infonero/alamo/6753-disminuye-la-produccion-de-mi...El presidente de la Asociación de Apicultores de este municipio Gustavo Aranga, dio a conocer que debido a los cambios climáticos que se han originado.(2011). Fuentes de Información. Consultado 2014.

Reyes R., Soto M.., (2014)., Método Sistémico para el Desarrollo de Proyectos Mecatrónicos Terminales, (Diseño de Conjuntos-Ingeniería de Proyectos), 2014, No. Reg. 03-2014-042912582900-01, INDAUTOR.

Jiménez T., Acebo C., Castro A., Aguilar J.., Betancourt P.,(2010). Integración de Tecnologías para Incrementar las Producciones Apícolas en Cuba. Instituto de Biotecnología de las Plantas. Universidad Central "Marta Abreu" de Las Villas. Cuba.

Contreras E., Pérez A.., Echazarreta C., Cavazos A., Macías M., Tapia G.. (2013). Características y situación actual de la apicultura en las regiones Sur y Sureste de Jalisco, México. SURESTE Revista Mexicana de Ciencias Pecuarias 2013;4(3):387-398.

Personas entrevistadas:

*Productor Apícola: Julio Sierra Martínez, Asociación de Apicultores de Álamo Veracruz.

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González R (2009) NoticiasApicolas.com. 19 de Agosto, Director de Apicultura sin Fronteras y NoticiasApicolas.com.

Méndez, I. E (2003) Verbenaceae. En: Greuter, W. (ed.). Flora de la República de Cuba. Fascículo 7(3). A.R. Gantner Verlag KG. Liechtenstein.

Pimentel y Ravelo, 2007. Flora apícola utilizada por la población natural de abejas de la tierra.

Vidal, F (1997). Panorámica del Mercado de la Miel en España. Agricultura, vol. LXVl, n° 774:24-32.

SAGARPA. SIACON (2010). Base de datos de la actividad agrícola, pecuaria y pesquera. México. Sistema de Información Agroalimentaria de Consulta.

Calendario para la coseñaanual de miel Fuente: M.V.Z. Oscar Trujillo Narcia, calendario apícola.

Nacional Financiera (www.nafin.gob.mx) y el Banco Nacional de Comercio Exterior, (www.bancomext.com.

Flores V. L., (2012). Competitividad de Miel en el Ejido el Progreso Municipio de Bella Vista Chiapas. Universidad Autónoma Agraria Antonio Narro. Division de Ciencias Socioeconómicas. Departamento de Administracion Agropecuaria. Tesis. Buenavista, Saltillo, Coahuila, México.

Gómez A. A. (1997). Eficiencia energética en la producción apícola. Universidad de Colima Facultad de Arquitectura. Tesis (Maestría en Bioclimática).

Sáinz C., Gómez C. (2000) ¨Mieles Españolas¨. Características e identificación mediante el análisis del polen. Ediciones Mundi-Prensa. Madrid-Barcelona-México.

Jean-Prost P. (2001) Apicultura. Ediciones Mundi-Prensa, Madrid-Barcelona-México.

ISSN-On line: 2414-4959

Secretaria de Economía (2014).

SAGARPA (2010). "RSAA". Situación Actual de la Apicultura en México No. 199, año 2010.

Caro E. J., Leyva M. M., Chi T. M. (2012). Comercialización de miel en el municipio de espita, Yucatán. Revista de Economía - Vol. XXVIII - Núm. 78, Págs: 9-35.

SAGARPA. 2009."Servicio de Información Agroalimentaria y Pesquera". México. En: Secretaria de Fomento Económico. 2010."Comercio Exterior". Revista Impulso Económico. No. 10. Gobierno del Estado de Yucatán. www.campomexicano.gob.mx/portal_siap/Integracion/.

SIAP (2010). "Balanza agropecuaria y agroindustrial". En:www.campomexicano.gob.mx/portal_siap/Integracion/Estadistica/Derivada/ComercioExterior/BalanzaComercial/balanzaAV.pdf.

Zavala O. J. A., Colomo G. Matalí P. N. A., Méndez V. A. y Vandame R., (2013). Miel de Cítricos de México.

SAGARPA (2013). Precios de Miel. Obtenidos por los Coordinadores Estatales del Programa y proporcionados por las organizaciones de apicultores y empresas comercializadoras (información del mes de septiembre). Reg. ISSN 088-179.

Barrera P. D., Valdés P., (2014). (AGRIMUNDO) Comercio Apícola, Diferenciación Oficina de Estudios y Políticas Agrarias. (ODEPA). Ministerio de Agricultura, Chile. www.odepa.gob.cl

Guerrero Cultural Siglo XXI, A. C. (2012). Apicultura, Chilpancingo, Gro., México, C.P. 39000. Email: guerrerocultural@hotmail.com, grocultural@enciclopediagro.org.

Gurría T. (2014). Exportaciones de miel, ComunicaCampeche. ttp://www.comunicacampeche.com.mx

DPCE – MIFIC (2009). Dirección de Políticas Comerciales Externas, Ministerio de Fomento, Industria y Comercio. Departamento de Análisis Económico. Managua, Nicaragua. www.mific.gob.ni

IFE (2014). Instituto de Fomento Empresarial, Informe Internacional de la Miel. Quinquenio 2009-2013. www.corrientesexporta.gov.ar .

SAGARPA F.R. (2011). Monografía de la Miel. Financiera rural.

INEGI (2011). Catálogo de especies y productos agropecuarios, forestales y pesqueros. Instituto Nacional de Estadística y Geografía.

http://www.inegi.org.mx/est/contenidos/espanol/metodologias/censos/cepafop/default.asp?c= (24 de enero de 2011).

Revista Mexicana del Caribe (2011). La apicultura en la Península de Yucatán: Actividad de Subsistencia en un Entorno Globalizado. Revista Mexicana del Caribe.

Zapata C. R. A. (2011). *Colmenas de maíz.* Universidad Autónoma Chapingo. Tesis.

INEGI (2011). Estados Unidos Mexicanos. Resultados definitivos. Tomo II. VII Censo Agrícola-Ganadero 1991-2007. Estados Unidos Mexicanos. Tabulados de resultados definitivos. VIII Censo Agrícola, Ganadero y Forestal.

Soto M. L. (2005). Mejoramiento integral para la producción de miel en Álamo Veracruz. ESIME. IPN. biblioteca.universia.net.

ISSN-On line: 2414-4959

Barradas H. j. E., Hernández G. A., (2013). Máquina Vertical para la Extracción de Miel. ESIME, IPN, Tesis.

Secretaría de Economía (2009). Oficina de representación en Tokio. Acuerdo de Asociación Económica México–Japón. Embajada de México en Japón.

Trujillo N. O. (2005). Calendario para la Cosecha Anual de Miel, Calendario Apícola.

Nacional Financiera (www.nafin.gob.mx) y el Banco Nacional de Comercio Exterior, www.bancomext.com.

Güemes R. F. J.; Echazarreta G. C.; Villanueva G., R.; Pat F. J. M., y Gómez Á,. R., (2003). La apicultura en la península de Yucatán. Actividad de subsistencia en un entorno globalizado. Revista Mexicana del Caribe, vol. VIII, núm. 16, pp. 117-132. Universidad de Quintana Roo. Chetumal, México.

Güemes y Ricalde, F. (2004). "Informe final. Proyecto Conacyt/Sisierra sobre 'Cultura de producción y consumo de miel ecológica en la península de Yucatán' 2000-2003", Chetumal, Universidad de Quintana Roo (Uqroo).

Güemes R. F., y Pat F. J. M., (2001). Condiciones actuales de la apicultura en el estado de Campeche, Campeche, Conacyt/Sisierra/El Colegio de la Frontera Sur/Uqroo.

Güemes R., F., y Villanueva G. R., (2002). Características de la apicultura en el estado de Quintana Roo y del mercado de sus productos, Chetumal, Gobierno del Estado de Quintana Roo/Sisierra/Uqroo/Ecosur.

Güemes R., F., Villanueva-G. R. y Eaton G. K., (2003). "Honey production by the Mayans in the Yucatán Peninsula", Bee World, vol. 84, núm. 4, pp. 144-154.

Urbeconomica (2014). Sectores de Producción Apícola en México. Por Zonas geográfica: www.urbeconomica.com/index.php...principales-productores-de-miel.

Blengino C. (2013), Sector Apícola. Área de Estudios Sectoriales, Dirección de Agroalimentos, Alimentos Argentinos. Informe de Coyuntura N° 3.

SER – SAGARPA (2015), Apicultores Mexicanos Logran las Mejores Ventas de Miel de los Últimos 20 Años. Secretaria de Relaciones Exteriores, Secretaria de Agricultura Ganadería, Desarrollo Rural, Pesca y Alimentación. Embamex.sre.gob.mx.

Barrera P. D., Valdés P., (2014), (AGRIMUNDO) Comercio apícola, diferenciación. ODEPA, Ministerio de Agricultura. Chile. Oficina de Estudios y Políticas Agrarias. www.odepa.gob.cl

Gurría T. F. (2015), A la Alza Exportación de Miel con Ayuda de una Agencia Aduanal en México. Grupo EI, Comercio Exterior.

ISSN-On line: 2414-4959