

The international honey industry is in an unprecedented situation with a confluence of major developments.

HONEY ANTIDUMPING RATES

The U.S. Department of Commerce's preliminary calculations of honey antidumping duties have sent shock waves throughout the world, especially in the U.S., Canada, Mexico, Europe, Argentina, Brazil, Ukraine and Vietnam. The countries in the antidumping case are currently among the top ten global honey exporters.

Preliminary Honey Antidumping Duty Rates (announced as of Nov. 17, 2021):

	Country Rate	Exporter Rates*
Argentina	16%	7.8%, 24%, 49%
Brazil	20%	7.8%, 29%
India	6.48%	6.24%, 6.72%
Ukraine	18%	18%, 32%
Vietnam	412%	410%, 413%
*Assigned to specific exporters		

This means that six of the largest honey exporters in the world are subject to U.S. antidumping orders. The antidumping order for Chinese honey has been in effect for 20 years. According to FAO statistics, China is the largest world exporter of honey. Within the U.S., the countries' rank by import volume is India, Vietnam, Argentina, Brazil, and Ukraine. Therefore what happens in the final determination, scheduled for April 2022, in respect to final rates and critical circumstances, will have a profound effect on the international honey market and on beekeepers in America and in the world.

U.S. law requires that the Department of Commerce conduct verifications to validate information and data submitted by foreign producers, and that interested parties may comment on the verification reports.

Brazil successfully argued that there were mistakes in the DOC's calculations, so that the rate for one exporter was reduced to 10.52% and the rate for all others came down to 9.38% in mid December.

Interested parties have the legal right to raise comments during the verification period regarding the comprehensiveness and accuracy of the evidence, the integrity of the documents, and the representations. It is anticipated that exporters, importers, beekeepers and lawyers will be presenting through proper channels their arguments for changes in respect to both rates and critical circumstances.

Before 2021 ended, there were reports that Argentina and Vietnam had critical circumstances. In the case of Argentina, the report is that the company with the lowest rate was exempt because their export volume did not create the type of surge that results in critical circumstances. As of this writing, Brazil did not receive critical circumstance designation, and it is not known whether India or Ukraine will. Since critical circumstances involve retroactive duties, this is a very significant question for importers.

The threat of an antidumping petition has been a concern as early as the 4th quarter of 2020, and international honey exporters and U.S. importers have been creating a surge of shipments presumably to beat the date that preliminary antidumping duties would be collected by U.S. Customs. Cash payments were imposed in November 2021. Total U.S. imports for year-to-date September 2021 increased by 65,000,000 lbs. (21%) compared to 2020 and reflect an overall surge in shipments.

The Final Determination of duty rates is scheduled for April 8, 2022. Until then, imports will be assessed cash duties at the preliminary rate. After the Final Determination is made, there could be a retroactive increase in duties to be collected.

	YTD Sep 2020	YTD Sep 2021	% Change
Argentina	66,059,571	73,741,248	12%
Brazil	46,902,726	56,141,804	20%
India	68,400,062	100,298,658	47%
Vietnam	82,139,703	99,385,528	21%
Ukraine	9,025,924	7,401,119	-18%
Total Imports	316,757,130	382,048,128	21%

U.S. Imports in Pounds Jan. to Sept. 2021 vs. 2020

There is an axiom in mathematical logic that states that if P implies Q and Q is false, then P is also false. Given the fact that Indian Light Amber and Vietnamese Light Amber have sold at similar low prices for many years, and, if as reported, India was used as a comparable country in the

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Shares of U.S. Imported Bulk Honey from Five Major Exporting Countries, 2015-2021(thru Aug.)							
	2015	2016	2017	2018	2019	2020	Jan Aug. 2021
Argentina	16%	21%	18%	20%	21%	21%	20%
Brazil	9%	12%	12%	13%	14%	18%	18%
Canada	5%	8%	8%	8%	4%	2%	1%
India	21%	18%	23%	24%	28%	20%	27%
Vietnam	22%	24%	18%	21%	21%	26%	23%
Other Countries	28%	17%	21%	14%	11%	13%	10%
TOTAL	100%	100%	100%	100%	100%	100%	100%

Vietnam antidumping duty calculations, it is hard to understand the 406 point (6.48% for India and 412% for Vietnam) disparity in the Preliminary Antidumping Duty Rates, with Vietnam's being so high and India's so low.

It is noteworthy that India, with a population of 1.3 billion which enjoys honey and uses it as a medicinal product, has increased their exports to the U.S. from zero in 2000 to claim a market share of nearly 30% of the U.S. market. India has received a dramatically lower antidumping rate compared to countries with mature beekeeping and honey exporting industries and good, internationally recognized beekeeping practices. Beekeepers in advanced honey producing nations have suffered declines in productivity which have been correlated with environmental degradation of soil, water and atmosphere. In China and India the environmental degradation and stress are even more severe, increasing the challenges to productivity rates for authentic honey.

Many beekeepers in North and South America were amazed and baffled to see a 6.48% duty rate for Indian honey, and no critical circumstances, when India's import

volume surged 82% in 2021 compared to the same period in 2020.

Underlying the concerns of accuracy are questions around what is actually being bought, authentic honey or economically adulterated honey. It is becoming increasingly clear that that question cannot be answered without reference to the modes of production and the full traceability of the products and their authenticity.

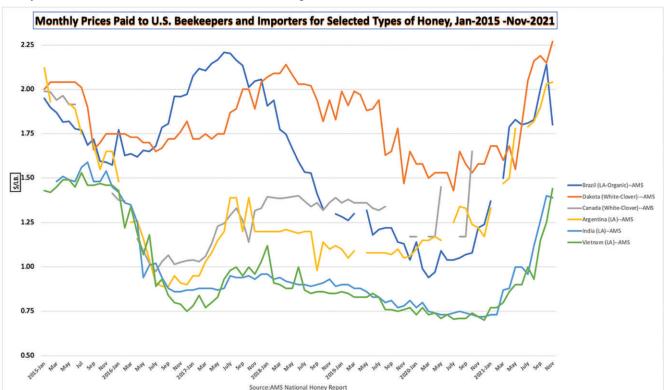
HONEY MARKET TENDENCIES

In the period leading up to the announcement of the antidumping findings, the market was basically frozen. Many exporting countries had low inventories and at the same time there was complete uncertainty as to what the duties would be. That included which countries and which exporters within those countries would achieve comparative advantage. After the announcement, along with other events, honey prices rose, in some cases dramatically. For those countries which have exported at extraordinarily low prices during recent years, the high antidumping rates are serving as an umbrella, allowing fresh offers from traditionally low-priced exporters to almost double. The whole tenor of the market has changed.

The confluence of events, including the promulgation of the USP standard and widespread use of Nuclear Magnetic Resonance testing, will most likely compel a shift in the export of honey, and a strengthening of prices. This is a market which will not be easily manipulated. That in turn will help prevent economically motivated adulteration. Countries which have a history of exporting adulterated honey may have to find other markets in a new environment in which adulteration, in its various modes, may become very difficult.

U.S. and import prices

Honey prices were trending downward until March 2021, and after the filing of the antidumping petition they turned sharply upward. In 2020, prices for clover were



above \$1.50/lb., then climbed over \$2.00/lb. after March 2021. Indian and Vietnamese prices were below \$0.75/lb. in 2020, and remained below \$1.00/lb. through 2021. All import prices rose after April 2021.

2021 Honey Prices

	March	July 2021
India	\$0.73/lb.	\$0.99/lb.
Vietnam	\$0.75/lb.	\$0.90/lb.
 Argentina 	\$1.25/lb.	\$1.75/lb.
 Brazil 	\$1.29/lb.	\$1.79/lb.
US White	\$1.60/lb	\$2.00 plus
 Canada 	\$1.25/lb.	\$1.97 (Sept.)

In the 4th quarter of 2021, the escalation of prices has become steeper and honey is being offered at \$1.80-\$2.25/lb.

The value of the global honey market was \$7.84 billion (U.S.) in 2020, experiencing significant growth of 9%, despite weak prices. Consumer demand for natural sweeteners, and the perception of honey as an immunity-boosting product, are helping to fuel the increase during a global pandemic.

Public Health England recommends honey for treatment of acute cough, one of the common symptoms in COVID patients. Honey is being incorporated into more and more pharmaceutical products globally.

Argentina

Argentina has received substantial antidumping rates, but within Argentina there is a major exporter with comparative advantage with respect to the antidumping rate and critical circumstances. Other exporters are subject to higher rates and critical circumstances. The amount of retroactive critical circumstances duties could be financially very significant for importers who bear liability for those duty payments. Honey exporters in Argentina, as well as in other countries, are concerned about terms of sale in this uncertain context.

At the beginning of the crop there were good rains and suitable temperatures in the areas producing the major spring honey crops. This is attributed to it being a La Nina year. If things continue with reasonable weather, the 2022 crop should be in the upper range. The majority of Argentine white honey was shipped to the U.S. in 2021, which received 70% of total exports. Japan prizes the quality of Argentine honey, and their requirements are strict. By November, Argentina had exported 60,567 metric tons, and by the end of December the quantity may reach 65,000 metric tons. Most quantities that remain in stock at the end of 2021 are dark honey.

The crop began in September-October with citrus and lemon in northern Argentina. Thus far the weather conditions are reasonable. Argentina expects a normal crop, which generally ranges from 55,000 to 75,000 metric tons. Because Argentina is a large country ranging over many longitudes with different climates, the national crop is stable. Since fields have been converted over past years from clover and alfalfa for dairy and cattle production to soybean production, honey crops have gone down.

Argentina is at the vanguard of promoting proper modes of production and beekeeping practices. The Argentine honey industry also promotes sophisticated and ongoing research on honey.

Argentina and Brazil both suffered serious economic and human consequences from the pandemic. Some internal transportation restrictions impeded movements of both bees and honey.

Brazil

In December, small amounts of honey were being produced in the Serrano region and parts of the Northeast, at high prices. Marmeleiro, some Angico, and polyfloral Extra Light Amber and White precede the main crops that will come in the first quarter of 2022. The condition of the bees is good. Not many offers were being made in early December, as beekeepers were awaiting clarity on the market and the U.S. antidumping rates.

Brazil Honey Exports Jan-November 2021			
Destination	Kilos	U.S. Dollar Value	
World	45,507,967	\$157,019,658	
USA	32,773,333		
Europe	8,650,877		
Canada	2,546,729		

CANADA

About 13,000,000 pounds of honey were exported from Canada in the first 10 months of 2021, according to Canada's government export data. The demand for Canadian honey appears to be considerably greater than the supply left in beekeepers' hands. Producer prices climbed from \$1.25/lb. (U.S.) in June 2020 to 2.18/lb. in January 2021. After the antidumping suit was filed in the U.S. in April, prices went up to \$2.40-2.70/lb. to Japanese and U.S. buyers.

Canadian beekeepers reacted to the antidumping rates with concern that there could be massive increases in volumes from countries that have never been suppliers to North America. There was shock at learning the preliminary determination rates and their anomalies.

There are reports of heavy bee losses in some regions, and weak bees that may not make it through the winter. The number of healthy colonies for one of the large beekeepers was 70% of normal as winter arrived. Northern regions of Canada have had major swings in temperature variation from day to day, and more wind through the season.

Canadian Honey Exports Jan-October 2021			
Destination	Kilos	U.S. Dollar Value	
World	5,875,016	\$35,008,000	
Japan	3,469,331	\$21,429,000	
USA	2,091,691	\$11,725,953	

U.S. imports from Canada in 2020 totaled 4,142,000 kilos. Japan has become an increasingly important market for Canada, and beekeepers are exploring export opportunities in the U.K., the EU and the Middle East.

A decade ago, 80% of Canada's honey exports went to the U.S. Japan now represents Canada's largest market, and prices to Japan are much higher. There is much less need to compete with adulterated honey. Although there are signs of high varroa counts for some beekeepers, Canada is gearing up to increase honey production. The bee numbers have recovered in Alberta, with increases of over 32,000 colonies in autumn 2021. With higher prices to all markets, beekeepers are optimistic. Rod Scarlett of the Canadian Honey Council reports that the Council is planning to promote Canada's high-quality honey at international trade shows in New Delhi, Shanghai, Paris, Jakarta and Ufa (Russia).

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Mexico

In 2021 there was a ten percent increase in honey production over 2020. The 22,000 metric ton crop of 2020 was the lowest in 40 years. Mexico is anticipating favorable weather conditions for the 2022 crop.

At present, the conditions of bees are generally strong throughout Mexico. The beekeepers attribute this to an increase in prices of 80% in the past year which increase has re-incentivized beekeepers for diligent care for the beehives and new investments. As Mexican friends have said, "Beekeepers have returned to care for the hives." The attitude is very positive and hopeful. In the 4th quarter of 2021 demand was frozen because the industry was waiting for the decision on antidumping. After the decision, prices increased about 10%. Since the preliminary decision may change in respect to both rates and the imposition of critical circumstances, significant uncertainty remains.

Mexican Honey Exports Jan-September 2021		
Destination	Kilos	US Dollars
World	29,266,686	\$107,714,102
Germany	12,581,408	\$ 46,898,380
UK	2,656,651	\$ 9,317,111
USA	2,611,592	\$ 9,249,789

Mexico has been a leader in the fight against economically motivated adulteration. They are actively participating in crucial scientific research projects on honey authenticity.

THE MACRO ENVIRONMENT

The global macro environment has been deeply influenced by both the pandemic and the climate crisis. The flow of goods and the flow of labor for the beekeeping industries have been impeded. Lack of visas hurt many beekeeping operations.

Unfortunately the pernicious pandemic has not disappeared. There are new epicenters, new surges and mutations. All of this has consequences in respect to human health, emotions, economics and education.

International freight rates have soared, increasing from \$3,000 to \$25,000 for one container. Long delays for vessels to enter ports, difficulty or inability to book export shipments, lack of dock workers, and costs for ocean freight which have gone up 500% in 2021, have all contributed to the supply chain crisis.

The pandemic has also influenced availability of labor and permission to enter seaports. The global supply crisis, mainly due to the transportation bottlenecks and astronomical freight prices, has influenced the honey industry and the packing industry.

While China tries to skirt any responsibility for the Covid pandemic, and to pose as a champion of protecting the global climate, an interesting chart shows the disharmony between words and deeds. A recent study of CO2 emissions, by country, revealed that the U.S. emissions declined dramatically, while China's increased exponentially over the last 15 years:

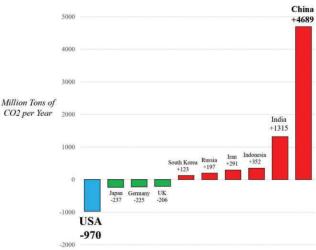
China's emissions are 150% greater than those of the U.S. and Europe combined. Only China had an increase in emissions during the pandemic years.

HONEY TESTING_

The overall picture remains very dynamic. As mandated under a Congressional authorization bill, Nuclear Mag-

2005 to 2020 Change in CO2 Emissions

Annual Million Metric tons of CO2 Difference



Source: Our World in Datax

netic Resonance technology is expected to be utilized for testing both country of origin and adulteration by Customs and other agencies. With antidumping duties in place, the temptation for circumvention rears its ugly head. Both circumvention of new antidumping duties and economically motivated adulteration of honey face more stringent and powerful testing capacity in an expanded and more sophisticated toolbox.

Apimondia identified 6 modes of honey adulteration in 2019:

- Immature honey
- Addition of sugar syrups
- Use of resin technology
- Improper use of antibiotics, fungicides, pesticides
- Excessive bee feeding at time of foraging
- Adding extraneous pollen

As honey from major producers such as Canada, the U.S., and Argentina enter the eastern markets, the contrast between authentic honey and adulterated products will become clearer. The demand for and appreciation of authentic honey will be felt internationally, including from those countries which have practiced illicit modes of production.

THE JUDICIAL ARENA

A class action suit is working its way through the federal court system. The complaint is in the public records and makes serious allegations regarding depressing markets for authentic honey by compelling U.S. beekeepers to compete with honey adulterated in any of the several modes cited by the U.S. Pharmacopeia and Apimondia. The filing contends that unfair competition arising from food fraud is a result of collusion and violation of antitrust law.

In the U.K., legal action is being considered to address violations of country-of-origin designations for honey.

Discovery in the U.S. case was expected to begin as early as January 2022.

The UN FAO has a memorandum on Food Fraud nearing authorization.

Conclusion

Given the global pandemic, the international transportation crisis, the supply chain crisis, and environmental pressures, there are multiple factors that are leading to price escalation for food and other essentials. In this context, we may see an end to price gouging in the honey and a reincentivization of beekeepers throughout the world.

The U.S. and international markets have entered a stage in which market manipulation has become more difficult and the need to reward beekeepers for high-quality authentic honey has never been greater.

There is a profound shift in momentum and direction in the international honey market.

Given the major deliberations in the U.S. Department of Commerce, filings in the judicial system against antitrust activities and food fraud, and continuing research on honey authenticity, we can remember, as we say in baseball, the game's not over until the fat lady sings.

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Ron is also President of the Board of the Long Island Concert Orchestra/Chamber Players International.

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