# American Honey Producers Association


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American Honey Producers Association

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## News from AHPA Federal Policy Advisor

Greetings AHPA Members:

The fall is shaping up to be busy here in Washington, DC. For starters, government-wide funding and the Farm Bill both expire at the end of September. Absent agreement in the House and Senate, which is elusive these days, we could see another federal government shutdown. Sound familiar?

What will it take to avoid that? The Freedom Caucus just this week laid out a vague set of demands for provisions they want to see included in a continuing resolution, or "CR". You'll recall that a CR is a temporary extension of government funding while the appropriators continue their work on a final deal for the upcoming fiscal year. Unfortunately, many of the items on the Freedom Caucus demand list are non-starters for the Senate, and even for some House Republicans. And so, the question is what pathway will Speaker McCarthy choose? Since he can only afford to lose 4 Republican votes and still pass a Republican-only funding bill, he either needs to enlist some Democrat support or acquiesce substantially to the Freedom Caucus demands. If the Speaker enlists Democrat support, the Freedom Caucus may choose to call for a vote to strip him of his Speakership (the recall process was a condition of Speaker McCarthy gaining enough votes to get elected in January). If he acquiesces to the Freedom Caucus instead, the bill will die in the Senate and the risk of government shutdown and political backlash increases significantly. He has a tough political decision on his hands.

What does this mean for our industry? Significant cuts to the USDA budget remain on the table in the House. While the Senate Appropriations Committee passed a bill with mostly level funding for the Agricultural Research Service, the House is under a lot of pressure to make cuts. Worse than that, the pressure to cut overall spending is likely to carry over to the Farm Bill. While both sides may be able to find agreement on a short term extension to the Farm Bill before it expires, a new five year bill with increased spending will be much harder to come by. Put simply, research funding for honey bee health and programs like the Emergency Livestock Assistance Program (ELAP) are not out of there woods yet. It goes without saying that ELAP remains an essential support for beekeepers with roughly $50 million in annual claims paid, according to a recent data release.

With all of that said, there is still plenty of reason to be optimistic about our long term Washington goals. Your Executive Committee came to Washington again in May of this year to do an exhaustive round of meetings with USDA, the House and the Senate. We advocated on AHPA's annual policy agenda (https://www.ahpanet.com/policyagenda), which includes Farm Bill, appropriations, customs and other miscellaneous issues. We are hopeful about the Customs collections legislation introduced by Senators Tester (D-MT) and Cassidy (R-LA), among others. It would result in millions of dollars in payments to the industry - long overdue.

In connection with the Farm Bill, we've gained quite a bit of traction thanks the hard

work of our most loyal supporters in the Senate and the House. Senator Thune (R-SD) introduced a stand alone bill with Senator Lujan (D-NM) that would, among other things, extend the ELAP program in the Farm Bill, begin payouts at 15% of losses (instead of 23%), and expand eligibility to include specific drought coverage. It also aims to help standardize documentation requirements nationally to overcome challenges beekeepers have had with inconsistent administration of the program. https://www.thune.senate.gov/public/index.cfm/2022/10/thune-luj-n-introduce-bill-to-improve-livestock-disaster-assistance

In the House, Representative Panetta (D-CA), along with a long list of co-sponsors, introduced a bill that would waive Adjusted Gross Income (AGI) limitations under the program, which are currently set at $900,000. This would allow all commercial beekeepers access to the ELAP program, if enacted. Senators Padilla (D-CA) and Cornyn (R-TX) are set to introduce a companion bill in the Senate when they return after Labor Day. Feel free to weigh in with support if you are in their states and would benefit!

Also in the House, Representative Armstrong (R-ND) introduced the HIVE Act to protect the U.S. honey supply and the American beekeeper. The bill would require an FDA standard of identity once and for all. And it would clean up the label requirements for country of origin, making it more consumer friendly and informative about content by volume. Combined, these are critical tools the industry has long requested. Your AHPA leadership is hard at work recruiting co-sponsors in the House and will begin meetings with the Senate after this congressional recess. More information on the bill can be found here: https://armstrong.house.gov/media/press-releases/armstrong-introduces-legislation-create-standard-identity-honey-and-update

We continue to work on a number of other issues as well. We are fighting to preserve ARS research funding for FY 2024, and have already begun meeting with a number of Senate offices on a FY ’25 plan when we hope the House pressure to make cuts is in the rear view. A number of Senate offices are showing interest in working with us on the research funding agenda - Republicans and Democrats alike. Among them are Senators Tester (D-MT), Hoeven (R-ND), Kennedy (R-LA), Durbin (D-IL) and Van Hollen (D-MD). We’re hopeful about the year ahead.

AHPA is also working to extend the pollinator research sections of the Farm Bill, increase the marketing loan for honey from $.69/lb to something more aligned with current market pricing, push back against APHIS’s efforts to release biocontrols in the southeast to control Tallow, and make honeybees a higher priority in conservation programs and on public lands. Some of these are harder uphill battles than others, but we are putting our best foot forward. This list is not exhaustive, as many of you know.

As always, I encourage you to work with the AHPA executive committee to bring issues to our attention, and to support our efforts in Washington and in the courts. A

special thanks to many of you who this year have helped me engage your state-level beekeeping associations, farm bureaus and even state Commissioners of Agriculture. We are a small industry but allies like those help us expand our influence. Thank you!

Signing off for now. But more to come in the fall… See you all in San Diego!

Eric Silva
Federal Policy Advisor
AHPA

# News from AHPA Science Advisor

## Jerry Hayes

I was asked to submit an article on the 'Latest Beekeeping Technology'. One thing that I have learned as I have aged gracefully in the Honey Bee , Beekeeping world is that I don't know everything. I know you don't believe me, but its true.

So what I did was reach out to those in the industry who are deeply involved in the latest beekeeping technology day to day, minute by minute in order to get you real up to date information and a look into the now and into the future.

There are other small entrepreneurial companies and organizations focusing on a variety of honey bee issues and monitoring with AI as that grows. It is all evolving, on our behalf and benefit but is very competitive in and for our small but vital industry.

The information below is timely. But, as we all know we are the ignored part of agriculture because each of you is so good at adjusting, modifying and re-inventing honey bee management techniques in order to control pest, parasites and diseases in order to keep your business functioning and give you ROI. With the $$$ value that each of you provide to agriculture and the environment I selfishly wish 'we' would get more support and management control attention.

**Project apis m.**
Project Apis m. has funded several academic and industry research projects assessing new technologies over the years. Repeated investments over time have helped bring some tools to fruition as well as increase our understanding of how they work. A few examples:

With the Healthy Hives research initiative PAm funded work with Dr. Brandon Hopkins to research aspects about the indoor storage of honeybees for overwintering as well as developing free guides and other resources for beekeepers. Indoor storage is being used on a large scale by beekeepers to secure healthy colonies over the winter in preparation for the following almond pollination season and on a small scale to improve overwintering in general.

Several grants over the years helped Dr. Kaira Wagoner continue the development of the UBO assay, a novel tool that will soon be on the market. The UBO assay is a convenient way for beekeepers to more easily assess a colony's ability to manage mites and diseases and to select for hygienic traits in breeding programs. Over time, this tool could potentially help beekeepers reduce mite treatment costs and overwintering losses.

From lab to landscape there is a long pipeline for the development of new miticides that requires major investment. In 2021 PAm. directed funding to project with Dr. Stephen Pernal, Dr. Erika Plettner and their team to further assess a compound they found to be effective against Varroa. This compound works by preventing the mite from finding the bee and attaching to it. Having treatments with diverse modes of action against Varroa is part of the future of combating it, and this compound is currently in field trials.

While software-based tools are often what we think of as technology, PAm also supports research on practical technologies that can make a big impact, like improving shipping practices for queens. Every project that has been funded can be found in our research database on our website (https://www.projectapism.org/honey-bee-research.html) and we are thankful to beekeepers for their support, input, and collaborations that makes all of this work possible!

Grace Kunkel
Communications Manager,
Project Apis m.

**USDA-ARS Bee Research Lab, Beltsville**

Amidst the rapid advancement of beekeeping technology, USDA-ARS Bee Research Laboratory (BRL) researchers are leading the way in developing solutions for managing bee diseases. Employing artificial intelligence (AI) and machine learning methodologies, they have successfully pinpointed potential small molecule drug candidates capable of effectively inhibiting the protease enzyme function of the Deformed Wing Virus. This virus stands as one of the most prevalent and widespread afflictions among honey bees, posing a significant threat to their well-being.

Furthermore, the BRL scientists have harnessed the power of RNA interference (RNAi), a technique for gene silencing, to precisely target specific genes in pests and pathogens that pose a menace to bee health. This approach has proven effective in disrupting the life cycles of harmful organisms like Varroa mites and viruses, thus contributing to the preservation of honey bee health. Amidst the continuous contention regarding the utilization of neonicotinoid pesticides, BRL researchers have ingeniously developed a detoxification strategy. By leveraging the properties of Cyclodextrins (CDs), a food additive, they can effectively neutralize pesticide residues present in hives and on bees. These CDs can form complexes with environmental toxins, presenting a robust solution to the significant challenges pesticides pose to bee health.

Moreover, the BRL scientists have designed a sophisticated 32-antenna RFID system. This system serves the purpose of monitoring various honey bee behaviors, including foraging, robbing, and the mating activities of queens and drones. Complementing this innovation is the development of a Smart Beehive System, which enables real-time monitoring of conditions within bee hives. Parameters such as temperature, humidity, weight, and even the auditory signals of honey bee colonies can be tracked. Through the integration of these cutting-edge devices, beekeepers are empowered to remotely assess the health of their colonies and make well-informed decisions pertaining to hive management.

Yanping(Judy) Chen, Ph.D
Research Leader/ Research Entomologist
USDA-ARS Bee Research Laboratory

**BIP, Bee Informed Partnership**

In the beginning of September 2023, the Bee Informed Partnership (BIP) will release a new app that is a free version of its professional honey bee health and management tracking application through the research.beeinformed.org portal. This new application called BIP ArcHive is based on the database and hive inspection procedures used by BIP Honey Bee Health Specialists in commercial operations since 2011. The application aids the beekeeper, inspector, or beekeeping consultant in keeping track of colony health and management actions over time. The free version, BIP ArcHive, will be focused for individuals to track their own colonies to be able to quickly view a timeline of management actions and varroa levels, enabling the beekeeper to better visualize their varroa levels in relation to management they do. A web version and mobile app will be available for use while networked or remote, for both desktop and mobile use. BIP ArcHive was sponsored by a USDA APHIS cooperative agreement and continues the tradition at BIP to enable citizen scientists and aspiring professional beekeepers to utilize technology and practices used by our Honey Bee Health Specialists and Technical Transfer team.

Anne Marie Fauvel, Mikayla Wilson and the BIP Team.

**USDA-ARS, Honey Bee Breeding, Genetics & Physiology Lab, Baton Rouge**
Scientists at the USDA-ARS Honey Bee Breeding, Genetics & Physiology Laboratory in Baton Rouge, LA leverage state of the art genetics and genomics technologies, artificial insemination, and standard breeding practices to develop lines and stocks of honey bees with improved survivorship, resilience, and productivity and to improve management practices. Development of two honey bee pangenomes is providing genomic information at large scales (honey bee research and commercial stocks, and the global honey bee population). The broad scope of the pangenomes incorporate population level diversity that is used for trait-based genetic marker development for marker-assisted selection (MAS) and to inform breeding decisions. A marker-based genetic stock identification assay for Russian honey bees has been modernized and enhanced using microfluidic chip technology that increased the accuracy and expediency of sample processing. Artificial intelligence protein modeling is being used to develop marker-assisted selection for Vitellogenin, a protein that interacts with all four major honey bee stressors: pest, pathogens, pesticides and poor nutrition.

RNAi and genomics technologies are being used for marker development and to combat viruses and varroa mites, and to mitigate growing treatment resistance in the varroa mite. Unit scientists are using engineered microalgae as a production platform and delivery system for honey bee therapeutics. This design presents a sustainable and scalable photosynthetic chassis that can be added to supplemental feed to mitigate pathogen stressors and conceivably reduce pathogen spillover from managed honey bees into wild bee populations. Antiviral drug treatments and luminescence assays are being paired to assess efficacy of in development of breeding strategies to improve virus resistance in honey bees. State of the art hive monitoring technology (entrance counters, audio signaling, and in-hive monitoring) is being used to track bee activity during almond bloom and to assess the relationship of hive box size on bee productivity, health, and overwinter survivorship. Development of improved, healthy, and productive honey bee stocks will help mitigate the effects of disease and climate change, improving the food supply at local, national and global levels.

Lanie Bilodeau, Ph.D. (she/her)
Research Leader/Location Coordinator
USDA-ARS, Honey Bee Breeding, Genetics & Physiology Laboratory

**Canadian Honey Council**
Technological improvements in Canadian beekeeping have been somewhat limited in scope and directed primarily to indoor overwintering and the detection of adulteration in honey. Sensor technology to address such items as temperature,

humidity and CO2 levels are being incorporated more and more in indoor overwintering facilities. Issues remain, however, in determining the exact value of the information and solutions to address critical situations are sometimes difficult to ascertain. The commercial nature of the industry means that many technological advancements are either too costly or are not scalable to operations running 1000's of colonies across hundreds of square miles.

Work on ensuring consumers pay for true honey is perhaps the greatest emphasis in Canada as it pertains to technology. Crossover research between private companies dealing with nuclear magnetic resonance testing and mass spectrometry is setting the stage for Canada to be a world leader in testing for adulteration in honey. The Canadian Honey Council continues to press the Canadian Food Inspection Agency to expand the testing using a number of diverse testing methods on both imported and exported honey.

Rod Scarlett, Canadian Honey Council

**Greenlight**

In the area of Varroa mite control, GreenLight Biosciences has submitted a biological double-stranded RNA mite treatment to the EPA for review. The molecule disrupts the production of an essential protein in the mites through RNA interference and represents a new mode of action for Varroa mite control. The company's research has shown that this significantly reduces mite populations, leading to improved hive health. The product was designed to be specific to mites without having negative effects on bees and other beneficial insects, which is confirmed in GreenLight's research trials.

The active ingredient, vadescana1, is delivered to the hive through sugar syrup contained in easy-to-use pouches. The product is then delivered by the bees to the brood cells where mites reproduce and are exposed. GreenLight has been extensively testing vadescana in field trials with commercial beekeepers and the results have been comparable or better than commercial standards. Specifically, the results have shown that mite levels can be kept below threshold levels for up to 18 weeks following a spring treatment, which translates to better overwintering success compared to treatments with a commercially available miticide. Because vadescana impacts mite reproduction, beekeepers have found that it works best when mite levels are not yet out of control.

GreenLight's Varroa solution and vadescana are subject to regulatory approval and not yet registered for sale

Dr. Jim Masucci

BeeHero

BeeHero is a data-driven tech company founded in 2017. With headquarters in Fresno, California and an R&D center in Tel Aviv, Israel, BeeHero is the pioneer of Precision Pollination as a Service (PPaaS). With over 200,000 monitored hives under management on five continents, BeeHero today is the world's largest provider of pollination services and possesses the world's largest database of bee behavior.

BeeHero's technology is a powerful combination of low-cost proprietary IoT sensors, sophisticated machine learning, and artificial intelligence, all patented. BeeHero partners with commercial beekeepers who install the company's unique IoT sensors in their hives. These sensors are uniquely designed to capture high-quality data from bee colonies, enabling the company to monitor the colonies' health, behavior, and pollination efficiency with unprecedented accuracy. The sensors monitor several vital parameters, including brood temperature, humidity, colony acoustics, magnetic field, hive position, and orientation. The sensors log the hive data and transmit it to a gateway unit using BLE 5.1, which then transfers the collected data to the cloud for analysis. Additionally, the sensors provide immediate alerts in the event of significant incidents, such as hive movement or opening, providing invaluable insights into the health and behavior of the bee colonies. The gateway unit logs all data collected by sensors and transmits it directly to the cloud utilizing an onboard modem. Furthermore, the gateway unit captures local data such as sound, microclimate, sensor position, and relative location, all of which are incorporated into BeeHero's machine-learning models for early detection and prediction of potential issues that may require attention.

BeeHero works with growers of pollination-dependent crops and introduces precision and efficiency into the pollination process. By leveraging the company's advanced technology and data analytics, BeeHero can provide an exact and customized service tailored to each customer's needs. By providing the actual number of bees required to pollinate the crops and a precise placement of the hives in the field, BeeHero's Precision Pollination as a Service model allows agricultural producers to optimize their crop yields, improve crop quality, and reduce the risk of crop loss due to inadequate pollination. This advanced technology also provides growers with real-time visibility into the pollination of their fields and the ability to measure and quantify its effectiveness, overcoming the limitations of current practices for pollination management.

Several weeks ago, BeeHero introduced a new solution for crop growers: PIP (Pollination Insights Platform). PIP is an in-field sensing solution that measures bee activity in crops and provides growers with crucial knowledge of how many bees are actually pollinating the crops and additional actionable data to make real-time decisions that will vastly influence crop yield. PIP is a complementary solution to BeeHero's groundbreaking in-hive sensors —providing valuable in-field sensing capabilities for various seed, row and orchard crops. Leveraging BeeHero's

patented sensor technology and AI-powered analytics, the PIP sensors collect and analyze data on bee visits to flowers, bee behavior, and environmental conditions.

Pollination outcomes and crop yield are primarily impacted by the number of bee visits to the crops' flowers, so growers need real-time intelligence to make informed decisions on managing their pollination efforts. The PIP sensors provide crucial data previously collected manually, inaccurately and inefficiently. The activity reported by the PIP sensors is easily managed through a simple mobile app that serves as an effective management tool, helping farmers keep track of dates, hive placements, and pollination strength.

Dr. Jim Masucci

**Super DFM/Apis Biologix**

It is a well know fact that Honey Bees have difficulty digesting artificial food. Researchers have studied both pollen and nectar for decades. Research has indicated that honey bees need the natural compounds in nectar for both immunity and health. Real nectar is bioactive and is part of the microbiome. Mother Earth is the essence of nectar, its not sugar and water. Polyphenols and Bioflavonoids help honey bees to express genes that are necessary for vitality. These compounds along with vitamins, minerals and trace amounts of amino acids, create fuel that Honey Bees need to survive.

Honey Bees need supplemental feeding to survive dearth and stress periods and to build up colony populations during critical times. They need the unique nutrition found in floral nectar and pollen, even when floral resources are not available. Super Fuel ™ is a probiotic fondant for Honey Bees. Apis Biologix, creators of Canadian “rocket fuel” and strong Microbials, creators of SuperDFM, came together to blend this nectar-on-demand for honey bees. Soft and supple, but not runny under heat, SuperFuel™ contains vitamins, amino acids, polyphenols and bioflavonoids to reflet floral nectars composition and to enhance the Honey Bee diet. Beneficial Bacillus bacteria enhance SuperFuel™ with digestive enzymes such as amylase and scientifically documented pathogen-fighting power.

Earl Hoffman, Strong Microbials

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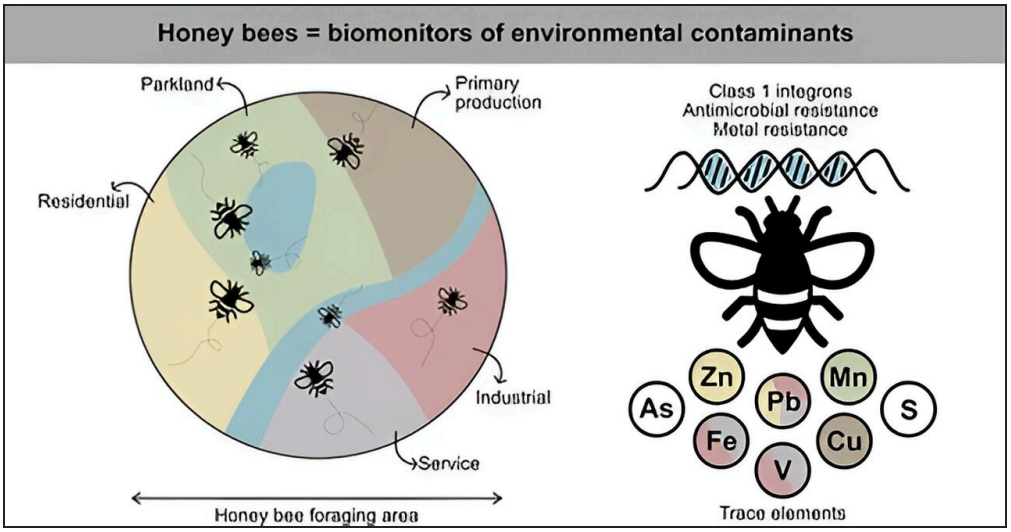
# Patrolling honey bees expose spread of antimicrobial resistance

by Macquarie University




Bees could become biomonitors, checking their neighborhoods to determine how far antimicrobial resistance (AMR) has spread, according to research by Macquarie University scientists.

At least 700,000 people die each year due to drug-resistant diseases, according to the World Health Organization (WHO), which estimates that 10 million people will die due to AMR by 2050. But we have few tools to keep track of its spread in the environment.

The study, published in Environmental Science and Technology, recruited honey bees, which can be a "crowdsourced" environmental proxy as they interact with contaminants in soil, dust, air, water and pollen while they forage.

"Bees interact with human environments, so they are a really good indicator of pollution that may present of risk of harm to humans," says first author Kara Fry, an Adjunct Research Fellow at Macquarie University's School of Natural Sciences and also Senior Research and Development Officer at the Environment Protection Authority Victoria (EPA).

"Bees only live for about four weeks, so whatever you're seeing in a bee is something that is in the environment right now."

Fry and lead author Professor Mark Taylor, who is the EPA Victoria Chief Environmental Scientist, examined 18 hives from citizen-scientist beekeepers who had hives across

Greater Sydney in a mixture of land-use types.

She sampled eight bees from each hive to see what was in their digestive tracts.

Specifically, she was looking for genetic elements called Class 1 integrons, key drivers of resistance to antibiotics. She also looked for toxic metals such as lead.

"As humans have released their own bacteria into the environment, Class 1 integrons have spread into other natural systems. You can now find them on every continent, even Antarctica. You can find them in really diverse spaces," Fry says.

The study found that more than 80% of the bees sampled across all hives were positive for one or more antimicrobial resistance targets, surprising the researchers by showing that AMR is prevalent irrespective of the land-use context.

Fry and her team expected to find more integrons in more densely populated areas. Instead, they found them distributed over an extremely wide area but with higher concentrations around waterbodies such as dams and lakes.

"We suspect the presence of local waterbodies that collect run-off is a critical source of AMR contamination," Fry says. "Everything from the catchment drains down, then it stays in that system.

"As anticipated, our study data showed that residential and industrial areas were impacted very heavily with environmental lead, with greater concentrations in more densely populated areas. By contrast, AMR was much more pervasive across the whole urban environment."

While being able to monitor pollutants and determine where their concentrations are highest could provide an invaluable tool to understand where to implement clean-ups, the discovery of how widespread AMR is also provides a wake-up call for people to alter their behavior.

"The main drivers of AMR are the misuse and overuse of antimicrobial products. The message from this research reinforces the need to use antibiotics when needed and as directed, and to dispose of them appropriately by returning unused medicines to your pharmacy," Fry says.

"In addition, we should also take a look at the products we are using in our homes and avoid those with added antimicrobial agents."

The researchers are now investigating the use of bees to detect other environmental contaminants as well as exploring whether certain bird species could be used in biomonitoring.

https://phys.org/news/2023-08-patrolling-honey-bees-expose-antimicrobial.html

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# Researchers Discover That Bees Can Make Decisions Better and Faster Than We Do

By Macquarie University September 4, 2023

A new study reveals how we could design robots to think like bees

Honey bees excel in weighing effort against reward and risk, quickly determining which flowers can provide sustenance for their colony. A study recently published in the journal eLife illustrates how eons of evolution have fine-tuned honey bees to make swift judgments while minimizing danger.

This research sheds light on the workings of insect minds, the evolution of human cognition, and offers insights for improved robot design.

The paper presents a model of decision-making in bees and outlines the paths in their brains that enable fast decision-making. The study was led by Professor Andrew Barron from Macquarie University in Sydney, and Dr. HaDi MaBouDi, Neville Dearden, and Professor James Marshall from the University of Sheffield.

“Decision-making is at the core of cognition,” says Professor Barron. “It’s the result of an evaluation of possible outcomes, and animal lives are full of decisions. A honey bee has a brain smaller than a sesame seed. And yet she can make decisions faster and more accurately than we can. A robot programmed to do a bee’s job would need the backup of a supercomputer.

“Today’s autonomous robots largely work with the support of remote computing,” Professor Barron continues. “Drones are relatively brainless, they have to be in wireless communication with a data center. This technology path will never allow a drone to truly explore Mars solo – NASA’s amazing rovers on Mars have traveled about 75 kilometers in years of exploration.”

Bees need to work quickly and efficiently, finding nectar and returning it to the hive while avoiding predators. They need to make decisions. Which flower will have nectar? While they’re flying, they’re only prone to aerial attack. When they land to feed, they’re vulnerable to spiders and other predators, some of which use camouflage to look like flowers.

“We trained 20 bees to recognize five different colored ‘flower disks’. Blue flowers always had sugar syrup,” says Dr. MaBouDi. “Green flowers always had quinine [tonic water] with a bitter taste for bees. Other colors sometimes had glucose.”

“Then we introduced each bee to a ‘garden’ where the ‘flowers’ just had distilled water. We filmed each bee then watched more than 40 hours of video, tracking the path of the bees and timing how long it took them to make a decision.

"If the bees were confident that a flower would have food, then they quickly decided to land on it taking an average of 0.6 seconds)," says Dr. MaBouDi. "If they were confident that a flower would not have food, they made a decision just as quickly."

If they were unsure, then they took much more time – on average 1.4 seconds – and the time reflected the probability that a flower had food.

The team then built a computer model from first principles aiming to replicate the bees' decision-making process. They found the structure of their computer model looked very similar to the physical layout of a bee brain.

"Our study has demonstrated complex autonomous decision-making with minimal neural circuitry," says Professor Marshall. "Now we know how bees make such smart decisions, we are studying how they are so fast at gathering and sampling information. We think bees are using their flight movements to enhance their visual system to make them better at detecting the best flowers."

AI researchers can learn much from insects and other 'simple' animals. Millions of years of evolution have led to incredibly efficient brains with very low power requirements. The future of AI in the industry will be inspired by biology, says Professor Marshall, who co-founded Opteran, a company that reverse-engineers insect brain algorithms to enable machines to move autonomously, like nature.

Reference: "How honey bees make fast and accurate decisions" by HaDi MaBouDi, James AR Marshall, Neville Dearden and Andrew B Barron, 27 June 2023, eLife.
DOI: 10.7554/eLife.86176

https://scitechdaily.com/researchers-discover-that-bees-can-make-decisions-better-and-faster-than-we-do/

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# Raw Honey from Argentina, Brazil, India, and Vietnam Injures U.S. Industry, Says USITC

May 11, 2022
News Release 22-058
Inv. No. 731-TA-1560-1562 and 731-TA-1564 (Final)
Contact: Jennifer Andberg, 202-205-1819

**Raw Honey from Argentina, Brazil, India, and Vietnam Injures U.S. Industry, Says USITC**

The United States International Trade Commission (USITC) today determined that a U.S. industry is materially injured by reason of imports of raw honey from Argentina, Brazil, India, and Vietnam that the U.S. Department of Commerce (Commerce) has determined are sold in the United States at less than fair value.

Chair Jason E. Kearns, Vice Chair Randolph J. Stayin, and Commissioners David S. Johanson, Rhonda K. Schmidtlein, and Amy A. Karpel voted in the affirmative.

As a result of the Commission's affirmative determinations, Commerce will issue antidumping duty orders on imports of this product from Argentina, Brazil, India, and Vietnam.

The Commission made a negative critical circumstances finding with regard to imports of this product from Argentina. The Commission made an affirmative critical circumstances

finding with regard to imports of this product from Vietnam.

The Commission's public report *Raw Honey from Argentina, Brazil, India, and Vietnam* (Inv. Nos. 731-TA-1560-1562 and 731-TA-1564 (Final), USITC Publication 5327, May 2022) will contain the views of the Commission and information developed during the investigations.

The report will be available by June 20, 2022; when available, it may be accessed on the USITC website at: *http://pubapps.usitc.gov/applications/publogs/qry_publication_loglist.asp*.

**UNITED STATES INTERNATIONAL TRADE COMMISSION**
Washington, DC 20436

**FACTUAL HIGHLIGHTS**
Raw Honey from Argentina, Brazil, India, and Vietnam
Investigation Nos.: 731-TA-1560-1562, 1564 (Final)

**Product Description:** Honey is a sweet, viscous fluid produced from the nectar of plants and flowers which is collected by honeybees, transformed, and combined with substances of their own, and stored and left in honeycombs to mature and ripen. Raw honey is honey as it exists in the beehive or as obtained by extraction, settling and skimming, or straining.

**Status of Proceedings:**

1. Type of investigation: Final antidumping duty investigations.
2. Petitioners: American Honey Producers Association ("AHPA"), Bruce, South Dakota; and Sioux Honey Association ("SHA"), Sioux City, Iowa.
3. USITC Institution Date: Wednesday, April 21, 2021.
4. USITC Hearing Date: Tuesday, April 12, 2022.
5. USITC Vote Date: Wednesday, May 11, 2022.
6. USITC Notification to Commerce Date: Tuesday, May 31, 2022.

**U.S. Industry in 2020:**

1. Number of U.S. producers: approximately 30,000 to 60,000.
2. Location of producers' plants: North Dakota, South Dakota, California, Texas, Montana, Florida, Minnesota, and Michigan
3. Production and related workers: 1,360.
4. U.S. producers' U.S. shipments: $302 million.
5. Apparent U.S. consumption: $690 million.

6. Ratio of subject imports to apparent U.S. consumption: 42.8 percent.

**U.S. Imports in 2020:**

1. Subject imports: $296 million.
2. Nonsubject imports: $93 million.
3. Leading import sources: Argentina, Brazil, India, Vietnam.

https://www.usitc.gov/press_room/news_release/2022/er0511ll1935.htm

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## What does this mean for beekeepers?

The decision will be transmitted to the Commerce Department, which will issue antidumping duty orders shortly. In addition, the Commission reached an affirmative critical circumstances determination against Vietnam. This means that U.S. Customs will collect antidumping duties on entries going back an additional 90 days prior to the preliminary antidumping duty determination—from August 28, 2020, forward. This is an important additional finding, and one that the Commission rarely makes.

These results should continue to ensure that the American honey producer gets the fair prices they deserve.

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We truly appreciate all of the donations that we have received to cover legal fees.

The good fight isn't over yet, however, and we still need your support.

To donate to the Antidumping Fund, please contact
Cassie Cox: cassie@ahpanet.com
281-900-9740

Or donate on our secure website: https://www.ahpanet.com/donations-1

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American Honey Producers Association

# AHPA App

As AHPA continues to work on behalf of all beekeepers, one of our initiatives is advocating with the FDA in Washington D.C. to update honey labeling guidelines. As part of this effort, we need your help to collect pictures of honey labels from around the United States. Our goal is primarily to find honey that is mislabeled according to current FDA guidelines. Secondarily, we need examples of any labels which misrepresent country of origin or are purposefully confusing to consumers so that we can advocate for positive changes and updates.

Search the App Store or Google Play for "AHPA app". We need to collect as many pictures from honey on the store shelf as possible. Please take a few minutes to help collect this data.

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