

September 6, 2023

TO: CFIA cfia.AIED-DIEA.acia@canada.ca

RE: Request for consideration of a regional approach in the new risk assessment for the import of packaged bees from the United States.

To Whom It May Concern;

Thank you for the notification of the Canadian Food Inspection Agency's decision to conduct a new risk assessment for the importation of packaged bees from the United States.

We are pleased that there has been enough new science presented, reviewed, and accepted over the past year to warrant a new risk assessment.

The challenge in reviewing the health status of honey bees in a country the size, geographical and climatic diversity of the United States is immense. In addition, the World Animal Health Organization's (WAHO) Sanitary and Phytosanitary Measures Agreement requires a level of transparency so that both governments and industry understand what the actual risks are, factors that will be taken into consideration during the assessment, the assessment procedures used, what level of risk is determined to be acceptable and what mitigating strategies can be put into place to ensure the safe trade in honey bees between Canada and the United States.

It is important to ensure benefit to the beekeeping and crop pollination sectors in Canada and to that end, as the risk assessment gets underway, many would acknowledge that not all regions in the United States would be safe regions to consider in a new risk assessment (Bee Informed Partnership 2022). As well, there are two key bee breeding regions in the US; Georgia and Northern California. **Therefore, we request the consideration of a regional approach, as has been done in Australia, to the risk assessment conducted of the health status, surveillance systems and protocols in place in the U.S, in particular Northern California.** While CFIA may not have the latitude to exclude portions of the US from a risk assessment, it can and should according to the Sanitary and Phytosanitary Measures Agreement (SPS) make recommendations on those regions in the U.S. which would be considered a safe or compartmentalized zone (based on WAHO definition) – such as the region in Northern California from which honey bee queens are currently imported and have been imported safely for the past 20 years. There is a considerable amount of data within the state of California's state and county inspectors, academia and veterinary surveillance professionals as well as 10 years of health data and status of the bee breeder yards in Northern California collected by the Bee Informed Partnership Tech Teams. In addition, the depth and breadth of the biosecurity and surveillance protocols in the bee breeding regions of the United States is well documented.

As noted in CFIA's decision to conduct a new risk assessment, science has provided new information on the 4 risks identified in the 2013 risk assessment. Concomitantly science and improvements in beekeeping practices, biosecurity, testing and surveillance have also resulted in a number of and constantly improving mitigation strategies (protocols) employed by packaged bee exporters, queen bee exporters and beekeepers as noted the information provided to CFIA in 2022 and 2023.

Africanized Honey Bees (AHB) are not considered within the WAHO lists of diseases and pests of concern for trade in honey bees. In addition, the United States Department of Agriculture also does not consider

AHB as a concern, in fact stopped monitoring the movement of AHB in 2011. It would be helpful to understand how AHB became a concern in Canada, and if it is considered a public health/safety risk or an industry risk or both.

We appreciate the offer to provide any new (or old) science that would be useful in the risk assessment.

Sincerely;

Alberta Beekeepers Commission, Canadian Beekeepers Federation*, Manitoba Beekeepers' Association



Curtis Miedema, President

A handwritten signature in blue ink, appearing to be "C. Miedema".

Mike Paradis, President

A handwritten signature in blue ink, appearing to be "Mike Paradis".

Ian Steppler, President

A handwritten signature in blue ink, appearing to be "Ian Steppler".

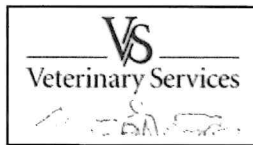
cc

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*The Canadian Beekeepers Federation is a newly incorporated national organization representing Canada's commercial beekeepers in 6 provinces managing more than 20% of Canada's honey bee colonies



Health Certificate No. _____
(Valid Only if the USDA Seal
Appears Over the Certificate No.)
CFIA Import Permit No. _____

HEALTH CERTIFICATE TO EXPORT HONEYBEE QUEENS *Apis Mellifera* FROM THE UNITED STATES OF AMERICA-CONTINENTAL TO CANADA

I. Origin

Name and address of exporter: _____

Name and address of producing beekeeper: _____

Place of origin of the honeybee queens: _____

II. Destination

Name and address of consignee: _____

III. Description:

Number of queens (with 2-6 attendants/queen) shipped (total) _____

Number of queen cages/box _____

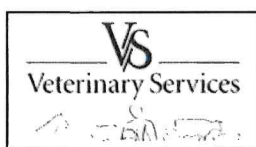
Type of feed provided (if any) _____ (if honey, irradiation certificate must accompany shipment)

IV. CERTIFICATION STATEMENTS

1. Based on current maps and surveillance programs for Africanized bees, the honeybee queens originate from an apiary free of genes of the sub-Saharan type of the Africanized honeybee, *Apis mellifera scutellata*. Africanized honeybees have not, in the past one year, been detected within 30 miles of the apiaries of queens' origin. A certificate from an authority of the State Department of Agriculture is included in the export documentation.

2. The Mitochondrial Polymerase Chain Reaction-DNA (PCR-DNA) testing did not show signs of *Apis mellifera scutellata* in the progeny of the breeder queens tested according to the following protocol: Mitochondrial (PCR-DNA) testing was done on random samples of worker bees which represented the progeny of the selected breeder queens. The testing was conducted within 180 days prior to export. One worker bee was collected from each breeder queen. Samples were pooled and run as a single sample if appropriate for the technique. The testing was carried out by an accredited or state laboratory. Date of testing and laboratory name:

3. The United States of America or the State of origin have been designated by Canada as free from reports of the Asian honey bee (*Apis cerana*) and Asian honey bee hybrids.



Health Certificate No. _____
(Valid Only if the USDA Seal
Appears Over the Certificate No.)
CFIA Import Permit No. _____

4. All queens originate from colonies that do not have visible clinical evidence of American foulbrood (AFB), European foulbrood (EFB) or Varroa mites. Apiaries were inspected within 90 days prior to export on _____ (date) according to the following protocol: [Five percent of the colonies] or [A minimum of 25 bee colonies] (whichever is larger – please specify) were randomly selected and examined from each of the queen production and mating apiaries from where queens are being exported.
5. On _____ (date) a visual examination of the brood for symptoms of AFB or EFB was done. Bee colonies used in queen production and mating apiaries were free from visible clinical evidence of AFB or EFB. At least three brood frames per hive were inspected.
6. Colonies were assessed for varroa mites by alcohol washing of bee samples (200-300 bees/colony). The sample of bees was placed in a basket, immersed in a solution of alcohol and the basket was shaken for a period of at least two (2) minutes. Varroa [was not detected]* or [was under 1% or 1 mite per 100 bees tested] or [was over 1% and the bee colonies in the queen rearing apiaries were treated with _____, a product that is registered in and the United States. Treated colonies were retested prior to collecting the queens and attendants to confirm that the level of varroa is below 1%.]
*[Please specify option that applies.]
7. On _____ (date) officials of the Federal or State apiary office inspected all packing and shipping location(s) on the apiary premises from which queen bees are derived for small hive beetle (SHB) with negative results within ninety (90) days prior to export. The packing and shipping location(s) are indoors and are inaccessible to entry by SHB at any time during packing and shipping.
8. Following due inquiry, the exporter has provided assurances to the Federal or State apiary inspector that they have knowledge of and will comply with the following requirements:
 - a) All packing of queens and attendants into cages and then into shipping boxes for export must be done in the inspected area (s).
 - b) All queens and attendant worker bees must be caught by hand and placed in new queen cages with ventilation holes no longer than 2 mm x 2mm or if longer than 2 mm are no wider than 1 mm. Worker bee attendants (2-6 attendants per queen) must be placed in individual queen cages with the queen and not loose in a battery box. Queen cages filled with queens and attendants must be stored in the designated and inspected packing and shipping location(s) until shipping.
9. The exporter/transporter has been advised that food supplied to the bees during transit does not contain honey or contains honey which has been irradiated to approved levels.

V. ISSUING OFFICIAL

Name: _____ Address: _____

Signature: _____ Date: _____

VI. ENDORSING APHIS OFFICIAL

Name: _____ Address: _____

Signature: _____ Date: _____

Valid only if USDA seal appears over the signature.

IMPORT REQUIREMENTS OF CANADA FOR HONEY BEE QUEENS FROM CONTINENTAL UNITED STATES OF AMERICA

DOCUMENTATION INSTRUCTIONS:

IMPORT PERMIT

- Needed to import the animal or product at the time of import
- Please contact local CFIA office to apply for an import permit BEFORE the animal(s) or thing(s) are imported.

EXPORT CERTIFICATE

- Is issued by the exporting country
- Must contain all statements and information as required by the Import Permit

CONDITIONS OF IMPORT:

The original or a copy of the signed original of this permit and any other necessary import / export documentation pertaining to the shipment of animal(s) or thing(s) must be provided for inspection at the first port of entry.

The conditions in this permit can only be changed or amended by a CFIA inspector. Any change to the permit by an unauthorized person will render the permit invalid.

Accompanying export documentation must be issued in either English or French.

The zoosanitary export documentation pertaining to the shipment must clearly describe the animal(s) or thing(s) and the country of origin. The export document must be issued within 30 days prior to exportation by an inspector of the US Animal and Plant Health Inspection Service (APHIS) or by an inspector designated for such purposes by APHIS and endorsed by an official APHIS inspector.

The CFIA import permit number must be indicated on the export certificate.

Should the disease status of the country of origin change between the time of issuance of this permit and the time of unrestricted entry into Canada, the import shipment may be refused entry into Canada or be subject to additional quarantine and testing or treatment. Importers will be responsible for any additional incurred costs.

CERTIFICATION

The apiary must be certified free from Africanized genetics as follows:

- 1) The queen's originate from an apiary free of genes of the sub-Saharan type of the Africanized honey bee, *Apis mellifera scutellata*.

Based on current maps and surveillance programs for Africanized bees, Africanized honey bees have not, within the past year, been detected within 30 miles of the apiaries

from which the queens originate. A certificate from an authority of the State Department of Agriculture must accompany the shipment.

2) Mitochondrial Polymerase Chain Reaction-DNA (PCR_DNA) test results must not show signs of *A. m. scutellata* in the progeny of the breeding queens when tested according to the following protocol:

Mitochondrial (PCR-DNA) testing is done on random samples of worker bees which represent the progeny of the selected breeder queens. The testing must be conducted within 180 days prior to export. One worker bee should be collected from each breeder queen. Samples may be pooled and run as a single sample if appropriate for the technique. If the test indicates the presence of *A. m. scutellata*, whether from a single bee or from pooled bees, that queen producer will not be given certification to export queens. The testing must be carried out by an accredited or state laboratory.

The country or zone of origin must have been designated by Canada as free from reports of the Asian honey bee (*Apis cerana*) and Asian honey bee hybrids.

The apiary must be certified free from bee diseases (AFB, EFB, and Varroa) as follows:

1) The apiary does not have any visible clinical evidence of American Foulbrood (AFB), European foulbrood (EFB), or Varroa mites when subjected to the following protocol:

Five percent (5%) of the colonies or a minimum of 25 bee colonies (whichever is greater) must be randomly selected and examined from each of the queen production and mating apiaries from which queens will be exported. Inspection for AFB, EFB, and Varroa mites must occur within the 90 days prior to export. Queens will be eligible for export if no clinical evidence of AFB, EFB, or Varroa mites was found.

Bee colonies will be examined as follows:

a) Visual examination of brood for symptoms of AFB or EFB is required. Bee colonies used in queen production and mating apiaries must be free from visible clinical evidence of AFB or EFB. If either disease is found, queens will not be eligible for export. At least three (3) brood frames per hive must be inspected.

b) Colonies must be assessed for Varroa by alcohol washing of bee samples (200-300 bees/colony). The sample of bees must be placed in a basket, immersed in a solution of alcohol and the basket should be shaken for a period of at least two (2) minutes. If Varroa is not detected or is under one percent (1% or 1 mite per 100 bees tested), honey bee queen shipments will be allowed.

c) If Varroa is found at levels above 1%, bee colonies in the queen rearing apiaries must be treated with a product that is registered in the country of origin. Treated colonies must be re-tested prior to collecting the queens and attendants to confirm that the level of Varroa is below 1%.

The premises must be certified for small hive beetle (SHB) (*Aethina tumida*) as follows:

1) All packing and shipping location(s) on the apiary premises from which the honey bee queens will be prepared for shipping to Canada have been inspected for SHB with negative results by Federal or State apiary inspector within 90 days prior to export. The packing and shipping location(s) must be indoors, must be certified to be free from SHB and must be certified to be inaccessible to entry by SHB at any time during packing and shipping.

2) The exporter has provided assurances to the Federal or State apiary inspector that they have knowledge of and will comply with the following requirements:

a) All packing of queens and attendants into cages and then into shipping boxes for export must be done in the inspected area (s).

b) All queens and attendant worker bees must be caught by hand and placed in new queen cages with ventilation holes no longer than 2 mm x 2mm or if longer than 2 mm are no wider than 1 mm. Worker bee attendants (2-6 attendants per queen) must be placed in individual queen cages with the queen and not loose in a battery box. Queen cages filled with queens and attendants must be stored in the designated and inspected packing and shipping location(s) until shipping.

The food for bees must be certified as follows:

1) Food supplied to the bees during transit must not contain honey, or, if honey is used, the honey must have been irradiated to an approved level.

The animal(s) described on this permit must be shipped by the most direct and appropriate route from the point of export to the address of destination in Canada. Transshipment through another country requires written authorization from the Canadian Food Inspection Agency.

Transit must be in a manner that (i) precludes the outside storage of the bees in transit; (ii) the shipment remains in a secure area on the airport premises, inaccessible to bees or bee pests (SUCH AS SMALL HIVE BEETLE, WHERE APPLICABLE), and is kept separate from any other animals and animal products; and (iii) includes verification by a representative of the exporter or importer that the outer covering of each shipment is free of hitch-hiker bees or bee pests, prior to departure for Canada.

The animals must be accompanied by a declaration by the certifying veterinarian or shipper in the country of origin stating: When transport is by air, transportation of the animals is in accordance with the International Air Transport Association (IATA) Live Animal Regulations, approved by the Office International des Epizooties (OIE). For all

forms of transport, suitable arrangements have been made for the feeding, watering and care of the animals during transportation, as far as can be determined.

UNIVERSITY OF CALIFORNIA, DAVIS

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August 5, 2023

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Canadian Food Inspection Agency / Government of Canada
Cecile.Ferrouillet@inspection.gc.ca / Tel : 450-230-2131

Dear Dr. Ferrouillet,

Thank you so much for reaching out to obtain additional information on the California Beekeeping industry to aid you in producing the new risk assessment in an effort to allow importation of packaged honey bees from the US and more specifically from California.

In addition to answers to your specific inquiry I am including a more general background that also might be of help to you. The California Food and Agricultural Code (<https://www.cdfa.ca.gov/plant/pollinators/docs/Laws-Bee-Management.pdf>), also referred to as the California Apiary Protection Act, provides authority for various regulatory activities to ensure safe and productive California beekeeping industry. "Article 14. Apiary inspection" specifically deals with regulations as it pertains to entry and inspection of apiaries and hives contained within, which allows the inspectors to quickly assess and remedy any situations requiring action such as presence of pests and pathogens including, Africanized honey bees, American Foulbrood and SHB (https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=FAC&division=13.&title=&part=&chapter=1.&article=14.).

Aiding in these efforts is the requirement for all beekeepers (residents and migratory) to register their apiary locations with the County Agricultural Commissioner allowing for pesticide notifications to protect colonies, as well as rapid response of the Apiary inspectors in case of an emergency or inspections requirements (https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=FAC&division=13.&title=&part=&chapter=1.&article=4.). The registration website: <https://beewherecalifornia.com/register-here/#:~:text=Registering%20your%20beehives%20is%20the,ounty%20of%20any%20relocation%20movement.>

For most specific inquiries your best contact will be the Apiary Protection Program, California Department of Food and Agriculture, Plant Health Division, 1220 N Street, Sacramento, CA 95814, Phone: 916-654-0317, Email: phppsinfo@cdfa.ca.gov

Below you will find responses to your specific questions and information on various regulatory and inspection processes as it pertains to California beekeeping industry.

Africanized honey bees (*Apis mellifera scutellata* hybrids)

Inquiry:

- Is there any ongoing surveillance in place related to Africanized honey bees?
- Is there a system or maps to let bee breeders know if and where Africanized honey bees are detected? If so, it is accessible by the public? If not available to the public, would you be able to share a recent version with us or provide the name of the person that we could contact to obtain access it?
- Is there a site where the detections of Africanized honey bees are reported? This would include those detected either through surveillance or through reporting by beekeepers or the public? If not available to the public, who should we ask to obtain the description of all detections in the State for the past three years?

Response:

The Apiary Protection Act disallows beekeeping activity with bees that are a nuisance including AHB as well as generally defensive bees. A number of Cities and Counties in the State have ordinances specifically addressing the abatement of such hives. The details of the CDFA code pertaining to AHB regulations can be found here

https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=FAC&division=13.&title=&part=&chapter=1.&article=16. Specific ordinances for individual counties can be found here:

<https://docs.google.com/spreadsheets/d/1IVXSET6OTGvGKXnr7bwPCYtlf8oqQ7Y-/edit#gid=573711691>

Please note that certain county ordinances as for e.g., Shasta, Tehama, Glenn counties not only forbid knowingly keeping AHB (example ordinance can be found here:

https://www.shastacounty.gov/sites/default/files/fileattachments/agriculture/_weights_amp_measures/page/2599/shasta-county-bee-ordinance.pdf), but also require any hives brought in for pollination, from states having AHB, to leave the county by a specific date (e.g., Butte County).

The most current *A. m. scutellata* hybrid range, to the best of my knowledge, has been reported in California based on testing of feral and managed colonies and can be found in Lin et al. 2018

(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5773081/>). According to the most current available data and from my conversations with the Apiary Inspectors, there have been no established populations of AHB recorded in the California counties as outlined in **Figure 1**. Furthermore, queen producers from Butte, Glenn, Lake, Shasta, Sutter, Yolo counties have been testing AHB negative for many years now, and have met requirements to export into Canada. For more specific information on any detections in the past 3 years I recommend you contact the CDFA Apiary Protection Program.

California Beekeepers and particularly Bee Breeders and Queen Producers in Northern California region in order to protect their honey bee stock and their businesses, regularly submit their samples for testing via California Department of Agriculture (CDFA), as well as other routes such as University laboratories (for example, North Carolina State University led by Dr. David Tarpy). CDFA regularly provides testing to determine *Apis mellifera scutellata* ancestry for honey bee samples in order to certify for exportation of honey bee queens by California queen producers (as per CFIA importation requirements <https://www.aphis.usda.gov/regulations/vs/iregs/animals/downloads/ca-hb-us-pro.pdf>), and in case of nuisance complaints as it pertains to various county and city ordinances. Those records can be requested from the Apiary Protection Program, California Department of Food and Agriculture, Plant Health Division, 1220 N Street, Sacramento, CA 95814, Phone: 916-654-0317, Email: phppsinfo@cdfa.ca.gov. I am guessing that CFIA also would have the health certification records (<https://www.aphis.usda.gov/regulations/vs/iregs/animals/downloads/ca-hb-us-hc.pdf>) for the imported honey bee queens from the exporters in California.

Furthermore, California Beekeepers are provided regular education on the best management practices in beekeeping which includes thorough explanation of the California Apiary Laws, as well as education on the importance of re-queening with gentle honey bee stock of known non-AHB genetic background and the proper re-queening techniques through the University of California Master Beekeeper Program (<https://cambp.ucdavis.edu/>). Beekeepers regularly requeen their colonies to maintain European genetics.

A map of California showing its 58 counties. The counties in the Sacramento Valley, including Del Norte, Siskiyou, Modoc, Humboldt, Trinity, Shasta, Lassen, Tehama, Plumas, Glenn, Butte, Sierra, Nevada, Placer, Lake, Colusa, Yuba, Sutter, Yolo, El Dorado, Sonoma, Napa, Solano, Amador, Calaveras, Tuolumne, Mono, Alpine, Contra Costa, San Joaquin, Stanislaus, Mariposa, Madera, Merced, Fresno, Inyo, Santa Clara, Alameda, San Benito, Monterey, Kings, Tulare, Kern, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, Orange, Riverside, San Diego, and Imperial, are shaded in light gray. The counties in the Sacramento Valley, including Del Norte, Siskiyou, Modoc, Humboldt, Trinity, Shasta, Lassen, Tehama, Plumas, Glenn, Butte, Sierra, Nevada, Placer, Lake, Colusa, Yuba, Sutter, Yolo, El Dorado, Sonoma, Napa, Solano, Amador, Calaveras, Tuolumne, Mono, Alpine, Contra Costa, San Joaquin, Stanislaus, Mariposa, Madera, Merced, Fresno, Inyo, Santa Clara, Alameda, San Benito, Monterey, Kings, Tulare, Kern, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, Orange, Riverside, San Diego, and Imperial, are shaded in light gray. The counties in the Sacramento Valley, including Del Norte, Siskiyou, Modoc, Humboldt, Trinity, Shasta, Lassen, Tehama, Plumas, Glenn, Butte, Sierra, Nevada, Placer, Lake, Colusa, Yuba, Sutter, Yolo, El Dorado, Sonoma, Napa, Solano, Amador, Calaveras, Tuolumne, Mono, Alpine, Contra Costa, San Joaquin, Stanislaus, Mariposa, Madera, Merced, Fresno, Inyo, Santa Clara, Alameda, San Benito, Monterey, Kings, Tulare, Kern, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, Orange, Riverside, San Diego, and Imperial, are shaded in light gray.

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Small Hive Beetles (SHB)

Inquiry:

- We read about the small hive beetle policy at the county level (<https://www.cdfa.ca.gov/plant/pollinators/docs/CountySmallHiveBeetlePolicy.pdf>).
- This policy was written in 2020. Is there an update of this policy?
- Is there ongoing surveillance related to small hive beetle in the State? Or in certain counties?
- Is there a report we could access that would describe the surveillance results or notification of detections

Response:

To my knowledge and from discussions with Apiary Inspectors there is no update to the SHB County level policies and therefore the policy you have is still valid.

Small hive beetles are present in California with infestations primarily occurring in coastal areas where the temperature and humidity afford the ease of reproduction. The dry climate and drought conditions proved not to be amenable to supporting SHB reproduction in most areas throughout California. Imports of hives into California from other states are strictly regulated and the importation of hives into California requires inspection at border stations (there are 12 Border Inspection Stations) and then at the destination (<https://www.cdfa.ca.gov/plant/pollinators/inspections.html>), which includes inspections for undesirable pest species such as SHB (<https://www.cdfa.ca.gov/plant/pollinators/>). If undesirable pests are found, the shipment is not accepted unless cleaned. In case of the SHB, as you are aware, California counties have individual policies on whether they are willing to accept shipments with small hive beetles or not. Many counties do not accept SHB and most have quarantine protocol where the hives containing SHB are treated, as well as the ground that they were placed upon. Additionally, Bee Breeders Association members composed of mainly Northern California Queen Producers, fund the SHB County programs to regularly inspect incoming hives and prevent potential spread of SHB. Since several already ship queens into Canada they have their apiaries regularly inspected for SHB presence as that is one of the Export Health Certification requirements.

American Foulbrood (AFB):

Inquiry:

- Do you have details on the prevalence of this disease in California and about disease management?
- Is there a program of prevention and control in California? Could we have access to it?
- Are there any surveillance program and surveillance report we could access?

Response:

County Apiary Inspectors regularly perform random checks of registered hives as they are allowed per the California Apiary Law

(https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=FAC&division=13.&title=&part=&chapter=1.&article=14). If any AFB infected hives are identified the apiary is quarantined, infected hives are burned/disposed of safely as per the Law. Hives cannot be moved for burning or disposal without the permission of an Apiary Inspector, therefore, the CDFA Apiary Inspectors are aware of any AFB finds and should be able to provide you with incidence reports. Detailed procedure for dealing with AFB infected hives can be found here (https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=FAC&division=13.&title=&part=&chapter=1.&article=14). Colonies without clinical symptoms are treated by obtaining a Veterinary Food Directive or a prescription from a trained veterinarian and administering one of the three legal antibiotic options (terramycin, lincomycin, tylosin; see <http://www.usfarad.org/honey-bees.html>).

Honey bee packages production in the US

Inquiry:

- Do you have any information on honey bee packages production in the US? I haven't found any figures for total annual production and for production by state or the list of states actually producing packages.

Response:

USDA NASS publishes an annual report on honey and bee production and crop pollination (https://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Bee_and_Honey/). However, you will note that the reports do not have the number of packages produced nationally or per state, and offer the average price of packages. It would appear that there is no question on the survey asking about the numbers of packages produced by a beekeeper (https://www.nass.usda.gov/Publications/Methodology_and_Data_Quality/Honey/04_2023/2022%20Honey%20PDI%20Questionnaire.pdf) I would still suggest you contact the person listed on the website: Adam Peters at (202) 690-4870 or via email at Adam.Peters@usda.gov

Some information on Apiary products although not specifically on package production in California can be found within the NASS/CDFA Crop Report (<https://www.cdfa.ca.gov/Statistics/>). Crop reports for individual counties can be found here https://www.nass.usda.gov/Statistics_by_State/California/Publications/AgComm/index.php Admittedly, these usually do not contain information on package production, except Glenn County (https://www.countyofglenn.net/sites/default/files/Agriculture/2021%20Glenn%20County%20Crop%20Report_0.pdf) which reports a production of over 40 thousand three-pound packages. However, I would like to invite you to consider not only what has been produced in the past, but more importantly what the potential capacity for package production is in California. California has many large beekeepers who have dozens of thousands of colonies which expand rapidly in the spring, and by my estimate I know of just 5-10 large beekeepers who are more than capable of easily producing close to 200 thousand three pound packages. In my discussions with Northern California beekeepers these were historically the numbers of packages produced prior to the Canadian border closing for honey bee package imports. Considering that beekeepers in just one county (Glenn County – see above) report producing over 40 thousand bee packages, the estimated capacity of 200 thousand packages being produced by only a few large beekeepers in Northern California is more than reasonable.

Other:

United States Department of Agriculture conducts an annual APHIS National Honey Bee Survey (<https://ushoneybeehealthsurvey.info/>) and the results can be found here <https://research.beeinformed.org/>. A number of California Beekeepers participate in a service for fee program offered by the Bee Informed Partnership Technical Teams and any inquiries about those results should be sent to Anne Marie Fauvel.

I appreciate your willingness to give serious consideration to the potential of the California package producers being able to export honey bee packages into Canada. Commercial beekeepers particularly those outside of AHB zones are invested in keeping their operations free of Africanized honey bees, as well as other pests and pathogens in question and regularly manage for these, as well as perform regular testing of their stock to ensure the highest quality product. I am happy to provide any further information as needed.

Sincerely,



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DATE: September 12, 2023

RE: Relative risks of intercontinental honey bee imports into Canada

Dear Dr. Ferrouillet:

I am writing you by request of the ABF Working Group concerning the imports of honey bees into Canada. With over 30 years of practical and scientific beekeeping research, and with an academic background in wide ranging fields such as population genetics, behavioral ecology, and integrated pest management, I feel that I am adequately qualified to comment on this topic and help you in this endeavor.

As you well know, honey bees are an indispensable part of not only agriculture but our natural ecology. Contrary to some perceptions, they do not only produce honey (the first and historically only natural sweetener), honey bees serve as pollinators to thousands of flowering plants and almost 100 crops to enable seed and fruit set. As such, bees are responsible for a third of everything we eat, and most of the produce that we eat every day. In short, if it were not for honey bees, we would be without billions worth of fruits, vegetables, nuts, and forage crops every year.

More appropriately, however, is that honey bees have been facing numerous challenges in recent years. Whether it be Colony Collapse Disorder that has been making all of the recent headlines, or parasitic mites, or numerous environmental contaminants, honey bees have been besieged by a number of factors that brings into question the sustainability of a healthy pollinator population. Here are my thoughts concerning two of them.

Queen quality. One of our areas of research specialization is the reproductive quality of queens. Our lab has a protracted history of testing queens for their body size, egg-laying potential, and stored sperm counts and viability (after queens mate, they store sperm for the rest of their lives). Based on our empirical research, we have been offering our Queen & Disease Clinic at NC State University for over 12 years to enable beekeepers and especially queen breeders to send in their live specimens for quantification on an objective scale using a holistic approach. We tend to find high variation among queens within operations rather than some operations producing queens that are markedly better than other operations. We have

also found (in collaboration with colleagues at the University of British Columbia) that temperature during shipping and handling can impact the stored sperm counts of queens, but not always. As a result, many US queen breeders have incorporated our recommendations into their shipping logistics to ensure that they arrive with minimal effects. There have been some recent reports in central Canada casting doubt on the viability of imported queens, but based on what I have seen those data are not very comprehensive and proper controls were not included. Thus I remain convinced that the source of queens does not necessarily dictate their quality, but rather a combination of beekeeper management and handling. To me, the importation of queens from distant countries—especially those at risk of importing the dreaded *Tropilaelaps* mite—poses a far, far greater risk to the apiculture industry in North America.

Africanized bees. Before CCD made all the headlines, the issue of the so-called “killer” or Africanized bees (AHB) was the most prominent issue of bees in the public perception. This type of honey bee does not live in beekeeper boxes but rather in natural cavities (e.g., hollowed trees or water meters). Beekeepers, however, maintain quality, selected stock that have been actively bred to be much less defensive and can be safely maintained in populated—even urban and suburban—areas. As such, beekeepers are literally on the front lines of this issue, and they will be the first to detect and combat the threat. More importantly, most beekeepers and scientists have moved past this simple dichotomy (Africanized = bad, European = good) since there is much more nuance in practice. In short, the highly defensive nature of the AHB has been dislinked from most other tropically-derived traits (e.g., increased swarming, poor overwintering), so that the diagnostics for AHB are, for all practical purposes, largely moot; there are sometimes highly defensive colonies of European origin that are equally unacceptable as the AHB. What it now comes down to is that there are behaviorally unacceptable bees (that beekeepers can readily remove from their operations) and behaviorally acceptable bees (that beekeepers continue to foster). This is what beekeepers have always done, so the antiquated specter of the AHB is by and large more of an issue of perception than practice.

Indeed, according to the US Center of Disease Control, an average of 72 people die each year from non-dog bites or allergies to insect stings. The vast majority of these cases are not attributed to honey bees but rather to non-canine animal bites, wasps (especially yellow jackets), fire ants, or other species. On average, approximately 1-2 people die each year nationwide from honey bee stings. Thus the general public is at much at risk of mortality from honey bees as dying from rat attacks or stepping on cacti and other spiny plants. Similarly, the public is 5 times more at risk from hot appliances, and 465 times more at risk from swimming pools. From a public safety standpoint, it would be far, far more effective to outlaw shellfish (and the subsequent allergies among a small proportion of the public) than to deter beekeeping. In short, because of the sensationalism of being stung, we tend to overemphasize the relative risk that AHB stings actually present.

Honey bees have always been a source of fascination yet trepidation for humans throughout our history. This stems in large part because they do not fit neatly into most categories, legal or otherwise. Bees are not domesticated animals—as they are free flying and live in the wild—but they are still managed and shepherded by beekeepers. Nonetheless, understanding the nuances of beekeeping should be driven by good decision making and empirical science.

Sincerely,

A handwritten signature in black ink, appearing to read 'David R. Tarpy', with a stylized flourish at the end.

David R. Tarpy
Professor and Extension Apiculturist
North Carolina State University

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8/29/2023

Jeffery S. Pettis, PhD
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USDA-APHIS, USA
CFIA, Canada

Comments on the Canadian boarder closure to US package bees

I am writing to offer comments on the continued border closure by CFIA to US package bees. CFIA has conducted Risk Assessments in 2003 and 2014 but these findings are out of date with the current state of pest and diseases in the two countries. I will elaborate below on the pests and diseases that are cited to keep the border closed but it is my opinion that all 4 pests and diseases listed are either now present in Canada or do not pose a significant threat to Canadian beekeepers, nor the public (i.e. Africanized bees AHB). Furthermore, the livelihood of the Canadian commercial beekeeper depends on package bees to replace winter losses which are averaging 30-50% per year. As such they need good reliable inexpensive package bees which the US had provided for many years and can provide once again at minimal risks. The package bees now imported into Canada come from the Southern Hemisphere and the bees are in poor shape and at the end of their lifespan due to being late "summer" bees. Additionally, by importing bees from the Far East Canada may facilitate the movement of a major pest, the Tropilaelaps mite, which is considered a far more dangerous pest of bees than the four items listed as reasons for closure to U S bees. I would recommend that CFIA at a minimum allow a test importation in the spring of 2024 into the Prairie Provinces and evaluate the health and productivity of US package bees. The Commercial beekeepers of Canada need North American bees to survive and be competitive.

The last risk assessment in 2014 listed four reasons that prevented US package bee import: American foulbrood resistant to antibiotics (rAFB); Varroa mites resistant to amitraz (rVar); Small hive beetles (SHB) and Africanized honey bees (AHB). I will comment below and add references as needed to support my argument that these four threats are already present in Canada or pose minimal risks to Canada.

Small Hive Beetles (SHB) and Africanized honey bees (AHB) are both tropical in origin (both from Africa) and are not expected to survive in Canada. The SHB in particular, needs warm soil to reproduce (Nor-ul-Ane and Jung 2020) and this limits their ability in cold climates to build up populations beyond very low levels that would not cause beekeeper problems (Neumann et al. 2016). SHB has been introduced into Canada on several occasions and has not become well established and thus it should not be considered a significant threat to Canadian beekeeping. Beeswax imports are a likely route of introduction of SHB into Canada (Idrissou et al. 2019). Package bees could move SHB but they would not survive the climatic conditions in Canada to become a major problem as demonstrated by the inability of previous introductions into Ontario have demonstrated. AHB is very similar in that there is reported scientific

evidence of AHB genes in Canada (openly reported data from the National Bee Diagnostic Centre in Alberta) and yet we do not see evidence of problems for beekeepers or the public. AHB has been overblown by the media. AHB is confined to the southern parts of Florida, California, Texas, New Mexico and Arizona and the beekeepers in those areas continue to keep bees. The reason that AHB has not spread further in the US is the tropical nature of AHB and this alone should suffice to remove AHB as a threat in Canada.

Parasitic mites resistant to amitraz (rVar) and American foulbrood resistant to antibiotics (rAFB) are both present in Canada and should not be used as a phytosanitary reason to exclude package bees. Beekeepers in Canada have alternative controls options for both issues. For the rVar listed as a concern in 2014, amitraz resistance in the US was not documented until 2020 although nation-wide surveys for amitraz resistance were being conducted starting in 2009 by USDA. For rAFB, the study by Evans (2013) showed that rAFB was present in Canada at several locations, had not originated in the US but rather had evolved in many locations at similar times. Thus, rAFB has been present in Canada since at least 2013 and Canadian beekeepers are dealing with this pathogen as are US beekeepers. For Varroa the beekeepers of Canada have alternate control options such as formic and oxalic acid and thus do not need to rely on amitraz for Varroa control.

Any evaluation of risks must consider the economic viability of the Canadian beekeeper but also their ability to deal with change and adapt to new problems. We as North American beekeepers have been doing this since tracheal and Varroa mites arrived, then SHB and now we face more threats; climate change and predatory hornets along with a major mite pest in *Tropilaelaps spp.*

In closing, Canadian beekeepers are already dealing with all the pests and diseases that were cited in the 2014 risks assessment. A focus by CFIA and APHIS on new and exotic pests such as Asian hornets and *Tropilaelaps* mites coming into North America will help protect Canadian and US beekeepers.

Sincerely



Jeffery S. Pettis, PhD

References:

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ScientificBeekeeping.com

Beekeeping Through the Eyes of a Biologist

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Risks Involved in Intercontinental Honey Bee Imports into Canada

The honey bee in Canada is under serious threat from a number of invasive parasites, pathogens, and predators that are currently not found on the North American continent. ***It is risky and extremely unwise for Canada to continue to allow the importation of honey bees from across the natural geological borders (such as oceans) that separate honey bee populations (and their associated pests and parasites) from each other.***

Replacement honey bees are readily available from the contiguous United States, which hosts a honey bee population that is naturally connected to that of Canada's (via flight and swarming), unrestrained by the political border.

Evaluation of Risks from Importation from the U.S.

Concerns have been raised about the importation of bees from the U.S., due to the presence of Africanized bee genetics, small hive beetle, or amitraz-resistant bee stocks, but as a beekeeper and biologist, I find these potential (and minimal) risks to be far outweighed by the risk from ***intercontinental*** importation of honey bees.

Africanized honey bees

Africanized bees (AHB) are established in some areas of the U.S. below 35° latitude – above that latitude they are outcompeted by European stock. There is no indication that AHB are adapted to the Canadian climate, and thus exhibit no risk of establishment. Restricting imports of bees to producers located above 35° latitude would virtually eliminate the risk of inadvertently importing any bloodlines of concern, which in any case could be easily identified and eradicated.

Small Hive Beetle

Small Hive Beetle (SHB) is already established in some areas of Canada, as well as in some of the countries from which Canada currently allows importation of bees. Allowing imports from the U.S. would not appreciably increase the risk of introduction.

Amitraz-resistant Stock

Canadian beekeepers have been using amitraz for a number of years, and there is already evidence of the development of resistance. Similarly, amitraz is commonly used in all other countries supplying bees to Canada, with the exception of Australia.

Fortunately, data from the U.S. indicates that there is a high fitness cost to the mite involved in resistance. For these reasons, importation of bees from the U.S. would not likely increase the development of resistance that it already occurring in Canada.

Evaluation of Risks from Importation from Other Continents

Tropilaelaps or Other Macroparasites

Of major concern to beekeepers in North and South America, as well as Europe, Australia, and New Zealand, is the introduction of the tropilaelaps mite (which may be more devastating than varroa). The importation of bees from countries outside of North America greatly increases the risk of introducing tropilaelaps into Canada. This also applies to the chance of introducing other parasites present in countries outside of North America.

Pathogen Variants

The pathogenic viruses, protozoans, bacteria, and fungi that infect honey bees are continually evolving. Each new variant poses the risk of going epidemic if introduced into the Canadian (and North American) honey bee population. We've seen this occur with chalkbrood, European Foulbrood, *Vairimorpha (Nosema) ceranae*, and Deformed Wing Virus. ***The importation of honey bees from populations outside of North America greatly increases the risk of introducing novel pathogen variants, which once introduced, are nearly impossible to control.***

Canada currently allows imports of honey bees from Chile, Australia, New Zealand, Denmark, Ukraine, Italy and Malta. From a pathogen risk assessment standpoint, ***this highly risky***, since it allows for the importation of undetectable novel variants of the dozens of honey bee pathogens present in each of those countries' honey bees populations (***as well as the countries from which they import bees***).

Conclusion

From the above biological perspective with regard to the potential for importation of parasites, pests, and pathogen variants, CFIA should limit any honey bee importations into Canada to those coming solely from the contiguous continental U.S. (and perhaps Hawaii).

Canada is currently putting all beekeepers in North America at risk, due to its importation of honey bees (and their associated pests and pathogen variants) from diverse populations of honey bees from other ecosystems.

If Canadian beekeepers are unable to produce their own replacement stock, they should import it from next door – not from geologically isolated countries all over the

world! Such unnecessary importation is biologically foolhardy and irresponsible – both to the Canadian bee industry, as well as that of the U.S.

draft

To: CFIA / Dr. Parthi Muthukumarasamy

Executive Director, International Programs Directorate

CC: USDA /Elizabeth Hill, APHIS/Nancy Ting

RE: New Risk Assessment.

Subject: local state inspections

I am writing on behalf and with the support of the American Beekeeping Federation (ABF), the American Honey Producers Association (AHPA), and the California State Beekeepers Association (CSBA) to address some areas of both risk, and misconceptions about the status of honeybees in the U.S. As you are aware, we seek to open the Canadian border to U.S. imports of complete packages and not just queens. These parties represent the majority of U.S. beekeepers.

It has come to our attention that there may be some risks that are not addressed, and some risks that are now known to be very unlikely if not impossible. Some of this is based on the reality that it's been over 10 years, since the last assessment and things that were designated as risk prior, have shown through ground truth, to be non-issues.

I intend to address the issues one at a time, and these issues will be supported by documents and industry professionals, in the interest of time we will submit them as each section is completed. We are aware of the Aug 31 timeline and are working diligently towards that.

As you are aware, we are puzzled by the border being closed to U.S. packages, and open to what we consider some unusual sources. We would like to explain, so that everyone is on the same page, packages are actually just a support structure for the queens' genetics. Package bees only live a few weeks, as they are spring bees and are depleted and replaced quickly. In this thread it is peculiar to purchase bees from the southern hemisphere, as at that time of year all they can send is older summer bees who are on the edge of life. These bees have already been exposed to the entire years' worth of pesticides and pathogens. Most experienced beekeepers will tell you the young spring bees are by far the healthiest. Only strong healthy bees survive the winter, and put forth the healthy spring rush of bees. For Canadian beekeepers this healthy spring rush is the key to a stronger colony with rapid buildup.

The first issue we would like to address is inspection. It has come to our attention, that there is a misconception of U.S. inspection requirements. It seems that misconception may be due to a lack of understanding in what is involved in package inspections. While its correct we do not have a national inspection process, we do in fact have many state inspections and restrictions.- In this sense we are just like Canada in no national inspection but instead handled at the state or provincial level.

In this reality we need to understand that there is in place, and has been, robust inspections. Our experienced package producers who ship to other states, are, and have been required for many years to have a robust inspection process. In this both California and Georgia have very strong inspection programs that have been in place for a long time. Decades would be the best description. In recent years they have even gotten stricter, with California in particular adding standards for small hive beetles, at the request of queen breeders. One needs to understand, the exporting of packages will only come from very restricted areas. In the U.S. the package industry is centered in 2 regions. These standards are for shipping within the U.S. borders. We believe these standards already meet all the WHO sanitary and phytosanitary measures as well as addressing those risks identified in the WAHO terrestrial code.

Inspection examples are attached. (7 documents)

Georgia inspection

California inspection

Queen export standards

Supporting paperwork

Additionally, the requirements for export of queens, which was set by CFIA and APHIS is applied in many of these same areas already. The requirements are in addition to any state inspection process, and would instantly apply to any producer wanting to export bees. We have been successfully shipping queens for almost 20 years now, many times to replace the queens purchased in packages from other sources, due to poor genetics. The current numbers are around 200k queens a year, which would mean over the last 20 years millions of queens, and with no problems that we are aware of.

In short, we have had in place. Strict inspections for package producers for many years. These standards could be added to, if APHIS and CIFA believe something is lacking, but as we understand it, they already meet international standards.

Should you have any questions or request additional documentation, feel free to contact us, and we will provide them, or refer you to the correct source.

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To: CFIA / Dr. Parthi Muthukumarasamy
Executive Director, International Programs Directorate

CC: USDA /Elizabeth Hill, APHIS/ Nancy Ting

RE: new risk assessment.

AHB issue

In this submission we would like to address the Africanized honey bee situation. In continuing the thread of addressing the major concerns head on.

We submit this as the final document in our presentation. Dr. Dave Tarpy is separately (due to time constraints) submitting a letter also, as well as Dr. Elina Ninos submission, and the added comments from Randy Oliver and Jeff Pettis submitted in prior submissions, we believe the AHB topic to be well supported.

The AHB risk is a fair one to address. As mentioned prior though, we have thru CFIA and APHIS established testing protocols. These protocols are set in place for lab testing of genetic background for any U.S. queen breeder including Hawaii who wishes to export to Canada. Right now, the number of queens imported by Canada from the U.S. is around 200k per year. The importation protocols have been in place for the past 20 years without any issues. The queen industry for export, and the package bees are in reality one in the same. They are using the same genetics in their hives as the queens they export.

In this thread, it is worth repeating, the bulk bees (package bees) are simply supporting structures. The queen is already mated and ready to produce. The package bees are simply in place to establish the new colony. Therefore, if the packages are being imported from elsewhere (e.g., Australia), but the beekeepers still prefer to purchase U. S. queens to install in the package-started colonies, those colonies will have the genetics from the U.S. The genetic makeup of the package is pretty inconsequential in this establishment of the hive. They simply die off before any additional reproduction takes place. Once again, its key to understand, fresh spring bees are absolutely the best to establish a hive quickly, fall bees from the southern hemisphere are not ideal.

AHB as you are well aware of became an issue in the 1990's here in the U.S. At first there was much hype and concern. Much research was done to explore the question of whether it would be possible to stop their range expansion and what would be the possible ultimate range of this hybrid. (Anderson 2006)

The media ran with the killer bee story, and fear was the order of the day. When they were first found, everything was done to quarantine them. Huge efforts were undertaken to stop the spread. Every day the media was full of stories.

Now, here we are 30 years later, we know now, it was a predominantly unfounded fear. True AHB has shown to not to establish outside of some small regions. The cold climates are simply not suitable at all for AHB to establish. This is the science of ground truth. Unfortunately, there have been no recent works to support it. The reason is simple, since the reality is here, no further research is needed. We don't do research papers on why polar bears do not live in Mexico. Climatic conditions in Canada are not conducive to AHB.

Since the media storm, every time aggressive bees are found, testing is done. For example, just this spring after an incident presumably involving defensive AHB in Alabama, the state inspectors tested and confirmed the bees were not of AHB descent. In fact, the Alabama state inspector has never had a case test positive, in 30 years. this is in an area one would say is prime for AHB, and yet beekeepers stay on top of the problem and in 30 years no positive cases.

Currently within the U.S. we do have some regions of AHB. These areas however are not areas in which we typically produce surplus bees for resale, or breed queens for resale. Recent research shows that the admixture of AHB genetics is considerably lower in U.S. populations^{1 #}, probably due to colder climates and beekeeper interventions.

It is quite clear at this point AHB has not even moved into the areas predicted by Anderson in 2006. In fact, falling way short of any of the predicted areas.

There is another reason AHB has not spread, besides the environmental factor. That is quite simply the beekeeping industry. In this industry there are multiple lines of defense on this issue.

- First off, we have the breeder. Breeders are well aware of the customer desire for gentle bees, as such their selection criteria quickly discards any aggressive hives.
- Inspectors are the second line. Any reputable breeder capable of export has an inspector. Inspectors also identify anything they consider aggressive. These hives are typically destroyed, by law. Any inspector will tell you that's rare, beekeepers catch them first.
- The 3rd line is consumers. Quite simply any breeder selling aggressive bees soon find themselves out of business. Consumers are fussy that way. Since the package industry as well as the queen producers, sell mainly to retail users, gentle absolutely has to be the order of the day. You could call it self-correcting. This is in place already in the U.S. and Canada. Canadian consumers have been using U.S. genetics for a long time and find them superior to other imports.
- 4th would be the bees themselves. You might not be aware, as many who have never made packages are also unaware of this, but aggressive or AHB simply cannot be made into packages. Once the hive is opened, any aggressive bees are in flight, and quite simply cannot be put in a package. They fly out faster than they can be put in. Packages are very young bees and by their nature, calm bees that are shaken thru a funnel. AHB does not tolerate that. Its pretty well impossible to put aggressive bees in a package.
- Last, but not least is the state level inspection process that has been in place for 20 years already, as outlined in the previous position. I do not mean to trivialize certifications. Just to point out, local inspection certification is actually the smallest and last criteria. As it should be. Any system that is robust and capable of quality uses inspection as a final quality check only.

In closing its sufficient to say 30 years of ground truth, coupled with beekeepers and breeders self-policing has kept AHB at bay, and they have been pretty close to a non-issue in the industry. Vigilance is still in place and will remain so.

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ⁱ *Admixture in Africanized honey bees (Apis mellifera) from Panamá to San Diego, California 2021*

ⁱⁱ *Selection and hybridization shaped the rapid spread of African honey bee ancestry in the Americas 2020*

Subject 40-4-1 BEEKEEPING

Rule 40-4-1-.01 Licensing of Queen and Package Bee Producers

- (1) No person shall engage in the business of selling package bees, queens, or nuclei in the State of Georgia without a license issued by the Commissioner. Such license shall be issued when:
 - (a) The applicant has submitted a license application containing information required by the Commissioner; and
 - (b) The Commissioner has inspected all colonies to be used in producing package bees and queens and has found them to be apparently free of American and European Foulbrood and other bee diseases; and
 - (c) The applicant has submitted the required \$50 license fee.
- (2) Licenses will be issued annually and will expire on December 31 of each year. The Commissioner may suspend or revoke any apiary license if he finds the license holder to have violated any requirements of this Chapter or if any of the organisms specified in (1)(b) above are found in an apiary or apiaries.

Rule 40-4-1-.02 Queen and Package Certificates

- (1) No licensee shall ship any package bees or queens unless they:
 - (a) are accompanied by a valid certificate issued by the Commissioner, certifying that the bees have been produced in an apiary which has been found apparently free of American and European Foulbrood, and other bee diseases;
 - (b) colonies from which queens and package bees originate must be treated at least 7 days prior to shipment with a pesticide registered by the U. S. Environmental Protection Agency and the Georgia Department of Agriculture for controlling *Varroa destructor*.
- (2) Certificates will be issued for a period not to exceed twelve (12) months from the date of inspection by the Commissioner.
- (3) Certificates will be issued by the Commissioner upon payment of the cost of printing. A certificate order form with certificate cost will be mailed to queen and package shippers by February 1st of each year.

- (4) The Commissioner may cancel and recall certificates issued to any apiary:
 - (a) In which he finds American or European Foulbrood or other bee diseases;
 - (b) Which he finds has used certificates on shipments of uncertified bees, or bees which have been shipped in violation of these rules.
- (5) Fees for certificates canceled and recalled by the Commissioner shall not be refundable.

Rule 40-4-1-.03 Queen and Package Bees Produced Outside the State of Georgia

Queen and package bees produced outside the State of Georgia may be shipped into Georgia when accompanied by a certificate issued by the apiary official of the state where the bees were produced, certifying that the apiaries of the producer have been inspected within one (1) year of the date of shipment and that such apiaries have been found apparently free of American and European Foulbrood and other diseases. All queen and package bees shipped into Georgia must originate from colonies that have been treated at least 7 days prior to shipment with a pesticide registered with the U. S. Environmental Protection Agency and the Georgia Department of Agriculture for controlling *Varroa destructor*.

Rule 40-4-1-.04 Interstate and Intrastate Movement of Honey Bees

- (1) No honey bees on comb or in hives shall be moved into or located in Georgia unless a permit has been obtained from the Commissioner of Agriculture of the State of Georgia.
- (2) Applications for a permit shall be made on a form obtained from the Entomology and Pesticides Division of the Georgia Department of Agriculture. Such form shall contain the following information:
 - (a) The number of colonies to be moved;
 - (b) The county(ies) in the state(s) of origin from which the colonies are being moved;
 - (c) Each state and county where the colonies have been located during the previous two years;
 - (d) The county location(s) in Georgia in which the bees are to be located;
- (3) No permit shall be issued by the Commissioner unless the application for the permit is accompanied by a certificate by the apiary official in the state of origin which certifies that the honey bees have been inspected within ninety (90) days of the date of shipment and

have been found to be apparently free of American and European Foulbrood, other bee disease, *Varroa destructor* and that bees were actively rearing brood at the time of inspection. In lieu of certification that hives are free of *Varroa, destructor* certification may be based upon treatment with hive strips that contain fluvalinate or with another pesticide registered by the U. S. Environmental Protection Agency and the Georgia Department of Agriculture for controlling *Varroa destructor*.

- (4) Honey bees on comb or in hives may enter Georgia from any other state for the sole purpose of passage through Georgia, subject to the following conditions:
 - (a) All shipment shall be securely netted or contained in refrigerated vessels to prevent escape;
 - (b) Movement through Georgia will be made without interruption, except for necessary fueling, meals, sleep, or emergency service.
- (5) Resident Georgia beekeepers may move honey bees on comb or in hives, freely, and without restriction, within Georgia, provided such honey bees have not entered Georgia in violation of any provision of this Chapter, or are not moved from any area in violation of quarantine.
- (6) Any Georgia resident beekeeper may, upon request and payment of inspection fee, obtain certification from the Georgia Department of Agriculture that his honey bees are apparently free of the tracheal mite, *Acarapis woodi*, *Varroa destructor* or other bee pest when such certification is required by another state as a condition for shipment. Request for sampling and certification shall be made to the Department of Agriculture at least fifteen (15) days prior to the scheduled time of shipment.

Rule 40-4-1-.05 Certificates Issued by Other States

If the Commissioner should find American or European Foulbrood, other diseases, or the parasitic mite, *Varroa destructor*, in shipments from another state under official certificates of inspection, the Commissioner may refuse to recognize any certificate from that state until such time as the Commissioner is able to determine that the inspection program of said state is adequate to support the issuance of valid certificates.

Rule 40-4-1-.06 Quarantines

Any apiary in any county in Georgia, found by the Commissioner to be infected with American or European Foulbrood, other disease shall be placed under quarantine and enforcement actions shall be taken as follows:

- (1) Any apiary found to be infected with American Foulbrood shall be placed under quarantine and all infected hives shall be immediately destroyed by burning under the supervision of the Commissioner. Any such apiary may be released by the Commissioner from quarantine any time after sixty days from the date of finding of the infection, when the Commissioner determines that the apiary is free of American Foulbrood.

- (2) In the case of Africanized honey bees (including African honey bees or hybridized African/European bees that are overly aggressive) the Commissioner shall have authority to treat such bees as deemed necessary.
- (3) The Commissioner may, in the case of abandoned bee yards, require the removal, treatment or destruction of bee colonies and/or equipment, in order to protect the interests of the honey bee industry.
- (4) Any apiary quarantined due to infection with European Foulbrood may be released by the Commissioner from quarantine any time after thirty (30) days from the finding of infestation, when the Commissioner determines that the apiary is free of the disease.

Rule 40-4-1-.07 Indemnification

Any Georgia resident beekeeper whose bees and/or hives are destroyed in accordance with Rules [40-4-1-.06\(1\)\(a\) or \(b\)](#), shall be eligible for indemnification, the amount of which shall be established by the Commissioner as provided in O.C.G.A. [2-14-45](#), subject to the provision of [40-4-1-.08](#).

Rule 40-4-1-.08 Enforcement

Any bees or hives found by the Commissioner to have been shipped into or brought into Georgia in violation of any provision of this Chapter shall be subject to:

- (1) Immediate depopulation or hive destruction under the direct supervision of the Commissioner, and shall not be eligible for indemnification; or
- (2) Such other procedures prescribed by the Commissioner which, in his opinion, are adequate to protect the beekeeping industry in the State of Georgia.

Rule 40-4-1-.09 Reserved



Gary W. Black
Commissioner

Georgia Department of Agriculture

P. O. Box 114 • Tifton, Georgia 31793 • (229) 386-3464

TO THE REGULATORY OFFICIALS CONCERNED

2023 CERTIFICATE OF APIARY HEALTH 2023

This is to certify that the apiaries and bees of Wilbanks Apiaries, **of Claxton, Georgia USA** have been under a regular inspection program by authorized inspectors of the Georgia Department of Agriculture and have been found to be **apparently free of diseases and pest of honeybees.**

Further, the Rules of the Georgia Department of Agriculture require that all honeybee queens and all packages of honeybees shipped from this state have been treated for the Varroa mite, Varroa destructor.

If you have any questions regarding this certificate or the health status of queen or package bees from Wilbanks Apiary, do not hesitate to contact me. This certificate expires December 31, 2023.

12/20/22

Jonathan Nixon
Lead Apiary Inspector
Plant Protection Section
Jonathan.nixon@agr.georgia.gov



State of California
Department of Food and Agriculture
Division of Plant Industry - Pest Exclusion
CERTIFICATE OF QUARANTINE COMPLIANCE
(ORIGIN OR TREATMENT) 66-079 (7-84)

Original - with Shipment
Duplicate - Destination Ag. Dept.
Triplicate - Origin Comm.

No. **45 04112023 01A**

The Following Commodity Meets the Requirements of Canada	Shipment Quantity Various
--	-------------------------------------

Commodity(ies) Queen Honey Bees with Attendants	
Shipper	Address
Consignee	Address
Various Beekeepers	Canada

ORIGIN OR RESHIPMENT

☒ COMMODITY ORIGINATED IN A PORTION OF SHASTA COUNTY
☒ NOT KNOWN TO BE INFESTED WITH Red Imported Fire Ant, Small Hive Beetle & Africanized Honeybees (<i>Apis mellifera scutellata</i>)
☒ COMMODITY IDENTITY HAS BEEN MAINTAINED AND COMMODITY HAS NOT BEEN EXPOSED TO INFESTATION

TREATMENT

Date	Concentration	Duration and Temperature
Chemical (Active Ingredient)	Treatment	Additional Information

Additional Declaration

The colonies have been inspected for small hive beetle AFB, EFB, African Honey Bee and Red Imported Fire Ant . A representative sample of bees was taken and assessed for varroa mite with none detected.

Quarantine Officer	County	Date
	SHASTA	



SHASTA COUNTY

DEPARTMENT OF AGRICULTURE/WEIGHTS & MEASURES

Rick Gurrola
Agricultural Commissioner
Sealer of Weights & Measures

3179 Bechelli Lane, Suite 210, Redding, CA 96002
Voice: 530-224-4949 Toll Free: 1-800-479-8009
Fax: 530-224-4951 CA. Relay: 711 or 800-735-2922

No. 45-031122-04

CERTIFICATE OF APIARY INSPECTION

THIS IS TO CERTIFY, that the bees and equipment as herein below described and enumerated originated in an apiary which was inspected _____ at which time the below described conditions were found to exist therein:

LOT: Hives of bees _____. Hive bodies or supers containing drawn comb **1-STORY HIVES.**

OTHER EQUIPMENT: **NONE.**

BRAND: _____

FINDINGS: Total number of colonies in apiary at time of inspection _____.

COLONIES FOUND DISEASED (AFB) **NONE** Date Destroyed **N/A**

REMARKS **NO AFB, EFB, RIFA OR SMALL HIVE BEETLE OBSERVED.**

Owner/Shipper _____
NAME MAIL ADDRESS

Destination _____
LOCATION NEAREST CITY COUNTY STATE

APIARY INSPECTOR
SHASTA COUNTY DEPARTMENT OF AGRICULTURE
(530) 224-4949 FAX (530) 224-4951



SHASTA COUNTY

DEPARTMENT OF AGRICULTURE/WEIGHTS & MEASURES

Rick Gurrola
Agricultural Commissioner
Sealer of Weights & Measures

3179 Bechelli Lane, Suite 210, Redding, CA 96002
Voice: 530-224-4949 Toll Free: 1-800-479-8009
Fax: 530-224-4951 CA. Relay: 711 or 800-735-2922

No. 45-032023-01

CERTIFICATE OF APIARY INSPECTION

THIS IS TO CERTIFY, that the bees and equipment as herein below described and enumerated originated in an apiary which was inspected _____ at which time the below described conditions were found to exist therein:

LOT: Hives of bees _____. Hive bodies or supers containing drawn comb **2-STORY HIVES.**

OTHER EQUIPMENT: **EMPTY SUPERS.**

BRAND: **STENCIL " " "PALO CEDRO CA"**

FINDINGS: Total number of colonies in apiary at time of inspection **COLONIES.**

COLONIES FOUND DISEASED (AFB) **NONE** Date Destroyed **N/A**

REMARKS **NO AFB, EFB, RIFA OR SMALL HIVE BEETLE OBSERVED.**

Owner/Shipper _____

	NAME	MAIL ADDRESS
Destination	<u>VARIOUS</u> ////////////////////////////////////	////////////////////////////////////
	LOCATION	NEAREST TOWN COUNTY STATE

APIARY INSPECTOR
SHASTA COUNTY DEPARTMENT OF AGRICULTURE
(530) 224-4949 FAX (530) 224-4951

	STATE OF CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE PLANT HEALTH AND PEST PREVENTION SERVICES PEST AND DAMAGE RECORD			PDR NUMBER 042P06004254			Date collected 3/23/2022			
				Lab	ENTO	PLANT PATH	NEMA	Time Collected 09:30		
					SEED	BOTANY	VERT			
				NOR Number:				RUSH		
Number of samples:										

Location: 04	Owner/receiver			Collector JENNINGS, ERIC			
Activity: 10	Owner BUZZ'S BEES			Affil. F S C E U O Describe Other			
Situation: 68	Address/physical description 3455 ORO DAM BLVD WEST			Quarantine shipper/broker			
Section: 20	City Oroville	State CA	Zip code 95965	Name BUZZ'S BEES			
Township: 19 N	County Butte			Address 3455 ORO DAM BLVD WEST			
Range: 3 E	Phone (530) 624-3361	Fax	Latitude 39.494388	City OROVILLE		Zip code 95965	
Base and meridian: M	E-mail NICOLE@BUZZSBEES.COM		Longitude -121.662923		State/Country CA		
	Cross street HWY				Phone (530) 624-3361	Fax	Latitude
					E-mail NICOLE@BUZZSBEES.COM		Longitude
Quarantine destination							
Quarantine origin (where host grown)				Carrier (ground/air/maritime)			
City	County	State/Country		Zip	Business name		Flight number
Shipment size / units /		Program QPHYT - Phytosanitary certification			License plate	License state	Tail/ship number

Submitter remarks PLEASE CONDUCT MITOCHONDRIAL PCR-DNA TESTING FOR AFRICANIZED HONEYBEE Suspect <u>Send report to:</u> Name: Butte County Ag Comm Phone: Fax: Email: <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4">Entomology</th> </tr> <tr> <td>Trap number</td> <td>Grid number</td> <td>Last service date</td> <td>Latitude</td> </tr> <tr> <td>Trap type</td> <td></td> <td>Trap density per</td> <td>Longitude</td> </tr> <tr> <td colspan="4">Survey method</td> </tr> </table>	Entomology				Trap number	Grid number	Last service date	Latitude	Trap type		Trap density per	Longitude	Survey method				<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4">General or Plant Pathology</th> </tr> <tr> <td colspan="4">Number of involved:</td> </tr> <tr> <td colspan="4">of plants affected:</td> </tr> <tr> <td colspan="4">Plant distribution:</td> </tr> <tr> <td colspan="4"><u>Plant parts affected</u></td> </tr> <tr> <td>Bark</td> <td>Bulbs or Corms</td> <td colspan="2">Leaves, upper surface</td> </tr> <tr> <td>Blossoms</td> <td>Fruit or nuts</td> <td>Petiole</td> <td>Stem</td> </tr> <tr> <td>Branches, large</td> <td>Growing tips</td> <td>Rootlets</td> <td>Trunk</td> </tr> <tr> <td>Branches, terminal</td> <td>Roots, large</td> <td>Seeds</td> <td>Tubers</td> </tr> <tr> <td>Buds</td> <td colspan="3">Leaves, lower surface</td> </tr> <tr> <td colspan="4"><u>Plant symptoms</u></td> </tr> <tr> <td>Canker</td> <td>Gumming</td> <td colspan="2">Slow Malformation Decline</td> </tr> <tr> <td>Die back</td> <td>Internal discoloration</td> <td>Marginal burn</td> <td>Stunting</td> </tr> <tr> <td>Fruit rot</td> <td>Leaf fall</td> <td>Root rot</td> <td>Sudden collapse</td> </tr> <tr> <td>Fruit spot</td> <td>Leaf mottling</td> <td>Rough bark</td> <td>Wilting</td> </tr> <tr> <td>Galls</td> <td>Leaf spot</td> <td>Shot hole</td> <td>Yellowing</td> </tr> </table>	General or Plant Pathology				Number of involved:				of plants affected:				Plant distribution:				<u>Plant parts affected</u>				Bark	Bulbs or Corms	Leaves, upper surface		Blossoms	Fruit or nuts	Petiole	Stem	Branches, large	Growing tips	Rootlets	Trunk	Branches, terminal	Roots, large	Seeds	Tubers	Buds	Leaves, lower surface			<u>Plant symptoms</u>				Canker	Gumming	Slow Malformation Decline		Die back	Internal discoloration	Marginal burn	Stunting	Fruit rot	Leaf fall	Root rot	Sudden collapse	Fruit spot	Leaf mottling	Rough bark	Wilting	Galls	Leaf spot	Shot hole	Yellowing
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Sample

Sample Tag	Location Description		Latitude	Remarks	
	Quantity and unit	Lot Number	Longitude		
Total pest count or number per (sweep, leaf, acre, trap, root, stem etc) Count:			<i>Entomology:</i> Conditions Dead Alive Unknown Stages Egg Larva Nymph Pupa Adult		
Nematology			<i>Botany/Vertebrate:</i> Acreage net: Acreage gross:		

Host

Host Tag	Common Name	Scientific Name	Type	Nema Field Block Type
	Variety	Container Size	Quantity and Units	Nema Field Block
	Remarks			

Identifications

Lab Entomology	Scientist Peter Kerr	Rating	Common Name honey bee
Date 4/8/2022	Order Hymenoptera	Family Apidae	
Genus Apis	Species mellifera - eastern european mitotype		
Sub-Species	Higher Category (phylum) Arthropoda, (class) Insecta		
General Identification Notes			
<i>Entomology</i>			
Mature:	Dead:	Egg:	Adult:
Immature:	Alive:	Larva:	Male:
Mated:	Unknown:	Nymph:	Female:
		Pupa:	
Egg Viability:			
Egg Viability Notes:			
Instar Notes:			

Host

Host Tag BUZZ1	Common Name EUROPEAN HONEY BEE	Scientific Name Apis mellifera	Type	Nema Field Block Type
	Variety	Container Size	Quantity and Units 2 each	Nema Field Block
	Remarks MITOCHONDRIAL PCR-DNA TEST FOR AFRICANIZED HONEY B			

Identifications

Lab Entomology	Scientist Peter Kerr	Rating	Common Name honey bee
Date 4/8/2022	Order	Family Apidae	
Genus Apis	Species mellifera - eastern european mitotype		
Sub-Species	Higher Category (phylum) Arthropoda, (class) Insecta		
General Identification Notes			
<i>Entomology</i>			
Mature:	Dead:	Egg:	Adult:
Immature:	Alive:	Larva:	Male:
Mated:	Unknown:	Nymph:	Female:
		Pupa:	

Egg Viability:
Egg Viability Notes:
Instar Notes:

Host

Host Tag BUZZ2	Common Name EUROPEAN HONEY BEE	Scientific Name Apis mellifera	Type	Nema Field Block Type
	Variety	Container Size	Quantity and Units 2 each	Nema Field Block
	Remarks MITOCHONDRIAL PCR-DNA TEST FOR AFRICANIZED HONEY B			

Identifications

Lab Entomology	Scientist Peter Kerr	Rating	Common Name honey bee
Date 4/8/2022	Order	Family Apidae	
Genus Apis	Species mellifera - eastern european mitotype		
Sub-Species	Higher Category (phylum) Arthropoda, (class) Insecta		

General Identification Notes

Entomology

Mature:	Dead:	Egg:	Adult:
Immature:	Alive:	Larva:	Male:
Mated:	Unknown:	Nymph:	Female:
		Pupa:	

Egg Viability:
Egg Viability Notes:
Instar Notes:

Host

Host Tag BUZZ3	Common Name EUROPEAN HONEY BEE	Scientific Name Apis mellifera	Type	Nema Field Block Type
	Variety	Container Size	Quantity and Units 2 each	Nema Field Block
	Remarks MITOCHONDRIAL PCR-DNA TEST FOR AFRICANIZED HONEY B			

Identifications

Lab Entomology	Scientist Peter Kerr	Rating	Common Name honey bee
Date 4/8/2022	Order	Family Apidae	
Genus Apis	Species mellifera - eastern european mitotype		
Sub-Species	Higher Category (phylum) Arthropoda, (class) Insecta		

General Identification Notes

Entomology

Mature:	Dead:	Egg:	Adult:
Immature:	Alive:	Larva:	Male:
Mated:	Unknown:	Nymph:	Female:
		Pupa:	

Egg Viability:
Egg Viability Notes:
Instar Notes:

Host

Host Tag BUZZ4	Common Name EUROPEAN HONEY BEE	Scientific Name Apis mellifera	Type	Nema Field Block Type
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	Variety	Container Size	Quantity and Units 2 each	Nema Field Block
	Remarks MITOCHONDRIAL PCR-DNA TEST FOR AFRICANIZED HONEY B			

Identifications

Lab Entomology	Scientist Peter Kerr	Rating	Common Name honey bee
Date 4/8/2022	Order	Family Apidae	
Genus Apis	Species mellifera - eastern european mitotype		
Sub-Species	Higher Category (phylum) Arthropoda, (class) Insecta		

General Identification Notes

Entomology

Mature:	Dead:	Egg:	Adult:
Immature:	Alive:	Larva:	Male:
Mated:	Unknown:	Nymph:	Female:
		Pupa:	

Egg Viability:

Egg Viability Notes:

Instar Notes:

Host

Host Tag BUZZ5	Common Name EUROPEAN HONEY BEE	Scientific Name Apis mellifera	Type	Nema Field Block Type
	Variety	Container Size	Quantity and Units 2 each	Nema Field Block
	Remarks MITOCHONDRIAL PCR-DNA TEST FOR AFRICANIZED HONEY B			

Identifications

Lab Entomology	Scientist Peter Kerr	Rating	Common Name honey bee
Date 4/8/2022	Order	Family Apidae	
Genus Apis	Species mellifera - eastern european mitotype		
Sub-Species	Higher Category (phylum) Arthropoda, (class) Insecta		

General Identification Notes

Entomology

Mature:	Dead:	Egg:	Adult:
Immature:	Alive:	Larva:	Male:
Mated:	Unknown:	Nymph:	Female:
		Pupa:	

Egg Viability:

Egg Viability Notes:

Instar Notes:

Host

Host Tag BUZZ6	Common Name EUROPEAN HONEY BEE	Scientific Name Apis mellifera	Type	Nema Field Block Type
	Variety	Container Size	Quantity and Units 2 each	Nema Field Block
	Remarks MITOCHONDRIAL PCR-DNA TEST FOR AFRICANIZED HONEY B			

Identifications

Lab Entomology	Scientist Peter Kerr	Rating	Common Name honey bee
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Date 4/8/2022	Order	Family Apidae
Genus Apis	Species mellifera - eastern european mitotype	
Sub-Species	Higher Category (phylum) Arthropoda, (class) Insecta	
General Identification Notes		
Entomology		
Mature:	Dead:	Egg:
Immature:	Alive:	Larva:
Mated:	Unknown:	Nymph:
		Pupa:
Egg Viability:		
Egg Viability Notes:		
Instar Notes:		

Host				
Host Tag BUZZ7	Common Name EUROPEAN HONEY BEE	Scientific Name Apis mellifera	Type	Nema Field Block Type
	Variety	Container Size	Quantity and Units 2 each	Nema Field Block
	Remarks MITOCHONDRIAL PCR-DNA TEST FOR AFRICANIZED HONEY B			

Identifications				
Lab Entomology	Scientist Peter Kerr	Rating	Common Name honey bee	
Date 4/8/2022	Order	Family Apidae		
Genus Apis	Species mellifera - eastern european mitotype			
Sub-Species	Higher Category (phylum) Arthropoda, (class) Insecta			
General Identification Notes				
Entomology				
Mature:	Dead:	Egg:	Adult:	
Immature:	Alive:	Larva:	Male:	
Mated:	Unknown:	Nymph:	Female:	
		Pupa:		
Egg Viability:				
Egg Viability Notes:				
Instar Notes:				

Host				
Host Tag BUZZ8	Common Name EUROPEAN HONEY BEE	Scientific Name Apis mellifera	Type	Nema Field Block Type
	Variety	Container Size	Quantity and Units 2 each	Nema Field Block
	Remarks MITOCHONDRIAL PCR-DNA TEST FOR AFRICANIZED HONEY B			

Identifications				
Lab Entomology	Scientist Peter Kerr	Rating	Common Name honey bee	
Date 4/8/2022	Order	Family Apidae		
Genus Apis	Species mellifera - eastern european mitotype			
Sub-Species	Higher Category (phylum) Arthropoda, (class) Insecta			
General Identification Notes				

Entomology

Mature:	Dead:	Egg:	Adult:
Immature:	Alive:	Larva:	Male:
Mated:	Unknown:	Nymph:	Female:
		Pupa:	
Egg Viability:			
Egg Viability Notes:			
Instar Notes:			

CERTIFICATE OF QUARANTINE COMPLIANCE
(ORIGIN OR TREATMENT)

66-079 (7-84)

ORIGINAL – WITH SHIPMENT
DUPLICATE – DESTINATION AG. DEPT
TRIPLICATE – ORIGIN COMM.

NO.
CS-04042023-1

THE FOLLOWING COMMODITY MEETS THE REQUIREMENTS OF

SHIPMENT QUANTITY
8400

WISCONSIN
COMMODITY(IES)
BEE PACKAGES WITH QUEEN

SHIPPER
B-Z BEE POLLINATION/ JOHN FOSTER

ADDRESS
24204 COUNTY ROAD 23, ESPARTO, CALIFORNIA 95627

CONSIGNEE
HERITAGE HONEY BEES LLC

ADDRESS
N6007 HILLSIDE DRIVE, SULLIVAN, WISCONSIN 53178

ORIGIN OR RESHIPMENT

- ☒ COMMODITY ORIGINATED IN A PORTION OF YOLO COUNTY
NOT KNOWN TO BE INFESTED WITH QUARANTINE PESTS OF CONCERN
- ☒ COMMODITY IDENTITY HAS BEEN MAINTAINED AND COMMODITY HAS NOT BEEN EXPOSED TO INFESTATION

TREATMENT

DATE	CONCENTRATION	DURATION AND TEMPERATURE
CHEMICAL (ACTIVE INGREDIENT)	TREATMENT	ADDITIONAL INFORMATION

ADDITIONAL
BEE PACKAGES SHIPPED FROM ESPARTO, YOLO COUNTY, CALIFORNIA ARE NOT IN A REGULATED AREA FOR RED IMPORTED FIRE ANT (RIFA) AND INSPECTED AND FOUND APPARENTLY FREE FROM AMERICAN FOULBROOD AND VARROA MITE INFESTATIONS AND OTHER BEE DISEASES.

CERTIFICATE TO COVER FIVE SHIPMENTS BETWEEN DATES OF APRIL 12TH, 2023 AND MAY 17TH, 2023.

PLANT QUARANTINE OFFICER COURTNEY STEMEN	COUNTY YOLO	DATE 04/04/2023
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STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE
SACRAMENTO

CERTIFICATE OF APIARY INSPECTION

THIS IS TO CERTIFY, That the bees and equipment as herein below described and enumerated originated in an apiary which was inspected **March 22nd, 2023**, at which time the below described conditions were found to exist therein:

Lots: **8400 BEE PACKAGES WITH QUEEN**

Hive bodies or supers containing drawn comb -

Other equipment

Brand(s) 24-49 (+ VARIOUS OTHERS)

Findings: Total number of colonies in apiary at time of inspection 96

Colonies found diseased (AFB) NONE Date destroyed N/A

Remarks APPARENTLY FREE FROM RED IMPORTED FIRE ANT, VARROA MITE AND AMERICAN FOUL BROOD INFESTATION AND OTHER BEE DISEASES.

Owner or shipper <u>B-Z BEE POLLINATION / JOHN FOSTER</u>	P.O. BOX 699, 24204 COUNTY ROAD 23 <u>ESPARTO, CALIFORNIA, UNITED STATES 95627</u>
NAME	MAIL ADDRESS

Destination <u>HERITAGE HONEY BEES LLC</u>	<u>N6007 HILLSIDE DRIVE</u>	<u>SULLIVAN</u>	<u>JEFFERSON</u>	<u>WISCONSIN</u>	<u>53178</u>
	LOCATION	NEAREST TOWN	COUNTY	STATE	

Original to be sent to destination.
First copy to accompany bees in transit.
Second copy to be retained by Commissioner.

<u>COURTNEY STEMEN</u>	
EX OFFICIO STATE APIARY INSPECTOR	
	(530) 666-8140
<u>70 COTTONWOOD STREET, WOODLAND, CA 95695</u>	
ADDRESS	PHONE NUMBER