

Apiary Inspectors of America 2000, continued 2023

## Honey Bee Imports

Author: 2000 AIA Resolutions Committee, revised 2023

The Apiary Inspectors of America (AIA) appreciates the action taken by USDA-APHIS to protect the United States border from the further introduction of honey bee pests and pathogens. For the purpose of this resolution, when the term “honey bee” is used, the authors refer to *Apis mellifera*.

The apiary inspectors are concerned about the possible importation of harmful subspecies of honey bees (example, *Apis mellifera scutellata* aka Africanized bees) and new pathogens, pests, parasites, and germplasm (example, Tropiclaelaps mite and invasive *Vespa* spp.). In the mid-2000s, honey bee colonies from other countries were imported to supplement domestic colonies used for pollination in the United States. While the market for these imported packages is relatively small, the risk of introducing a new honey bee pest or pathogen, is high. Furthermore, an introduced disease or parasite could rapidly spread throughout the continental United States as colonies are moved across state borders to pollinate crops. Currently, the United States’ bee losses of 25-35% are attributed to *Varroa* mites, viruses, and other pathogens. It would be irresponsible to introduce new pest and disease issues. Because international packages are known to have exceptionally high virus titers, the AIA expresses gratitude that the USDA-APHIS rescinded the invitation to import package bees from abroad.

AIA has been working to mitigate the movement of Africanized bees in the United States due to concerns for public safety. Importation of Africanized honey bees and other harmful subspecies of honey bees from other countries could have undesirable effects on the honey bee populations in the United States. Once colonies of bees move into the United States, they can move freely between the states. States are already saddled with an increased number of stinging incidences due to Africanized bees. The direct importation of other undesirable species of insects such as the Northern Giant Hornet (*Vespa mandarinia*) could increase stinging incidents and other burdens, such as hive slaughter events, on honey bee hives in the United States.

At the annual meeting of the AIA on January 6, 2023, the AIA resolves that:

- 1) USDA-APHIS-PPQ work to develop molecular tools and provide diagnostic services for screening imported and exported germplasm and other genetic material for pests, parasites, viruses.
- 2) USDA-APHIS-PPQ discuss with North American Plant Protection Organization (NAPPO) members to encourage a NAPPO agreement to protect North American beekeeping from the risk of pest, parasite, or pathogen introduction into North America. The AIA believes that there is a strong need for NAPPO members to agree to uniform standards on the acceptance of queen bees and packages into NAPPO member states. We strongly encourage APHIS to petition NAPPO partners to allow each State Apiary Inspection Program to review data from a specific country before allowing that country to import bees into the United States.
- 3) USDA-APHIS-PPQ require that countries requesting importation into the United States produce survey data of equivalent rigor to that being conducted by APHIS and the apiary inspection services of AIA member state organizations.
- 4) If the above conditions cannot be met, the USDA-APHIS-PPQ continues to protect American agriculture by keeping United States borders closed to honey bee introductions.

Audience: USDA-APHIS-PPQ  
NASDA

Copies to: Canadian Association of Professional Apiculturists  
American Association of Professional Apiculturists  
Executive Director, NAPPO, Biological Control Committee  
National Plant Board

2023 RESOLUTIONS

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Apiary Inspectors of America 2005, continued 2023

## **Continuance of the National Honey Bee Survey**

Author: *2005 AIA Resolutions Committee, revised 2023*

Apiary Inspectors of America (AIA) recognizes and appreciates that since 2009 USDA-APHIS- PPQ has organized and funded the National Honey Bee Survey.

In recent years, tremendous losses of honey bee colonies have been due to a variety of causes including *Varroa* mites and other parasites, viruses, and diseases, many of which are introduced. For example, several viral diseases introduced into the United States honey bee populations are vectored by introduced parasites. These events prove that the United States beekeeping industry is vulnerable to exotic pests and pathogens and the USDA should continue measures to prevent the introduction of these maladies. Thus, a continuing survey effort is vital for ensuring the rapid discovery of any novel pest, parasite, or disease into the already-stressed honey bee population and to adhere to international policy and trade agreements in order to restrict the movement of honey bees into the United States.

Be it resolved that the Apiary Inspectors of America at its annual meeting on January 6, 2023, recognizes the importance of a nationwide monitoring program and requests that USDA, both APHIS and ARS, provide a permanent funding source to maintain surveys of honey bee colonies not only for *Tropilaelaps* species, but for virus complexes, *Varroa* species and their variants, other species of honey bees as well as other organisms capable of adversely affecting honey bee health. Such surveys should continue to utilize current infrastructure among cooperating state agencies to collect and prepare samples for USDA analysis.

Audience:     USDA-APHIS-PPQ  
                  U.S. Secretary of Agriculture

Copy to:       National Plant Board  
                  Regional Plant Boards  
                  National Beekeeping Organizations  
                  Bee Informed Partnership  
                  NASDA

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Apiary Inspectors of America, 2023

Apiary Inspectors of America 2009, continued 2023

## **Evaluation and Registration of Pesticides Affecting Honey Bee Colonies**

Author: *2009 AIA Resolutions Committee, revised 2023*

Pesticide residues at prolonged sub-lethal concentrations appear likely to be contributing to honey bee colony losses and the population declines of some beneficial pollinators. Concerns identified by the research, regulatory and public communities point to the potential effects of pesticides, including systemic insecticides, fungicides, and herbicides, as well as pesticide metabolites and adjuvants, on honey bees and other beneficial insects. Research has identified that effects on honey bees from pesticide exposure can be both synergistic and cumulative when bees are exposed to multiple pesticides.

The Apiary Inspectors of America (AIA) exists for the purpose of protecting the health and welfare of honey bee colonies in North America.

Be it resolved that the AIA, at its annual meeting on January 6, 2023, hereby expresses appreciation to the U.S. Environmental Protection Agency (EPA) and Health Canada Pest Management Regulatory Agency (PMRA) in their efforts on this issue.

Be it further resolved that the AIA requests the EPA and PMRA continue to develop protocols to assess the risk of pesticides on bees, with particular focus on the potential sub-lethal and synergistic effects of pesticides under field conditions. AIA further requests the EPA and PMRA to take action to understand the effect of pesticides on all life stages of honey bees and to ensure adequate protection of bees and other beneficial pollinators in North America.

Be it further resolved that AIA would like to work cooperatively with the EPA and PMRA to exchange knowledge regarding honey bee health concerns, bee kill incidents, and in the development of pesticide registration protocols affecting honey bee health.

Audience: Health Canada PMRA  
EPA  
U.S. Secretary of Agriculture  
Executive Director, North American Plant Protection Organization, Biological Control

Copy to: National Plant Board  
Regional Plant Boards  
National Beekeeping Organizations Bee  
Informed Partnership  
Pest Management Regulatory Agency/Health Canada National  
Honey Bee Advisory Board  
AAPCO  
NASDA  
USDA-APHIS  
CAPA

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Apiary Inspectors of America 2020, continued 2023

## **Invasive Vespid Survey Efforts**

Author: 2020 AIA Resolutions Committee, revised 2023

Apiary Inspectors of America (AIA) recognizes and appreciates USDA-APHIS-PPQ for its efforts in survey and detection of invasive species.

Tremendous losses of honey bee colonies in recent years have occurred due to a variety of causes. Many of the beekeeping industry's most pressing problems are a result of introduced viruses, pests, and pathogens into the United States. The United States beekeeping industry is vulnerable to other pests, pathogens, and diseases, and the USDA should continue measures to detect and prevent the introduction and spread of these organisms into the United States.

During the Fall of 2019, USDA-APHIS-PPQ positively identified a specimen of Northern Giant Hornet, *Vespa mandarinia* Smith (Family: Vespidae), in Blaine, Whatcom Co., Washington state. *Vespa mandarinia* conducts group raids on colonies of European honey bees, resulting in the complete destruction of the colony. This wasp and other exotic vespids can enter the United States as colonies, or as individuals in soil and wood products, so multiple methods of survey are needed. A continued survey effort is vital for ensuring the rapid discovery and control of *Vespa mandarinia* and other invasive vespids.

Be it resolved that the AIA at its annual meeting on January 6, 2023, recognizes the importance of the wasp monitoring program and requests that USDA, both APHIS and ARS:

1. Continue to develop and improve suitability models for *V. mandarinia* and other potentially invasive vespids;
2. Expand current monitoring programs funded by the USDA to include multiple survey techniques for detecting both colonies and individual exotic vespids, and;
3. Provide a permanent funding source to maintain surveys for exotic vespids.

Such surveys should utilize current infrastructure among cooperating state agencies and be based on suitability models.

Audience:     USDA-APHIS-PPQ  
                  U.S. Secretary of Agriculture

Copy to:       National Plant Board  
                  Regional Plant Boards  
                  NASDA

## Apiary Inspectors of America 2022, continued 2023

### **Enhancing Pollinator Conservation Programs**

Author: *2022 AIA Pollinator and Resolutions Committees, revised 2023*

Because of population declines, the Apiary Inspectors of America (AIA) supports practices that increase habitat for honey bees and native bees. The AIA appreciates the efforts of Farm Bill programs that create pollinator habitat, increase the availability of pollen and nectar, provide shelter, and create a refuge from pesticides toxic to pollinators.

These programs include the United States Department of Agriculture (USDA) Conservation Reserve Program (CRP) and the Natural Resource Conservation Service (NRCS) Environmental Quality Incentives Program (EQIP). Conservation Reserve Program enrollment reached a height of 35 million acres in 2007 and has declined every year since. As of Sept 2022, just under 22 million acres are enrolled.

Be it resolved that the Apiary Inspectors of America at its annual meeting on January 6, 2023, expresses support for the CRP and EQIP programs. We encourage the USDA and NRCS to increase the proportion of funding that both programs receive and allocate to creating pollinator habitat.

Be it further resolved that the AIA requests that the USDA make the CRP program more attractive to land managers, through increased rental reimbursements, more flexibility of plant species and management options, and other measures to incentivize participation.

Audience:       USDA  
                      U.S. Secretary of Agriculture

Copy to:         National Plant Board  
                      NASDA

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Apiary Inspectors of America 2023

## **Tropilaelaps spp. Early Detection and Strategic Response Plan**

Author: 2022 AIA Resolutions Committee

Apiary Inspectors of America (AIA) recognizes and appreciates USDA-APHIS-PPQ for its vigilance to be prepared for the introduction of viruses, pests, and pathogens detrimental to *Apis mellifera*.

*Tropilaelaps* mites are a fast-reproducing ectoparasite that feed on bees. Originally a pest of *A. dorsata*, it has been found parasitizing *A. mellifera* in areas where both bee species are found. It has expanded rapidly outside of its native range and has been shown to survive in cold climates, up to three days in dry pollen, and up to six days in empty honeycomb<sup>1,2</sup>. *Tropilaelaps*' ability to survive almost a week without its host would allow for its introduction into mite-free countries in both living colonies and hive products and equipment.

*Varroa destructor* (another invasive mite) was discovered in Florida in 1987. Within two years it had spread to 19 states via migratory beekeeper pollination routes<sup>3</sup>. Today, *V. destructor* is found in every state in the United States and most other countries becoming the number one cause of colony death. If *Tropilaelaps* spp. were introduced into the United States, a similar rate of spread and damage could be expected.

Early detection of *Tropilaelaps* spp. and the development of a Strategic Response Plan is critical to stop *Tropilaelaps* spp. before an unchecked spread across the United States. The current National Honey Bee Survey (NHBS) provides monitoring for *Tropilaelaps* spp. Unfortunately, during the time it takes for samples to be processed and results to be reported, infested hives could move to other areas of the United States, spreading *Tropilaelaps* spp. across the country. Additionally, the NHBS is collecting samples from established hives already in the migratory pollination system. Detecting *Tropilaelaps* spp. before they become established in the migratory pollination system is critical to stop or slow its spread. A sentinel trapping program at high-risk ports would detect *Tropilaelaps* spp. before it enters the general bee population<sup>4</sup>.

Be it resolved that the AIA at its annual meeting on January 6, 2023, recognizes the importance of a strategic response plan for *Tropilaelaps* mites and requests that USDA, both APHIS and ARS:

1. Establish a working group made up of researchers, state and federal regulatory officials, and industry stakeholders to develop a Strategic Response Plan to eradicate or mitigate the spread of *Tropilaelaps* spp.
2. Provide permanent funding and expand current monitoring programs to include sentinel apiaries and swarm traps in high-risk areas to serve as an early detection system for *Tropilaelaps* mites.
3. Increase funding for research on *Tropilaelaps* spp. dispersal patterns, biology, and management.

Audience:     USDA-APHIS-PPQ  
                  U.S. Secretary of Agriculture

Copy to:       National Plant Board  
                  Regional Plant Boards  
                  NASDA  
                  CAPA  
                  CFIA

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References:

- <sup>1</sup>Khongphinitbunjong K, Chantawannakul P, Yañez O, Neumann P. Survival of Ectoparasitic Mites *Tropilaelaps mercedesae* in Association with Honeybee Hive Products. *Insects*. 2019 Jan 29;10(2):36.
- <sup>2</sup>de Guzman, L. I., Williams, G. R., Khongphinitbunjong, K., & Chantawannakul, P. (2017). Ecology, life history, and management of *Tropilaelaps* Mites. *Journal of Economic Entomology*, 110(2), 319–332.  
<https://doi.org/10.1093/jee/tow304>
- <sup>3</sup>Connor, L. (2015, December 10). *Varroa control past and future*. American Bee Journal. Retrieved November 25, 2022, from <https://americanbeejournal.com/varroa-control-past-and-future/>
- <sup>4</sup>Keeling, M. J., Datta, S., Franklin, D. N., Flatman, I., Wattam, A., Brown, M., & Budge, G. E. (2017). Efficient use of sentinel sites: Detection of invasive honeybee pests and diseases in the UK. *Journal of The Royal Society Interface*, 14(129), 20160908.