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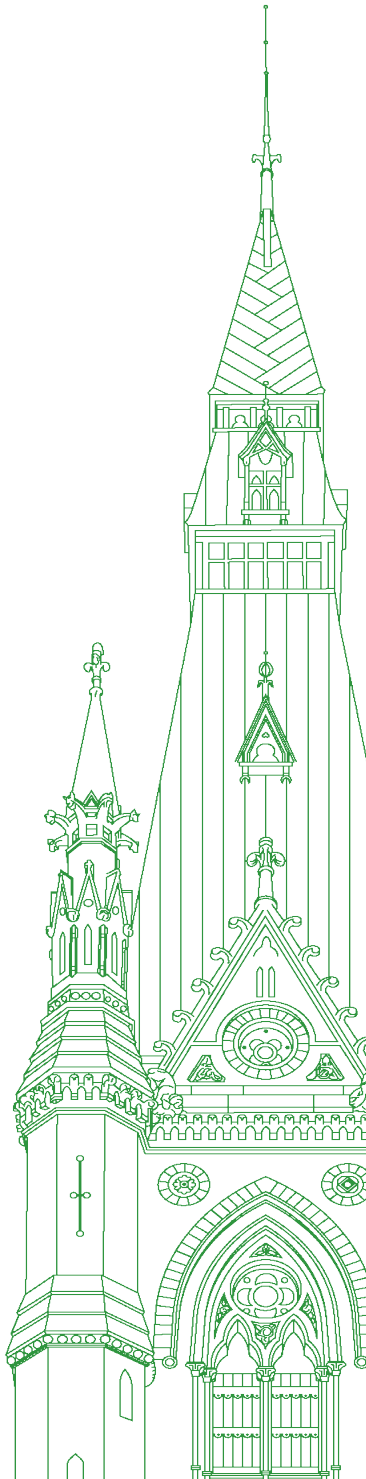

Chair: Mr. Kody Blois

Standing Committee on Agriculture and Agri-Food

Wednesday, May 31, 2023

● (1630)

[*English*]

The Chair (Mr. Kody Blois (Kings—Hants, Lib.)): I call this meeting to order.

Welcome to meeting number 65 of the House of Commons Standing Committee on Agriculture and Agri-food.

I'll start with just a few reminders.

Of course, we're meeting in hybrid format. The proceedings will be made available via the House of Commons website. The webcast shows only those who are speaking. Taking screenshots or photos of your screen is not permitted.

There are a couple of changes here today at committee. We have Arnold Viersen subbing in for Warren Steinley, and we have Mr. Shields here for Ms. Rood. Welcome to both of you.

Mr. MacDonald from Prince Edward Island is subbing in for Mr. Ryan Turnbull. It's great to see you as well. You're no stranger to the agriculture committee.

I have just a couple of reminders, colleagues, off the hop. We're looking for recommendations by next Monday in relation to the conversation we've had on bee policy so that we can incorporate those into the report. The analysts have told me that some of you have already shared those, so if you've already shared those, don't feel the need to reshare, but if you haven't said something on this or you want to make sure something is there, please do so by Monday.

Pursuant to Standing Order 108(2) and the motions adopted by the committee on Monday, January 31, 2022, Wednesday, October 5, 2022, and Monday, April 17, 2023, the committee is resuming its study on the environmental contribution of agriculture. Of course, as I mentioned, today we're talking about the topic of bee mortality.

I'd like to thank our witnesses. The last time, a few weeks ago, we tried to have you in, we had some real technical difficulties in the virtual environment. It's great to see you here in person. Thank you, and I'm sorry we had to cut that meeting short.

From the Canadian Food Inspection Agency, today we have Dr. Nancy Rheault, who is the senior director and deputy chief veterinary officer, and we also have Dr. Parthi Muthukumarasamy, executive director, international programs directorate.

From the Department of Agriculture and Agri-Food, we have Dr. Stephen Pernal, who will be joining us virtually.

From the Department of Health, we have Dr. Connie Hart, who is the senior science adviser, environmental assessment directorate, pest management regulatory agency. Ms. Hart and certainly PMRA do work that is always really important for our agriculture sector. Thank you for being here. Also joining you is Frédéric Bissonnette, acting executive director of PMRA. Welcome to the committee.

From the American Beekeeping Federation, we have Daniel Winter, who is the president. Thank you, Daniel, for joining us online.

Finally, from the National Association of State Departments of Agriculture, we have Ted McKinney, who is the chief executive officer. Mr. McKinney, thank you so much for joining us and for being able to give us a perspective outside of Canada.

We're going to allow five minutes for each organization or individual to provide opening statements and then we're going to get right to questions.

I'm going to start with the Canadian Food Inspection Agency for up to five minutes. Over to you.

Dr. Parthi Muthukumarasamy (Executive Director, International Programs Directorate, Canadian Food Inspection Agency): Thank you, Mr. Chairman, and good afternoon.

The CFIA is pleased to be invited here today to share its knowledge and regulatory perspectives.

The CFIA is a science-based regulatory agency, and its mandate is the safeguarding of plants, animals and food, which enhances the health and well-being of Canada's people, environment and economy. The CFIA fully recognizes that bee populations are important for the health and vitality of the Canadian agricultural sector.

Federal and provincial jurisdictions share responsibility for managing bee health in Canada. The CFIA works at the national level, first, by designating certain bee diseases as regulated and reportable diseases—this means that specific disease-control measures have to be applied for their control—second, by minimizing the risks of introducing bee diseases into Canada through the control of importations, and third, by providing guidance to the bee industry through the national bee farm-level biosecurity standard.

The provincial governments help to maintain bee health within their jurisdictions by administering bee health management programs and regulating the interprovincial movement of bees to minimize the spread of bee diseases and pests. Canada has always relied on strict, science-based import measures to safeguard our borders from the introduction of diseases and pests.

Comprehensive import risk assessments, guided by the methodology of the World Organisation for Animal Health, are conducted by CFIA science experts before imports of bees are permitted from any country. These risk assessments are peer-reviewed by members of the Canadian Association of Professional Apiculturists, an independent organization consisting of academia, researchers, and federal and provincial apiculturists. We then consider identifying, developing and implementing possible options for risk assessment.

Bee diseases and pests can spread between countries through the international trade of bees, especially with respect to packaged bees. A package of bees poses higher risks than queen bees, usually weighs two or three pounds, and contains about 8,000 to 12,000 bees. On the other hand, honeybee queens can be individually inspected for health and the presence of pests before importation into Canada and, therefore, pose lower risks than honeybee packages.

Based on science-based risk assessments, Canada currently allows for the import of honeybee queens from the United States, Chile, Australia, New Zealand, Denmark, Italy, Ukraine and Malta. Due to higher risks, honeybee packages are only permitted for import from Chile, Australia, New Zealand and, more recently, Italy and Ukraine.

I will now share some information on the current situation with the importation of honeybees from the United States.

Canada closed its border to U.S. honeybees in 1987 due to reports of varroa mites and tracheal mites in the United States. The CFIA reassessed the situation in 1994, 2003 and 2013. Although the last risk assessment was conducted in 2013, the CFIA, on an ongoing basis, reviews new scientific information on Canadian and U.S. honeybee health, and if any significant new information warrants a risk assessment, the CFIA would initiate another risk assessment.

Due to diverse views among experts and stakeholders on whether sufficient new scientific information is available or not, the CFIA undertook an initiative between July and October 2022 to formally request a call for submission of any new scientific information regarding honeybee health in Canada and the United States. The CFIA is currently evaluating all submissions received and remains open to receiving additional submissions. If sufficient new evidence is available that would warrant a new risk assessment, the CFIA will proceed with a new risk assessment. At that time, the CFIA will also review any science-based risk-mitigation protocols that could mitigate any risk.

The CFIA continues to engage with the Canadian Honey Council, the United States Department of Agriculture, provincial governments and apiculturists, and it is open to receiving information from other stakeholders and members of industry on the import of honeybees. However, the CFIA's first and primary responsibility is the safeguarding of plant and animal health and food safety.

Thank you again for this opportunity to provide the CFIA's perspective on bee health in Canada.

Thank you, Mr. Chairman.

● (1635)

The Chair: Thank you very much.

We'll now turn to the PMRA for up to five minutes, please.

Mr. Frédéric Bissonnette (Acting Executive Director, Pest Management Regulatory Agency, Department of Health): Thank you, Mr. Chair.

Good afternoon. My name is Frédéric Bissonnette. I'm the acting executive director at Health Canada's pest management regulatory agency, PMRA.

I'd like to start by acknowledging that we're meeting today in Ottawa, Ontario, which is the traditional, unceded territory of the Anishinabe and Algonquin people.

Thank you for the opportunity to speak to the committee about PMRA's role in protecting bee health. I'm joined today by Dr. Connie Hart, a senior science adviser in the environmental assessment directorate who has over 20 years of experience in environmental risk assessment, including expertise in assessing the risks of pesticide to bees.

PMRA is a federal authority responsible for the regulation of pesticides in Canada. Our mandate under the Pest Control Products Act is to prevent unacceptable risk to individuals and the environment from the use of pest control products. Pesticide manufacturers apply to Health Canada to register new pesticides or add new uses. Our role is to conduct thorough, science-based risk and value assessments of these pesticides before they can be registered for use in Canada.

PMRA also monitors and reassesses pesticides after they've been registered. We conduct periodic re-evaluations of pesticides using the most current science and risk assessment protocols, and we conduct special reviews of pesticides when there are reasonable grounds to believe the value or risk of their use is unacceptable.

We recognize the importance of bee health for agriculture in our society. The health of pollinators is complex and can be affected by many factors, including parasites and pathogens, habitat loss, food supply issues, queen bee quality, exposure to pesticides, general hive management and weather.

● (1640)

[*Translation*]

PMRA works with key stakeholders and our provincial counterparts on issues related to bee health. We collaborate with other pesticide regulators domestically and internationally to improve our risk assessments and management.

PMRA's incident reporting program allows anyone to report suspected pesticide-related effects on people or the environment, including effects on bees. Pesticide registrants are required to report incidents involving their products to PMRA. This allows us to monitor for unforeseen risks once pesticides are in use.

In 2012, PMRA began receiving large numbers of incident reports about bee deaths, colony losses and abnormal behaviour. An investigation into the causes of these incidents revealed that dust from the planting of neonicotinoid-treated seed was likely adversely impacting nearby bee colonies. Health Canada, in collaboration with many stakeholders, implemented risk reduction measures to minimize pesticide exposure to bees. With these risk mitigations in place, Health Canada saw a significant decrease in the number of incidents reported.

In 2014, PMRA published a pesticide risk assessment framework for bees, developed in cooperation with the United States Environmental Protection Agency. This framework is now used in all assessments conducted in Canada and United States where bees may be exposed to pesticides. It was applied in the re-evaluations of three neonicotinoid pesticides, completed in 2019. These assessments were based on a review of hundreds of open literature and pesticide company-submitted studies, that assessed risks to bee colonies, including overwinter mortality.

The re-evaluations of neonicotinoids resulted in decisions by PMRA to further mitigate potential risks to bees. As a result of these assessments, PMRA put in place major changes to product registrations. This included cancellation of a number of pesticide uses.

[*English*]

During the spring of 2022, high honeybee overwintering losses were reported in Alberta, Quebec, Ontario, Manitoba and other provinces. The Canadian Association of Professional Apiculturists reported that the most-cited cause of colony loss was ineffective control of varroa mites on bees, which could lead to the loss of colonies.

In addition to mitigating the risk to bees from pesticide use, PMRA is also responsible for decisions regarding registration of pest control products to protect honeybees, including products used to control varroa mites. PMRA continues to carefully monitor and consider the impact of pesticides on bee health. Our intent is to be proactive in our protection of bees and to take timely action where warranted.

Again, I thank you, Mr. Chair, for inviting PMRA to participate in this important discussion today.

The Chair: Thank you very much.

I'll now turn to the American Beekeeping Federation and Mr. Winter.

Mr. Daniel Winter (President, American Beekeeping Federation): Good afternoon.

My name is Dan Winter. I'm a second-generation commercial beekeeper from New York state. I do both commercial crop pollination and honey production. Currently, I'm president of the American Beekeeping Federation. I'm also on the New York State Apiary Industry Advisory Committee. Most recently, I was nominated to the National Honey Board.

I'd like to take a minute to talk about honeybee mortality in the United States in general. Most of the information is available from the Bee Informed Partnership. They have a 16-year mortality average that they have been working on with the USDA. That's available at the beeinformed.org website.

In the Bee Informed Partnership's managed honeybee loss estimates from April 2020 to April 2021 in the United States, beekeepers lost about 45.5%. These are very unsustainable levels of mortality, as I'm sure you already know in Canada. These rates continue to rise even despite a 50-state pollinator protection plan that went into effect under President Barack Obama, where all 50 states in the United States were required to develop a pollinator protection plan in order to help alleviate honeybee losses.

Now, the ABF attributes that managed pollinator mortality to be directly related to three main factors: pests and parasites; nutrition and problems associated with agri-chemicals; and synergistic problems when honeybees mix these contaminated pollens within the beehive.

A lot of chemicals are studied on an individual basis. Dr. Diana Cox-Foster from the ARS lab in Utah has done a lot of studies on the synergistic problems with adjuvants and things like that, which are added to chemicals when they are mixed together. As you know, honeybees bring pollen into the beehive, and they mix pollens together into a thing called “bee bread”, which they feed to their larvae.

The bee bread can contain several different chemicals, and rarely are these chemicals studied together within the beehive. I think that's where a lot of the testing and chemical residue studies have actually fallen short. I don't think they're taking into account that the bees themselves are mixing the chemicals within the hives.

I think that working toward more sustainable agriculture in the future is one of the only ways that we're going to alleviate pollinator losses. We have to remember, too, that what's good for managed pollinators is also good for native pollinators, so this would be a win-win across the board if we can start to develop this and look at how these chemicals affect each other within the beehive and stop looking at individual chemicals as a huge problem within the beehive.

Now, another pest we have is the Tropilaelaps mite. That is currently in Asia and has not been a problem in North America, but if that mite were to be imported into Canada or the U.S. via packages or things like that, the Tropilaelaps mite breeds three times faster than the current varroa mite and, therefore, honey production would sink to near nothing, because beekeepers would have to treat their colonies constantly to be able to keep up with commercial pollination demands. Therefore, we need to be proactive and not reactive when it comes to the Tropilaelaps mite. We really don't want to see that get into North America.

It has been brought to the American Beekeeping Federation's attention that Canada is importing some packages from some questionable areas. Now, again, we just worry about the commercial and the pollination and how that will affect our industry and our food resources. We would strongly like the Canadian Parliament to possibly consider importing packages from the United States, because they are a much lower risk, and we would entertain that fact and help to work on possible ways that we could make that happen so that our risks to commercial pollination in the United States and in Canada are drastically reduced.

● (1645)

The way we move bees around North America, a mite like that would spread so fast it would be catastrophic to our industry. We really need to follow the science on this, look at Dr. Samuel Ramsey's studies in Asia about this mite and be proactive in trying to keep it out of North America.

Thank you very much for your time. We really appreciate you inviting the American Beekeeping Federation to these hearings.

Thank you.

The Chair: We certainly appreciate you making the time for us, Mr. Winter. Thank you for your opening statement.

We'll now turn to Mr. McKinney, and then following that, colleagues, we'll turn it over to questions.

It's over to you, Mr. McKinney.

Mr. Ted McKinney (Chief Executive Officer, National Association of State Departments of Agriculture): Good afternoon.

Thank you, Chair Blois and Vice-Chairs Barlow and Perron, for the invitation to speak today.

I'm Ted McKinney. I'm very fortunate to serve as the CEO of the National Association of State Departments of Agriculture, or NASDA.

Who are we? We represent the commissioners, secretaries and directors. These would be direct equivalents to your ministers of ag from your provinces. They represent all 50 states and four international territories.

Many of you are aware that we're responsible for a wide range of programs, including food safety, conservation and environmental protection, while also serving as a coregulator with the U.S. EPA and, in some cases, the USDA on certain programs. Bee health is oftentimes—not always, but oftentimes—a part of our programs.

We have a strong relationship with your provincial ministers. In fact, coming up in a month or two will be the 32nd consecutive year in Saskatchewan for the Tri-National Agricultural Accord, where we address cross-border issues such as regulatory harmonization, animal and plant health, and, I suspect, bee health as well.

Let me speak to bee health.

First, it's critical to plant reproduction. You know that. Three-fourths of the world's flowering plants and about 35% of the world's food crops depend on pollinators to reproduce. The health of these species is critical to our agriculture, as it is to yours, in many cases. It's not just for agriculture, but food security and the overall economy.

The varroa mite you've heard referenced before. It is a significant threat. It's a clear and present danger right now facing health, honey production and pollination services.

Interestingly, the varroa mites' full name is *varroa destructor*, and it is, perhaps, an aptly named parasite because it's a plague for honey bees. The USDA cites the varroa mite as "inflicting more damage and higher economic costs than all other apicultural diseases." That's quite a claim, I might add.

Before the widespread introduction of varroa mites, beekeepers managed more than three million colonies for crop pollenation, and their winter losses were about 10% to 15%, typically. Today, those losses are averaging more than 40%, reflecting what was just shared by Mr. Winter.

What beekeepers truly need is more tools in the tool box—you'll hear that theme from us—to provide long-term solutions to the varroa mites and other parasitic mites that may arrive.

For commercial beekeepers, there are only three treatments available to combat varroa mites. These treatments are generally effective; however, this short list has not changed in more than a decade. In short, we're not adding new tools to the tool box. There are some folk remedies out there, and they have varying levels of success, but they are certainly far less consistent than these primary three treatments. All of them involve more labour and cost to apply.

The long-term solution to combatting these parasitic mites begins with funding additional research that would protect honeybee hives from the parasitic mites, and funding more research. This is something we're advocating for in our Farm Bill, and hope that you all will, as well, in your Parliament and your departments.

NASDA recognizes that a risk-based regulatory process is a fundamental pillar of future success. It's what we've long applied for and support. Specifically, we support the science-based regulations of pesticides by EPA under our FIFRA, the Federal Insecticide, Fungicide, and Rodenticide Act.

In addition, you have my full appendix that explains the EPA process of assessing these risks.

Here is a bit of international perspective, given my current and former roles. Ag throughout North America faces a lot of challenges, and they are significant. We enjoy tremendous opportunities, though, as well. It's critical that we, as a North American trading bloc, elevate the promotion of science-based decision-making regarding international regulation of sanitary and phytosanitary measures.

The fundamental objectives of this are under attack, most notably by our friends in the European Union under their green deal, and, more specifically, their farm to fork policies.

We at NASDA see this as a clear and present danger. These policies seek to demonize the technological advancements we've made in agriculture through improved chemistry and biotechnologies. If enacted, these policies can and will threaten our ability to produce sufficient food and fibre to support the world's population, which just recently, as you know, surpassed eight billion.

● (1650)

As leaders of Canadian agriculture, we hope this committee will reject calls for scientifically dubious policies promoted by the EU, and in some cases a few other countries, and embrace the technologies that have made our agricultural production so successful, not only in terms of food and feed quality and quantity but also safety, and likewise in terms of our significant environmental achievements.

In conclusion, pollinator health, especially bee health, is critical because of the role they play in plant reproduction across the globe. In producing food, fuel and fibre, we stand ready to work with you. I might say that some of these comments come from my own experience working on a farm with pesticides over my lifetime.

Thank you for the opportunity to join you on this occasion.

● (1655)

The Chair: Thank you very much, Mr. McKinney.

We'll now turn it over to questions.

Mr. Barlow, you have up to six minutes, please.

Mr. John Barlow (Foothills, CPC): Thank you very much, Mr. Chair.

Thank you to our witnesses for being here.

I want to start with the PMRA. This first question may not sound like it deals with bees, but I'll get there.

Certainly, the assessment of lambda-cy by the PMRA has caused a lot of concern within the agriculture sector. We have the ag ministers in Saskatchewan and Alberta asking for that decision to be re-evaluated. It certainly doesn't seem to make sense that it's approved for crops that are going to be used for human consumption but not for crops that are going to go to livestock feed. To me, there's clearly an error in that decision.

Has there been a decision by PMRA to do a reassessment of its de-labelling of lambda-cy?

Mr. Frédéric Bissonnette: To maybe give a bit of history on lambda-cyhalothrin, a re-evaluation happened. In the first consultation we were basically proposing to cancel all uses. We sought more information, as we typically do during a consultation. We also asked the company to prioritize the use. The risk was dietary in nature, for children in particular, in terms of the amount consumed every day or over a lifetime. The company prioritized the list of crops that would make it to the label. If the first one passes, we add it, and so on and so forth. The company did not identify feed as a priority. Hence, the decision allowed more uses on the label, but the feed did not make it, because the company did not identify it as a priority for them.

That being said, the company has now provided us with an application to revisit the decision with new information. We're in the middle of reviewing that information.

Mr. John Barlow: Now, the reason I'm going to get to the bee issue here is that when it comes to Matador and Silencer, key labels of lambda-cy, there are no other comparable products out there that are going to deal with grasshoppers, beetles and also honeybees. According to the Canadian beekeepers association, any other products are actually more harmful to bees. If Matador is used properly, it does not harm bees.

Was the impact on bees taken into consideration by PMRA when this decision was made?

Mr. Frédéric Bissonnette: First, all decisions on pesticides are based on the product, first and foremost. It has to have acceptable value. It has to have acceptable risks. If it doesn't, then that's it.

Every product that is registered goes through a risk assessment. It's only going to be registered if it's found acceptable. The bees would have been considered when the alternatives were registered.

That being said, I've talked to some of the growers myself. Chlorantraniliprole, a product that is currently available, is one that they find works, and to my understanding they've secured stock for the coming growing season.

Mr. John Barlow: Mr. Bissonnette, in terms of a timeline, you mentioned that you're reviewing the application to re-evaluate lambda-cy. Is there any timeline on when that will be done? We've obviously lost this season. I can't overstate enough that with the lack of rainfall we've had in western Canada this year, there's a real concern of grasshoppers and beetles being a major problem.

Is there any timeline you can give me on when this will be done? I think it's pretty clear that this decision will be that this product can come back, but I don't want to put words in your mouth. When will this happen?

Mr. Frédéric Bissonnette: We've actually prioritized the review. We're hoping that we'll be able to get the decision out in time for the next growing season.

Mr. John Barlow: Thank you.

To CFIA now, you've allowed queen bees to be imported from areas in the United States for many decades. What is the decision between allowing queen bees to be imported from those areas but not allowing live packaged bees?

Dr. Parthi Muthukumarasamy: The risks posed by queen bees and packaged bees are totally different. Queen bees are single bees with a few helpers that are exported. They are able to be inspected and to be certified as being free from pests, diseases and parasites, because it's a very small number. However, packaged bees, as I mentioned in my opening statement, are about a kilogram in size and weight, and include 8,000 to 12,000 bees. The risk parameters are different.

When we did the risk assessment in 2003, at that time we were able to allow queen bees to be imported from the United States but not packaged bees, because the risk is higher.

Mr. John Barlow: You mentioned in your opening statement that we're also allowing the importation of bees from Ukraine. The United States has not allowed bees to be imported from Ukraine. Obviously, there are some issues going on with Russia's illegal invasion of Ukraine.

How is that assessment done? Why are we not following a similar decision to that of one of our most important trading partners, which obviously has concerns about importing these bees from Ukraine where Canada does not?

● (1700)

Dr. Parthi Muthukumarasamy: Our decision to allow imports of packaged bees from Ukraine was made after the extensive risk assessment that was conducted on Ukraine and its control programs, its surveillance programs, the disease prevalence, and a number of other scientific parameters.

Mr. John Barlow: I have one really quick question for Mr. Winter of the American Beekeeping Federation.

Would you agree with the assessment that it makes, which is that there shouldn't be a concern between importing queen bees and packaged live bees from the United States into Canada?

Mr. Daniel Winter: I think some of the older risk assessments are outdated. Therefore, I don't think a current risk assessment would show the same problems as the same risk assessment from 10 years ago. I really think that it would be fairly safe for Canada to import packages from the United States.

We've had meetings within the USDA, and places like that, to possibly explore regulations that would indeed let packages come into Canada if Canada would like to go into talks and would like to entertain how we could possibly make that happen. I think it's important.

The Chair: That's great.

Thank you, Mr. Winter.

Thank you, Mr. Barlow.

Now we have Mr. Drouin for six minutes.

[*Translation*]

Mr. Francis Drouin (Glengarry—Prescott—Russell, Lib.): Thank you, Mr. Chair.

I also want to thank my colleagues and, of course, the witnesses who are with us.

[*English*]

You've identified significant new scientific information. I'm just trying to understand how CFIA labels significant new information when we talk about, for instance, if we're allowed to send packaged bees from south to north. I think that's part of the reason we're here. I don't know the answer, so I'm asking honestly. How do you say this is significant new information versus this is not significant new information?

Dr. Parthi Muthukumarasamy: The risk assessment looks at four hazards from a bee health perspective. The four of them are small hive beetle, amitraz-resistant varroa mites, oxytetracycline-resistant American foulbrood and Africanized bees.

There is a scientific process where it assigns risks to each of those subsets. If the risk level changes as a result of new scientific information that is available on surveillance, on control measures and on mitigation measures, that will allow us to re-evaluate and to re-quantify the risks that are there. It is based on a World Organisation for Animal Health process—the risk assessment itself. It is a scientific process where you can say that there is significant new information that changes our assessment from the 2013 or not.

Mr. Francis Drouin: I look at my colleague, Mr. MacGregor, who's in B.C., and I've certainly been to his province. We know that there are two roads: one's in the U.S., and one's in Canada. There's farmland right there. The bees aren't going to stop at CBSA and say "I need to get in, in order to pollinate, or to get some food". How do we measure that risk versus other risks that you've certainly identified?

How do we move away from saying "no" and move to managing risk properly in terms of saying there's a lack in the Canadian market? We know that packaged bees are going to other continents. I'll be honest with you. I have an issue with them. We are going to other continents, yet we can't go to the North American continent, especially the northern American continent, where we have an artificial political Canada-United States.... I get it, but bees don't get it.

How do we manage this risk? How do we communicate it if there's really an issue? Your basing this on 2013 science. I'm having a hard time saying that, since 2013, since 10 years ago, we haven't had a significant update on science information in order for us to not only import queens but also import packaged bees.

Dr. Parthi Muthukumarasamy: I will make two quick comments.

First, in terms of bees flying over from across the border, bees fly relatively short distances—one kilometre to five kilometres. They are bound to their hives, so they go back to their hives.

The situation does not pose the same risk as the intentional introduction of 8,000 to 12,000 bees coming in packages and being introduced in the high-production areas.

The risks are very, very different, and that's why—

● (1705)

Mr. Francis Drouin: Respectfully, in the Abbotsford region, whether you put a beehive in the U.S. or in Canada, it's the same thing. They are very close.

Are we monitoring this particular region, to say, "Let's treat this as a pilot project. Let's look at this particular region"? From my understanding, there's absolutely no difference. There's no net that goes up thousands of kilometres.

I know that the bees are travelling from one kilometre to five kilometres away from the beehive, but in that particular region, I know for a fact that they are pollinating in blueberry harvests and going back to the U.S. I'm having a hard time explaining this to Canadians in that particular region, who are looking for whether it's their honeybees or pollinators. I'm having a hard time explaining that.

To me, if we're basing this on 2013 science, are we looking at this particular region? It is a perfect area to say that they are actually travelling one kilometre back and forth across the border. They're not checking in to CBSA, I can tell you that.

I'm not trying to dumb down the conversation. I'm trying to get the scientific basis as to why we're still refusing packaged bees from northern states to Canada.

Dr. Parthi Muthukumarasamy: Although our risk assessment was done in 2013, we review any new publications, new surveillance reports, any new science that's coming out, to continually evaluate whether there are any significant changes that would warrant a risk assessment.

Also, I mentioned in my opening remarks that CFIA has formally solicited calls for new information and scientific information from a number of stakeholders, which we have received and we are currently reviewing. In the next few weeks, we will make a decision on whether we will go ahead with another risk assessment or not.

Mr. Francis Drouin: Thank you.

I will ask this to my American friends on the other side.

Obviously, there has been an opening and they have openly asked for information.

Have you provided some information to CFIA up in Canada about this new scientific data that may be available?

The Chair: Mr. Winter or Mr. McKinney, is there any response to Mr. Drouin?

Is there any sharing of information that has happened with the United States to our regulators here in Canada that you know of?

Mr. Daniel Winter: There's none that I know of. Certainly, we're more than willing to work through USDA and into Canada on any science we have. We can make that available to you.

I think it's important to understand—and I agree with you completely—that the bees can fly right across the St. Lawrence Seaway. I'm from northern New York myself, so I understand what you're saying.

I think it's important to understand that the risk assessment from 10 years ago does not contain the Tropilaelaps mite in Asia. Where you're importing bees from is the most important thing to recognize. A hive beetle or Africanized bees will have severe trouble in the freezing climates in Canada, so I don't think they are a huge issue.

The Chair: Thank you, Mr. Winter. We're at time, unfortunately.

I want to thank my good friend, Mr. Perron. Thankfully, he tabled our main estimates today on my behalf so we could get started.

You have six minutes. I might even give you a few extra seconds for that good deed.

[*Translation*]

Mr. Yves Perron (Berthier—Maskinongé, BQ): If I had known that reports had to be tabled, Mr. Chair, I would have done it before.

Thank you very much to the witnesses and virtual participants for being with us today. I am very grateful to them.

I'd like to continue with the folks from the Canadian Food Inspection Agency.

You say that you're constantly reviewing the bee standards from the United States, and I have a series of questions about that.

If I understand correctly, you have been importing queens without any issues. You're going to tell me it's because we can inspect them.

What's the difference between 8,000 packaged bees from the United States and 8,000 packaged bees from Ukraine? You can't inspect the ones from Ukraine any better, can you?

Dr. Nancy Rheault (Senior Director and Deputy Chief Veterinary Officer, Animal Import/Export Division, Canadian Food Inspection Agency): At the Canadian Food Inspection Agency, we follow a rigorous risk analysis process. When we go through that process, we assess the risks based on the information we receive from the exporting country as well as the monitoring programs and measures in place.

When we assessed the situation in Ukraine, we obviously had a lot of discussions. We received scientific evidence to ensure that the imported bees came from safe areas. There were also questionnaires that told us Ukraine met the requirements. When Ukraine imports bees, a qualified vet certifies that the bees come from safe areas.

● (1710)

Mr. Yves Perron: Can't you get that information from the United States?

Dr. Nancy Rheault: We did a risk analysis for packaged bees from the United States, and there are currently no mitigation measures to reduce the risk to an acceptable level.

Mr. Yves Perron: So if they have offered to cooperate, we can hope that they will one day be reassessed. Can we agree on that?

Dr. Nancy Rheault: Yes.

I'd also like to point out that, since bees fly, this situation doesn't carry the same risks as the intentional introduction of a hive of 8,000 to 12,000 bees packaged for import. In 2022, beekeepers imported 56,000 packages of bees. We're talking about twice as many packages of imported bees. There's no doubt that the intentional introduction of packaged bees doesn't carry the same level of risk as the biological aspect.

Mr. Yves Perron: Thank you very much.

I have another question. The previous witnesses mentioned the importance of restricting imports of bees from different climate zones. Maybe that's the way to look at it. For example, they recommend limiting imports of bees bearing the African gene, which are less resistant to the cold. Imports of bees from the United States could also carry a transportation advantage. The transportation of bees results in a lot of losses, so fewer would be lost because they would travel shorter distances.

Do you have any data on the losses caused by overseas transportation? What can we do to improve on that?

Dr. Nancy Rheault: Perhaps Mr. Pernal from Agriculture and Agri-Food Canada can answer this question about bee transportation.

Mr. Yves Perron: This question is for anyone who can answer it. If not, we can get an answer later.

Can you answer it, Mr. Pernal?

[*English*]

Dr. Stephen Pernal (Research Scientist, Apiculture and Officer-in-Charge, Beaverlodge Research Farm, Science and Technology Branch, Department of Agriculture and Agri-Food): I can speak to the question if I interpreted it correctly.

One of the losses with long-distance transport from, let's say, New Zealand or Australia compared to the U.S.... There would be lower risk coming from a shorter distance, but I will also point out that Canada has successfully imported bees from Australia and New Zealand for decades now. Generally, those supply chains are quite good in bringing in packages. Occasionally, there can be losses, which are absorbed by the providers.

Transporting bees at shorter distances is inherently less risky, but the Canadian beekeeping industry has worked with suppliers in overseas locations to successfully transport bees from other continents.

[*Translation*]

Mr. Yves Perron: Thank you very much.

I'll go back to product licensing. Witnesses have told us that PMRA took six years to authorize the Apivar product when it was already being used elsewhere. The timelines seem to be quite long. Earlier, Mr. Barlow named a few other products that should perhaps be reassessed.

Are measures being taken to reduce the time it takes to register products, without running a risk, obviously?

Mr. Frédéric Bissonnette: I can't speak to exactly what happened, but we do publish performance standards, and they are met in about 95% of cases.

The processing time varies depending on the amount of scientific information to be reviewed. For a new active molecule, it can take two years, whereas a label change can take only nine months.

Our performance standards are generally very closely aligned with the Americans'.

The Chair: Thank you, Mr. Perron.

You only have 10 seconds left, so I can give you more time in the next round.

Mr. MacGregor, you have the floor for six minutes.

[*English*]

Mr. Alistair MacGregor (Cowichan—Malahat—Langford, NDP): Thank you very much, Mr. Chair.

Thank you to all the witnesses for joining us today.

I would like to start my questioning with the CFIA.

Again, I'm trying to get into the specifics on how you conduct your risk assessment. You're trusting a lot of the information you receive from an authorized veterinarian who can provide some assurance or where the bees are coming from or whether they are free from disease. Is there an acceptable level of disease? If you were to look at a package of bees coming in.... You said it could be in the neighbourhood of 8,000 to 12,000 bees. If one bee were to show the problem of having a mite or disease....

What are the percentages you're looking at, as an acceptable risk? I want you to walk the committee through some of the specifics of how you arrive at these conclusions.

● (1715)

Dr. Parthi Muthukumarasamy: The risk assessment is not based on individual packages. It's based on the entire system the country has in place, including its veterinary infrastructure, its surveillance, its research, its control measures for bee movements, the prevalence of any disease we are concerned about and also its reporting. Every country and national competent authority, as we call it, has obligations under the World Trade Organization SPS agreement and also under the World Organisation for Animal Health to have certain measures in place to protect its bee health. Also, when they export and certify that these bees are safe, they have to meet certain parameters.

The risk assessment is based on a number of scientific parameters, as I mentioned. Once we are satisfied with all the control measures that are in place, then we look at how we can permit imports from those countries. We also have conducted audits in other countries, going on site to evaluate for ourselves that the measures that have been conveyed to us are actually in place.

There are a number of measures in place to ensure that the bees we import are safe and are free of diseases, pests and parasites.

Mr. Alistair MacGregor: That is your baseline: They have to be absolutely free of diseases and pests. That is the only acceptable metric. There isn't any kind of variance allowed. Thank you for that.

I'll turn to the PMRA.

It has been reported that, with some of the chemicals used to control mites, some of those mites are now showing resistance. When that begins to happen with a well-known chemical that has been successful, it's kind of like an evolutionary arms race. That's just simply what happens. When a pest such as a mite begins to exhibit those kinds of traits, where it is steadily becoming more resistant to a long-accepted type of chemical treatment.... When the PMRA is doing its assessments of approved treatments, is it looking at the safe rate of application and whether it has to reassess whether more has to be used?

Do you ever consider that if you continue using a certain chemical, you're going to start doing more harm than good? How does this factor into your long-term thinking?

Mr. Frédéric Bissonnette: Part of the assessment includes a consideration of the potential to develop resistance. We do look at the rate, the frequency. It has to be a rate that works: not too much but also not so little that it could actually accelerate the types of.... In biology, resistance will happen. It's inevitable to a point, but we do consider it.

In terms of the rate, if the rate is no longer sufficient, the company can always reapply and seek an increase, and then we'll look at it from all the different aspects—human health, environment and value—to see if it's necessary. These processes are driven by industry. We can't go in and change a label unless it's to add mitigation measures and that sort of thing.

Mr. Alistair MacGregor: Okay, so you're depending on a company to come back to you to say, “We are noticing resistance to our product. We have to ask for a stronger rate of application.” Do you ever proactively go out into the fields to check up on a company to see if it's, you know, living up to its standards and so on?

Mr. Frédéric Bissonnette: The growers will usually be in contact with the company to flag such issues, and they will let us know of these things. Sometimes, in terms of timelines, if something is really pressing, we might consider emergency registration. We have a process. I don't think resistance is usually a factor for emergency registration, but there is an option for an accelerated timeline if there's a really pressing issue. It's working with all the stakeholders, but as a regulator, we can't really go.... It would be a bit awkward for us to seek a registrant to come add a product to the market. Usually the growers will do that, sometimes in collaboration with Agriculture and Agri-Food Canada.

Mr. Alistair MacGregor: I'll cite one that is being used. It's called amitraz. Are you currently looking at the growing resistance to that particular product, or are you awaiting initiation by the company that sells it?

● (1720)

Mr. Frédéric Bissonnette: We're aware of the resistance to amitraz. We're not necessarily proactively talking to the company. We pretty much have all the active ingredients registered elsewhere in the world right now. There is some biotech development. Some companies are developing new types of products that they are doing research on to see if they would work, and when they come talk to us, we obviously consider the current situation. Obviously, everything needs to pass the risk assessment.

Mr. Alistair MacGregor: Do you have anything to add from the CFIA's perspective?

Dr. Parthi Muthukumarasamy: Certainly, amitraz-resistant varroa mites are one of our hazards, one of our concerns, that we include when we do the risk assessment. When there is varroa resistance in another country that wants to export to Canada, certainly the CFIA will be looking at that from a risk assessment perspective because it introduces varroa resistance to Canada. We already heard in the committee that there are very few treatment products available for varroa mites, and we don't want to introduce any resistance into the Canadian bee population through importation.

The Chair: Thank you very much, gentlemen.

Mr. Viersen, go ahead for five minutes, please.

Mr. Arnold Viersen: Thank you.

Mr. Winter, I imagine your being from New York state means you're close to Canada. I'm wondering whether you have a relationship with Canadian beekeepers and if there is any difference in the kinds of diseases and threats we deal with on our side of the border compared to where you're operating.

Mr. Daniel Winter: The American Beekeeping Federation has several members who are Canadian beekeepers. They come down to our annual convention every year. Most of the pests in that risk assessment, I think, are already in Canada. That is my understanding anyway.

Things like varroa resistance are very minor. If the tropilaelaps mite—I can't stress that enough—comes to North America, we are in big trouble. I think that's the most important thing to look at right now.

Dr. Frank Rinkevich at the USDA lab in Baton Rouge has some great studies on amitraz resistance. I'm sure you can look those up online. Some of those studies.... They're all public information. I urge you to take a look at those, because there is amitraz resistance. I think it's everywhere.

Mr. Arnold Viersen: Mr. Winter, would you recommend a North American bee strategy?

Mr. Daniel Winter: I would. I think we should work together, share science and see whether we can make this happen. Obviously, being proactive is far better than being reactive. If we get into a situation where we have to react to the tropilaelaps mite, it's going to be catastrophic for our industry.

Mr. Arnold Viersen: Thank you.

Mr. Bissonnette, we had several beekeeping association beekeepers at this committee earlier this year. One thing they were frustrated with was.... They tell me there is a way to deal with the mites that's not approved yet.

Are you familiar with this? Have you seen this testimony? What's the hold-up?

Mr. Frédéric Bissonnette: I read the transcripts. I believe we have a product with the same active ingredient, but not that particular one. The company obviously needs to seek a registration, and then we would do a risk assessment.

Connie, do you have anything to add on your end?

Dr. Connie Hart (Senior Science Advisor, Environmental Assessment Directorate, Pest Management Regulatory Agency, Department of Health): I don't think we have received a submission for registering it, at this point. I think there may have been discussions and presubmission consultations, but we have not received the application for that product to register.

Mr. Arnold Viersen: Can you name the product? What's the active ingredient we're dealing with?

Dr. Connie Hart: The product that was raised in one of the previous hearings.... It was about an application method for oxalic acid—a different way of applying it. I believe that's what you're referring to.

I could turn this over to Steve Pernal, who would be more familiar with developments in that area.

Mr. Arnold Viersen: Thank you.

To the Canadian Food Inspection Agency, from your perspective, is there a significant difference in the disease profile of America versus Canada? We've heard from beekeepers. They're saying the diseases they're dealing with in North Dakota are the same as the diseases we're dealing with in northern Alberta. It doesn't make sense that we can't take the bees from one place to the other, because there are no differences in the way we're keeping bees or the diseases we're fighting.

Could you talk a little about that?

Dr. Parthi Muthukumarasamy: Thank you for the question.

We demonstrated that there is a different level of risk and disease prevalence between Canada and the U.S. That is the basis of the risk assessment and the decision to restrict the import of packaged bees into Canada.

● (1725)

Mr. Arnold Viersen: Is there a disease the Americans have that we don't have?

Dr. Parthi Muthukumarasamy: For example, the Americans have Africanized bees in California, and they are moving north every year. We don't have Africanized bees in Canada. Africanized bees, as you know, have undesirable traits, such as more aggressive swarms and bees—

Mr. Arnold Viersen: However, Africanized bees are not a disease.

Dr. Parthi Muthukumarasamy: It is a pest we are concerned about.

In terms of the small hive beetle, for example, that's another parasite that is present. While it is in the U.S., it's only sporadic in localized areas in Canada. However, we also have excellent control programs in the provinces that manage bee health and ensure these, for example, small hive beetles do not spread to other parts of the country or within the province.

Mr. Arnold Viersen: Would there be opportunities to do assessments on individual states?

Dr. Parthi Muthukumarasamy: That depends. Each state has a different disease prevalence and disease status.

There are opportunities to look at a zone, but they need significant scientific information and assessment in terms of, again, the prevalence of the disease: when they last had outbreaks, what kind of surveillance they have in place and what natural barriers are present that don't allow the disease to come into a state. There are a number of scientific parameters and risk mitigation options that CFIA would look at, if there is scientific evidence provided for us.

Mr. Arnold Viersen: Thank you.

The Chair: Let's go to Ms. Taylor Roy.

Ms. Leah Taylor Roy (Aurora—Oak Ridges—Richmond Hill, Lib.): Thank you very much to our witnesses and our neighbours in the States for being here today.

There's been a lot of discussion about importing bees to Canada from different countries. I'd actually like to focus on why bee mortality is so high and what's happening.

I'd like to address some of my questions to you, Dr. Hart, regarding, in particular, the use of neonics. I know it's been studied. It was reassessed in 2019 and we are monitoring it to see what's happening. I would imagine the science here and in the EU is very similar in terms of the effects of neonics, yet it was banned in the EU and it's not been here.

I'm wondering what the difference is in our assessment approach that has led to one conclusion in the EU and another here.

Dr. Connie Hart: I won't speak to how the EU made their decision, but our assessment was a risk-based assessment that looked at environmental exposure and effects for bees. It followed the new pollinator risk assessment framework that we had developed in conjunction with the U.S. EPA, so it has a large data component.

We looked at both laboratory and basic studies, but we also had many higher-tier studies. We looked at information from the public literature, as well as some registrant-submitted data. The higher-tier studies look at more realistic effects, so we had information on pollen and nectar residues in crops that were treated in Canada—the actual levels measured. We had semi-field studies, so that included tunnel studies where you put bees in a tunnel and they're exposed in a realistic situation to crops that are treated. We had feeding studies where, again, they're in a natural environment and they are exposed through a known concentration in their feeding solution to different test doses of neonics, and we looked for sensitive effects measures on that. The studies were over a long exposure period, so it was over a long, six-week exposure period, which is a lot of the growing season, and then they continued to be monitored through the fall and through overwintering, and we looked at the colony health in the spring as well.

We had all of that information. We also had sensitive information from public literature looking at other types of bees, such as bumblebees, and used all of those effects measured.

In 2019, as you know, we published our final decision on that. We removed a lot of uses for high pollinator-attractive crops to protect bees. We put other mitigations in place, such as restricting the timing of application so you could not apply during bloom for many pollinator-attractive crops, and other restrictions, such as some pollinator-attractive crops you could only apply postbloom.

We put all of those mitigations in place to protect bees, and we kept registered products with mitigation in place where risk was acceptable.

The difference with the EU was that they have different uses and things as well, but they did not necessarily have the same pollinator residue levels in pollen and nectar that we had in North America from those crops. To my knowledge, they did not look at the same field-level studies. That's the long study that I described with feeding. They did not have that as part of their package when they considered their risk profile.

● (1730)

Ms. Leah Taylor Roy: Mr. Winter mentioned his concern about the interaction of different chemicals that might occur in a hive from bees bringing in different chemicals, obviously. Have you looked at that issue and examined what has happened, not only cumulatively but interactively, with these different chemicals?

Dr. Connie Hart: It's a challenging area, looking at multiple chemical exposure for bees.

We look at that when you have a product that has, for example, two different pesticides in it. We would look at that together, because we know it's being applied together. There has been research, for example, that has shown that certain insecticides and fungicides increase toxicity when they're together. When that research is available, we're able to put protections on the pesticide labels, such as, “Don't tank mix these products together.”

Beyond that, we rely on work with our partners, such as Agriculture Canada and other researchers, to do the research to determine where these interactions might be happening.

Ms. Leah Taylor Roy: Has there been any testing done of the inside of the hive to see what chemicals have been found interacting when they bring the pollen back?

Bees can't read labels, so they're not going to be looking at the labels and saying, “Oh, we're not going to go there and there.” They're not going to have that same information that you're labelling on products.

The Chair: We're at time right now, Ms. Taylor Roy.

Ms. Hart, if you'd like to, please answer the question succinctly.

Dr. Connie Hart: I would just like to say that it was a program that AAFC was looking at: monitoring colony-wide health across Canada. My colleague Steve Pernal could provide more information on that. It's more of a research question in terms of monitoring what's happening with colony health across Canada and getting that information.

Ms. Leah Taylor Roy: Could I ask that the information be sent to us?

The Chair: Yes, certainly. We can make sure that it does happen. I'll look to my clerk.

[*Translation*]

Mr. Perron, you have the floor for two and a half minutes.

Mr. Yves Perron: Thank you very much.

I'm going to go to Dr. Hart or Mr. Bissonnette.

My question is about the neonicotinoids assessment. I know that Quebec has regulated these pesticides more. Compared to other provinces still using them, have you seen any differences in crop yields and bee mortality?

[*English*]

Dr. Connie Hart: Thank you for the question.

No, we have not received differences in incident reports. That would be I think the mechanism largely where we would see a difference among provinces. We've received low levels of bee incident reports across all the provinces in Canada, and there hasn't been a difference in reports of incidents from Quebec compared to other provinces.

[*Translation*]

Mr. Yves Perron: Is it the same thing for crops?

Mr. Frédéric Bissonnette: We haven't heard anything about differences in crops.

As you know, in Quebec, an agronomist certifies whether there is a need or not. So we don't necessarily expect to see a difference.

Mr. Yves Perron: Thank you very much.

I imagine that these assessments are an ongoing process. Ms. Taylor Roy is asking about experimentation in hives, and I do feel it's an interesting option.

Is that something you're looking at doing down the road?

Mr. Frédéric Bissonnette: We always try to keep an eye on what's going on. It's part of the transformation effort. I don't know if you've heard about it, but we received money from the government to explore how we can improve. One thing we've been looking at is more systematic monitoring and analysis of what's going on. We already have some mechanisms. For example, from time to time, we review what's been published; we have international contacts; we monitor international decisions. So we do have monitoring systems.

Mr. Yves Perron: Thank you very much.

Dr. Rheault, with regard to assessments, from what I understand, one of the reasons we haven't yet accepted packaged bees imported from the United States is because the U.S. doesn't have uniform legislation, since the laws vary from state to state. Is that correct? In that case, could we not assess import possibilities with a particular state, particularly one of the border states, further north and in a climate zone similar to ours?

● (1735)

Dr. Nancy Rheault: When we do a risk analysis, we assess the acceptable risk. What is the acceptability of the risk?

When we did the risk analysis for packages of bees from the U.S., the risk associated with the dangers mentioned was significant. When we assess that the risk is not acceptable, we must ensure that we evaluate the mitigation and control measures taken before imports are permitted.

Mr. Yves Perron: I understand, but my question was more about whether it would be possible to do so with specific states.

The Chair: Your time is up, Mr. Perron.

Mr. Yves Perron: Those are my 10 seconds from earlier.

The Chair: No, I'm sorry, you've already had more time. Please respect the chair.

Thank you very much, Mr. Perron.

Mr. MacGregor, you now have the floor for two and a half minutes.

[*English*]

Mr. Alistair MacGregor: Thank you very much, Mr. Chair.

I'd like to turn my questions to Mr. McKinney from the National Association of State Departments for Agriculture.

Sir, in your opening statement, you talked about needing more tools in the tool box and the need to fund additional research to combat problems associated, I guess, with the fact that we're seeing resistance to those current treatments.

In your mind, where do you see some of the most beneficial research occurring in additional treatments? What's the state of development of other chemical products? Is there any promising research showing maybe biological agents that might help? Is there any promising research into breeding that may help bees develop beneficial traits to allow them to be resistant to some of the pests they are having to deal with? Anything you can help guide our committee through on this, please....

Mr. Ted McKinney: I'll be brief because I think Mr. Winter might be able to help with some of the specifics.

Broadly, we are pursuing.... NASDA and many of our colleagues across agriculture are pushing for additional research at the USDA through part of our Farm Bill. It's been many years since that has seen an increase, and we're seeing the need for that across many areas, including that of bee health.

Having been in the industry, it is usually companies pursuing additional labels that get this. I think you're well aware that minor-use crops, minor-use needs, are often a very difficult decision because of the sensitivities, the liabilities and all that goes with that. This is why we're at a pinch point with these three primary products and a variety of other related products.

We are hoping that our university system can keep going on this. They are very active, in some cases, on bee health. Certainly, it depends on the location.

I think companies are there. We have an onslaught of biological products coming that could be applicable to many uses. Most of those would be insecticides, because that's what most people would like to get rid of. Insecticide research with biologicals is a key one.

I can't answer the specific question, but I think, generally speaking, that's the direction—we are hoping, at NASDA, at my level—we'd like to pursue.

The Chair: Thank you very much to both of you.

We'll now go to our final rounds of five minutes for the Conservatives and five minutes for the Liberals.

I think, Mr. Barlow, you're going to kick us off.

Mr. John Barlow: Yes. Thanks, Mr. Chair. I'll split my time with my colleague, Mr. Lehoux.

This is for the CFIA.

I think we've all been talking about this, but as my colleague Mr. Drouin was saying, we're basing a lot of these decisions on information that may or may not be outdated. I think one of the recommendations we may come up with on this is that a new assessment be done as quickly as possible to re-evaluate the dangers of importing bees from the United States.

Can you give me a timeline on whether that's possible? Is it in the works to do that, or is that a regular thing that's done on a certain schedule?

Dr. Parthi Muthukumarasamy: As I mentioned in the opening remarks, we are reviewing the call for information and scientific data we have solicited. We have received over 55 scientific documents, publications, opinions and comments. We are reviewing those. In the next eight weeks, we will make a determination on whether we will go ahead and proceed with a new risk assessment or not.

Mr. John Barlow: As my colleague, Mr. Viersen, mentioned in talking to our American colleagues—so maybe I'll ask Mr. Winters first—as the CFIA here mentioned, we're importing bees from Ukraine, Italy, New Zealand, Australia and other countries. If we really want to keep a lid on importing pests, would it not make more sense to have a North American strategy where it's easier to keep monitoring those diseases or those pests, rather than import bees from farther reaches of the globe?

● (1740)

Mr. Daniel Winter: I think it's very important, actually, to work that way. In the United States, I think we are set up to inspect some of these companies that could potentially ship bees into Canada, and there is no reason that we couldn't meet the requirements that are needed to enter Canada. I think it's a no-brainer, as far as I am concerned, to try to work within North America.

Mr. John Barlow: Mr. McKinney, what are your thoughts?

Mr. Ted McKinney: The answer is yes. We have been looking and looking for more ways to interface with your ministers of agriculture at the provincial level. I think there is already a healthy relationship at the federal level, and that needs to continue.

However, this is something we would welcome and embrace, and in fact, we might even talk about it when we gather in Saskatchewan in about a month or two.

Mr. John Barlow: Thank you very much, Mr. Chair.

I'll cede the rest of my time to Mr. Lehoux.

[*Translation*]

Mr. Richard Lehoux (Beauce, CPC): Thank you, Mr. Chair.

My question is for the Department of Agriculture and Agri-Food representative.

Some witnesses told us that they were having trouble ensuring succession in their beekeeping business, because the programs were not tailored specifically to beekeeping and beekeepers and did not encourage the younger generation to go into beekeeping. We were asked whether the AgriInvest program could be adjusted to provide more assistance for the next generation.

What are your thoughts on that?

[*English*]

The Chair: Mr. Pernal, I believe that question was directed to you at the Department of Agriculture, unless I'm wrong.

Dr. Stephen Pernal: Agriculture and Agri-Food Canada is a big government department. I work for the science and technology branch, so I can speak authoritatively to technical answers with bees but not AgriStability programs. I'm afraid I can't specifically answer your question. You'd have to go to some of my colleagues in other branches of the department.

It is a valid concern. Certainly success in agriculture, including beekeeping, is important to the country in terms of continuing these operations.

[*Translation*]

Mr. Richard Lehoux: My next question is for the Pest Management Regulatory Agency.

We know that research to improve genetics is important, and that everything is going to depend on that.

Dr. Hart, what progress or advancements have been made in genetic research? In my opinion, Canada needs to do more research to develop this sector in a significant way.

[*English*]

Dr. Connie Hart: I would respectfully point to my colleague Steve Pernal, who would be better able to answer that question.

Dr. Stephen Pernal: That question I can answer. Thank you for your interest.

Agriculture and Agri-Food Canada has been involved in projects looking at developing markers for breeding bees. These would be markers based on the proteins expressed by honeybees or markers in their genome and genetics. We've been working with many labs across Canada in developing markers for better selectively breeding bees. We have been successful in concluding some of these projects and trying to help introduce them to the industry.

We're currently involved in projects with our university collaborators to also look at markers of stress, which may help us more to real-time diagnose what's actually happening in a bee colony, rather than looking at a dead colony and trying to figure out what happened.

I would say that there is progress on this front. I think the aim certainly is to move bee breeding more into the realm of other major animal systems like cattle or swine. Through AAFC and our collaborators at Canadian universities, we have worked on marker selection projects for bees.

The Chair: Thank you very much to you both. We're 45 seconds over the time.

Ms. Valdez, we'll go over to you for five minutes.

Mrs. Rechie Valdez (Mississauga—Streetsville, Lib.): Thank you, Mr. Chair.

Thank you to the witnesses for joining us today.

Through you, Mr. Chair, I'll direct my questions to Mr. Winter.

Earlier, you mentioned how bees will mix chemicals within their hives. What measures do you have in place in the U.S. to limit the spread of pests and diseases affecting bees?

Mr. Daniel Winter: We have inspections that vary from state to state. Some states, of course, work harder to inspect the bees.

About 20 years ago, the United States government started a pollen analysis program in which we sample hives yearly to determine what chemicals are coming into the hive. There were two or three in the pollen 20 years ago, and now there are upwards of 20 or more.

It's important to understand that those particular chemicals are not showing up in honey. They are showing up in the bee bread with which they feed larva. It's not a risk to humans per se, so they're not looking at it real close. I think it's a bigger problem as far as bee health. It definitely needs more research and more science, for sure.

● (1745)

Mrs. Rechie Valdez: Thank you.

You just touched on my second question, which is around what measures are put in place by your government, or even industry in the U.S., to prevent or at least track movement of bee packages between states or between the groups of states when the bees are travelling.

Mr. Daniel Winter: I can only speak for my own particular business, but I get inspected in all three states that I go to. I get inspected in New York state and in Florida, and I get inspected when my bees go to California. I think it's more rigorous than most people understand. To my understanding, 29 states have some sort of registration and inspection program. It's higher now, because I know that New York state has started a registration program.

Since the pollinator protection plans were enabled, the states have have done a better job of following pollinators in general than they have in the past.

Mrs. Rechie Valdez: Thank you, Mr. Chair.

I'll direct my next questions to the Department of Health.

We know your mandate that PMRA applies modern, evidence-based, scientific approaches to assess whether the health and environmental risks of pesticides are acceptable or whether the products have value.

Can you elaborate on your scientific-based approach—we've talked about it a few times today—and whether our current regulations in Canada need to be strengthened to support that or to maybe limit any risks for health and the environment?

Mr. Frédéric Bissonnette: I'll ask my colleague to talk about the risk assessment, and then I can supplement afterwards.

Dr. Connie Hart: Sure.

Are you asking specifically about the bee risk assessment or in general?

Mrs. Rechie Valdez: It's about the bee risk assessment.

Dr. Connie Hart: As mentioned, we put a new risk assessment framework in place in 2014, and we developed that jointly with the U.S. EPA and the California Department of Pesticide Regulation.

That risk assessment is done for all pesticides that would be used where there would be bee exposure. That means all outdoor-use pesticides as well as greenhouse-use pesticides. We use the framework for every type of pesticide.

We have an initial screening-level risk assessment, for which we now require more robust data. It includes a number of laboratory studies for adult and larval bees and acute and chronic risk. It looks at both contact and dietary exposure—contact being if the bee would be sprayed or if it's exposed to dried residues on plants, and the dietary exposure is through pollen and nectar. In the initial screening, we have a way to estimate the expected exposure in the pollen and nectar from the application rate at which the pesticide is used.

That is the initial screen that is done for all pesticides. If a potential risk is identified, we can also ask for higher-tier data, which, as I mentioned before, includes tunnel studies, feeding studies, field studies and more realistic information on the exposure data—so that's the levels of pesticide in pollen and nectar that are actually measured, instead of the conservative estimate that's done initially.

We also consider other factors such as agronomic considerations. Is the crop something that is attractive to pollinators and that pollinators will be foraging on or, for example, is it something that's harvested before it blooms so there will not be pollinator exposure through pollen and nectar?

We look at the risk mitigation options as we're determining whether or not risk is acceptable. Is there risk mitigation that we can put in place, such as restricting timing during bloom or pre-bloom for different scenarios? For seed treatments, do we have to address dust considerations when planting treated seed, for example?

The risk assessment method we have now is very robust. It looks at both adults and larvae. With larvae, we consider the exposure when adults bring pollen and nectar back to the hive. We look at that. We also take into account native pollinators. We consider not only honeybees but also native bees, such as bumblebees and solitary bees, in our assessment.

● (1750)

The Chair: Thank you, Ms. Valdez.

Thank you, Ms. Hart, for that very robust description of all the work you guys do.

Colleagues, that brings us to the end. I do want to take one quick opportunity to ask a question with CFIA and PMRA here.

Certainly when I deal with my agricultural producers at home in Nova Scotia, one of the things they talk about often is competitiveness. I don't know if there's an actual provision within your legislative statute that talks about that, but I think about things like Bill S-6, which is before the House right now and which, I believe, allows and opens the door for both of your agencies to start considering foreign recognition.

Can you tell this committee what is being done through CFIA, whether on crop protection products or certain seeds, when there are demonstrably strong scientific processes from other jurisdictions, to create expedited pathways in Canada?

Mr. Bissonnette, you talked, for example, about how you really have to wait until someone actually comes to apply to Canada, but the evidence that I think many of our colleagues would have at this committee is that many major manufacturers would start in the United States or they'd start in Europe—they'd start in larger markets—before they would even get to Canada, and then we would still have a couple-year process by the time it landed in our lap.

How do we close that gap for competitiveness? Are there ways in which we can use the existing science of other agencies that we trust to expedite our own processes? What work are you guys doing in that domain?

I'll start with CFIA and then go to PMRA.

Dr. Parthi Muthukumarasamy: Thank you, Mr. Chair.

I'm not qualified to talk about seeds, but in general CFIA has excellent regulatory co-operation with many other jurisdictions that do assessments similar to CFIA's.

We also have international standard-setting bodies. For food, it is Codex Alimentarius. For animal health, it's the World Organisation for Animal Health, and for plants, it's IPPC. We work through those organizations but also bilaterally and also with like-minded partners in terms of exchanging regulatory practices, in terms of their assessments. We pool the assessments and share best practices among ourselves on a very regular basis.

The Chair: Okay.

Is there anything from PMRA?

Mr. Frédéric Bissonnette: For PMRA, I would say that we are very strong internationally. We work a lot with the EPA. We actually get most chemicals first here in Canada and the U.S.—sometimes a bit after the U.S.—because of our history of doing joint reviews with the U.S.

In my substantive position as chief registrar, I'm responsible for the premarket. The head of the delegations that we see and a lot of my colleagues around the table are quite jealous of the relationship we have with the U.S. We often get the products here first because of the big market that we have and the importance of both sides having the same chemicals.

We still have an active CUSMA working group with the U.S. and Mexico to make sure that competitiveness is considered.

The Chair: Just quickly.... Will Bill S-6 actually allow you to draw different processes than you have now?

Mr. Frédéric Bissonnette: I'm not familiar enough with all the changes, so we'll have to take that—

The Chair: I don't want to take any more time from my colleagues, but from where I respectfully sit—and I appreciate that there are existing processes—the more work we can do in that domain, I think, really matters for farmers in terms of their having the tools to be competitive with their international partners.

I want to thank you for coming here before the committee. To our folks and friends at the CFIA, the PMRA and the Department of Agriculture and Agri-Food Canada, and to our American friends, thank you for taking the time. I think your perspectives were certainly welcomed, and we appreciate your joining the committee.

Mr. Winter with the American Beekeeping Federation and Mr. McKinney with NASDA, thanks so much. Enjoy Saskatchewan when you're up there in a few months.

Colleagues, we're going to suspend for five minutes. Please don't go far. I want to be able to get our committee work done.

Mr. Louis, please jump over as quickly as you can. We're going to get started.

Thanks.

[*Proceedings continue in camera*]