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Canadian Honey Council Report



Although it took far too long, the Canadian Honey Council finally received PMRA approval for a label expansion for oxalic glycerin pads. It was a drawn-out process and a costly one for the association, but all beekeepers, commercial, sideline and hobbyist will benefit. For commercial beekeepers who use oxalic and or oxalic glycerin pads there is no doubt the cost savings incurred pay for the CHC hive assessments many times over.

In addition to the label expansion, this year PMRA reviewed the registration of oxalic dihydrate, for which the CHC is the registrant. Working with Univar and a consultant, the proper documentation has been submitted at a cost of about \$22,000. When final approval is given a full review of oxalic should not occur for another decade or so. For the record, over the last number of years, the CHC has kept Fumagillin, OxyTet 25, oxalic and oxalic glycerin pads on the market and available at cost effective levels.

BeeTech 2026 was held in early February and from all the feedback I received, it was a successful event. A special thanks goes out to Dr. Shelley Hoover for all the work she did putting together an informative and engaging program. Later in Hivelights you will find a great overview of the event written by Courtney MacInnis who I now apparently owe "big time". The CHC tried a new facility in the hopes of attracting more people and it was somewhat successful. The cost of hosting has skyrocketed in the last

few years so in order to break even we will need either more attendees or must charge more for convention fees. The Board will have a difficult decision as to whether or not we try hosting another national convention.

The CHC has received a number of provincial resolutions urging for the halting of imported bee from Europe due to the Tropilaelaps scare. Tropilaelaps was first discovered in the early 1960's in southeast Asia. Canadian researchers have been aware of Tropilaelaps since that discovery. One cannot count the number of cargo ships that have landed at ports in both Canada and the United States from countries that have Tropilaelaps and no domestic reports exists. Packaged bees from Australia and New Zealand have been coming into Canada for nearly 40 years with no infestations.

Researchers, academia and many professionals have been very persuasive in their presentations that it is a matter of when, not if, Tropilaelaps comes to North America and that is something nobody wants. Being proactive is essential and I realize that beekeepers do not want to deal with a new pest. If we rely on the Canadian Food Inspection Agency to evaluate risks in birds, cattle, hogs and any other food commodity, should we not provide them at least a little leeway to do their job regarding bee threats? There is confusion as to the immediacy of the threat and we certainly know very little about its survival in our northern climate.

Alternatively, should we not be paying more attention to a new threat that is

already in North America? The yellow legged hornet was found in the state of Georgia in 2024 and is rapidly expanding its territory. Science has indicated that it certainly can survive in

some Canadian climates. The UK and New Zealand are actively dealing with trying to eradicate this pest that can devastate honey bee colonies. As far as I am aware, there is no known way of killing the hornet other than a giant flyswatter. Perhaps we should be focussing on the threat that is right next door, but that might impact thoughts of an integrated North American bee industry. Moreover, varroa still represents the major threat to colonies in Canada.

Despite of all the threats from pests and diseases, I firmly believe that the greatest threat to the Canadian beekeeping sector is financial viability and not Tropilaelaps. Reducing expenses and increasing revenues needs to be the focus of the CHC and we can't lose track of that. Yes, we must mitigate real risks, but if beekeepers can't stay in business, then all the concern about Tropilaelaps is moot.



Rod Scarlett,
Executive Director, CHC

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Regional Reports



Atlantic



Lauren Park

I'd like to start my inaugural Hivelights column with a heartfelt thank you to Rodney Reid for his work as CHC rep for the Atlantic region over the last three years. As you all know, Rodney was the first rep from Newfoundland and Labrador and CHC is now stronger for having representation from the east coast to the west. I'm Lauren Park, a commercial beekeeper in the Annapolis Valley of Nova Scotia. My farm pollinates apples, blueberries and cranberries,

harvests a wildflower honey crop and raises queens. I'm grateful for the opportunity to represent Atlantic Canada with CHC.

At the time I am writing this, many beekeepers have not yet looked through their hives while others were able to take a look during a short weather window in mid-late March. Beekeepers seem to have the same cautious optimism that shows itself every spring after a long winter. After several seasons of all kinds of unpredictable weather across the east, beekeepers agree it would be nice to have a season without so many extreme weather events.

2025 was a drought year for many areas in the east. The winter saw above average snowfall in many areas which will hopefully result in some more water in the ground in 2026. As a result of the drought, there was some potential damage in several crops most notably to wild blueberry fields. Spring reports indicate that the winter snow cover was good and growers are still assessing the potential damage to 2025 sprout fields, which are now 2026 crop fields. There are no significant changes expected to pollination demand for the 2026 season.

The winter season had several successful provincial AGMs which will finish with the Newfoundland and Labrador AGM at the beginning of May. Key topics at provincial AGMs included tropilaelaps, queen rearing/overwintering, climate change, and varroa control. Additionally, it was very encouraging to see such a strong representation from Atlantic Canada at the Bee Tech Conference in Calgary in February. I hope everyone has a successful spring beekeeping season.

Québec



Maggie Lamothe Boudreau, agr., M. Sc., Les Apiculteurs et Apicultrices du Québec

Le printemps 2026 débute dans un contexte bien différent de l'an dernier. Après une période plus difficile sur le plan organisationnel et financier, l'industrie apicole québécoise entre dans une phase plus structurée, avec plusieurs dossiers majeurs qui ont avancé de façon significative.

Assemblée générale annuelle et journée d'information

LAGA et la journée d'information ont connu une participation record cette année, avec plus

de 100 participants pour la journée d'information et près de 80 pour l'assemblée générale annuelle.

Cette forte mobilisation envoie un message clair : les apiculteurs québécois sont engagés, concernés et prêts à faire évoluer leur industrie. Les échanges ont été nombreux et constructifs, et plusieurs dossiers importants ont été présentés et discutés, notamment :

A) Chambre de coordination : un projet structurant

Le projet de Chambre de coordination et de développement apicole a franchi une étape déterminante avec l'accréditation des AADQ en tant que responsables officiels en 2025 par la Régie des marchés agricoles. Cette reconnaissance confirme la légitimité des AADQ à représenter les producteurs visés et marque un tournant important vers une industrie plus structurée et autonome.

Les travaux se poursuivent afin de compléter la prochaine étape, soit la création officielle de la Chambre, avec un objectif de mise en œuvre progressive d'ici 2027. La Chambre s'adresse principalement aux entreprises de 200 ruches et plus, qui représentent une part importante du cheptel et de la production au Québec. Elle permettra notamment d'instaurer une contribution à la ruche dédiée au financement de la recherche.

B) Situation financière

Les résultats financiers de 2025 démontrent une amélioration, mais la situation demeure à surveiller. Il faut souligner que cette stabilisation a été rendue possible en partie grâce à un appui important de l'UPA (Union des producteurs agricoles du Québec), notamment sous forme de ressources professionnelles et d'accompagnement stratégique dans la création de la Chambre de coordination et de développement. Ce soutien a permis de maintenir les opérations et de faire avancer ce dossier majeur.

C) Recherche, innovation et santé des ruches

Le projet de relance de la vanne de désinfection est maintenant amorcé, en réponse au retour de maladies comme les loques. Il s'agit d'un outil concret qui pourrait avoir un impact direct sur la santé des ruches.

Du côté de la sélection, l'intégration du BLUP et de la génomique se poursuit et représente un changement important dans notre façon de travailler. Ces outils nous permettront de bâtir des lignées mieux adaptées à nos conditions.

En matière de gestion du varroa, les approches de lutte intégrée prennent de plus en plus de place. Cela demande plus de rigueur et de suivi, mais aussi une meilleure compréhension des dynamiques en jeu.

Dans l'ensemble, on observe un virage vers une apiculture plus précise, plus technique et mieux outillée.

D) Marché et pollinisation

Les écarts de prix entre le Québec et certaines provinces voisines continuent d'influencer les décisions de déplacement des ruches de nos membres. Dans un contexte où les tarifs offerts ailleurs sont plus avantageux, certaines entreprises choisissent d'exporter leurs ruches pour la pollinisation. Cela a un impact direct sur la disponibilité des colonies au Québec et soulève de sérieux questionnements en matière de biosécurité, qui devront continuer d'être pris en compte dans nos pratiques.

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E) Enjeux réglementaires et environnementaux

Les discussions entourant les normes biologiques se poursuivent. Plusieurs producteurs rencontrent des défis importants liés à leur application dans le contexte québécois. Malgré cela, ces échanges permettent de mieux définir les limites du modèle actuel et d'alimenter les réflexions pour l'avenir.

Perspectives pour 2026

Plusieurs priorités se dégagent pour la prochaine saison :

- poursuivre la mise en place de la Chambre de coordination ;
- continuer l'adaptation des stratégies de lutte contre le varroa ;
- maintenir une vigilance face aux risques sanitaires ;
- et travailler à améliorer les conditions de marché.

Les défis sont bien réels, mais les avancées des dernières années démontrent que nous avons la capacité de nous organiser, d'innover et de faire évoluer notre secteur. Le Québec a tout ce qu'il faut pour être un leader en apiculture au Canada. À nous maintenant de continuer à nous structurer pour transformer ce potentiel en force durable.

Je vous souhaite à tous un excellent début de saison 2026 et beaucoup de succès dans vos entreprises.

Spring 2026 begins in a very different context compared to last year. After a more challenging period on the organizational and financial fronts, the Quebec beekeeping industry is entering a more structured phase, with several key initiatives having made significant progress.

Annual General Meeting and Information Day

This year's AGM and Information Day saw record participation, with over 100 attendees at the Information Day and close to 80 at the Annual General Meeting.

This strong turnout sends a clear message: Quebec beekeepers are engaged, invested, and ready to move the industry forward.

Discussions were numerous and constructive, and several key topics were presented and addressed, including:

A) Coordination Chamber: A Structuring Initiative

The Beekeeping Coordination and Development Chamber project reached an important milestone with the accreditation of the AADQ as the official representing body in 2025 by the Régie des marchés agricoles. This recognition confirms the legitimacy of the AADQ to represent the targeted producers and marks a significant step toward a more structured and autonomous industry.

Work is ongoing to complete the next phase, which is the formal establishment of the Chamber, with a gradual implementation targeted for 2027. The Chamber will primarily apply to operations with 200 hives or more, which represent a significant portion of Quebec's hive inventory and production. It will introduce a per-hive contribution dedicated to funding research.

B) Financial Situation

The 2025 financial results show improvement, although the situation remains one to monitor closely.

It is important to note that this stabilization was made possible in part through significant support from the UPA (Union des producteurs agricoles du Québec), particularly in the form of professional resources and strategic guidance in the development of the Coordination and Development Chamber. This support has been instrumental in maintaining operations and advancing this major file.

C) Research, Innovation, and Colony Health

The disinfection chamber project has now officially launched in response to the re-emergence of diseases such as American and European foulbrood. This represents a concrete tool that could have a direct impact on colony health.

On the breeding side, the continued integration of BLUP and genomics, including the Apiomics project, represents a significant shift in how we approach selection. These tools will allow us to develop stock better adapted to our conditions.

In terms of varroa management, integrated pest management (IPM) approaches are becoming increasingly central. This requires more rigour and monitoring, but also a deeper understanding of colony dynamics.

Overall, we are seeing a shift toward a more precise, technical, and better-equipped beekeeping industry.

D) Market and Pollination

Price gaps between Quebec and neighbouring provinces continue to influence hive movement decisions among our members. In a context where pollination rates are more competitive elsewhere, some operations choose to move their hives out of province. This has a direct impact on colony availability within Quebec and raises important concerns regarding biosecurity risks, which must remain a key consideration in our practices.

E) Regulatory and Environmental Issues

Discussions surrounding organic standards are ongoing. Several producers are facing significant challenges in applying these standards within the Quebec context.

Despite this, these discussions help clarify the limitations of the current framework and contribute to shaping future directions.

Outlook for 2026

Several priorities are emerging for the coming season:

- continuing the implementation of the Coordination Chamber;
- further adapting varroa management strategies;
- maintaining vigilance regarding sanitary risks;
- and working toward improved market conditions.

The challenges are real, but the progress made in recent years shows that we have the ability to organize, innovate, and move our sector forward.

Quebec has everything it needs to be a leader in Canadian beekeeping. It is now up to us to continue building on this momentum and turn that potential into long-term strength.

I wish you all a successful start to the 2026 season and continued success in your operations.

Ontario



Albert Devries

I think it's fairly safe to say that most of Ontario saw a fairly classic winter. I feel there was more snow than average, and it was certainly colder than what we've seen the last few years. While it is still early, I'm hearing reports of some beekeeper experiencing fairly significant winter loss. I feel it could be a combination of the cold hard winter and the fact that the fall was really quite dry. I feel that queens quit laying eggs relatively early, leaving us

with a lot of old bees that had to try to make it through a cold winter. These two complicating factors may haven't made for a poor combination for overwintering success.

Our tech transfer program has seen great uptake of their Hive Minds webinar series. I've enjoyed it. I've missed the live version several times, but have been able to catch up when the recordings are released. This has been a great series. I hope the Ontario TTP is able to do something like this again next winter. So often in the summer we are focusing on the tasks at hand. I find in the winter I'm more open to learning and considering doing things differently. I wish everyone a good beekeeping season. As the daylight lengthens and the temperatures rise it feels good to be outside. I wish everyone a safe and productive season.

Manitoba



Mike Grysiuk was elected to the position at the time of printing so no report is available at this time.

Saskatchewan



Jake Berg

I feel changes to the hive levy are needed. The CHC board has requested all provinces acknowledge a hive levy increase of four cents a year over four consecutive years. In four years, the hive levy would be doubled from \$.16 to \$.32. I feel that the increase of a high levy is justified. The CHC hasn't increased the hive levy for multiple years and in



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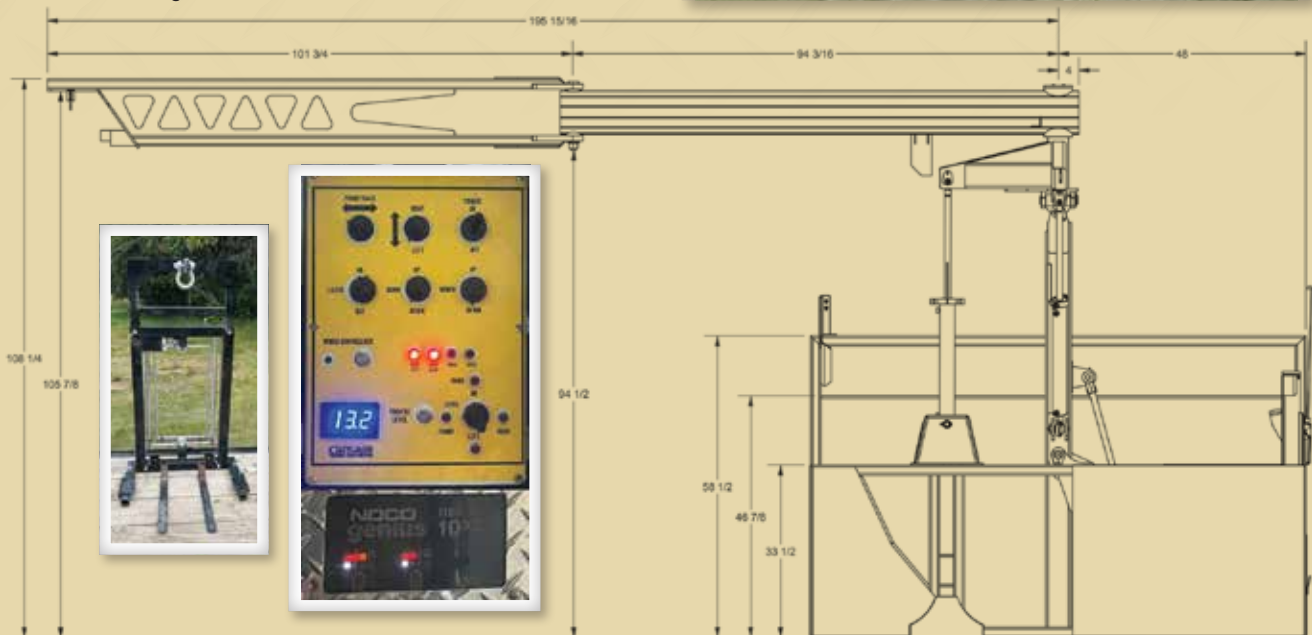


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the past few years inflation has been exceptionally high, in turn, affecting the operational costs of the CHC and budget. This is something everyone can relate to and understand. I think the CHC has been doing some very important work in the beekeeping industry such as the label expansion for oxalic acid over the past couple of years. This project has cost the CHC roughly \$80,000 and I would like the CHC to be able to take on projects like this that are in the interest of all beekeepers in Canada. For the CHC to continue operating at its current level, the budget needs to be increased. The hive levy slowly increased over four years will be a huge step in keeping CHC viable and its budget in the black.

It is currently late March and but there is an optimism in the air. From earlier reports, most of the bees in Saskatchewan have come through the winter fairly healthy. Now I realize there is still plenty of time for bee numbers to dwindle. Old Man Winter does not want to relinquish his grip on Northeastern Saskatchewan. At the end of March, we still have about 2 1/2 feet of snow in my area with more snow in the forecast. There are no real melting days forecasted in the first 14 days of April. So hopefully this means when spring does arrive in Saskatchewan, it comes quickly.

Alberta



Kevin Nixon

A few years back I had mentioned to my family members that we should not post anything in social media or do any media interviews regarding TFW's anymore as we had done an interview and took a little heat from the public afterwards for not employing Canadians.

During the past year, there has been a lot of pressure for the government to make some changes and I have changed my thoughts on this recently. Staying silent and keeping your head down is not going to win any battles. I believe we need to start speaking up regarding the need of the TFW programs to fill the labor gaps we face in our industry. The general public really does not understand and there is a lot of misinformation out there. Politicians are responding to public opinion and if we do not speak up, the outcome may not be in our best interest. People actually believe that we get government subsidies to employ TFW's. I am not aware of any subsidies within agriculture for employing TFW's. This is a huge piece of misinformation which must be corrected. After I recently did an interview with CTV on the subject I received a few emails to our farm email address of 60+ year old people applying for work. People also don't understand these people we are bringing have a skill set. Mostly, they have many years of beekeeping knowledge and experience they are bringing to the table from the investment we have made in these workers over the years. But people think we can just stop bringing these worker's immediately and replace them with unskilled general laborers from Canada. As you all know, this is simply not possible for anyone that is a commercial skill and employs more than a couple of TFW's. You cannot replace that knowledge and skillset at the flip of a switch. This needs to be corrected with the general public. Every single one of us that use the TFW program has a responsibility to correct this misinformation and public perception. Otherwise it may bite us in the butt soon. In my case, I sent the following response to the emails we received from the excited baby boomers:

In follow up to your email, I believe you would be willing to work your ass off as most boomers do from your generation. My dad is/was one of those people and passed that work ethic on to me and my brother as well. I wish the next generation was more like that. I would like to take this opportunity to maybe clarify any misunderstanding as we do not receive any government handouts of any kind for employing any foreign workers. I'm not sure if this is happening in other industries but it does not happen in our business. It seems you are implying that we do not pay a fair wage and that is why we employ seasonal foreign workers. What in your opinion is a fair wage? Do you know the skill set that is required for these positions? The workers we get

are not cheap labor. We pay airfare, accommodation, vehicle use, insurance, web, travel insurance for non work illness or injury, internet service. The workers also pay provincial and federal tax, pay EI and CPP and do not/ will not collect either. Their kids do not come here and use the schools and they do not get Alberta Health Care which they are paying for both of these in their taxes. Zero government subsidies to the worker or the employer. These workers are less of a burden on the system then some of our fellow Canadians. I am not saying this is the same for all foreign workers and in other industries but this is the case in agriculture. I am not familiar with other industries so I can only speak to what I know.

You had mentioned you would like to come work for us. Do you have knowledge and experience in beekeeping? Are you able to identify pests and diseases in honeybees and know what treatments to apply if required? Do you know the basic functions of a beehive and able to identify queens and drones, able to make decisions for population management within a hive to prevent swarming? Do you have a class 1 or class 3 license with air endorsement to drive tandem trucks? Do you have any knowledge/ experience in food production and food safety? Do you have any knowledge/ experience in operating honey extraction equipment? These are just a few of the initial basic requirements to apply for a position as a beekeeper for our farm. Any applications we receive that do not meet these requirements would be considered as an application for a general labor position which we mostly fill with high school/college age individuals to try and start training them in these areas with the hope that they may have interest in a long term position however it does take a few years of full time beekeeping to develop these skills.

Please feel free to send a resume and we can have a look at it.

Thank you for reaching out.

Of course, I have not received an application from this person or a response of any kind. It is probably long overdue that we need to take a stand for this otherwise the general public may determine the outcome for us. If there are people abusing the system or the workers, shame on them and they absolutely should be charged or suspended from using the program but as much as possible we need to find ways to share the good news stories and show that these workers are here working for us because they want to and because we treat them well.



Lorne Prins

As I write this on the 1st of April, Winter has not yet given up its grasp on the prairies. With more snow in the forecast, beekeepers are experiencing delays in surveying how their hives fared the winter. The wildly fluctuating temperatures of this past winter may have taken a toll on hives across the prairies, with some producers already reporting high losses, while other producers seem to be fairing ok so far. With last winters mortality rates averaging at 41% in

Alberta, we are hopeful for a better outcome this spring.

The Alberta Beekeepers Commission board is currently engaged in renewing its strategic plan, to ensure that Alberta's priorities are in line with National priorities and current industry needs. The board is also in the process of interviewing candidates for their Executive Director position. After many productive years with the Alberta Beekeepers Commission, Connie Phillips will be retiring from that position this summer. We thank her for all of her hard work and dedication to the beekeeping industry, both on the Provincial and National level.

Wishing you all a very successful Spring. Happy splitting and queen grafting!



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Jeff Lee

had selected Dr. Abigail Chapman to succeed Paul van Westendorp as the head of B.C.'s Apiculture Division.

Chapman is a known quantity to many of us in British Columbia; she is an experienced researcher, scientist and beekeeper. She also served on the board of the BC Honey Producers Association as a vice-president and took a keen interest in promoting education and our Technology Transfer Program. Her most recent research project was working with Emily Huxter on a mass storage wintering experiment for queens.

Here's how Burns introduced her new chief apiculturist in an email to the beekeeping community:



Abigail Chapman

"Dr. Chapman brings a strong combination of scientific expertise, practical beekeeping experience, and a long-standing commitment to education and outreach. She earned her PhD in Biochemistry and Molecular Biology from the University of British Columbia in 2025 under the supervision of Dr. Leonard Foster, where her research focused on understanding how viral infections affect honeybee queen health and reproductive potential.

"Following her doctoral work, Dr. Chapman served as a Postdoctoral Fellow at UBC, leading the design and implementation of a major field study within a national initiative aimed at improving the availability of locally adapted honeybee stock in Canada. In addition to her research background, she has been beekeeping since 2017 and has spent multiple seasons working in queen breeding and stock production within a commercial operation, providing strong practical insight into industry practices and challenges."

Abbi (as she likes to be called, with two B's) announced her hiring to us at the CHC BeeTech conference in January. She was immediately welcomed into both our association and the Canadian Association of Professional Apiculturists, where other Provincial Apiculturists have taken her under their wings.

She comes into the job at a time of great challenges. Preparing for the looming spectre of the *Tropilaelaps* mite arriving in North America has become one of her top priorities. At the BCHPA's online Semi-Annual business meeting earlier in March she said Tropi is high on her list. She's concerned about hardening B.C.'s ports against the mite potentially hitchhiking aboard shipboard swarms, and she is working with other provincial PA's to develop a national identification, detection and response strategy. She has already directed beekeepers to not capture and keep swarms found at B.C.'s ports.

But Abbi says she also has other challenges to navigate; finding new bee inspectors for some of the province's 13 bee districts, encouraging beekeeper compliance with the province's Animal Health Act and Bee Regulations (which require registration of apiary sites and colonies for health purposes), and dealing with localized outbreaks of reportable diseases such as American Foulbrood. This all comes at a time when the province faces higher budget deficits and growing fiscal restraint.

On a personal note, I see this as an exciting time for B.C.'s beekeeping industry. We've historically had a relatively few number of PA's, as they tend to stay long in the job and retire with grey hair. Think of the long and valuable service of Paul, who took over from Doug McCutcheon, who also had a long career, who took over from John Corner, an equally long-serving PA.

Here, in Abbi, we have a young (and equally bright) scientist coming into the job at a time when beekeeping continues to change and evolve. Corner witnessed the growth of farming development in the Okanagan

and Peace regions. McCutcheon saw the beginning rise of urban beekeeping. Paul witnessed that too, and the growth of the pollination-dependent blueberry industry. But he also dealt with the devastating invasion of the varroa mite and the sea-change in beekeeping as a result.

And now Abbi comes in during a new era, on the cusp of a new devastating mite and a profound change in how the Canadian beekeeping industry needs to innovate and adapt.

Paul and Abbi are working together through a transition phase, and she is learning the ropes at the Abbotsford research centre. Those lab services, which are free to B.C.'s beekeepers, will continue, she has said. Paul continues to provide help in working through the backlog of samples sent in for analysis.

Don't think you have seen the last of Paul, however. He has now joined the board of the Boone Hodgson Wilkinson Trust Foundation, a charitable and research-funding arm of the BCHPA. (And a welcome addition, too!)

Changes in the BCHPA education program

After many years, the BCHPA has – at least for now – discontinued its in-person spring education program and business meeting. In its place the board has opted to begin a three-year rotation of regional spring field workshops, designed to bring hands-on education to various B.C. communities. We're doing this on a trial basis to see if we get better participation with beekeepers, many of whom found the cost of participating in two annual hotel-centric events cost-prohibitive.

We continue to have our business day. However, it is now held online. It is still free of charge to participants. But our education programming is now more mobile, and takes our workshops to communities. They will be held on farms hosted by beekeepers.

This year we're holding five of day-long field days in Vancouver's Lower Mainland, southern Vancouver Island and Sunshine Coast. This region has the province's highest density of small-scale and hobbyist beekeepers. They'll be held in April and May in Aldergrove, Sechelt, Coombs, Victoria and Ladner. Dates and agendas are on our BCHPA website. The Tech-Transfer Program staff are involved in this important extension work.

The next two years will see the program move to other parts of BC, hosted in locations central to the most beekeeping-dense communities.

Reported Pesticide Poisoning of Hives

Lastly, I have received a report of a total kill of an apiary as a result of sustained spraying of an adjacent field crop. More than a dozen hives were wiped out. The affected beekeeper is working with the local bee inspector and has sent samples for testing at Beaverlodge. The company that did the spraying is cooperating by supplying a calendar and list of the (many) different chemicals that were sprayed.

At this point I am not naming the type of crop or the regional location of the apiary, but want to make this information available for a particular reason.

It is important for beekeepers to not let pesticide kills go unreported. Do not accept this as inevitable. If we want to change the culture around the inherent risks and conflicts in farming, we need to be direct when things like this happen. In the Creston Valley I work with cherry growers who need my pollination, and we cooperate successfully without injury to my bees.

The proper response when you have a suspected pesticide kill is to call your local bee inspector, as well as the federal Pest Management Regulatory Agency, and the provincial pesticide branch. Preserve the evidence. Collect samples in a paper bag and freeze them for later analysis.

Accidents happen. Pesticide kills take place because of a lack of communication, lack of knowledge about neighbouring beeyards, or the applicator did not apply according to the approved label directions.

PMRA can, and often will, ask for the spray records of applicators to determine what happened. Amanda and I experienced this in 2015 when a Richmond farm inappropriately used a neonicotinoid on everbearing strawberries and wiped out two apiary sites. The result was that the farmer's ignorant application resulted in PMRA cancelling the use of this chemical for all strawberry growers across Canada.



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1 - When used according to the label directions.

2 - Testapi. (2021). Assessment of effects of a single application of multiple doses of "FLASH" formulation on broodless honeybee colonies in Dadant and double Langstroth shaped hives and associated efficacy against *Varroa destructor*. GLP Study No. 507-2021.

3 - Testapi. (2021). Assessment of effects of one or two applications of "FLASH" formulation on honeybee colonies in Dadant shaped hives and associated efficacy against *Varroa destructor*. GLP Study No. 514-2021.

4 - Testapi. (2021). Assessment of effects of one or two applications of "FLASH" formulation on honeybee colonies in double Langstroth shaped hives and associated efficacy against *Varroa destructor*. GLP Study No. 552-2021.



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BeeTech, Calgary

By: Courtney MacInnis



Another BeeTech has come and gone! Held on February 13th and 14th, 2026, nearly 300 attendees gathered at the Westin Airport Hotel in Calgary, AB, dressed in their spring best (just missing the snowstorm!) for two fun-filled days dedicated to catching up on all the latest and greatest in the honey bee sphere. Hosted by the Canadian Honey Council (CHC) and the Canadian Association of Professional Apiculturists (CAPA), BeeTech remains the largest beekeeping convention and tradeshow in Canada outside of the Apimondia congresses! Over the course of the convention, nearly 40 individuals shared their expertise through presentations and panels covering a wide variety of topics – from *Tropilaelaps* to parasite management strategies, and deliberately deleting duds from your operation! The quality of presentations and speakers were excellent, sparking important conversations about the current issues the Canadian beekeeping industry is facing.

At the conclusion of the scientific program on Friday afternoon, student award recipients were presented with their Certificates of Achievement. Danika Strelaeff (MSc winner) and Prabashi Wickramasinghe (PhD winner) received the CAPA Student Merit Awards while Christine Macpherson received the AS Atwal Graduate Scholarship. Congratulations to all!

Following a short break on Friday afternoon, many attendees drifted back to the conference hall for the annual BeeTech banquet. The feature speaker for the event, Dr. Jeff Pettis, gave us a short presentation on “what ifs”. Although we are all sorry that his pig Sally died, we learned that IF she hadn’t, Jeff might never have found his way into the world of bees!

PROGRAM HIGHLIGHTS TROPILAEALAPS: SMALL BUT MITEY

Although *Tropilaelaps* are small (are there really six of them on that postcard?!), they played a big role at the convention with several subject matter experts discussing their biology, potential invasion plans, and treatment strategies.

During his keynote address, Dr. Geoff Williams indicated that while there are four species of *Tropilaelaps*, we are currently only concerned about *Tropilaelaps mercedesae*, as it is popping up outside of its native range in Asia, and is the only species to have undergone a host shift from *Apis dorsata* (giant honey bee) to *A. mellifera*.



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Dr. Rogan Tokach, evaluated some of these controls, and found that brood breaks and formic acid were effective. He also indicated that optimizing a brood break plus formic acid application might be the best treatment option to eliminate *Tropilaelaps* from colonies if it's detected in a new region.

NOVEL DEVELOPMENTS IN VARROA CONTROL

After a multi-year drought in the registration of chemical control products for Varroa, we've now got four new registered products! Amiflex® and Apivar® 2.0 are two amitraz-based miticides developed by Vêto-Pharma that we heard about from Lynae Ovinge. Both formulations will be available later this year, but likely not in time for early spring treatments. VarroSan, an oxalic acid-in-cardboard strip produced by Vita Bee Health is another miticide we heard about from a few speakers! This product was registered for use in Canada



Monitoring for *Tropilaelaps* will require different techniques than monitoring for Varroa. Because of their short dispersal phase (1-2 days), alcohol or washer fluid washes **WILL NOT WORK**. Sticky boards appear to be the most sensitive detection method (100%) but are time consuming to process. The current official USDA Animal and Plant Health Inspection Service (APHIS) method for detecting *Tropilaelaps* is the 'bump' test, originally developed by Dr. Jeff Pettis et al., which involves knocking the edge of a brood frame against the edge of a collection pan, and then inspecting the contents of the pan for *Tropilaelaps*. This technique is much more sensitive than an alcohol wash, but less time consuming to process than sticky boards. We also learned from Geoff Wilson that a popular field detection method for *Tropilaelaps* used by Georgian beekeepers are wax hair removal strips! Beekeepers take a brood frame, and run the wax strips along late-stage pupal cells to remove part of the cappings. The frame is then observed to detect any mites that run out of the cells.

Tropilaelaps requires active management. Dr. Geoff Williams noted that beekeepers in Thailand use a number of chemical and cultural controls as part of their management strategies. He further explained that his former PhD student,

in October 2025, and according to their representative, Paulo Mielgo, should be available for the early spring treatment window. Finally, the oxalic acid dihydrate label was amended with a section for glycerin strips earlier this month thanks to the Canadian Honey Council!

What's on the horizon for Varroa control? We heard from Brian Manley and Matthew Polinsky about Norroa™, an RNA-i based treatment developed by GreenLight Biosciences that affects (and effectively stops) mite reproduction. Norroa™ is currently a sucrose pouch treatment powered by vadesca (the RNA-i technology) that is currently registered for use in most of the United States, and has been submitted to the Pest Management Regulatory Agency for registration in Canada, which we will hopefully see in the next few years!



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Overall, BeeTech 2026 was a great success, offering attendees opportunities to learn, network, share ideas, and make tradeshow purchases (how about those Hummerbees?!). A big thank you to all who helped make BeeTech the success it was – the speakers, moderators, delegates, vendors, hotel staff, and of course Rod Scarlett (CHC) and Shelley Hoover (CAPA) for organizing the event. We are already looking forward to future BeeTech meetings!

Ernesto Guzman wins the Willie Baumgartner Award

Submitted by Albert Devries

Hello, it is my privilege to present the Willie Baumgartner award here tonight. The Baumgartner award recognizes an outstanding Contribution to improving the Canadian beekeeping industry. When I look at the names of past recipients. I think everyone will agree that this years recipient also belongs on this prestigious list. This Baumgartner recipient has built a legacy of work that will continue to benefit our industry well into the future. Many students have been supervised and taught. Papers have been authored that will be referred to for years to come. Research has been done that will continue to provide benefits to our industry. It is truly a lifetime of outstanding work that still continues. We wish to honour that here tonight. The list of past recipients is as follows: Rob Currie, Medhat Nasr, Pierre Giovenazzo, Rheel Lafreniere, Derek Johnson, and now we add Ernesto Guzman to that list.



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Team Canada Travelling to Northern Ireland to Participate in the International Meeting of Young Beekeepers

By Lenka Petric and John MacFarlane, Kawartha Junior Beekeepers Program Mentors and Team Canada Coordinators



In July, three young Canadian beekeepers will travel to Belfast, Northern Ireland to represent Canada at the 14th International Meeting of Young Beekeepers (IMYB). They will participate in competitive, social and cultural activities with young beekeepers from around the world. It is expected that 40 countries will be represented. This will be the fourth time a team from Canada will attend. Teams of three young beekeepers attended the IMYB in 2019 in Slovakia, in 2023 in Slovenia and in 2024 in the UAE.

This year, the members of Team Canada are from Ontario and Nova Scotia: Madeline from Bethany, ON, Charles from Norwood, ON and Bridget from Truro, NS. All are avid beekeepers and eager to represent their country at this unique event. They are busy preparing, including fundraising and improving their beekeeping skills and knowledge. At the IMYB, they will be judged on their beekeeping skills and knowledge across a wide range of areas including frame/hive assembly, colony management skills, larvae grafting, queen marking, bee biology and anatomy, pests and diseases and honey tasting. They will also learn about other cultures and meet young beekeepers from across the globe.

The IMYB was formed in 2010 in the Czech Republic and has become the largest gathering of young beekeepers worldwide. This is a once in a lifetime opportunity for these youth to represent their country at an international event. It is also a unique opportunity to learn about beekeeping and beekeeping programs for youth in other countries.

The estimated cost of this trip, including the team registration fee and travel, is approximately \$12,000.

Fundraising efforts are underway to help offset the cost and make it more affordable for the youth and chaperones who are attending.

We couldn't do this without the generous support of beekeepers, beekeeper associations and businesses. If you'd like to support Team Canada with a donation, you can do so via e-transfer or cheque (please contact macpet@nexicom.net for payment details). The Team also has a gofundme page: <https://gofund.me/53b9b83f7>; Team Canada 2026 - International Meeting of Young Beekeepers.

While we are focussed on this year's event, we are also looking towards the future. We don't know yet where the IMYB will be held in 2027, but we would love to hear from young beekeepers who are interested in participating. We are excited that we'll have representation from Ontario and Nova Scotia at this year's event. In 2023, a young beekeeper from British Columbia was a member of Team Canada. Our goal is wider participation of young beekeepers across the country and increased involvement of local beekeeper associations. Ultimately, we'd love to see the IMYB come to Canada.

For more information about the IMYB, visit the IMYB website: <https://www.icyb.cz/imyb>. You can read about Team Canada's experience at the IMYB on the Kawartha Junior Beekeepers website: www.jrbeekeepers.ca.

Beekeeper Associations: If you'd like a presentation about the event at one of your meetings, please contact us at macpet@nexicom.net.

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Meet Team Canada



Madeline: I am 12 years old and in grade 7. I live in Bethany, Ontario. I have been beekeeping for 3 years and a member of Kawartha Junior Beekeepers for 3 years. I started beekeeping when my neighbor gave me a hive and since then I have taken many opportunities to learn more about bees. Along with Kawartha Junior Beekeepers I also do 4H, which has taught me how to be a leader and collaborate with youth of all ages. In 4H I show cattle which has given me the opportunity to travel in Ontario and meet new people. I'm excited to be competing as part of Team Canada at IMYB in Northern Ireland. I am very excited to learn about other people's cultures and how they keep bees.



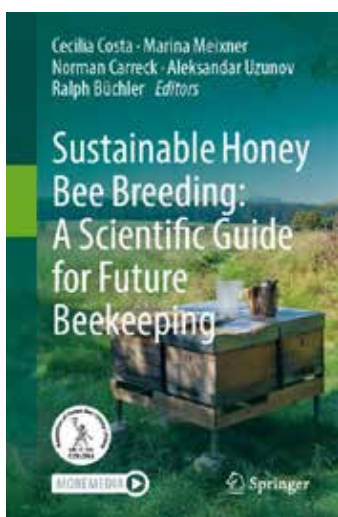
Charles: I am 13 years old, and I live in Norwood, Ontario. I started beekeeping at the Northumberland Junior Beekeepers program when I was 11, so I could help my parents with the new hives we had bought. We started out with four colonies, and through splitting and buying new hives, we have fifteen. As of now, I am responsible for two colonies of honeybees, but I hope to see that number increase. In my spare time, I like to plan Dungeons and Dragons adventures to play with my friends. I am SUPER excited to get to go to Northern Ireland and be a part of the International Meeting of Young Beekeepers!



Bridget: I'm 17 years old, living in Truro, Nova Scotia. I'm a fourth-generation beekeeper, so I've grown up around the apiary and have been involved with bees for as long as I can remember. My passion for beekeeping lies in exploring new and creative approaches to hive management. While I'm more than happy to carry out routine hive inspections, I'm especially excited by experimenting with alternative hive designs, including building my own observation and Sun hives. I also enjoy working with beeswax and creating my own handmade products. I'm honoured to have been selected as a representative for Team Canada at the International Meeting of Young Beekeepers this year, and I'm really looking forward to connecting with other like-minded youth, sharing ideas, and learning from different perspectives on beekeeping from around the world.

Book review

Sustainable Honey Bee Breeding: A Scientific Guide for Future Beekeeping



- Unique synopsis of all theoretical and practical aspects of honey bee breeding, diversity and selection
- Vividly enriched with figures, tables, expert interviews and further reading links
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Authored by an expert team of more than 30 scientists, extension specialists and beekeepers from 16 countries around the world, the present synopsis provides all theoretical and practical aspects of honey bee breeding. It is rich in figures and vivid case studies, including hands-on

interviews with bee breeders and other stakeholders. Finally, a supplementary video can be accessed online as well as directly from the print book; simply download the free Springer Nature More Media App and scan the link in the accompanying figure caption.

Cecilia Costa, Marina Meixner, Norman Carreck, Aleksandar Uzunov and Ralph Büchler Eds.

Sustainable Honey Bee Breeding: a Scientific Guide for Future Beekeeping

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Inside The Queen Honey Bee: How Gut Bacteria Change With Age And Mating

Leslie A. Holmes¹, Jemma M. Todoschuk¹, Patricia Wolf Veiga², Jeffery Pettis³, M. Marta Guarna^{4,5}, and Shelley E. Hoover¹

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We have developed a non-invasive method to evaluate queen honey bees by collecting their faeces to characterize the bacterial microflora as a proxy for their gut microbiome¹. Microorganisms play important roles in digestion, nutrition, and immunity², and can also indicate exposure to stressors³. However, destructive sampling, wherein the queen is sacrificed, limits the use and potential of whole gut microbiome studies (and the dissected queens!). Instead, our non-invasive evaluation of queen faeces permits us to characterize the queen faecal microbiome to learn more about how queen health, immunity, and physiological responses to environmental stressors change throughout her adult life. In developing these techniques, we observed queen faeces differ between virgin and mated queens; virgin queen faeces are brown while mated queen faeces are clear (Figure 1)⁴. Thus, we were interested in learning the developmental and/or environmental interactions responsible for the changes we see in queen faeces throughout her early life. Specifically, whether age and mating cause the changes we see in queen faeces between virgin and mated queens.

In the spring of 2024, we set up 40 small six-frame nucleus honey bee colonies (nucs) and raised a single queen cell in each nuc⁴. Queens less than one day old (n = 26) were

brought into the lab for faecal sampling and returned to their respective colonies the same day. Half of these queens were returned to their colonies in queen cages to prevent them from mating, while the other half were hand released into their colonies and permitted to mate. Two weeks later, when eggs were found in the colonies with queens that had mated, we collected all caged virgin (n=13) and mated (n=12) queens for faecal sampling. We also sampled nurse bees from each queen's colony for gut microbiome analyses. Specifically, for each sampling event, queen faeces were collected (i.e., one-day-old virgin and two-week-old virgin or two-week-old mated) and approximately 50 nurse bees (herein 'workers') were sampled from the same frame near where each queen was found, frozen, and later dissected, to isolate each worker's gut. Queen faecal and worker gut samples were sent to the National Bee Diagnostic Centre and Genome Quebec for DNA extraction and 16S rRNA amplicon sequencing, respectively, to characterize any changes to the faecal and gut bacterial communities of each queen (and her attendant workers) between the time queens were one-day-old virgins, and when they were either two-week-old virgins or two-week-old queens that had successfully mated and begun laying eggs in their respective colonies.



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We identified ten bacterial genera in the queen faecal samples and in the worker guts sampled alongside their queens. While these taxa were largely shared across queens and workers, their presence and relative abundances varied among queens and workers, as well as among sampling events (i.e., one-day-old virgin, two-week-old virgin, and two-week-old mated queens) (Figure 2). For example, consistent with a previous queen gut microbiome study⁵, Gamma-proteobacteria, which are involved in the breakdown of sugars and pollen⁶, were detected only in one-day-old virgin queens and in all workers. This pattern suggests that the queen's gut microbiome is initially environmentally acquired, similar to that of her workers.

We also observed temporal changes in queen gut microbiome complexity. The gut microbiome of mated queens simplified to just a few bacterial taxa within two weeks (Figure 2), indicating a rapid transition from a more complex bacterial community at queen cell emergence to a queen-specific microbiome as queens are primed for reproduction and egg-laying. Although the overall bacterial communities of two-week-old virgin and mated queens were broadly similar and both simple, mated queens exhibited a shift in community composition compared to aged virgins, with Alpha-proteobacteria becoming more dominant in mated queens. In contrast, one-day-old and two-week-old virgin queens were dominated by Bacilli. A transition from *Lactobacillus* (Bacilli) to *Commensalibacter* (Alpha-

proteobacteria) has previously been reported as bacterial succession associated with queen age^{5,7}. Here, by controlling for queen age, we demonstrate a similar shift in bacterial community composition between virgin and mated queens, suggesting that this transition may be linked to queen mating status rather than age alone. This pattern points to a potential, yet untested, role for these bacterial taxa in queen reproductive physiology or developmental state.

The gut microbiome is closely linked to immune function in animals⁸, and previous studies have shown a trade-off between queen bee fertility and immune function in queen honey bees⁹. However, how the queen gut microbiome develops throughout her adult life, responds to stress, and interacts with essential immune functions remains poorly understood, in part because existing approaches rely on destructive sampling. By using a non-destructive method to characterize the queen gut microbiome throughout her adult life, our study provides a framework to investigate how queen development and environment shape gut microbial communities, which in turn may influence fertility and immune function. In addition, by following individual queens throughout her life, we are exploring the potential use of queen faeces to screen queens for viral and other infections. Details of our queen faecal sampling method and its application for viral screening are available in our open access publication¹.



Figure 1. Queen faeces sampled from a one-day-old virgin queen (left), a two-week-old virgin queen (middle), and a two-week-old mated queen (right).

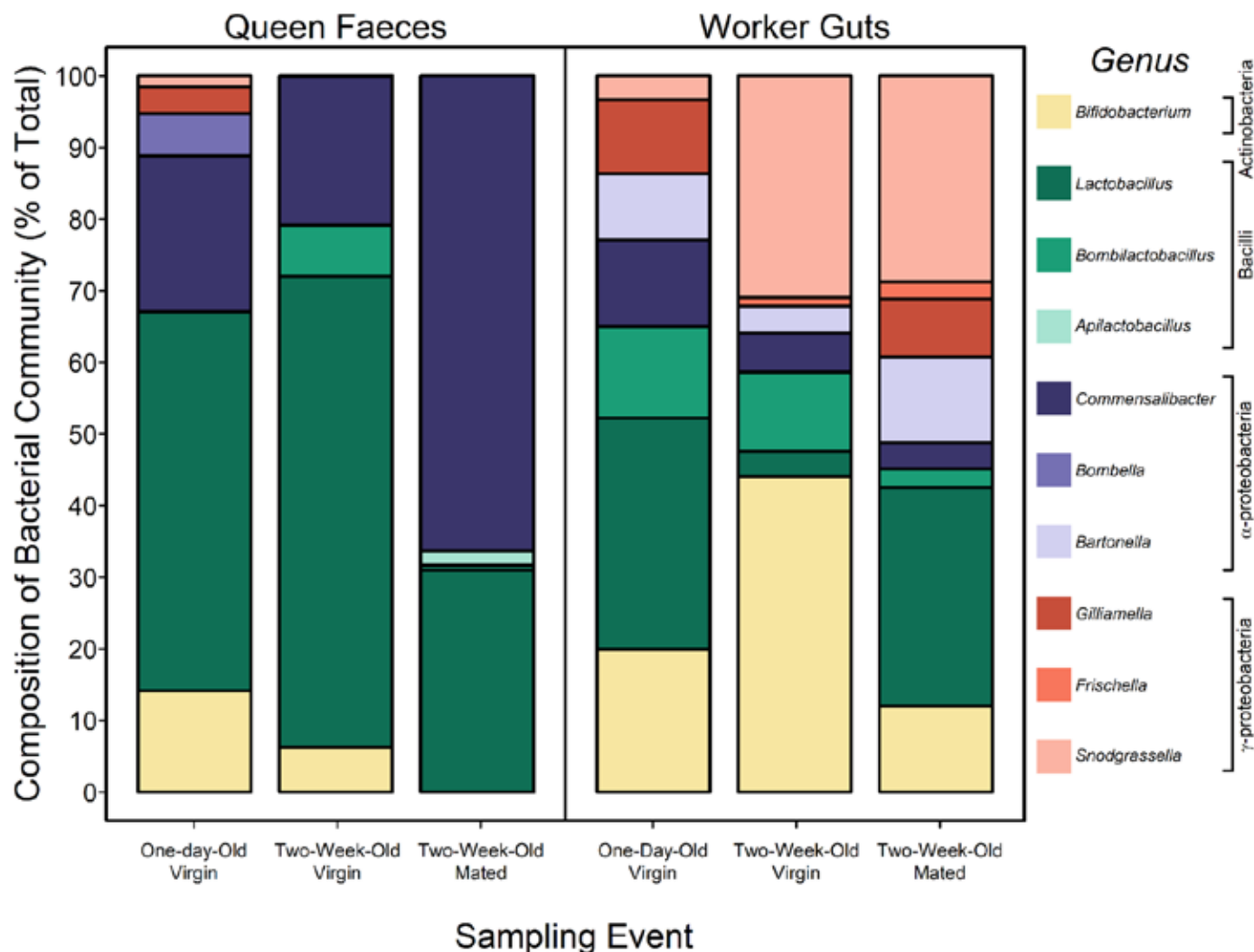


Figure 2. Relative abundances (%) of faecal bacterial genera among one-day-old virgin (n=23), two-week-old virgin (n=13), and two-week-old mated (n=10) queen honey bees (left), and relative abundances (%) of gut bacterial genera among honey bee worker guts sampled from colony frames where queens were located during fecal sampling of one-day-old virgin (n=25), two-week-old virgin (n=12), and two-week-old mated (n=12) queen honey bees (right). Each bar is a group of queens (left) or workers (right) sampled at their respective sampling event (i.e., when queens were one day old, two-weeks-old unmated, or two-weeks-old mated). All colours within a bar make up the entire bacterial community; the taller a specific colour is, the more common that bacterial taxa is relative to other taxa.

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HOT AND BOTHERED?

How temperature affects the development and infectivity of *Lotmaria passim*

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INTRODUCTION

Lotmaria passim (Figure 1) is a globally distributed, commonly encountered digestive tract parasite of the honey bee that has recently been associated with altered behaviour¹⁻², physiology²⁻³, and decreased survivorship^{1,4-7}. Because this parasite resides in the honey bee hindgut (Figure 2), it is likely transmitted via a fecal-oral route⁸, exposing it to a

Our first experiment examined the effect of temperature on *L. passim* growth by culturing the parasite at the three temperatures (25, 33, 38.5°C) under controlled lab conditions. Because changes in growth do not necessarily reflect changes in infectivity, we conducted a second, independent experiment to directly assess the effect of temperature on *L. passim* infectivity. In this experiment, cultures of *L. passim* were exposed to the same three temperatures (25, 33, 38.5°C), but were then fed to bees (Figure 3). At the end of the experiment, microscopy was used to quantify infectivity by measuring infection prevalence (proportion of bees infected with *L. passim*) and infection intensity (*L. passim* load per infected bee).

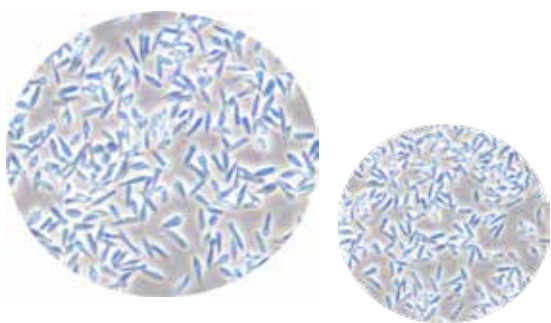


Figure 1.
Lotmaria passim viewed under a phase-contrast microscope

variety of environmental temperatures. To better understand how temperature exposure might affect the transmission of *L. passim*, we conducted two separate experiments examining the effects of three different temperatures on the parasite's growth and infectivity: 25°C, the typical temperature for maintaining *L. passim* in the lab; 33°C, representing brood nest temperature; and 38.5°C, representing a hot summer day in southern Alberta.



Figure 2. Honey bee infected with *L. passim* in the hindgut



Figure 3. Honey bee being fed *L. passim*

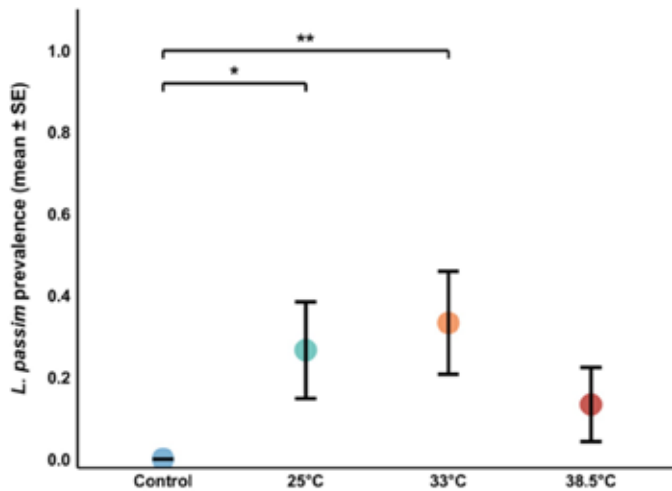


Figure 4. Mean prevalence of *L. passim* in bees after being fed cells that were maintained at 25, 33, or 38.5°C, or sucrose as a control. $\alpha=0.05$, $*=P<0.05$, $**=P<0.01$

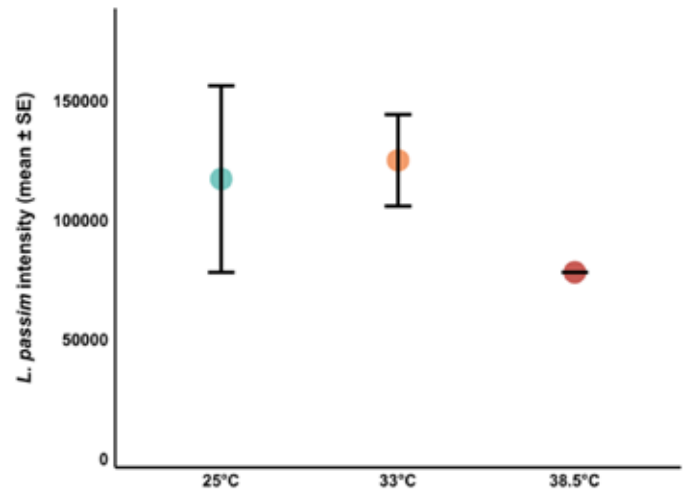


Figure 5. Mean intensity of *L. passim* infections in bees after being fed cells that were maintained at 25, 33, or 38.5°C

RESULTS AND CONCLUSION

We found there was a significant effect of temperature treatment ($F_{2,4} = 10.85$, $P = 0.02$) on the growth of *L. passim* cultures under lab conditions. Cultures maintained at 25 and 33°C experienced exponential increases in cell number, while those maintained at 38.5°C hovered near the number they initially started with. Interestingly, *L. passim* cultures maintained at 33°C experienced a more rapid increase in growth at the start of the experiment compared to those maintained at 25 and 38.5°C.

Our infectivity experiment yielded results consistent with our culture experiment. Bees fed *L. passim* cells maintained at 25 and 33°C had a significant increase in infection prevalence compared to those fed a sucrose solution (Figure 4, $\chi^2_3 = 16.07$, $P = 0.001$). Additionally, bees that were fed *L. passim* cells maintained at 25 and 33°C experienced a numerical increase in infection intensity (Figure 5, $F_{2,4} = 10.85$, $P = 0.02$) at the end of the experiment compared to bees that were fed cells maintained at 38.5°C.

Overall, the results of these two experiments suggest that within colony transmission of *L. passim* may be highly effective, given the exponential growth observed in cultures maintained at 25 and 33°C. The infectivity experiment further supports these findings and indicates that transmission within the brood nest is likely. Interestingly, although cultures maintained at 38.5°C exhibited minimal growth, the infectivity experiment demonstrated that *L. passim* cells exposed to this temperature remained infective. This suggests that transmission in the environment may still occur even at elevated temperatures.

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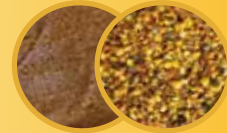
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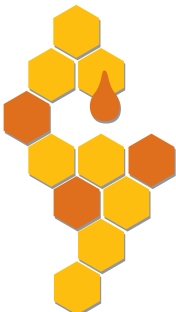
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