Public Tick IPM Working Group
November 8th, 2017

Please send additions, omissions or other corrections to flaufenberg@ipminstitute.org

The Working Group meets via conference call on the second Wednesday of each month at 1:00PM CT (2:00PM EST). The following notes are for November 8th, 2017.

Roll
- Frank Laufenberg, IPM Institute of North America
- Jim Lunders, Jackson County Vector Control
- Susan Weinstein, Arkansas State Public Health Veterinarian
- William Nicholson, CDC Atlanta
- David Whitman, Tickbox Technology Corporation
- Richard Whitman, Tickbox Technology Corporation
- Larry Scrapper, Cherokee Nation
- Tom Mather, University of Rhode Island
- Bob Maurais, Mainely Ticks
- Tim Fox, Madison Area Lyme Support Group
- Lynnae Jess, North Central IPM Center
- Chris Przybyszewski, US BIOLOGIC
- Alicia Cashman, Madison Area Lyme Support Group
- Monica White, Colorado Tick-Borne Disease Awareness Association
- Stephan Herrera, Evolva
- Karl Malamud-Roam, Rutgers
- Alina Freund, IPM Institute of North America
- Jody Gangloff-Kaufman, New York State IPM Program
- Bienecke Bron, UW-Madison
- Jennifer Gruener, Warren County Mosquito Commission

Agenda
1. Stephan Herrera--Evolva's work on Nootkatone
2. Additional updates, comments and announcements from Working Group members

1. Stephan Herrera--Evolva's work on Nootkatone
   a. Stephan Herrera works as the VP for Strategy & Public Affairs for Evolva.
   b. The presentation shared with the listserv is solely meant for discussion at this meeting.
      i. Nootkatone is found in the bark of the yellow cedar or the skin of a grapefruit.
      ii. It would take 400,000 grapefruits to create a kg of nootkatone.
      iii. It is used as a natural flavor and fragrance, but the far larger commercial opportunities for this ingredient lie in pest control.
iv. Data from multiple studies indicate that nootkatone is effective at repelling and killing a range of biting insects, including mosquitoes and ticks.

v. Evolva can produce nootkatone in a sustainable, industrial-scale process via yeast fermentation that provides a reliable, safe supply.

vi. Evolva is working hard to advance nootkatone for multiple applications in pest control.

vii. EPA review should be complete in Q4 2018.

c. Advancing nootkatone in collaboration with the CDC – working with the government initially for using this product on mosquitoes.

d. In parallel we are conducting research and development for tick applications.

e. Building stakeholder and funding networks on tick product R&D and pre-commercialization.

f. Carl: Bio-identical or natural? That will be entirely up to the commercial partner that we work with to take nootkatone to the consumer markets—Evolva will be making the active ingredient nootkatone.
   i. Are other molecules, such as pyrethrum, able to be produced these ways?
   ii. Evolva is only focusing on nootkatone at the moment.

g. Environmental risk areas, when you apply it to your body in small amounts that’s one thing, but what if you apply mass quantities to the environment?
   i. So far so good on testing this product.

h. Grant for mosquito control products?
   i. How will people use the product, spray, topical, etc?
   ii. We aren’t able to say the specific application method at this time, but yes, it will be registered as a biochemical, with all that that implies.

i. Monica: How is the product for ticks different than what you found for mosquitoes?
   i. Some is immediately applicable, but some does not overlap—for statistics and viability.
      1. R and D (overlap, it will inform work on ticks)
         a. Some data is available from the CDC, there’s also a video on the website.
      2. Regulatory, it helps a little, but not very much (need separate clearance for each application of a biopesticide).
         a. We can get the product fast tracked because it is a biopesticide as opposed to a synthetic.
      3. Commercial: there is not a made-for-market standalone product. Most products are mosquito and tick.

2. Additional updates, comments and announcements from Working Group members
   a. Brief update on the Public Tick IPM Working Group grant
      i. Thank you for everyone who provided review and a letter of support, the IPM Institute submitted the renewal proposal on November 16th.
   b. Alina: As a reminder, our working group has some travel support funds for the 9th International IPM Symposium, our group has a one-day tick summit at the symposium.
   c. Carl: Published an inventory of IPM biological products in 2012 including a section on tick control—he is planning on putting out a second addition in 2018 depending on global pheromones and products. If there are any new products, please send information to Frank.
d. Adult ticks are very active out east right now.
   a. 130 ticks in 20 minutes with a headlamp.
   e. Please notify Frank if the Tick Pest Alert has been shared with any new organizations or individuals so we can keep track of its reach!
   b. Here is the link to share: https://www.ncipmc.org/action/alerts/ticks.pdf
   f. If you come across articles that would benefit members of this group feel free to share them by sending an email to the PUBLIC_TICK_IPM_WG@LISTSERV.URI.EDU

These notes are for a Working Group call on November 8th. Future calls will continue to fall on the second Wednesday of each month at 1 PM Central time. Please send Frank updates, announcements or other additions for November’s call.

The Public Tick IPM Working Group is funded by the USDA National Institute of Food and Agriculture, Crop Protection and Pest Management Program through the North Central IPM Center.