



NAPPO

North American Plant Protection Organization
Organización Norteamericana de Protección a las Plantas

NAPPO Expert Group Zoom Meeting Report

Expert Group:	NAPPO Forestry – Water bath ring test	
Location:	Zoom meeting	
Date:	July 10, 2025	
Chairperson	Meghan Noseworthy (NR Canada)	
Participants:		
Tyrone Jones (APHIS PPQ)	Baode Wang (APHIS PPQ)	Chuck Dentelbeck (CLSAB-Canada Industry)
Eric Allen (Retired)	Lydia Gonzales (SENASICA -AMC member)	Stephanie Dubon (APHIS PPQ – AMC member)
Hoffmann Blasio (SENASICA – AMC member)	Adnan Uzunovic (CW – Canada Industry)	Brad Gething (NWPCA- U.S. Industry)
Alonso Suazo (NAPPO)		
Summary		
Project:	Design a standard operating procedure/ manual, outlining the methods for testing and recording the results of water bath heat treatment experiments on wood product pests of concern to the NAPPO region	
General comments:	<p>The team discussed experimental design, terminology, equipment, and methodology for water bath heat treatment testing across different laboratories. They considered how to ensure consistency across the different bath locations. Testing the same organisms (same species and stage) at each location, and the use of pop-up thermometers were considered.</p> <p>The chairperson outlined the draft of a standard operating procedure (SOP) for heat treatment, addressing topics such as bath construction, temperature monitoring, data collection, and result analysis. The group also covered presentation arrangements for the upcoming NAPPO Annual meeting, database security considerations, and plans for future collaborations and international involvement.</p>	
Item 1:	Project logistics and experimental design.	
Consensus:	Experimental Design and focus <ul style="list-style-type: none">- The team discussed the experimental design and reviewed action items from their last meeting.- Eric Allen shared his research findings on similar studies. He emphasized the goal of demonstrating that their technique works consistently across different locations and noted that the term 'ring study' is not widely used.- The group agreed to use the term "interlaboratory test" instead of "ring test" for clarity and ease of translation.- The team discussed whether to test organisms from	

	<p>specific guilds or whether to use the same species for testing in each location. For example, fungal isolates inoculated under identical conditions could be shared and tested at each lab. Baode noted this is more challenging with insects. EAB was suggested as it has been previously studied <i>in vitro</i>, paired with in-wood experiments, and is readily available.</p> <ul style="list-style-type: none"> - The group also considered the possibility of a pre-test to ensure consistency in the equipment and experimental design across labs. The team considered adding a control organism to the pest list to validate the experimental design and equipment. - The team discussed using pop-up thermometers as a calibration method for equipment testing. Chuck Dentelbeck confirmed that the pop-up thermometers are accurate, can be made for specific target temperatures, and are about an inch and three-quarters in size. He offered to send samples for testing. - The group agreed that these thermometers could be a reliable and cost-effective alternative to biological organisms for pre-test calibration, as they would provide consistent results regardless of environmental factors. <p>Sharing files and data, Standard operating procedures, and analysis</p> <ul style="list-style-type: none"> - Meghan shared information on a potential secure Canadian government platform called GC Collab. Simultaneous editing had some limitations, but documents and data can be shared securely. Alonso Suazo noted some limitations in using Microsoft Teams. All EG members have been invited to join the GC Collab platform to view the draft SOP. - Meghan shared the draft SOP on GC Collab and gave an overview of its content, including constructing the bath and lid, making carrier assemblies, using temperature monitoring equipment, programming ramps, assessing test subjects, and analyzing results. - The team discussed the need to include guidance on selecting isolates, minimizing variability, and ensuring representative organisms for testing. - They agreed to review and refine the SOP, with a focus on making it accessible and useful for other labs. Eric emphasized the importance of testing the SOP with fresh sets of hands to identify potential issues. - Meghan agreed to proceed with adding a new researcher with expertise in statistics and data collection methods. Alonso Suazo suggested requesting this through Tanya Staffen, the NAPPO AMC member from Canada. - The team agreed to review a cleaned copy of the draft SOP.
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Water bath equipment overview

- Meghan gave a tour of the quarantine lab, the heat treatment water bath, the thermocycler, and the growth chamber.
- The heat treatment process, which involves slowly ramping up the temperature to ensure accurate results, was discussed.
- The team discussed the effectiveness of different temperature profiles and the importance of equilibrating samples before testing.
- Several organisms post-treatment were viewed, including ambrosia fungi. The group discussed the potential of treating insects with an associated fungi and culturing the fungi for separate testing.

Water bath specifications and construction

- The group discussed the need to ensure the same specifications for water bath installations, including voltage, lid thickness, and rubber seals, with Meghan confirming that customized lids would be sent to each lab to ensure consistency across the baths. Currently, the number of water baths involved in the interlaboratory test is three.

Meeting Plans and Updates

- The group discussed presentation arrangements for the upcoming NAPPO Annual Meeting, with Brad Gething agreeing to present and Meghan Noseworthy offering support.
- A potential cloud-based database with password protection and email notifications was noted to be available by Tyrone.
- The upcoming International Forestry Quarantine Research Group meeting in Paris in September was noted as well as the agenda items on treatments for forest products, molecular tool use, ISPM 15 guidance and plants for planting research. The announcement will be sent to the group.
- The group agreed to continue meeting monthly, with the next meeting scheduled for August 20th from 2:00 to 3:00 p.m. Eastern Time. Alonso noted that the group would remain bilateral until membership from a third country is secured, at which point simultaneous interpretation would be implemented.

Next Steps

Responsible Person	Action	Date
Meghan Noseworthy	Clean up and circulate the updated SOP document	

EG members	Try accessing the GC Collab platform and provide feedback to Meghan	
Chuck Dentelbeck	Send pop-up temperature indicators to Meghan for testing.	
Adnan	Review and provide input on the SOP regarding isolate selection philosophy.	
Brad Gething	Present on the project at the upcoming NAPPO Annual meeting, with assistance from Meghan in preparing the presentation.	
Meghan Noseworthy	Send information about the International Forestry Quarantine Research Group meeting to Alonso and Tyrone.	
Alonso Suazo	Include a note about the upcoming International Forestry Quarantine Research Group meeting in Paris, France in the July issue of the NAPPO Newsletter.	
Eric Allen	Look into physical tests (e.g., melting crystals) for equipment calibration.	
Meghan Noseworthy	Reach out to Tanya regarding including the Ontario researcher in the group.	
Eric Allen	Finalize the purpose statement for the abstract.	
Next Meeting		
Location	Zoom meeting	
Date:	August 20, 2025, from 2:00 to 3:00 p.m. EST (12:00 – 1:00 p.m. Mexico time)	
Proposed Agenda Items		
1. Welcome remarks		
2. Approve/amend meeting agenda		
3. Review the July 10, 2024 action items and pending action items from previous meetings		
4. Discuss the SOP and experimental design		
5. Other business		
6. Next meeting		
7. Meeting adjourned.		