# **Integrated Pest Management Workshop**

**Date:** January 25, 2023

Time: 8:30 AM - 3:30 PM



Morning session: Climate change and its impact on nursery production

Time	Speaker	Topic
8:45	Mario Lanthier	Introduction
8:50	Dr. Elizaveta Malinina	Climate Modeling and Analysis
9:20	Dr. Andrew Hirons	Using sap flow to evaluate waterlogging tolerance in temperate trees.
10:10	Break	Break
10:30	Mario Lanthier	Impact of extreme weather on pest problems
11:15	Edward Nichol	Metro Vancouver Tree Species Selection Database
11:45	Table discussion	Table discussion
12:00	Lunch Break	Lunch Break











# **Integrated Pest Management Workshop**

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Afternoon session: Rodents and management

Time	Speaker	Topic
1:00	Emily Carmichael	New rules for second-generation anticoagulant rodenticides
1:45	Shaun Dhaliwal	Understanding rodenticide label statements
2:15	Break	Break
2:45	Sofi Hindmarch	Non-chemical rodent control on farmland
3:10	Wrap-up	Wrap-up











### 8:50 to 9:20 - Dr. Elizaveta Malinina

Title: Climate change and its influence on the 2021 BC floods

#### Dr. Elizaveta Malinina

Research Scientist, Canadian Centre for Climate Modelling and Analysis (CCCma), Environment and Climate Change Canada

Dr. Malinina's current research is on the attribution of extreme weather events and temperature changes in Canada. Her research interests also cover changes in sea ice and the influence of volcanic eruptions on climate. She served for the IPCC Working Group I 6th Assessment Report as a chapter scientist for the chapter on human influence on the climate system and as a contributing author to the crosschapter box on the climate effects of volcanic eruptions.

In 2019, Elizaveta received her PhD in Environmental Physics from the University of Bremen, Germany.













# 9:20 to 10:00 - Dr. Andrew Hirons, University Centre Myerscough, UK - Virtual.

Title: Using sap flow to evaluate waterlogging tolerance in temperate trees.

#### Andrew D. Hirons (PhD)

Senior Lecturer in Arboriculture and Research Lead for Plant Sciences

Andrew is a Senior Lecturer in Arboriculture and Research Lead for Plant Sciences at University Centre Myerscough, UK. His teaching responsibilities focus on modules relating to tree biology, tree establishment and tree management to both full-time and online students. He is particularly interested in the application of science to practice; making sure that arboricultural management is evidence-based wherever possible. To this end, he co-authored Applied Tree Biology (Wiley-Blackwell) to support others in understanding tree biology and how it relates to managing trees in urban environments.

In addition to teaching responsibilities, he is also engaged with research aimed at creating resilience in our urban forests. This work has resulted in a number of peer-review publications as well as professional guidance entitled Tree Species Selection for Green Infrastructure: A Guide for Specifiers published by Trees and Design Action Group (TDAG).













## 10:30 to 11:15 - Mario Lanthier

Title: Impact of extreme weather on pest problems

Mario Lanthier CropHealth Advising & Research.













## 11:15 to 11:45 - Edward Nichol

Title: Metro Vancouver Tree Species Selection Database

**Edward Nichol** 

Metro Vancouver.











## 1:00 PM - 1:45 PM - Emily Carmichael

Title: New rules for second-generation anticoagulant rodenticides

Emily Carmichael
BC Ministry of Environment.

**Description:** There are new restrictions in BC for the sale and use of second-generation anticoagulant rodenticides. This presentation will provide an overview of the new rules and what this means for managing rodents within an Integrated Pest Management framework.

**Bio:** Emily is a Professional Agrologist and the Senior Integrated Pest Management Policy Analyst for the Integrated Pest Management Program at the B.C. Ministry of Environment and Climate Change Strategy. She specializes in policy analysis under the Integrated Pest Management Act including regulatory development and public outreach.

She completed a Master of Science degree in Agriculture and Life Science through Virginia Polytechnic and State University where her research focused on surveying aphid species and associated natural enemies in hop fields. She has an undergraduate degree in Environmental Studies from the University of Northern British Columbia as well as a certificate in Integrated Pest Management from University of the Fraser Valley. Prior to joining the BC Public Service, Emily spent many years working in field crop, greenhouse, nursery, and cannabis IPM.











#### 1:45 to 2:15 - Shaun Dhaliwal

Title: Understanding rodenticide label statements

#### Shaun Dhaliwal

Pest Management Regulatory Agency (PMRA), the branch of Health Canada in charge of pesticides.

Description: Reviewing important label statements for rodenticides that are used in Agriculture.

Bio: Shaun Dhaliwal works as a Pesticide Compliance & Enforcement Officer in Burnaby, BC with Health Canada. In this role, Shaun conducts inspections with pesticide manufactures, retailers and commercial users. During his 14 years with Health Canada, he has also worked in a number roles in pesticide regulation. Shaun graduated from Simon Fraser University with a Bachelor of Science in Biology.











#### 2:45 to 3:25 - Sofi Hindmarch

Title: Non-chemical rodent control on farmland

#### Sofi Hindmarch

Project Biologist Fraser Valley Conservancy

Description: The presentation will look at various aspects of rodent control ranging from vole to rat control using an integrated pest management (IPM) approach, where monitoring and prevention are the key steps in controlling infestations. Best management practices on rodenticide use on agricultural lands will also be covered.

Bio: Sofi Hindmarch (MSc) is a Project Biologist at the Fraser Valley Conservancy. She is BC's recognized expert on barn owl biology and ecology. Since 2016, she has worked with farmers on how to reduce the dependency on rodenticides to control rodents on agricultural lands. The focus has been on an Integrated Pest Management (IPM) approach and trialling new control methods, including encouraging raptors as a pest management ally. She has also created best management practices on rodenticide use on agricultural land.









