

Conferences bring disease experts together

By Mike Cruickshank, Pacific Forestry Centre,
Natural Resources Canada



Cronartium ribicola

Fruiting of *Cronartium ribicola*, the cause of white pine blister rust, on the main stem of an eastern white pine.

Plant diseases threaten many of Canada's most important timber crops and tree species.

Over the years forest pathologists from Mexico to Alaska have worked together to develop important knowledge on how to manage North American forest diseases. Experts work across borders to discuss climate change, mistletoe, foliage and twig diseases, hazard trees, nursery disease, root disease and rusts.

Like people, plants catch viruses too. Blueberry Scorch Virus infects our blueberry crops in BC, and infected plants suffer with sluggish growth that reduces yields. Another example is Blister Rust of white pine trees; this fungal disease severely affects this tree's survival.

Pathologists use a range of tools to combat these diseases, but not creating the conditions for them to flourish is one of the most important steps. Detailed knowledge of the plant physiology and anatomy, as well as the life cycle of the pathogen are essential to do this. This means research, which can take years, must be done – and

include climate effects on plant and fungi, bacteria, viruses and their genetic makeup.

Pathogens are constantly changing so scientific research is also a constantly changing challenge. Once a disease is understood, that knowledge is often incorporated into an integrated pest management (IPM) decision-making framework for the grower. IPM seeks to manage diseases in an economical, environmentally sound way with the least amount of impact on the ecosystem. IPM uses a variety of strategies and tactics to solve problems based on the biology of the specific disease.

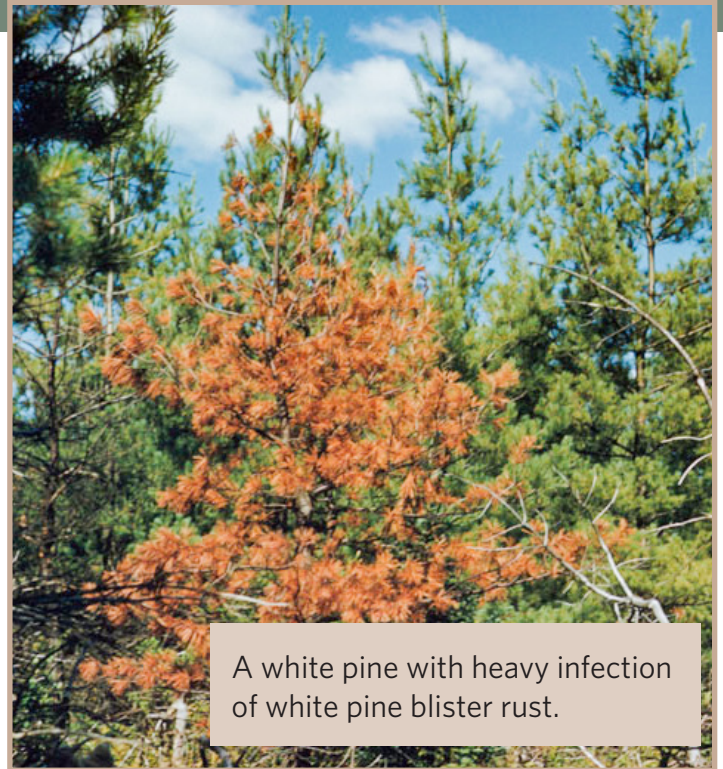


Mike Cruickshank, Research
Scientist, Root Diseases.

This fall, BC hosts two gatherings of tree disease experts.

The Western International Forest Work Disease Conference (WIFDWC) happens in Parksville, British Columbia, October 2nd to 6th, 2017. The WIFDWC meeting focuses on forest diseases in Western North America and is jointly sponsored by American and Canadian governments.

Next month, November 2nd and 3rd, the Canadian Phytopathological Society will meet at the Pacific Forestry Centre in Victoria. This is a local meeting of BC pathologists to discuss plant disease on a wider scope covering forestry, agriculture and nursery/landscape industries. Both meetings include a variety of students, academics, technical assistants, extension plant pathologists, research scientists, federal and provincial governments, and companies.



A white pine with heavy infection of white pine blister rust.

Links

65th Western International Forest Work Disease Conference

<https://www.wifdwc.org/>

Canadian Phytopathological Society

<http://phytopath.ca/>

White pine blister rust

<https://tidcf.nrcan.gc.ca/en/diseases/factsheet/24>

Blueberry Scorch Virus

<http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/plant-health/insects-and-plant-diseases/berries>

Trees, insects and diseases of Canada's forests

<https://tidcf.nrcan.gc.ca/en/trees>