

BREEDING AND DEPLOYMENT OF INSECT AND DISEASE RESISTANCE TREES IN BRITISH COLUMBIA: A 2018 UPDATE

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At the 2011 meeting in Eugene, OR, I provided a “thought piece” where I assumed we won’t have much success if we continue to breed trees for any individual pests or diseases, one at time. But most of us were somewhat overwhelmed of what that could mean, in terms of our research program, building new partnerships, obtaining funding for something that may not exist (i.e., the pest or disease) at this time, and the complexity in what to screen or test for. We are making small steps in the respect, and our program is expanding to include more pest and disease traits. For instance, (1) Swiss Needle Cast in Douglas-fir, (2) lodgepole pine rusts (western gall rust, commandra), and needle disease (*Dothistroma*), (3) a new cedar leaf rust, (4) western tent caterpillar in alder, and (5) western spruce budworm in interior Douglas-fir (see Strong presentation), to mention a few. We are still actively trying to improve resistance in our long-term programs (i.e., blister rust, spruce weevil, etc.), and hopefully over time, with more research, we might uncover more traits that could provide more durable trees (i.e., trees with “cross resistance”). Without a doubt, climate change, new exotic pests, the outbreak of our current pests, and major disturbances by fires, haven’t gone away and forest tree improvement programs will continue to show they have a large part to play in managing our forests.

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