



Landscapes

- CA: Canmore, AB
- CN: Crowsnest Pass, AB
- CH: Cypress Hills, AB
- FV: Fairview, AB
- FC: Fox Creek, AB
- G: Golden, BC
- GP: Grande Prairie, AB
- KY: Kootenay-Yoho, BC
- SW: Sparwood, BC
- TR: Tumbler Ridge, BC
- V: Valemount, BC
- WK: Wilmore-Kakwa, AB

Sites

1-5 infested sites/
landscape
minimum 5 km
between sites

Trees

3-14 trees/sites
Ave. 8.9 trees/site
~50 m between trees

Galleries

~10 MPB galleries/tree
2 fungal isolations/gallery

Appendix S1: Hierarchical sampling design for MPB associated ophiostomoid fungi. Landscapes were selected in regions of MPB outbreaks to represent the range of ecoregions encountered by the beetles in eastern British Columbia and Alberta. Multiple sites per landscape and multiple trees per stand were sampled. From each tree 10 disks of xylem+phloem were obtained that contained sections of MBP galleries. From these disks, ~10 MPB galleries were sampled per tree. From each gallery a 5 mm² wood sample and a beetle larvae or adult were collected for fungal strain isolation and morphotyping.