



Figure S1. Soil chemistry analysis by Centre de Foresterie des Laurentides, Service canadien des forêts, Ressources naturelles Canada in 2017. N, P, K, Ca, Mg and pH were measured for soil located beneath control and defoliated trees in 2017. Samples were dried at 70°C for 48h. The pH was determined in distilled water with Orion 2-star pH Benchtop Meter (Thermo Fisher Scientific Inc., Waltham, MA, USA), total C and N with wet digestion and analyzed with a LECO CNS-2000 (LECO Corporation, St. Joseph, MI, USA) and nutrients by ICP-MS (Perkin Elmer OES OPTIMA 7300 DV, Perkin-Elmer, Inc. Shelton, USA) [66].