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Natural root grafting in *Pinus Banksiana*

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Natural grafting between roots of the same species is common in many pine species. However few studies have addressed the ecological significance of these physiological links. The main objective of this research was to determine the frequency of root grafts in native stands and plantations of jack pine (*Pinus banksiana*) and their influence on the growth of connected trees. Nine 50 m² plots were excavated with a high pressure water spray in the Western boreal forest of Quebec. Preliminary results show a high level of intra-specific root grafting ranging 12 to 71% of trees grafted within each plot. Native stands showed a higher percentage (51%) of grafted tree than plantations (37%). Most root grafts occurred between trees located less than 2m apart. Dendrochronological analyses showed that graft formation needed from 3 to 8 years to complete. The relationship between the timing of graft formation and radial growth of trees will be examined.