CONTAINER TYPE AFFECTS ROOT DEVELOPMENT OF JACK PINE SEEDLINGS THREE YEARS AFTER OUTPLANTING

Ronald M. Girouard, Forestry Canada, P.O. Box 3800, Sainte-Foy, Québec, Canada, G1V 4C7

Observations on root development of jack pine (Pinus banksiana Lamb.) seedlings grown in two types of containers (the Quebec tube and the BC/CFS Styroblock 415) with peat moss were made three years after outplanting. In general, the containers caused bending, intertwining, and grafting of roots. Air-pruning during the cultural phase resulted in the formation of replacement roots on the taproot and the primary lateral roots. In seedlings planted with the Quebec tube (paper laminated with polyethylene), lateral root development was reduced or absent, especially if the tube remained intact. However, if the tube became unglued during or after planting, roots developed on the uncovered side of the plug root. In most cases, seedlings grown in Styroblock 415 had roots deformed orthogeotropically followed by chignon formation. This did not prevent root tips from developing from the top, middle, and lower portion of the plug roots or seedlings forming vigorous root systems.

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