

## Reforestation in British Columbia and the current world-wide debate on Genetically Modified Organisms

There is a good deal of debate in agriculture, food, medicine and, to some degree, in forestry about Genetically Modified Organisms (GMO). This Extension Note is a brief, non-technical summary of current practice regarding the reforestation of public (Crown) lands in British Columbia. It is intended to provide clear and unequivocal answers to anyone seeking more information about genetically modified organisms and reforestation practices in British Columbia.

- British Columbia Crown land reforestation programs do not use GMO<sup>1</sup>
- The provincial forest genetics program relies upon the selection of wild stand trees expressing naturally superior growth and resistance characteristics. Conventional breeding techniques are then followed throughout the tree breeding cycle. These do not include any form of transgenics, gene splicing, genetic engineering, or recombinant DNA<sup>2</sup> technologies.
- There are no GMO<sup>1</sup> registered for use on Crown lands and there are none awaiting registration. Registration is required for wild or seed orchard collected seedlots prior to reforestation on Crown lands. This registration responsibility lies with the Ministry of Forests.
- Seed orchard trees and the seed they produce are not genetically modified. The Ministry of Forests licenses seed orchards in British Columbia. These orchards produce registerable seedlots from trees, or the offspring of trees, selected from wild stands.
- There are no genetically modified trees growing on Ministry of Forests Research Station sites or test plantation sites.
- Forest nurseries growing registered seedlots for Crown land reforestation in British Columbia are not growing genetically modified organisms.

### Definitions:

GMO <sup>1</sup>	The product of an insertion of a novel (introduced) gene into an organism (Rachel Owusu 1999 for World Wildlife Fund).
Recombinant DNA <sup>2</sup>	Means DNA molecules derived from different sources that have been spliced together <i>in vitro</i> to form novel hybrid DNA molecules not normally encountered in nature (David Suzuki, 1988).