



Forest Genetics Council of BC - Operational Tree Improvement Program

Project Report: Reports are due no later than March 31, 2007.

Name of Project Leader Patti Brown	For Official Use Only
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Name of Organization: Canadian Forest Products Ltd.	OTIP Project CFC 200601
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Financial Officer: Scott Wilson

Project Title:

Test of systemic insecticides for cone and seed insect control (2006)

Approved Project Funding: \$38,000

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Objectives:

1. Test the systemic pesticides imidacloprid and/or acetamiprid using sprays, injections, or both against cone and seed insects in Douglas fir, Western red cedar, larch and Interior spruce over 3 years. Collect data to support URMULE application for dimethoate on Sx, Fdi., Cw, and Lw. Target pests are: Douglas fir seed chalcid; Douglas fir cone gall midge; coneworms; red cedar cone midge, cone maggots, spruce seedworm and seed wasps.
2. Co-ordinate and co-operate with other forestry and seed orchard programs across Canada in the collection of efficacy data for registration. Target partners include: Forestry Canada, other provincial seed orchard managers and the manufacturer.

Results:



Due to the unfortunate inability of obtaining an injection system and product to test in year one of this project a great deal of effort was put into obtaining this ability for the 2006 treatment year. Many thanks to chip Doole of Arborsystems for the use of the Wedgle/Pointer injection system and to Joe Meeting of Bioforest for the product Confidor. Special thanks go to Jim Watts of the City of Calgary for helping organize these injection possibilities.

The 2006 trials occurred on 3 sites, Orchard #183 at Mt Newton, Orchard #177 at Sechelt and the Sx and Fdi clone banks at Kalamalka Research Station.

The treatments were as follows:

Mt Newton Fdc and Kalamalka Sx and Kalamalka Fdi:

Treatment		Timing	# trees
Admire (imidacloprid)	single @ label rate	Pre budburst	10
	single @ 2x label rate	Pre budburst	10
	double @ label rate	1 st pre budburst; 2 nd +6 weeks	10
Tristar (acetamiprid)	single @ label rate	Pre budburst	10
	single @ 2x label rate	Pre budburst	10
	double @ label rate	1 st pre budburst; 2 nd 6 weeks	10
Dimethoate	single @ label rate	Pre budburst	10
Acecaps	single @ label rate	Pre budburst	10
Control	Water	Pre budburst	10
Pointer*	single @ label rate	Pre budburst	10
Confidor*	single @ label rate	Pre budburst	10

**Mt Newton only*

Sechelt Fdc:

Acecaps	single @ label rate	Pre budburst	10
Control		Pre budburst	10
Pointer	single @ label rate	Pre budburst	10
Confidor	single @ label rate	Pre budburst	10

Although 10 trees per treatment were available it was a very marginal crop year at all sites, the number of cones per tree dropped significantly on the coast after an unusually wet and cold pollination season. This put additional stress from insects on the remaining cones and along with other unfortunate events compromised the data collected on the coast and no determination of effectiveness of the treatments was possible. The cone crop in the Interior was also minimal confounding the results of those trials.

No results were available from the Sechelt cones but preliminary data on cones from both Mt Newton and Kalamalka suggest that Acecaps, acetamiprid and imidacloprid have some impact on selective insects feeding on Douglas fir cones on the coast and in the interior, and on Kalt... on spruce cones in the interior. Dioryctria damage seemed to be unaffected by all treatments regardless of rate or number of applications.



2006/2007 Financial (maximum one page)

Note: Information in this section will be routinely and publicly released

	Quarter				Total Year 1
	1 st	2 nd	3 rd	4 th	
a) Salaries and benefits Organizing injection system for trial Collecting cones	\$1,500	\$300			\$1,800
c) Travel					
d) Materials & supplies Contract TW for trial applications/collections Shipping of cones		\$16	\$7,500		\$7,516
f) Administrative Costs				\$600	\$600
TOTALS	\$1,500	\$316	\$7,500	\$600	\$9,916