

The Seed Orchard Pest Management Subprogram supports research, extension activities, and pest management operations to increase orchard yields of high quality seed. A Ministry of Forests and Range (MoFR) Research Branch scientist (Dr. Ward Strong) leads the research component. MoFR Tree Improvement Branch personnel (Jim Corrigan and Dr. Robb Bennett) deliver extension services. Seed orchard personnel handle operational activities. The Pest Management Technical Advisory Committee (PM-TAC) guides investments and activities. The PM-TAC is comprised of members from MoFR Research and Tree Improvement Branches, the Canadian Forest Service, private seed orchards, universities, and the Forest Genetics Council.

Research plans and budgets are established through an annual process of proposal development and discussions by the PM-TAC. Priority issues not currently being addressed through this process are subject to a public call for proposals. Currently (2006/07) the PM-TAC is administering projects on *Leptoglossus* seed bugs, *Dioryctria* cone worms, *Fusarium* fungi, adelgids, mountain pine beetle, systemic pesticides, a cone crop monitoring system, and a cone and seed insect field guide. Projects showing significant progress in 2006/07 fiscal year are summarized below.

Project	Species primarily impacted	Progress
Conifer seed bug (<i>Leptoglossus occidentalis</i>): damage control methods	All Pinaceae	Demonstrated that <i>Leptoglossus</i> seedbugs find hosts through infrared detection and respond to vibrational stimuli when on hosts. Based on this a novel trap is being developed
Fir coneworms (<i>Dioryctria</i> spp.): Identification of an effective sex pheromone lure and the demonstration of its efficacy in seed orchards	Fdi, Fdc, Sx	Pheromone characterization completed. Refinements to production methodology underway. Adult monitoring conducted throughout field season to determine flight period on coast and in interior
<i>Fusarium</i> fungi: reducing infections in orchard seed - determining infection mechanisms	All species	Work completed. Summary report encapsulating results of several related projects has been drafted for publication.
Conifer adelgids (<i>Adelges</i> & <i>Pineus</i> spp.): species composition, biology, & density/damage relationships	Sx, Lw, Fdi, Fdc, Pw	Initial species composition and population parameters analysis completed
Systemic insecticides: tests for cone & seed insect control	All species	The second year of pesticide trials at coastal and interior sites produced inconclusive results. Based on this, the trials were restructured to look at new injectable formulations