

Identification of Seed Chalcids Infesting Seeds of B.C. Conifers (SPM 0003)

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2004/05 marked the second year of Forest Genetics Council support for this long-standing international collaborative project led by the Canadian Forest Service (CFS) and the Institut National de Recherches Agronomiques (INRA - France). The B.C. Ministry of Forests (BCFS – the Tree Seed Centre and the Seed Pest Management group) and

Yellow Point Propagation Ltd. are major collaborators. The long-term objectives are to:

- clarify the identity and host range of the North American species of seed chalcids in general, and of those exploiting conifer seed in B.C. in particular, and
- determine the identity of and attack timing data for parasitoid insects attacking seed wasps.

The 2004 growing season saw poor cone crops in most natural stands across the province.

Addressing the second objective requires significant cone crops, and thus BCFS did no post-harvest parasitoid work in 2004/05. CFS and INRA staff continued post-harvest work on this objective in Ontario, the United States, and France.

Seed samples from 33 seed lots (11 natural stand and 22 orchard seed lots) collected in fall 2004 were shipped to the CFS Sault Ste. Marie lab in early 2005. Host species represented are: *Pseudotsuga menziesii*, *Abies amabilis*, *Larix occidentalis*, *Pinus monticola*, *Pinus ponderosa*, *Tsuga heterophylla*, and *Picea* sp. All seed lots were X-rayed during winter 2005 to determine the presence of insect larvae within seeds.

Currently, a proportion of infested seed from all seed lots are being stored at 2°C until spring 2005 when they will be put in an outdoor insectary and checked daily for adult seed chalcid or parasitoid emergence. Half or more of seeds from each infested sample have been shipped to INRA for genetic analysis of emerging specimens.

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