

Jack Pine Budworm

Choristoneura pinus Freeman

Lepidoptera: Tortricidae

Pendrel, B. A. 1985. Population distribution of Jack pine budworm--1984 described through pheromone trapping. Tech. Note 133. *Canadian Forest Service, Maritimes Forest Research Centre*; 4 p.

Objective: To determine if pheromone-baited traps are useful for monitoring *C. pinus* populations.

Abstract: The jack pine budworm is an important pest of jack pine, *Pinus banksiana* Lamb., and to a lesser extent red pine, *P. resinosa* Ait., in the Great Lakes region and Canada. Extensive top kill is common during outbreaks, but tree mortality is rare unless infestations coincide with periods of drought.

The pattern of capture of *C. pinus* moths using pheromone-baited traps during 1984 resembled closely the expected distribution in both New Brunswick and Nova Scotia. The range of numbers caught and distribution suggest this trapping system may be an excellent tool for monitoring *C. pinus* populations. This system can be used to indicate where *C. pinus* populations are likely increasing, thus serving as an indication that defoliation may occur the following year.

Sampling Procedure: Place Pherocon II, or the larger capacity Pherocon 1C (Zoecon Corp., Palto Alto, CA), sticky traps baited with pheromone lures in the area of interest. Pheromone lures (90% 85/15 E/Z11-14:AC and 10% 85/15 E/Z11-14:OH) in concentrations of 0.003, 0.03 or 0.3% in polyvinyl chloride (PVC) rods are suitable (Silk and others 1985). The author suggests that in its present state this system can be used to indicate where *C. pinus* populations are likely increasing, thus serving as an indication that defoliation may occur the following year.

Note: No information is provided regarding trap density or placement.

Reference:

Silk, P. J.; Kuenen, L. P. S.; Tan, S. H.; Roelofs, W. L.; Saunders, C. J.; Alford, A. R. 1985. Identification of sex pheromone components of the jack pine budworm, *Choristoneura pinus pinus* Freeman. *Journal of Chemical Ecology* 7: 159-167.