METHODOLOGY TO ORGANIZE OPERATIONAL LODGEPOLE PINE CONE HARVESTS BY USING OBSERVATIONS OF SEED SET DECLINES

Poor seed set in North Okanagan lodgepole pine (*Pinus contorta* var. *latifolia*) seed orchards has been an issue for a number of years. Results from numerous trials indicate that seed set levels are acceptable until early in August. After this point seed set declines rapidly. Each lodgepole pine clone experiences this sudden loss of seed at a different point in time. We relate this period to growing degree days.

In order to increase seed production, each clone must be harvested at the correct time. If the cones from a particular clone are harvested too early seed quality is poor. If the same clone is picked after its unique seed decline period has started seed production is poor.

We are working on developing a method to identify the best time to harvest each clone. We collect weekly cone samples from throughout the summer and x-ray the seed in order to identify the onset of sudden seed decline. Relating this information to degree days will allow us to schedule our cone harvest timing so that each clone is collected when seed yield and seed quality are at acceptable levels.

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