

LOGEPOLE PINE CROP STATISTICS FROM SELECTSEED LTD. ORCHARDS

SelectSeed Ltd. is wholly owned by the Forest Genetics Council of BC, a government – industry cooperative. It's mandate is the production of genetically selected tree seed within a financial objective of long-term sustainable profit and a modest return on capital employed. Nine of the 14 seed orchards operated by SelectSeed under contract are lodgepole pine (Pli) (*Pinus contorta* var. *latifolia*) (about 29 of 35 thousand ramets). As a result, Pli seed production and sales are key to the SelectSeed's long-term business prospects.

The original seed production and cash-flow expectations used for SelectSeed's business plan were based on the small amount of information available in about 2000. More recent information clearly shows issues with low seed production (filled seeds per cone) from Pli orchards located in the north Okanagan valley of south-central British Columbia relative to orchards located near Prince George in central BC. Using seed production statistics from the nine SelectSeed orchards, comparisons are made between forecast and actual seed production statistics, with breakdowns for Pli derived from naturally occurring stands from seed planning units (SPU) located in southern BC vs. central BC, and between north Okanagan orchards vs. those located in slightly cooler environments just outside the Okanagan valley. A SPU is a geographic area where tree populations are genetically similar enough to allow seed transfer within the geographic and elevation boundaries of the SPU.

Overall seed production across the nine SelectSeed Pli orchards does not vary substantially from initial forecasts (Fig. 1). Orchards with selected trees from SPUs in central BC, however, have had poorer seed production than those from SPUs in southern BC. There is a confounding of SPU origin and orchard location that makes direct comparison difficult, but there is evidence that Pli populations from central BC SPUs, planted in orchard locations cooler than the Okanagan valley but not cool enough to be within naturally occurring lodgepole pine forests, are producing more seed than the same populations in north Okanagan orchard locations. Reduced seed production relative to potential is a significant financial concern to the company, even though actual production levels are close to initial forecasts.

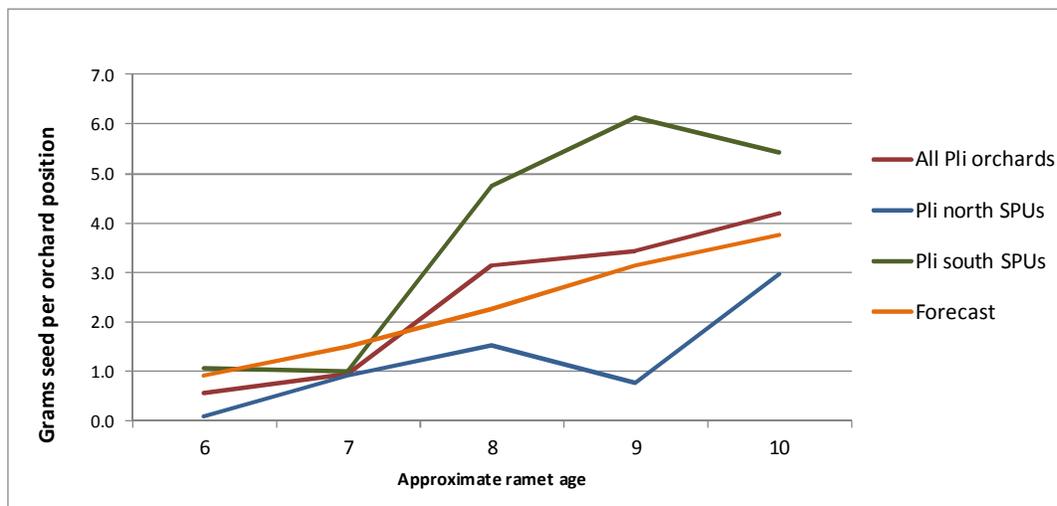


Figure 1. Age-adjusted grams of lodgepole pine seed produced per orchard position for selected trees from northern and southern seed planning units (SPU).

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