

SPU # 33 **Western Redcedar** **Maritime** **700 - 1500m**

Breeding and Orchard Production

Adjusted for new Parent Tree Area of use. Previously 600-1500m

Program category: First-generation **Seedling need (million): 0.4**

filename: 33 Cw M high July 12, 2015

STRATEGY Polycross testing of lower-elevation parents selected from wild stands in the Maritime zone. Upward elevation seed transfer limits will be estimated. Methods are being developed to minimize selfing in wildstand collections .

TRAITS **Primary: stem volume** **Secondary: wood quality and durability**

TESTING AND PRODUCTION **Crop production year (July 1 to June 30) -- (Cone harvest year shown)**

	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31	'32	'33	'34
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Parents in progeny test:

- Open pollin.
- Polycross
- Clonal
- F1
- F2
- F3

Production forecast (million plantables)

Orchards (#, owner)	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31	'32	'33	'34
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Progeny testing is integrated with low elevation Maritime zone testing. Results will determine seed zone elevation boundary. Seed orchard development is dependent on test results.

Vegetative prod.:

- Phase 1
- Phase 2
- Estimated gain in primary trait

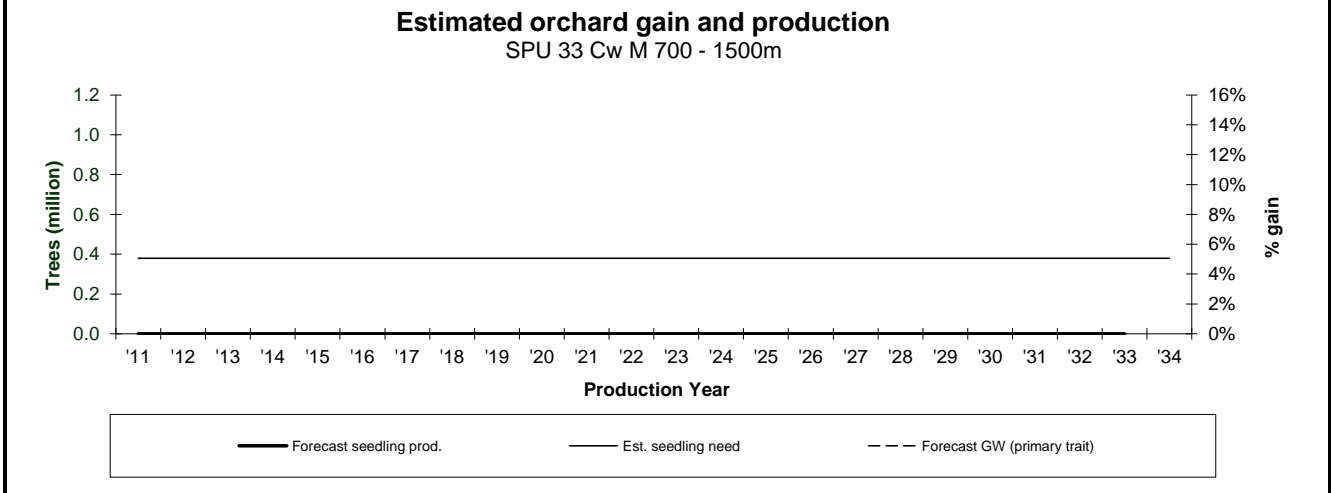
Orchards

Orchards	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31	'32	'33	'34

Vegetative prod.:

- Phase 1
- Phase 2

Total Production	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31	'32	'33	'34
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total gain	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%



Seed production estimates are subject to change. When using this information for silviculture planning or timber supply analysis, contact the Tree Improvement Branch of the Ministry of Forests Lands and Natural Resource Operations to confirm data. See SeedMap on www.for.gov.bc.ca/hti/seedmap for current inventory by Seed Planning Unit

GENETIC CONSERVATION STATUS

Conservation statistics

Seed planning unit (SPU) area	3,512,544	ha
Area protected within SPU	473,991	ha
Percentage of SPU area protected	13%	
Estimated genetic reserves with >5000 mature trees based on botanical sample data	>9	
Confirmed genetic reserves with >5000 mature trees based on forest inventory data	41	

Conservation status

Current in-situ protection status: **Very well protected**
 Probability of maintaining > 3 protected areas with adequate population size given natural disturbance regimes: **Very high**

For further information visit <http://www.genetics.forestry.ubc.ca/cfgc/>

ORCHARD STATUS

Orchard location	Orchard number	Number of parents	Mean BV	# of ramets currently established	# of ramets planned for final orchard size	Target Seed production kg/y at maturity	Total Seedling Prod. million seedlings
No seed orchards at this time							
				Total ramets	0	Total production	0.00

Vegetative propagation	Stecklings/Emblings	0.0
	Total production	0.0

Seed and Nursery Factors

Estimate of Required Orchard Capacity

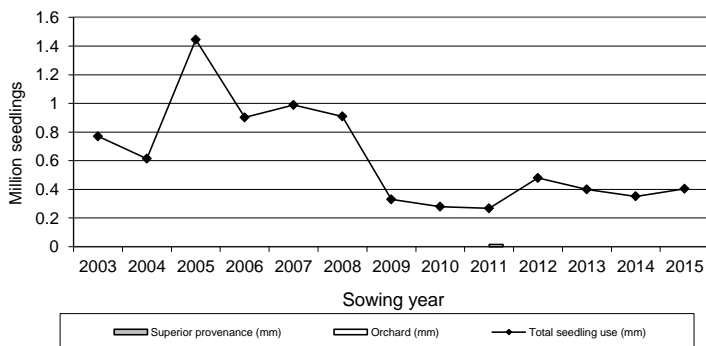
Expected annual average seedling production per ramet = 10,000	Annual planting (million seedlings)	0.4
Seed weight (seeds/gram) = 766	Planned over-production factor	1.3
Seedling recovery factor (seedlings/seed) = 0.33	Ramets required	38
Seedling recovery factor (seeds/seedling) = 3.03	Ramets required with over-capacity	49
	Projected necessary expansion	49

SEEDLING USE AND SEED IN STORAGE

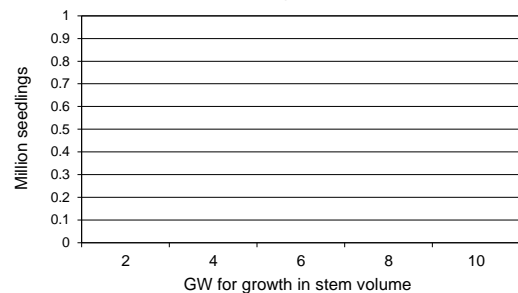
5-year average seedling requests to SPAR (2011 - 2015) **0.4 million**
Estimated years of class-A seed in storage **0.0 years**

Note: Class A seed shown here is from specific parental collections in low-elev. orchards

Seedling Use Trend - 2003 to 2015



Seed in Storage by GW class



Notes:

- Seed held in both "reserve" and "available" status in the Seed Planning and Registration (SPAR) system is included
- Seed inventories change with new orders. Data presented here are based on an June sample.
- For up-to-date information use SPAR, or contact the Tree Improvement Branch of the Ministry of Forests and Range

- Notes:**
- Seedling use data include 1/2 of adjacent overlap zones, where applicable
 - Sowing year: Aug 1 to July 31 (i.e. 2015 sowing year starts Aug 1, 2014)

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