

# Western Redcedar

## Multiple Trait Breeding Population (MTBP)

- Four subpopulations
  - volume; CLB; deer; heartwood;
  - 30 to 40 selections/subpopulation;
- Further testing to refine subpopulations for selection
  - F1 GH testing for monoterpenes (volume/CLB/deer)
  - Clonal field testing for growth/deer/CLB; early selection
  - Screening for Didy/Trunca (NB and in-vitro) (**David Noshad**)
  - Genomic selection for htwd extractives (**UPP GBC/GAPP GC**)



# Western Redcedar – Achievements 2019/20

## Breeding:

- Start of series C – 2<sup>nd</sup> generation families
- Updating Control crosses

## Maintenance/measurements

- Finished Px 7 measurements (7 sites)
- 4 deer trials – GAPP

## Analysis

- Px 6 – snow press analysis in support of CBST
- Px 6 – initial analysis for BV15

## CEDaR GC GAPP Genomics Project

- Phenotyped foliar chemistry for entire Target population (2,900 trees)
- Developed GS model and selected 120 trees



# Western Redcedar – Planned Activities

## FY 20/21 planned activities

### Maintenance/measurements

- Px (growth/CLB): Series 5 – two maritime sites (Holberg and Sandcut)
- Measure 2 second gen F1 family trials (series B) – 5 yr measurements
- Measure 4 second gen clonal trials (series Y) – 5 yr measurements

### Establishment

- 2 clonal trials – second part of last set of deer/clb/growth clonal trials – trials already fenced, planting to begin shortly

### CLB Inoculations/clonal screening

### CEDaR GC GAPP Genomics Project

- Continue refining GS model
- Detailed phenotyping for browse resistance



# Budget – SPU 2

Item	Growth	Forest Health
Breeding	16,000	15,500
2 <sup>nd</sup> gen – Series B measurements	10,000	-
2 <sup>nd</sup> gen – Series X measurements	12,500	12,500
1 <sup>st</sup> gen – Px 5 final measurements	20,000	20,000
Contribution to pathologist contract	-	47,500
GAPP phenotyping	-	20,000
Technical support (nursery workers at CLRS, technician)	70,750	70,750
Travel	8,000	2,000
Materials and Supplies	5,000	5,000
<b>TOTAL</b>	<b>142,250</b>	<b>193,250</b>
	<b>335,500</b>	

# Yellow Cypress - Achievements

FY 19/20 main activities

- Measured 2 provenance trials for 20 year measurements (Jordan River High & Jordan River Low)
- Collected first seed crop from pilot orchard; seed testing being done by TSC



# Yellow Cypress – Planned Activities

- Measure 2-3 Yc Provenance trials (Adam, Eve, Misty)
- Induce Yc pilot orchard for additional round; perform more intensive pollen management
- Continue and improve irrigation structure in map 33, re-graft where needed
- OTIP hedge scale down



# Budget – SPU 11

Item	Growth	Forest Health
Measure 2 provenance trials – 21 years	25,000	-
Technical support (nursery workers at CLRS, technician)	16,000	-
Travel	2,000	-
Materials and Supplies	1,000	-
<b>TOTAL</b>	<b>44,000</b>	<b>-</b>

