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Supplementary table S2. Calendar days (CD) of 99, 50, and 1% seedling needle frost damage (NFD) for different genotypes (Gtype) and climate treatments. Duration of frost hardiness development averaged for climatic treatments.

Gtype	Origin	Ambient T+1 °C			Ambient T+4 °C			Ambient T+4 °C + CO ₂		
		CD 99%	CD 50%	CD 1%	CD 99%	CD 50%	CD 1%	CD 99%	CD 50%	CD 1%
		NFD	NFD	NFD	NFD	NFD	NFD	NFD	NFD	NFD
V455	F × S	234	262	275	248	266	278	245	265	277
V456	F × S	245	265	278	248	266	278	252	268	280
V447	F × G1	245	265	277	250	268	279	254	270	281
V448	F × G1	248	266	278	250	267	279	246	266	278
V449	F × G1	249	267	279	251	268	280	246	266	278
V49	F × G2	251	268	280	255	271	282	256	271	282
V302	F × G2	244	265	277	257	272	283	257	272	282
V381	F × G3	245	265	277	245	265	277	257	272	282
V382	F × G3	253	269	280	254	270	281	252	269	280
V383	F × G3	248	267	279	249	267	279	249	267	279
V469	F × L	248	267	279	253	269	281	258	273	283
V470	F × L	245	265	278	253	269	280	251	268	280
V325	R	241	264	276	248	266	278	251	268	280
V327	R	244	265	277	250	267	279	251	268	280

Gtype	Origin	Ambient T+1 °C			Ambient T+4 °C			Ambient T+4 °C + CO ₂		
		CD 99%	CD 50%	CD 1%	CD 99%	CD 50%	CD 1%	CD 99%	CD 50%	CD 1%
		NFD	NFD	NFD	NFD	NFD	NFD	NFD	NFD	NFD
V386	F × E	246	265	278	254	270	281	253	269	280
V388	F × E	246	266	278	250	268	279	253	269	280
V389	F × E	247	266	278	256	271	282	256	271	282
V47	F	246	265	278	252	269	280	255	271	282
V332	F	247	266	278	243	264	277	250	268	279
V43	F	246	265	278	237	262	275	258	272	283
V48	F	249	267	279	237	262	276	243	264	277
V465	F	243	264	277	255	270	281	258	273	283
All genotypes		246	266	278	251	268	279	253	269	280
Duration, CD		32			28			27		

Note: Mother tree origins – Finland × Switzerland (F × S), Finland × Germany (F × G), Finland × Latvia (F × L), Finland × Estonia (F × E), Russia (R) and Finland (F). Numbers 1, 2, and 3 for F × G indicate different crosses for mother trees. Ambient T+1 °C – 1 °C above ambient and ambient CO₂, Ambient T+4 °C – 4 °C above ambient and ambient CO₂, Ambient T+4 °C + CO₂ – 4 °C above ambient and elevated CO₂.