

Levkoev E., Mehtätalo L., Luostarinen K., Pulkkinen P., Zhigunov A., Peltola H. (2018). Development of height growth and frost hardiness for one-year-old Norway spruce seedlings in greenhouse conditions in response to elevated temperature and atmospheric CO<sub>2</sub> concentration. *Silva Fennica* vol. 52 no. 3 article id 9980. <https://doi.org/10.14214/sf.9980>

**Supplementary table S1.** Random effects for final mean height (*asym*), mean height at start of height measurement (*hmin*), day (*xmid*) half mean height was reached (*asym-hmin*) in by-climate-treatment height development model (Eq. 2).

Treatment	Random part						
	Variance				Correlations		
	<i>asym</i>	<i>hmin</i>	<i>xmid</i>	$\varepsilon_{ijt}$	<i>asym-hmin</i>	<i>asym-xmid</i>	<i>hmin-xmid</i>
Ambient T+1 °C	Box level						
	4.80 <sup>2</sup>	1.29 <sup>2</sup>	1.38 <sup>2</sup>	—	-0.773	-0.672	0.988
	Seedling level						
	23.36 <sup>2</sup>	4.25 <sup>2</sup>	3.42 <sup>2</sup>	3.07 <sup>2</sup>	0.429	0.205	0.102
Ambient T+4 °C	Box level						
	7.59 <sup>2</sup>	0.51 <sup>2</sup>	0.98 <sup>2</sup>	—	0.490	-0.079	0.827
	Seedling level						
	38.38 <sup>2</sup>	5.09 <sup>2</sup>	3.69 <sup>2</sup>	4.47 <sup>2</sup>	0.706	-0.047	-0.119
Ambient T+4 °C + CO <sub>2</sub>	Box level						
	4.32 <sup>2</sup>	0.00 <sup>2</sup>	2.38 <sup>2</sup>	—	0.989	0.991	0.998
	Seedling level						
	40.98 <sup>2</sup>	5.29 <sup>2</sup>	3.25 <sup>2</sup>	4.26 <sup>2</sup>	0.605	0.16	-0.107

**Note:** Ambient T+1 °C – 1 °C above ambient and ambient CO<sub>2</sub>, Ambient T+4 °C – 4 °C above ambient and ambient CO<sub>2</sub>, Ambient T+4 °C + CO<sub>2</sub> – 4 °C temperature elevation above ambient and elevated CO<sub>2</sub>.