

Jin X., Pukkala T., Li F., Dong L. (2019). Developing growth models for tree plantations using inadequate data – a case for Korean pine in Northeast China. Silva Fennica vol. 53 no. 4 article 10217. <https://doi.org/10.14214/sf.10217>

Supplementary file S1. Fitting statistics for the tested dominant height models

Model	Formula	Comment	MSE
McDill-Amateis	$H_2 = \frac{b_0}{1 - \left(1 - \frac{b_0}{H_1}\right) \times \left(\frac{T_1}{T_2}\right)^{b_1}}$	Not perfectly logical	1.190
Schumacher 1	$H_2 = \exp \left[\ln(H_1) + b_0 \left(\frac{1}{T_1^{b_1}} - \frac{1}{T_2^{b_1}} \right) \right]$		1.249
Schumacher 2	$H_2 = \exp \left[b_0 - \frac{b_1}{T_2} + \left(\ln(H_1) - b_0 + \frac{b_1}{T_1} \right) \left(b_2 - \frac{1}{T_2} \right) \left(b_2 - \frac{1}{T_1} \right) \right]$		1.303
Lundqvist-Korf	$H_2 = b_0 \times \left(\frac{H_1}{b_0} \right)^{\left(\frac{T_1}{T_2} \right)^{b_1}}$		1.219
Chapman-Richards 1	$H_2 = b_0 \times \left\{ 1 - \left[1 - \left(\frac{H_1}{b_0} \right)^{1-b_1} \right]^{\frac{T_2}{T_1}} \right\}^{\frac{1}{1-b_1}}$		1.254
Chapman-Richards 2	$H_2 = H_1 \times \left(\frac{1 - e^{-b_0 T_2}}{1 - e^{-b_0 T_1}} \right)^{\frac{1}{1-b_1}}$	No sensible model obtained	-
Chapman-Richards 3	$H_2 = b_0 \left(\frac{H_1}{b_0} \right)^{\left(\frac{\ln(1 - \exp(-b_1 T_2))}{\ln(1 - \exp(-b_1 T_1))} \right)}$	No sensible model obtained	-
Sloboda	$H_2 = b_0 \left(\frac{H_1}{b_0} \right)^{\exp \left(\frac{b_1}{(b_2-1)T_2^{(b_2-1)}} - \frac{b_1}{(b_2-1)T_1^{(b_2-1)}} \right)}$	No sensible model obtained	-
Hossfeld	$H_2 = \frac{T_2^2}{b_0 + T_2 \left(\frac{T_1}{H_1} - b_1 T_1 - \frac{b_0}{T_1} - b_1 T_2 \right)}$		1.241

MSE = mean of squared errors