CORRECTION

Correction: Fitting and Calibrating a Multilevel Mixed-Effects Stem Taper Model for Maritime Pine in NW Spain

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In Table 4, the value for $\delta$ in the “MM3 ($a_1$, $b_3$)” column is incorrect. Please see the corrected Table 4 here.

The value for “delta” in the S1 Appendix is incorrect. Please view the correct S1 Appendix below.

Table 4. Parameter estimates of the fixed-effects model (fitted by OLS, FMOLS) and the recommended mixed-effects model (expanding $a_1$ and $b_3$ with random effects, MM3), fitted using the whole data set.

| Parameter | FMOLS   | MM3 ($a_1$, $b_3$) |
|-----------|---------|---------------------|
| $a_0$     | 0.9891  | 1.050               |
| $a_1$     | 0.9633  | 0.9427              |
| $a_2$     | 0.04585 | 0.04734             |
| $b_1$     | 0.3672  | 0.3619              |
| $b_2$     | -0.3350 | -0.6907             |
| $b_3$     | 0.5192  | 0.5847              |
| $b_4$     | 0.8471  | 1.126               |
| $b_5$     | 0.01777 | 0.02271             |
| $b_6$     | -0.02647| -0.05812            |
| $\sigma^2_{\epsilon_1}$ | $\sigma^2_i$ | 1.263 $10^{-5}$ |
| $\sigma^2_{a_1}$ | 8.273 $10^{-4}$ |                      |
| $\sigma^2_{a_1,b_3}$ | -1.104 $10^{-5}$ |                      |
| $\sigma^2_{b_3}$ | 1.205 $10^{-4}$ |                      |
| $\sigma^2_{a_1,b_3}$ | 3.095 $10^{-3}$ |                      |
| $\sigma^2_{b_3}$ | 3.847 $10^{-5}$ |                      |
| $\sigma^2$ | 1.555 | 6.117 $10^{-3}$ |
| $\delta$ | 1.481 |                      |

$\sigma^2_{a_1}$, $\sigma^2_{b_3}$, $\sigma^2_{a_1,b_3}$, variances and covariance of random effects in parameters $a_1$ and $b_3$ at plot level; $\sigma^2_{a_1}$, $\sigma^2_{b_3}$, $\sigma^2_{a_1,b_3}$, variances and covariance of random effects in parameters $a_1$ and $b_3$ at tree level; $\sigma^2$, residual variance; $\delta$ parameter of power function. Note that the $\sigma^2$ of the mixed-effects model must be multiplied by $g = \delta^2$ when applied (variance obtained from ordinary residuals is 0.6866).
Supporting Information

S1 Appendix. R implementation of the calibration procedure for a multilevel mixed-effects model based on stem taper function of Kozak (2004).

(ZIP)

Reference

1. Arias-Rodil M, Castedo-Dorado F, Cámara-Obregón A, Diéguez-Aranda U (2015) Fitting and Calibrating a Multilevel Mixed-Effects Stem Taper Model for Maritime Pine in NW Spain. PLoS ONE 10(12): e0143521. doi: 10.1371/journal.pone.0143521 PMID: 26630156