

Table S1. GADA base models selected for modeling the dominant height growth of clonal teak plantations in Eastern Amazon, Brazil.

Base model	Parameters related to the target variable X	Initial solution for X with Y_0 and t_0	Dynamic equation
Lundqvist-Korf $Y = A \exp(-B t^{-c})$	$A = \exp^{(X)}$ $B = b_1 + \frac{b_2}{X}$	$X_0 = \frac{1}{2} t_0^{-b_3} \left[b_1 + t_0^{b_3} \text{Ln}(Y_0) \pm \sqrt{4b_2 t_0^{b_3} + (-b_1 - t_0^{b_3} \text{Ln}(Y_0))^2} \right]$	$Y = \exp^{(X_0)} \exp \left[-\left(\frac{b_1 + b_2}{X_0} \right) t^{-b_3} \right]$
Cieszewski $Y = \frac{B t^c}{t^c + A}$	$A = B + X$ $B = \frac{A}{X}$	$X_0 = h_0 - b_1 + \sqrt{(h_0 - b_1)^2 + 2 h_0 \exp \left(\frac{b_1}{t_0^{b_3}} \right)}$	$Y = Y_0 \left[\frac{t^{b_3} (t_0^{b_3} X_0 \exp^{(b_2)})}{t_0^{b_3} (t^{b_3} X_0 \exp^{(b_2)})} \right]$
Shumacher $Y = \exp^{(A + B t^{-1})}$	$A = X$ $B = b_1 X$	$X_0 = \frac{\text{Ln } Y_0}{\left(\frac{t_0 + b_1}{t_0} \right)}$	$Y = \exp^{[X_0 + X_0 \left(\frac{b_1}{t} \right)]}$

Y and Y_0 : variables at age t and t_0 , respectively; t and t_0 : age of stands (months); X : unobservable and unquantifiable theoretical variable; X_0 : initial solution for A , B and C : parameters of the base model; b_1 , b_2 , and b_3 : global parameters of the dynamic equations. Source: Cieszewski (2001); Cieszewski & Strub (2008); Tewari *et al.* (2014).