

Table S1. Linear and nonlinear regression models adopted in displaying the trends of height of plants, SPAD values and vertical growth rates over time.

	Model	Formula	Parameter definition
Eq.	Height vs Time		
1.1	Sigmoidal function	$Y = Y_{\text{asym}} / \{1 + \exp[-(t - t_0)/b]\}$	Y is the response variable (e.g., height), t is the explanatory variable (e.g., time), Y_{asym} is the asymptotic Y value, t_0 is the inflection point of the curve, b controls the steepness and the shape of the curve
	SPAD vs Time		
1.2	Linear function	$Y = a + bt$	Y is the response variable (e.g., SPAD value), t is the explanatory variable (e.g., time), a is the intercept at the origin of y axis, b is the angular coefficient
	GR vs Time		
1.3	Gaussian function	$Y = Y_{\text{asym}} \exp\{-0,5[(t - t_0)/b]^2\}$	Y is the response variable (e.g., GR), t is the explanatory variable (e.g., time), Y_{asym} is the asymptotic maximum Y value, t_0 is the inflection point at which the growth rate is maximized a (default = 0.5 for the Gaussian function), b, c and k are coefficients controlling the height and the width of the skew of the “bell”

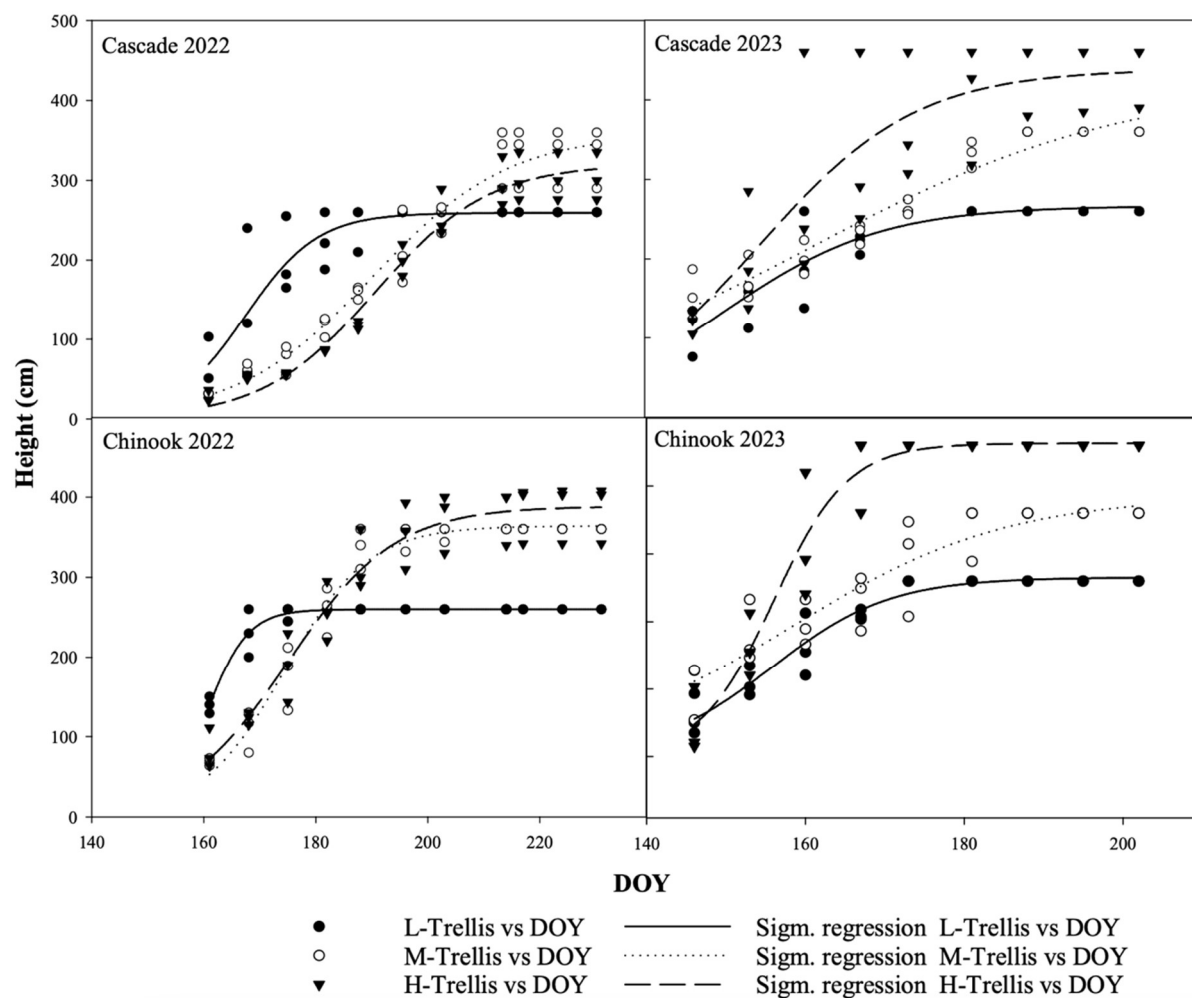


Figure S1. Scatter plots of plant height (cm) against DOY and regression curves for 'Cascade' and 'Chinook' varieties, tested in trellis at low (L), medium (M) and high (H) height in 2022 and 2023.

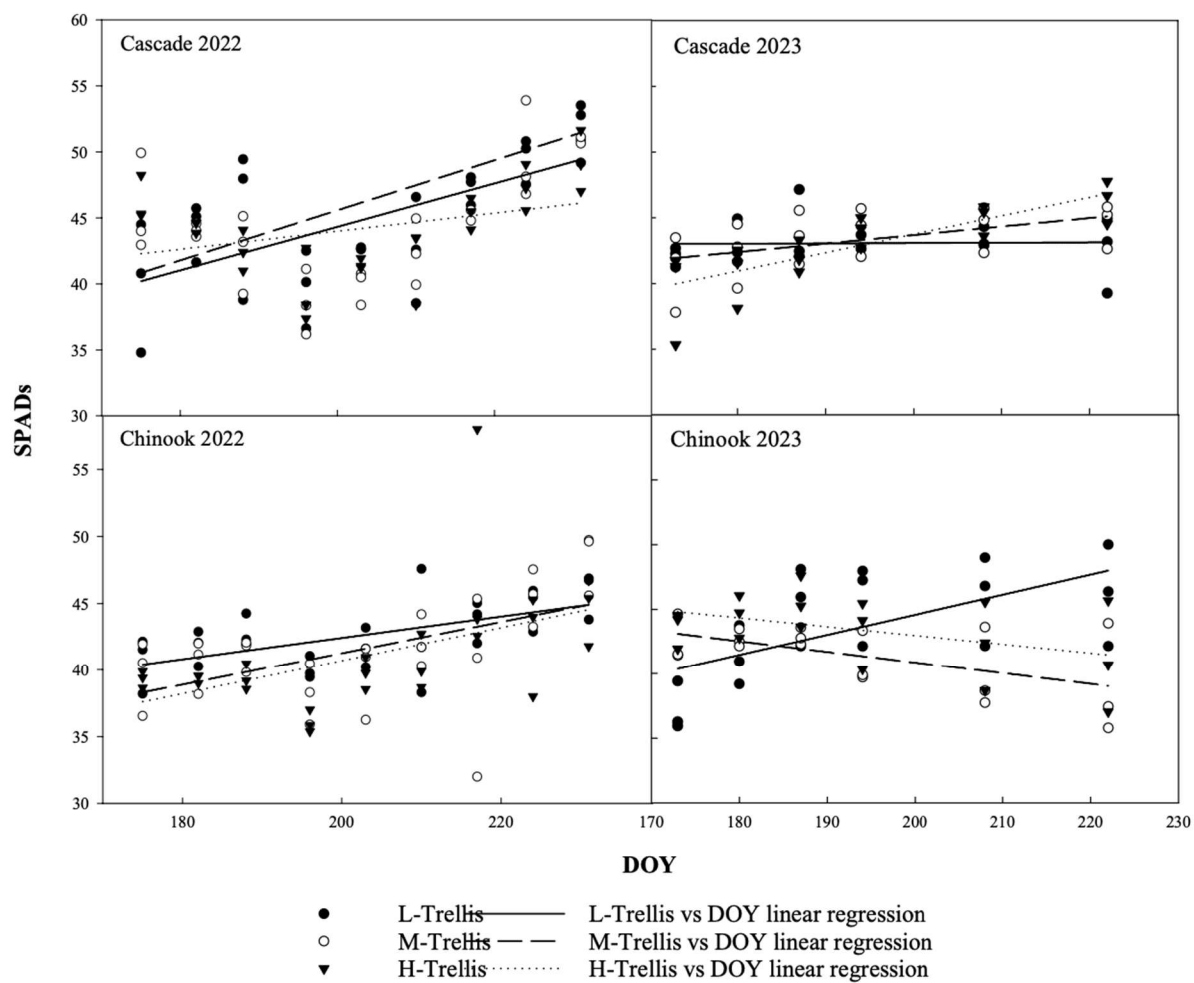


Figure S2. Scatter plots of SPAD values against DOY and regression lines for ‘Cascade’ and ‘Chinook’ varieties, tested in trellis at low (L), medium (M) and high (H) height in 2022 and 2023.

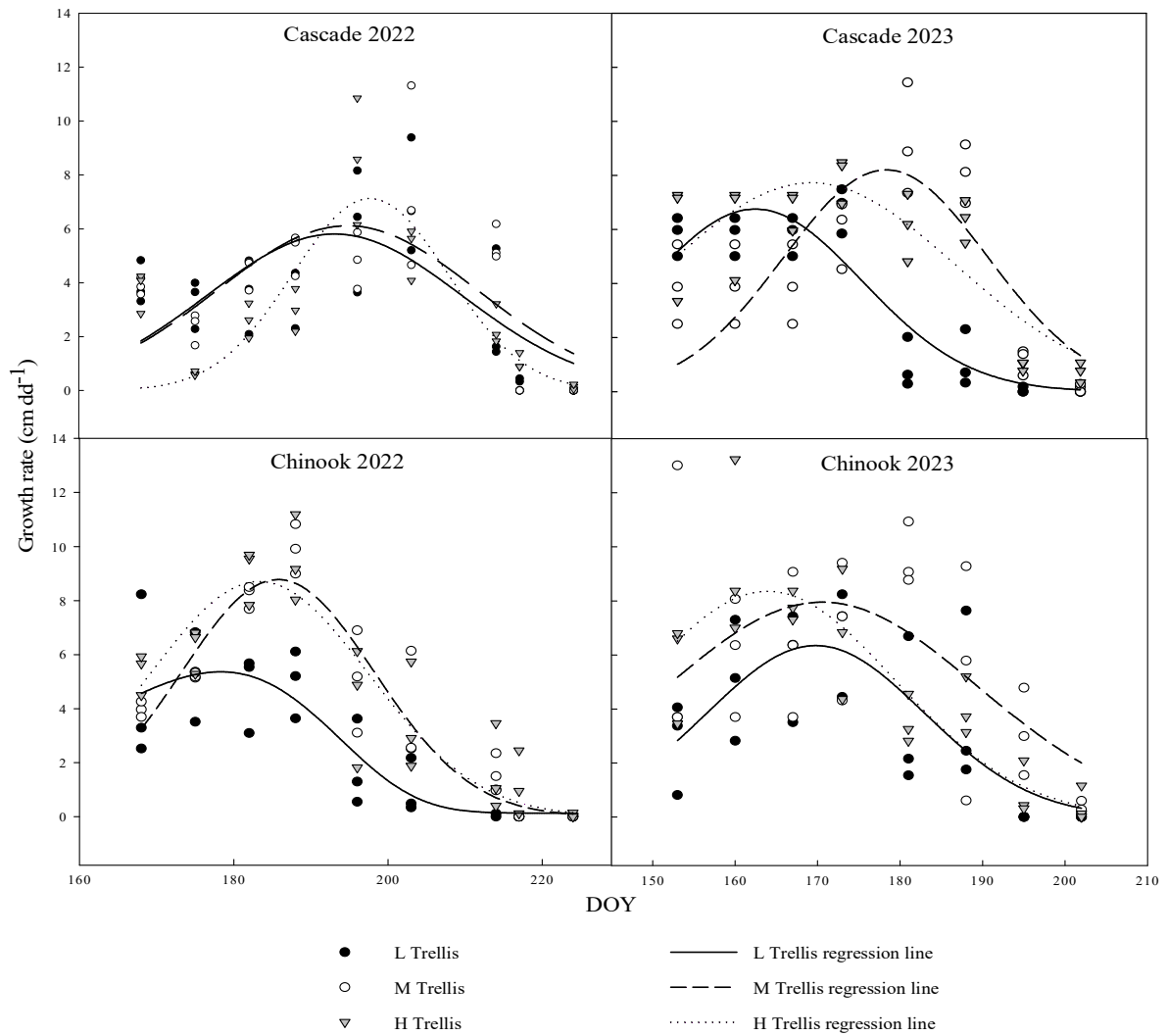


Figure S3. Scatter plots of plant growth rates (cm dd⁻¹) against DOY and regression curves for 'Cascade' and 'Chinook' varieties, tested in trellis at low (L), medium (M) and high (H) height in 2022 and 2023.