

Table S1

Allometric equations tested for 147 and 97 *Laurus azorica* (Seub.) Franco trees sampled respectively at breast height (BH) and at base in São Miguel Island.
 Allometric models: * [54]; ** [2]; *** Current study. Regression model equations; Null Model (M_0); Adjusted determination coefficient (Adj R²); Akaike Information Criterion (AIC); Root Mean Square Error (RMSE); Mean Relative Error (MRE), Correction Factor (CF). Diameter (D); Tree Height (H); Basal Area (BA).

Model	Regression Model	Adj R ²		AIC		RMSE		MRE		CF##	
		BH	Base	BH	Base	BH	Base	BH	Base	BH	Base
1	$\ln(Age) = a + b_1 \ln(D) + \varepsilon^*$	0.34	0.36	118.60	74.47	10.01	11.60	-0.07	-0.06	1.07	1.06
2	$\ln(Age) = a + b_1 \ln(D) + b_2 \ln(H) + \varepsilon^{***}$	0.38	0.41	110.29	67.46	10.05	11.70	-0.06	-0.06	1.06	1.06
3	$\ln(Age) = a + b_1 \ln(D^2) + \varepsilon^{**}$	0.34	0.36	118.60	74.47	10.01	11.60	-0.07	-0.06	1.07	1.06
4	$\ln(Age) = a + b_1 \ln(D^2 H) + \varepsilon^{**}$	0.24	0.25	137.61	88.92	10.38	11.99	-0.07	-0.07	1.07	1.07
5	$\ln(Age) = a + b_1 \ln(D^2 H) + b_2 \ln(H) + \varepsilon^{**}$	0.38	0.41	110.29	67.46	10.05	11.70	-0.06	-0.06	1.06	1.06
6	$\ln(Age) = a + b_1 \ln(BA) + \varepsilon^{***}$	0.34	0.37	117.20	71.97	9.91	11.34	-0.07	-0.06	1.07	1.06
7	$\ln(Age) = a + b_1 \ln(BA) + b_2 \ln(H) + \varepsilon^{***}$	0.39	0.44	106.87	62.31	9.75	11.12	-0.06	-0.05	1.06	1.05
8	$\ln(Age) = a + b_1 \ln(BAH) + \varepsilon^{***}$	0.25	0.26	137.95	88.64	10.40	11.98	-0.08	-0.07	1.08	1.07
9	$\ln(Age) = a + b_1 \ln(BA^2 H^2) + \varepsilon^{***}$	0.24	0.26	106.88	62.31	10.40	11.97	-0.08	-0.07	1.08	1.07
10	$\ln(Age) = a + b_1 \ln(D^3) + \varepsilon^{**}$	0.34	0.36	118.60	74.47	10.01	11.59	-0.07	-0.06	1.06	1.06
11	$\ln(Age) = a + b_1 \ln(D^3) + b_2 \ln(H) + \varepsilon^{***}$	0.38	0.41	110.29	67.46	10.45	11.70	-0.06	-0.06	1.06	1.06
12	$\ln(Age) = a + b_1 \ln(D^2 BA) + \varepsilon^{**}$	0.34	0.36	117.38	74.47	9.92	11.58	-0.07	-0.06	1.07	1.06
M_0		178.18		116.37							

Note: All equations included significant regression coefficients (p<0.05). All equations before application of Correction Factor. ##Correction factor to remove the bias of regression estimates for logarithmic transformed data.

11 **Table S2**

12 Allometric equations tested for 25 *Laurus azorica* (Seub.) Franco trees (ALL) and for 19 samples (without outliers, WO) of *Laurus azorica* trees from Lombadas, São
 13 Miguel Island. Allometric models: *[54]; **[2]; ***Current study. Regression model equations; Null Model (M_0); Adjusted determination coefficient (Adj R²); Akaike
 14 Information Criterion (AIC); Root Mean Square Error (RMSE); Mean Relative Error (MRE), Correction Factor (CF). Diameter (D); Tree Height (H); Basal Area (BA).

Model	Regression Model	Adj R ²		AIC		RMSE		MRE		CF##	
		ALL	WO	ALL	WO	ALL	WO	ALL	WO	ALL	WO
1	$\ln(\text{Age}) = a + b_1 \ln(D) + \varepsilon^*$	0.22	0.61	21.26	-11.26	8.31	4.41	-0.06	-0.01	1.06	1.01
2 #	$\ln(\text{Age}) = a + b_1 \ln(D) + b_2 \ln(H) + \varepsilon^{***}$	0.20	0.59	22.86	-9.57	8.31	4.39	-0.06	-0.01	1.06	1.01
3	$\ln(\text{Age}) = a + b_1 \ln(D^2) + \varepsilon^{**}$	0.22	0.61	21.26	-11.26	8.31	4.41	-0.06	-0.01	1.06	1.01
4	$\ln(\text{Age}) = a + b_1 \ln(D^2 H) + \varepsilon^{**}$	0.17	0.56	22.84	-9.06	8.53	4.75	-0.07	-0.01	1.07	1.01
5 #	$\ln(\text{Age}) = a + b_1 \ln(D^2 H) + b_2 \ln(H) + \varepsilon^{**}$	0.20	0.59	22.86	-9.57	-0.06	4.39	-0.06	-0.01	1.06	1.01
6	$\ln(\text{Age}) = a + b_1 \ln(BA) + \varepsilon^{***}$	0.22	0.61	21.26	-11.27	8.31	4.41	-0.06	-0.01	1.06	1.01
7 #	$\ln(\text{Age}) = a + b_1 \ln(BA) + b_2 \ln(H) + \varepsilon^{***}$	0.20	0.59	22.86	-9.57	8.23	4.39	-0.06	-0.01	1.06	1.01
8	$\ln(\text{Age}) = a + b_1 \ln(BAH) + \varepsilon^{***}$	0.17	0.56	22.84	-9.06	8.53	4.75	-0.07	-0.01	1.06	1.01
9	$\ln(\text{Age}) = a + b_1 \ln(BA^2 H^2) + \varepsilon^{***}$	0.17	0.56	22.84	-9.06	8.53	4.75	-0.07	-0.01	1.06	1.01
10	$\ln(\text{Age}) = a + b_1 \ln(D^3) + \varepsilon^{**}$	0.22	0.61	21.26	-11.26	8.31	4.41	-0.06	-0.01	1.06	1.01
11#	$\ln(\text{Age}) = a + b_1 \ln(D^3) + b_2 \ln(H) + \varepsilon^{***}$	0.20	0.59	22.86	-9.57	8.23	4.39	-0.06	-0.01	1.06	1.01
12	$\ln(\text{Age}) = a + b_1 \ln(D^2 BA) + \varepsilon^{**}$	0.22	0.61	21.26	-11.26	8.31	4.41	-0.06	-0.01	1.06	1.01
M ₀				26.56	5.69						

15 Note: All equations before application of Correction Factor. # Equations that included non-significant regression coefficients (P>0.05). ##Correction factor to remove
 16 the bias of regression estimates for logarithmic transformed data.

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20 **Table S3**

21 Allometric equations tested for 20 *Laurus azorica* (Seub.) Franco trees (ALL) and for 16 samples (without outliers, WO) of *Laurus azorica* trees from Achada das
 22 Furnas, São Miguel Island. Allometric models: *[54]; **[2]; ***Current study. Regression model equations; Null Model (M_0); Adjusted determination coefficient (Adj
 23 R^2); Akaike Information Criterion (AIC); Root Mean Square Error (RMSE); Mean Relative Error (MRE), Correction Factor (CF). Diameter (D); Tree Height (H); Basal
 24 Area (BA).

Model	Regression Model	Adj R ²		AIC		RMSE		MRE		CF##	WO	25
		ALL	WO	ALL	WO	ALL	WO	ALL	WO			26
1	$\ln(\text{Age}) = a + b_1 \ln(D) + \varepsilon^*$	0.44	0.62	7.05	-6.82	5.89	4.63	-0.03	-0.01	1.03	1.01	28
2#	$\ln(\text{Age}) = a + b_1 \ln(D) + b_2 \ln(H) + \varepsilon^{***}$	0.42	0.65	8.52	-7.27	5.72	4.27	-0.03	-0.01	1.03	1.01	29
3	$\ln(\text{Age}) = a + b_1 \ln(D^2) + \varepsilon^{**}$	0.44	0.62	7.05	-6.82	5.89	4.63	-0.03	-0.01	1.03	1.01	30
4	$\ln(\text{Age}) = a + b_1 \ln(D^2 H) + \varepsilon^{**}$	0.41	0.55	8.17	-4.27	6.19	5.07	-0.03	-0.02	1.03	1.02	31
5#	$\ln(\text{Age}) = a + b_1 \ln(D^2 H) + b_2 \ln(H) + \varepsilon^{**}$	0.42	0.65	8.52	-7.27	5.72	4.27	-0.03	-0.01	1.03	1.01	32
6	$\ln(\text{Age}) = a + b_1 \ln(BA) + \varepsilon^{***}$	0.44	0.62	7.05	-6.82	5.89	4.63	-0.03	-0.01	1.03	1.01	33
7#	$\ln(\text{Age}) = a + b_1 \ln(BA) + b_2 \ln(H) + \varepsilon^{***}$	0.42	0.65	8.52	-7.27	5.72	4.27	-0.03	-0.01	1.03	1.01	34
8	$\ln(\text{Age}) = a + b_1 \ln(BAH) + \varepsilon^{***}$	0.41	0.55	8.17	-4.27	6.19	5.07	-0.03	-0.01	1.03	1.01	35
9	$\ln(\text{Age}) = a + b_1 \ln(BA^2 H^2) + \varepsilon^{***}$	0.40	0.55	8.17	-4.27	6.19	5.07	-0.03	-0.01	1.03	1.01	36
10	$\ln(\text{Age}) = a + b_1 \ln(D^3) + \varepsilon^{**}$	0.44	0.62	7.05	-6.82	5.89	4.63	-0.03	-0.01	1.03	1.01	38
11#	$\ln(\text{Age}) = a + b_1 \ln(D^3) + b_2 \ln(H) + \varepsilon^{***}$	0.42	0.65	8.52	-7.27	5.72	4.27	-0.03	-0.01	1.03	1.01	39
12	$\ln(\text{Age}) = a + b_1 \ln(D^2 BA) + \varepsilon^{**}$	0.44	0.62	7.05	-6.82	5.89	4.63	-0.03	-0.01	1.03	1.01	40
M ₀				17.62	7.62							41

42 Note: All equations before application of Correction Factor. # Equations that included non-significant regression coefficients (P>0.05). ##Correction factor to remove
 43 the bias of regression estimates for logarithmic transformed data.

44 **Table S4**

45 Allometric equations tested for 49 *Laurus azorica* (Seub.) Franco trees from Pinhal da Paz, São Miguel
 46 Island. Allometric models: *[54]; **[2]; ***Current study. Regression model equations; Null Model
 47 (M_0); Adjusted determination coefficient (Adj R²); Akaike Information Criterion (AIC); Root Mean
 48 Square Error (RMSE); Mean Relative Error (MRE), Correction Factor (CF). Diameter (D); Tree Height
 49 (H); Basal Area (BA).

Model	Regression Model	Adj R²	AIC	RMSE	MRE	CF##
1	$\ln(\text{Age}) = a + b_1 \ln(D) + \varepsilon^*$	0.86	-22.87	3.92	-0.02	1.02
2#	$\ln(\text{Age}) = a + b_1 \ln(D) + b_2 \ln(H) + \varepsilon^{***}$	0.86	-22.17	4.03	-0.02	1.02
3	$\ln(\text{Age}) = a + b_1 \ln(D^2) + \varepsilon^{**}$	0.86	-22.88	3.92	-0.02	1.02
4	$\ln(\text{Age}) = a + b_1 \ln(D^2 H) + \varepsilon^{**}$	0.80	-8.87	4.65	-0.02	1.02
5	$\ln(\text{Age}) = a + b_1 \ln(D^2 H) + b_2 \ln(H) + \varepsilon^{**}$	0.86	-22.17	4.03	-0.02	1.02
6	$\ln(\text{Age}) = a + b_1 \ln(BA) + \varepsilon^{***}$	0.85	-21.18	4.09	-0.02	1.02
7#	$\ln(\text{Age}) = a + b_1 \ln(BA) + b_2 \ln(H) + \varepsilon^{***}$	0.86	-22.42	3.72	-0.02	1.02
8	$\ln(\text{Age}) = a + b_1 \ln(BAH) + \varepsilon^{***}$	0.79	-4.30	5.56	-0.03	1.03
9	$\ln(\text{Age}) = a + b_1 \ln(BA^2 H^2) + \varepsilon^{***}$	0.79	-4.30	5.56	-0.03	1.03
10	$\ln(\text{Age}) = a + b_1 \ln(D^3) + \varepsilon^{**}$	0.86	-22.88	3.92	-0.02	1.02
11#	$\ln(\text{Age}) = a + b_1 \ln(D^3) + b_2 \ln(H) + \varepsilon^{***}$	0.86	-22.17	4.03	-0.02	1.02
12	$\ln(\text{Age}) = a + b_1 \ln(D^2 BA) + \varepsilon^{**}$	0.86	-24.02	3.59	-0.02	1.02
M ₀			71.01			

50 Note: All equations before application of Correction Factor. # Equations that included
 51 non-significant regression coefficients (P>0.05). ##Correction factor to remove the bias of regression
 52 estimates for logarithmic transformed data.

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65 **Table S5**

66 Allometric equations tested for 49 *Laurus azorica* (Seub.) Franco trees from Sete Cidades, São Miguel
 67 Island. Allometric models: *[54]; **[2]; ***Current study. Regression model equations; Null Model
 68 (M_0); Adjusted determination coefficient (Adj R²); Akaike Information Criterion (AIC); Root Mean
 69 Square Error (RMSE); Mean Relative Error (MRE), Correction Factor (CF). Diameter (D); Tree height
 70 (H); Basal area (BA).

Model	Regression Model	Adj R²	AIC	RMSE	MRE	CF##
1	$\ln(Age) = a + b_1 \ln(D) + \varepsilon^*$	0.07	5.58	9.02	-0.03	1.03
2	$\ln(Age) = a + b_1 \ln(D) + b_2 \ln(H) + \varepsilon^{***}$	0.13	1.76	8.60	-0.03	1.03
3	$\ln(Age) = a + b_1 \ln(D^2) + \varepsilon^{**}$	0.07	4.58	9.02	-0.03	1.03
4#	$\ln(Age) = a + b_1 \ln(D^2H) + \varepsilon^{**}$	0.01	8.26	9.28	-0.03	1.03
5	$\ln(Age) = a + b_1 \ln(D^2H) + b_2 \ln(H) + \varepsilon^{**}$	0.13	1.76	8.60	-0.03	1.03
6	$\ln(Age) = a + b_1 \ln(BA) + \varepsilon^{***}$	0.10	3.00	8.86	-0.03	1.03
7#	$\ln(Age) = a + b_1 \ln(BA) + b_2 \ln(H) + \varepsilon^{***}$	0.15	0.94	8.52	-0.02	1.02
8#	$\ln(Age) = a + b_1 \ln(BAH) + \varepsilon^{***}$	-0.01	8.42	9.29	-0.03	1.03
9#	$\ln(Age) = a + b_1 \ln(BA^2H^2) + \varepsilon^{***}$	-0.01	8.42	9.29	-0.03	1.03
10	$\ln(Age) = a + b_1 \ln(D^3) + \varepsilon^{**}$	0.07	4.58	9.02	-0.03	1.03
11	$\ln(Age) = a + b_1 \ln(D^3) + b_2 \ln(H) + \varepsilon^{***}$	0.13	1.76	8.60	-0.03	1.03
12	$\ln(Age) = a + b_1 \ln(D^2BA) + \varepsilon^{**}$	0.08	3.82	8.94	-0.03	1.03
M_0			6.90			

71 Note: All equations before application of Correction Factor. # Equations that included
 72 non-significant regression coefficients (P>0.05). ##Correction factor to remove the bias of regression
 73 estimates for logarithmic transformed data.

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84 **Table S6**

85 Allometric equations tested for 48 *Laurus azorica* (Seub.) Franco trees (ALL) and for 33 samples (without outliers, WO) of *Laurus azorica* trees from Tronqueira, São
 86 Miguel Island. Allometric models: * [54]; ** [2]; *** Current study. Regression model equations; Null Model (M_0); Adjusted determination coefficient (Adj R²); Akaike
 87 Information Criterion (AIC); Root Mean Square Error (RMSE); Mean Relative Error (MRE), Correction Factor (CF). Diameter (D); Tree Height (H); Basal Area (BA).
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Model	Regression Model	Adj R ²		AIC		RMSE		MRE		CF##	
		ALL	WO	ALL	WO	ALL	WO	ALL	WO	ALL	WO
1	$\ln(\text{Age}) = a + b_1 \ln(D) + \varepsilon^*$	0.45	0.66	-32.72	-69.53	6.13	3.12	-0.01	-0.003	1.01	1.003
2#	$\ln(\text{Age}) = a + b_1 \ln(D) + b_2 \ln(H) + \varepsilon^{***}$	0.45	0.65	-32.72	-67.55	6.04	3.11	-0.01	-0.003	1.01	1.003
3	$\ln(\text{Age}) = a + b_1 \ln(D^2) + \varepsilon^{**}$	0.45	0.66	-32.72	-69.53	6.13	3.12	-0.01	-0.002	1.01	1.002
4	$\ln(\text{Age}) = a + b_1 \ln(D^2 H) + \varepsilon^{**}$	0.34	0.56	-24.59	-61.39	6.63	3.45	-0.02	-0.004	1.02	1.004
5	$\ln(\text{Age}) = a + b_1 \ln(D^2 H) + b_2 \ln(H) + \varepsilon^{**}$	0.45	0.65	-32.44	-67.55	6.04	3.11	-0.01	-0.003	1.01	1.003
6	$\ln(\text{Age}) = a + b_1 \ln(BA) + \varepsilon^{***}$	0.45	0.66	-32.72	-69.53	6.13	3.12	-0.01	-0.003	1.01	1.003
7#	$\ln(\text{Age}) = a + b_1 \ln(BA) + b_2 \ln(H) + \varepsilon^{***}$	0.45	0.64	-32.44	-67.55	6.04	3.11	-0.01	-0.003	1.01	1.003
8	$\ln(\text{Age}) = a + b_1 \ln(BAH) + \varepsilon^{***}$	0.34	0.56	-24.59	-61.39	6.63	3.45	-0.02	-0.004	1.02	1.004
9	$\ln(\text{Age}) = a + b_1 \ln(BA^2 H^2) + \varepsilon^{***}$	0.34	0.56	-24.59	-61.39	6.63	3.45	-0.02	-0.004	1.02	1.004
10	$\ln(\text{Age}) = a + b_1 \ln(D^3) + \varepsilon^{**}$	0.45	0.66	-32.72	-69.53	6.13	3.12	-0.01	-0.003	1.01	1.003
11#	$\ln(\text{Age}) = a + b_1 \ln(D^3) + b_2 \ln(H) + \varepsilon^{***}$	0.45	0.65	-32.44	-67.55	6.04	3.11	-0.01	-0.003	1.01	1.003
12	$\ln(\text{Age}) = a + b_1 \ln(D^2 BA) + \varepsilon^{**}$	0.45	0.66	-32.72	-69.53	6.13	3.12	-0.01	-0.003	1.01	1.003
M ₀				-5.41	-34.95						105

106 Note: All equations before application of Correction Factor. # Equations that included non-significant regression coefficients (P>0.05). ## Correction factor to remove
 107 the bias of regression estimates for logarithmic transformed data.
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109 **Table S7**

110 Allometric equations tested for 47 *Laurus azorica* (Seub.) Franco trees from Povoação stand, São
 111 Miguel Island. Allometric models: *[54]; **[2]; ***Current study. . Regression model equations; Null
 112 Model (M_0); Adjusted determination coefficient (Adj R²); Akaike Information Criterion (AIC); Root
 113 Mean Square Error (RMSE); Mean Relative Error (MRE), Correction Factor (CF). Diameter (D); Tree
 114 Height (H); Basal Area (BA).

Model	Regression Model	Adj R ²	AIC	RMSE	MRE	CF##
1	$\ln(\text{Age}) = a + b_1 \ln(D) + \varepsilon^*$	0.37	20.11	11.20	-0.04	1.04
2#	$\ln(\text{Age}) = a + b_1 \ln(D) + b_2 \ln(H) + \varepsilon^{***}$	0.39	19.78	10.77	-0.04	1.04
3	$\ln(\text{Age}) = a + b_1 \ln(D^2) + \varepsilon^{**}$	0.37	20.11	11.20	-0.04	1.04
4	$\ln(\text{Age}) = a + b_1 \ln(D^2H) + \varepsilon^{**}$	0.40	17.78	10.77	-0.04	1.04
5#	$\ln(\text{Age}) = a + b_1 \ln(D^2H) + b_2 \ln(H) + \varepsilon^{**}$	0.39	19.78	10.77	-0.04	1.04
6	$\ln(\text{Age}) = a + b_1 \ln(BA) + \varepsilon^{***}$	0.37	20.11	11.20	-0.04	1.04
7#	$\ln(\text{Age}) = a + b_1 \ln(BA) + b_2 \ln(H) + \varepsilon^{***}$	0.39	19.78	10.77	-0.04	1.04
8	$\ln(\text{Age}) = a + b_1 \ln(BAH) + \varepsilon^{***}$	0.40	17.78	10.77	-0.04	1.04
9	$\ln(\text{Age}) = a + b_1 \ln(BA^2H^2) + \varepsilon^{***}$	0.40	17.78	10.77	-0.04	1.04
10	$\ln(\text{Age}) = a + b_1 \ln(D^3) + \varepsilon^{**}$	0.37	20.11	11.20	-0.04	1.04
11#	$\ln(\text{Age}) = a + b_1 \ln(D^3) + b_2 \ln(H) + \varepsilon^{***}$	0.39	19.78	10.77	-0.04	1.04
12	$\ln(\text{Age}) = a + b_1 \ln(D^2BA) + \varepsilon^{**}$	0.37	20.11	11.20	-0.04	1.04
M_0			40.76			

115 Note: All equations before application of Correction Factor. # Equations that included
 116 non-significant regression coefficients (P>0.05). ##Correction factor to remove the bias of regression
 117 estimates for logarithmic transformed data.

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