

**Table S1.** Correlation between the Alba-Péllico index and the variables *h*, *d*, *g*, *v*, and mortality, and test of homogeneity of the coefficients.

NW	Clone	<i>h</i>	<i>d</i>	<i>g</i>	<i>v</i>	M(%)	<i>Di</i>	<i>I</i> (2)	<i>I</i> (1)
1	A	-0.13 <sup>ns</sup>	-0.92 <sup>**</sup>	-0.92 <sup>**</sup>	-0.91 <sup>**</sup>	0.97 <sup>**</sup>	-0.75 <sup>**</sup>	0.85 <sup>**</sup>	-0.53 <sup>**</sup>
	F	-0.92 <sup>**</sup>	-0.90 <sup>**</sup>	-0.90 <sup>**</sup>	-0.90 <sup>**</sup>	0.96 <sup>**</sup>	-0.74 <sup>**</sup>	0.97 <sup>**</sup>	-0.78 <sup>**</sup>
Homogeneity of the correlation		47.46 <sup>**</sup>	0.46 <sup>ns</sup>	0.46 <sup>ns</sup>	0.19 <sup>ns</sup>	2.05 <sup>ns</sup>	2.05 <sup>ns</sup>	1.34 <sup>ns</sup>	7.56 <sup>**</sup>
2	D	-0.95 <sup>**</sup>	-0.86 <sup>**</sup>	-0.82 <sup>**</sup>	-0.84 <sup>**</sup>	0.94 <sup>**</sup>	-0.83 <sup>**</sup>	0.97 <sup>**</sup>	-0.72 <sup>**</sup>
	E	0.06 <sup>ns</sup>	-0.84 <sup>**</sup>	-0.83 <sup>**</sup>	-0.57 <sup>**</sup>	0.99 <sup>**</sup>	-0.80 <sup>**</sup>	0.93 <sup>**</sup>	-0.79 <sup>**</sup>
	F	-0.91 <sup>**</sup>	-0.90 <sup>**</sup>	-0.87 <sup>**</sup>	-0.89 <sup>**</sup>	0.99 <sup>**</sup>	-0.80 <sup>**</sup>	0.93 <sup>**</sup>	-0.70 <sup>**</sup>
Homogeneity of the correlation		46.50 <sup>**</sup>	0.86 <sup>ns</sup>	0.45 <sup>ns</sup>	0.799 <sup>ns</sup>	1.28 <sup>ns</sup>	0.12 <sup>ns</sup>	4.52 <sup>ns</sup>	0.50 <sup>ns</sup>
3	C	-0.84 <sup>**</sup>	-0.88 <sup>**</sup>	-0.85 <sup>**</sup>	-0.86 <sup>**</sup>	0.97 <sup>**</sup>	-0.77 <sup>**</sup>	0.92 <sup>**</sup>	-0.65 <sup>**</sup>
	E	-0.38 <sup>ns</sup>	-0.90 <sup>**</sup>	-0.86 <sup>**</sup>	-0.78 <sup>**</sup>	0.99 <sup>**</sup>	-0.82 <sup>**</sup>	0.99 <sup>**</sup>	-0.71 <sup>**</sup>
	G	-0.68 <sup>**</sup>	-0.74 <sup>**</sup>	-0.68 <sup>**</sup>	-0.60 <sup>**</sup>	0.98 <sup>**</sup>	-0.85 <sup>**</sup>	0.88 <sup>**</sup>	-0.59 <sup>ns</sup>
	I	-0.90 <sup>**</sup>	-0.92 <sup>**</sup>	-0.88 <sup>**</sup>	-0.90 <sup>**</sup>	0.99 <sup>**</sup>	-0.84 <sup>**</sup>	0.99 <sup>**</sup>	-0.82 <sup>**</sup>
Homogeneity of the correlation		16.12 <sup>**</sup>	5.48 <sup>ns</sup>	4.83 <sup>ns</sup>	8.57 <sup>**</sup>	5.14 <sup>ns</sup>	0.83 <sup>ns</sup>	1.63 <sup>ns</sup>	3.07 <sup>ns</sup>
4	H	-0.83 <sup>**</sup>	-0.90 <sup>**</sup>	-0.87 <sup>**</sup>	-0.85 <sup>**</sup>	-0.37 <sup>ns</sup>	-0.78 <sup>**</sup>	0.97 <sup>**</sup>	-0.76 <sup>**</sup>
	I	-0.94 <sup>**</sup>	-0.90 <sup>**</sup>	-0.86 <sup>**</sup>	-0.92 <sup>**</sup>	0.95 <sup>**</sup>	-0.76 <sup>**</sup>	0.97 <sup>**</sup>	-0.63 <sup>**</sup>
Homogeneity of the correlation		6.94 <sup>ns</sup>	0.04 <sup>ns</sup>	0.12 <sup>ns</sup>	0.026 <sup>ns</sup>	1.15 <sup>ns</sup>	0.14 <sup>ns</sup>	0.26 <sup>ns</sup>	1.85 <sup>ns</sup>
5	H	-0.70 <sup>**</sup>	-0.70 <sup>**</sup>	-0.65 <sup>**</sup>	-0.64 <sup>**</sup>	0.97 <sup>**</sup>	-0.53 <sup>**</sup>	0.73 <sup>**</sup>	-0.56 <sup>ns</sup>
	I	-0.92 <sup>**</sup>	-0.89 <sup>**</sup>	-0.86 <sup>**</sup>	0.86 <sup>**</sup>	0.14 <sup>ns</sup>	-0.77 <sup>**</sup>	0.98 <sup>**</sup>	-0.80 <sup>**</sup>
Homogeneity of the correlation		2.86 <sup>ns</sup>	0.057 <sup>ns</sup>	0.037 <sup>ns</sup>	0.23 <sup>ns</sup>	10.02 <sup>**</sup>	0.44 <sup>ns</sup>	0.092 <sup>ns</sup>	1.39 <sup>ns</sup>
6	A	-0.79 <sup>*</sup>	-0.91 <sup>**</sup>	-0.86 <sup>**</sup>	-0.84 <sup>**</sup>	0.98 <sup>**</sup>	-0.72 <sup>**</sup>	0.98 <sup>**</sup>	-0.70 <sup>**</sup>
	E	-0.56 <sup>*</sup>	-0.80 <sup>**</sup>	-0.81 <sup>**</sup>	-0.81 <sup>**</sup>	0.57 <sup>ns</sup>	-0.80 <sup>**</sup>	0.92 <sup>**</sup>	-0.53 <sup>ns</sup>
	C	-0.63 <sup>**</sup>	-0.74 <sup>**</sup>	-0.62 <sup>**</sup>	-0.62 <sup>**</sup>	0.98 <sup>**</sup>	-0.73 <sup>**</sup>	0.91 <sup>**</sup>	-0.45 <sup>ns</sup>
Homogeneity of the correlation		1.18 <sup>ns</sup>	4.40 <sup>ns</sup>	3.02 <sup>ns</sup>	3.22 <sup>ns</sup>	1.66 <sup>ns</sup>	0.60 <sup>ns</sup>	1.16 <sup>ns</sup>	10.93 <sup>**</sup>
7	A	0.14 <sup>ns</sup>	-0.59 <sup>**</sup>	-0.63 <sup>**</sup>	-0.54 <sup>**</sup>	0.98 <sup>**</sup>	-0.85 <sup>**</sup>	0.98 <sup>**</sup>	-0.78 <sup>**</sup>
	B	-0.16 <sup>**</sup>	-0.74 <sup>**</sup>	-0.74 <sup>**</sup>	-0.70 <sup>**</sup>	0.45 <sup>ns</sup>	-0.85 <sup>**</sup>	0.68 <sup>**</sup>	-0.58 <sup>**</sup>
	C	-0.26 <sup>**</sup>	-0.64 <sup>**</sup>	-0.68 <sup>**</sup>	-0.59 <sup>**</sup>	0.98 <sup>**</sup>	-0.86 <sup>**</sup>	0.89 <sup>**</sup>	-0.77 <sup>**</sup>
Homogeneity of the correlation		0.24 <sup>ns</sup>	0.90 <sup>ns</sup>	0.80 <sup>ns</sup>	0.80 <sup>ns</sup>	2.29 <sup>ns</sup>	0.033 <sup>ns</sup>	6.58 <sup>ns</sup>	2.30 <sup>ns</sup>
8	B	-0.76 <sup>**</sup>	-0.73 <sup>**</sup>	-0.68 <sup>**</sup>	-0.66 <sup>**</sup>	0.96 <sup>**</sup>	-0.79 <sup>**</sup>	0.90 <sup>**</sup>	-0.74 <sup>**</sup>
	C	-0.89 <sup>*</sup>	-0.91 <sup>**</sup>	-0.88 <sup>**</sup>	-0.92 <sup>**</sup>	0.96 <sup>**</sup>	-0.76 <sup>**</sup>	0.94 <sup>**</sup>	-0.55 <sup>ns</sup>
	G	-0.80 <sup>**</sup>	-0.75 <sup>**</sup>	-0.69 <sup>**</sup>	-0.69 <sup>**</sup>	0.91 <sup>**</sup>	-0.71 <sup>**</sup>	0.90 <sup>**</sup>	-0.73 <sup>**</sup>
	E	-0.77 <sup>**</sup>	-0.80 <sup>**</sup>	-0.75 <sup>**</sup>	-0.76 <sup>**</sup>	0.93 <sup>**</sup>	-0.79 <sup>**</sup>	0.75 <sup>**</sup>	-0.54 <sup>**</sup>
Homogeneity of the correlation		2.61 <sup>ns</sup>	5.38 <sup>ns</sup>	5.05 <sup>ns</sup>	9.47 <sup>ns</sup>	1.63 <sup>ns</sup>	0.6 <sup>ns</sup>	2.73 <sup>ns</sup>	8.05 <sup>**</sup>
9	C	-0.20 <sup>ns</sup>	-0.76 <sup>**</sup>	-0.71 <sup>**</sup>	-0.60 <sup>*</sup>	0.96 <sup>**</sup>	-0.83 <sup>**</sup>	0.98 <sup>**</sup>	-0.78 <sup>**</sup>
	G	-0.48 <sup>ns</sup>	-0.90 <sup>**</sup>	-0.87 <sup>**</sup>	-0.80 <sup>**</sup>	0.96 <sup>**</sup>	-0.80 <sup>**</sup>	0.97 <sup>**</sup>	-0.69 <sup>**</sup>
	E	-0.11 <sup>**</sup>	-0.60 <sup>**</sup>	-0.53 <sup>**</sup>	-0.39 <sup>**</sup>	0.96 <sup>**</sup>	-0.79 <sup>**</sup>	0.89 <sup>**</sup>	-0.71 <sup>**</sup>
Homogeneity of the correlation		2.24 <sup>ns</sup>	7.57 <sup>**</sup>	5.68 <sup>ns</sup>	5.67 <sup>ns</sup>	0.00 <sup>ns</sup>	0.12 <sup>ns</sup>	1.1 <sup>ns</sup>	0.51 <sup>ns</sup>

*h*: total height; *d*: diameter at 1.3 m aboveground; *g*: transversal area; *v*: total volume; *D*: distance between trees; M (%): percentage of mortality. \*: significant at 95% probability; *ns*: not significant at 95% probability; *I*(1): Moore *et al.* (1973); *I*(2): Hegyi (1974)

**Table S2.** Effect of clones within the same Nelder circle on the production of basal area and volume per hectare.

NW	Clones	Description
1	A-F	Clone A was the most productive for both variables. However, clone A showed higher mortality at closer spacing than clone F.
2	D-E-F	Clone F was the most productive for both variables. D showed higher mortality and competition.
3	E-G-H-I	Clones H and G were the most productive for basal area. Clone I was the most productive in volume. Clone E showed higher mortality. E and H showed higher mortality and competition.
4	I-H	Clone I was the most productive for both variables. Volume production was similar.
5	I-H	Clone I was the most productive for both variables.
6	A-C-E	Clone E was more productive in the basal area and clone A in volume. High mortality.
7	A-B-C	All clones of this NW showed good productivity for both variables. Among them, clone A was the most productive. Highest mortality in denser places. C showed higher mortality and competition.
8	B-C-E-G	Clone C was the most productive in basal area and clone B in volume.
9	C-E-G	Clone G was the most productive for both variables.

**Table S3.** Effect of the age of a clone in different locations.

<b>Clone</b>	<b>Age (Years)</b>	<b>Local NW</b>	<b>Description</b>
A	3, 4	1, 6, 7	This clone was statistically significant between sites. At NW 7, the highest values were obtained, both for volume and basal area. In this place the trees are 4 years old.
B	3, 4	7, 8	NW 7, four years old, was the most productive for both variables.
C	3, 4	6, 7, 8, 9	The lowest productivity for this clone occurred at NW 9, three years old. The highest productivity occurred in the NW 7 at the age of four years.
E	3, 5	2, 3, 6, 8, 9	In NW 6, the highest values were obtained in basal area and in Nelder 2 in volume. Difference between the values, both for basal area and for volume in different NW.
F	4, 5	1, 2	Even at different ages, the results for this clone were similar for the basal area and volume variables in both locations, with low values for both variables.
G	3, 3.5	3, 8, 9	The highest values of basal area were obtained in NW 3, and of volume in NW 8.
H	2, 3	3, 4, 5.	The basal area and volume values were similar, with the highest values observed in NW 5 for both variables.
I	2, 3	3, 4, 5	In NW 4, the highest values were obtained for both variables and the values were similar.

**Table S4.** Effect between sites for the same clone of the same age.

<b>Age</b>	<b>Clone</b>	<b>Description</b>
2	I	For this clone present at sites NW4 and NW5 the values were similar for both variables, with the values of NW 4 slightly higher. Low mortality rates.
	H	This clone showed similar behavior to clone I and were planted in the same places. In NW 5, the values were higher. Low mortality rates.
3	E	This clone, present in NWs 3 and 9, showed differences in different locations for basal area and volume estimates. The values in NW 9 were higher. High mortality.
	G	Clone G behaved similarly to clone E at the same age and locations (NWs 3 and 9). It showed higher values in NW 3 for both variables. High mortality.
3.5	E	Clone E, present in NW 6 and 8 of the same age, showed differences between sites, for basal area and volume estimates. The values in NW 6 were higher. High mortality.
4	A	Clone A showed high productivity in both locations at the age of four years (NWs 1 and 7). In NW 7, the values were higher.

**Table S5.** General assessment of the groups, in which greater productivity was obtained.

<b>Variables</b>	<b>Clones</b>	<b>Description</b>
Basal area	A-B-C-E	Clone A was the most productive for this variable, followed by clones C, B and E.
Volume	A-G-I-H-E	Clone A was the most productive for this variable, followed by clones I, H, E and G.