

## SUPPLEMENTAL DATA

**Table S1.** Analysis of variance components using the residual maximum likelihood (REML) method for the average number of shoots produced by 21 monumental trees. Percentage of variance components (%) was calculated using Wald chi-squared test.

Factor	Variation	Components	Wald test	%
Tree	5.788951	4.430038	$p = 0.0034$ *	85.27
Others		0.65257		14.73
Sum		5.195295		100

\* Significant differences

**Table S2A.** Analysis of variance (MANOVA) for the average number of shoots produced in in vitro cultures by trees of different ages, in the period from the 18<sup>th</sup> to the 21<sup>st</sup> month of cultivation. NumDF, degrees of freedom in the numerator; denDF, DF in the denominator.

	Test	F	NumDF	DenDF	$p$
Tree	F	3.1168	10	44	<b>0.0044</b> *
Time	F	15.7938	3	42	<b>&lt;0.0001</b> *
Interaction					
Tree x Time	Wilks' Lambda	2.7204 <sup>1</sup>	30	123.95	<b>&lt;0.0001</b> *

\* Significant differences

<sup>1</sup> Approximated F value

**Table S2B.** Analysis of variance (MANOVA) for the average length of shoots produced in in vitro cultures by trees of different ages, in the period from the 18<sup>th</sup> to the 21<sup>st</sup> month of cultivation. NumDF, degrees of freedom in the numerator; denDF, DF in the denominator.

	Test	F	NumDF	DenDF	$p$
Tree	F	3.6892	10	44	<b>0.0044</b> *
Time	F	24.6808	3	42	<b>&lt;0.0001</b> *
Interaction					
Tree x Time	Wilks' Lambda	34332 <sup>1</sup>	30	123.95	<b>&lt;0.0001</b> *

\* Significant differences

<sup>1</sup> Approximated F value

**Table S3A.** Analysis of variance for the average number of new shoots grown under different conditions on WPM medium. Df, degrees of freedom; SS, sum of squares; MS, mean squares.

	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b><i>p</i></b>
Type of culture	2	8988.937	4494.47	63.0215	<b>&lt;0.0001 *</b>
Error	357	25459.96	71.32		
Total	359	34448.9			

\* Significant differences

**Table S3B.** Analysis of variance for the average number of new shoots grown under different conditions on BG1 medium. Df, degrees of freedom; SS, sum of squares; MS, mean squares.

	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b><i>p</i></b>
Type of culture	2	206.0802	103.04	6.9276	<b>0.0013 *</b>
Error	141	2097.215	14.874		
Total	143	2303.295			

\* Significant differences

**Table S3C.** Analysis of variance for the average number of new shoots grown under different conditions on WPM medium. Df, degrees of freedom; SS, sum of squares; MS, mean squares.

	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b><i>p</i></b>
Type of culture	2	79.90556	39.9528	17.2493	<b>&lt;0.0001 *</b>
Error	357	826.8833	2.3162		
Total	359	906.7889			

\* Significant differences

**Table S3D.** Analysis of variance for the average number of new shoots grown under different conditions on modified QL medium. Df, degrees of freedom; SS, sum of squares; MS, mean squares.

	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b><i>p</i></b>
Type of culture	2	13.0417	6.52083	11.9472	<b>&lt;0.0001 *</b>
Error	141	76.95833	0.5458		
Total	143	90			

\* Significant differences

**Table S4.** The composition of modified Quoirin and Lepoivre (QL) and Woody Plant Medium.

<b>Macronutrients</b>	<b>QL (mg· L<sup>-1</sup>)</b>	<b>WPM (mg· L<sup>-1</sup>)</b>
NH <sub>4</sub> NO <sub>3</sub>	50.00	400.00
K <sub>2</sub> SO <sub>4</sub>	800.00	990.00
CaCl <sub>2</sub>	-	72.50
Ca(NO <sub>3</sub> ) <sub>2</sub> ·4H <sub>2</sub> O	1000.00	471.26
MgSO <sub>4</sub> ·7H <sub>2</sub> O	200.00	180.54
KH <sub>2</sub> PO <sub>4</sub>	200.00	170.00
<b>Micronutrients</b>	<b>QL (mg· L<sup>-1</sup>)</b>	<b>WPM (mg· L<sup>-1</sup>)</b>
FeEDDHA	100.00	36.70
ZnNa <sub>2</sub> EDTA	10.00	-
ZnSO <sub>4</sub> ·7H <sub>2</sub> O	-	8.60
H <sub>3</sub> BO <sub>3</sub>	8.00	6.20
MnSO <sub>4</sub> ·H <sub>2</sub> O	10.00	22.30
Na <sub>2</sub> MoO <sub>4</sub> ·2H <sub>2</sub> O	0.25	0.25
CuSO <sub>4</sub> ·5H <sub>2</sub> O	0.20	0.25
CoCl <sub>2</sub> ·6H <sub>2</sub> O	0.02	-
NiCl <sub>2</sub> ·6H <sub>2</sub> O	0.01	-
KI	0.20	-
<b>Vitamins and aminoacids</b>	<b>QL (mg· L<sup>-1</sup>)</b>	<b>WPM (mg· L<sup>-1</sup>)</b>
m-inositol	200.00	100.00
thiamine	2.00	1.00
pyridoxine	0.50	0.50
nicotinic acid	2.00	0.50
glycine	2.00	2.00
<b>pH</b>	<b>5.8</b>	<b>5.8</b>