

Figure S1. Sketch representing native (N) and relaxed (R) sample collection within the large forked branches. The branch was cut in air (red broken line). All other cuts were performed under water (white disconnection with black line). Leaves from the native side were collected for xylem water potential measurements (Ψ_x). Then the 3 native stem segments (orange) were excised. The branch was relaxed by cutting 10 cm segments from the base every 10-20 s. When the side branch containing the relaxed stem segment (blue) was cut from the main branch it was relaxed from both ends alternatively (basal and distal). When the first distal cut was performed the leaf above was collected for Ψ_x .

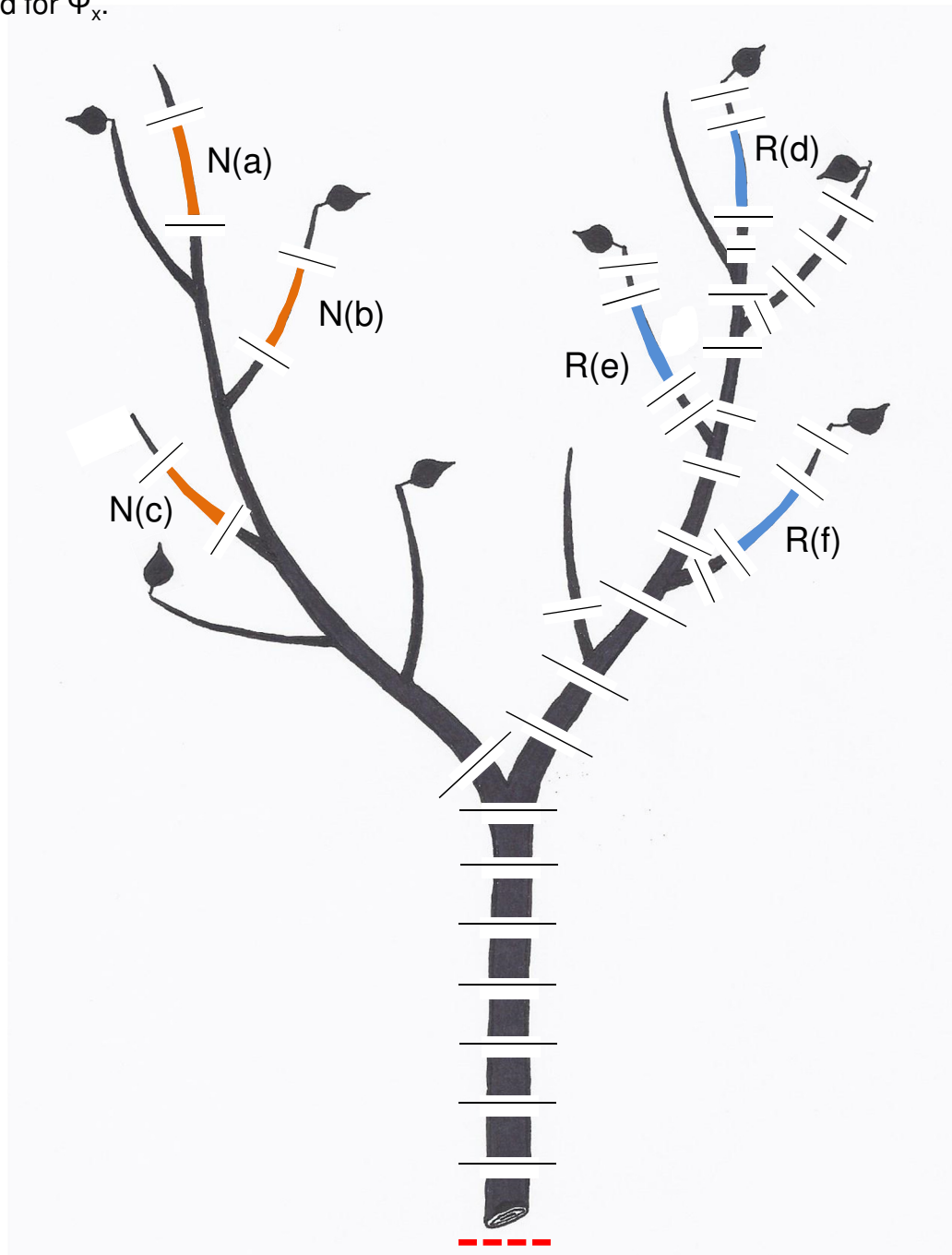


Figure S2. Sketch showing sample collection for determining if there is a tension-cutting artefact or refilling effect in *Laurus nobilis*. The branch was girdled, cut in air (red broken line) and left to equilibrate for 2 h as described in Material and Methods. Then the native (N, orange) sample was excised under water (cuts under water are represented as a discontinuities with a black line crossing the stem). Then the girdled (G, green) and relaxed (R, blue) samples were relaxed in parallel.

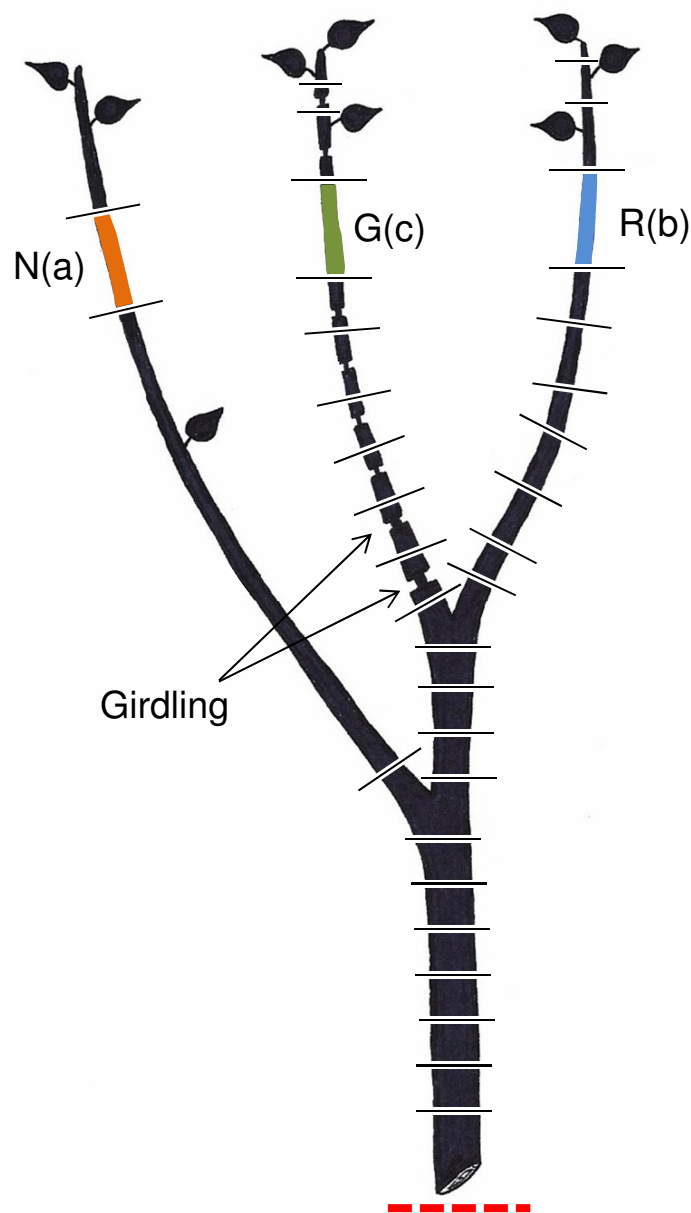


Figure S3. Sketch of the process followed for excising samples under negative and positive pressure: (i) the branch was cut in air (broken line) and then the native (N) stems were excised under water (cuts under water represented as a solid line); (ii) 80 cm from the basal end were cut under water; (iii) the branch was connected to a reservoir with degassed solution placed 35 cm above the branch for 15 minutes. Afterwards, positive pressure (R_p) stems were excised.

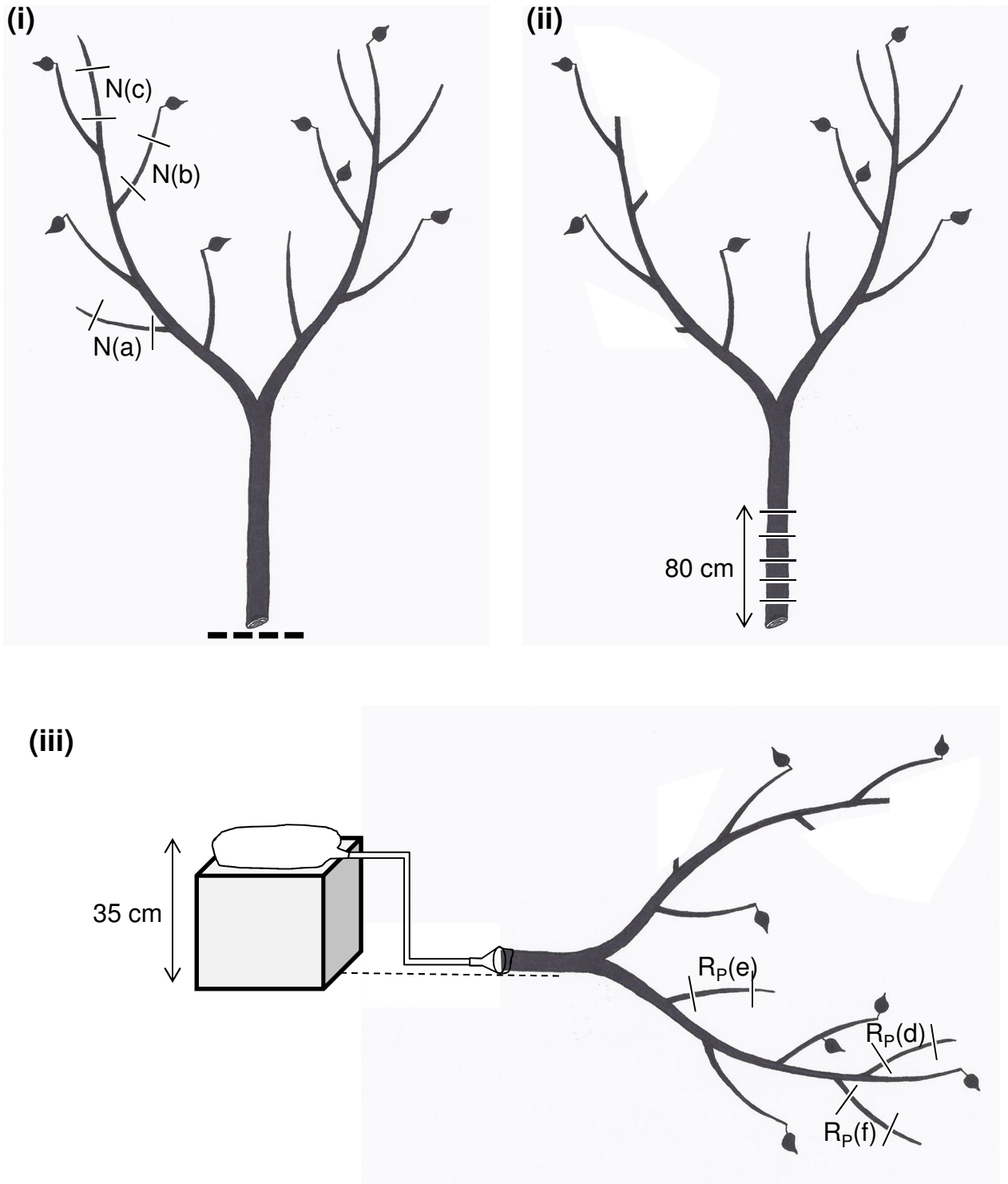


Table S1. Diagrams of the models to which the PLC data was fitted for each experiment.

Experiment 1. Model: PLC ~ Branch + Treatment

The measurements were performed on 3 independent replicates (branches). Within each branch 3 stems were excised with native treatment (a, b, c) and 3 with relaxed (d, e, f).

		Levels																	
Fixed effect	Treatment	Native									Relaxed								
Random effect	Branch	B(1)			B(2)			B(3)			B(1)		B(2)		B(3)				
Subsamples	Stem	a	b	c	a	b	c	a	b	c	d	e	f	d	e	f	d	e	f

Experiment 2. Model: PLC ~ Branch(Cut in) + Treatment + Cut in

The measurements were performed on n independent replicates (branches) per species. Half of the replicates (n/2) were excised and prepared under tap water and half in degassed solution. Within each branch 3 stems were excised with native treatment (a, b, c) and 3 with relaxed (d, e, f).

		Levels																											
Fixed effect	Cut in	Tap water								Degassed solution																			
Fixed effect	Treatment	Native				Relaxed				Native				Relaxed															
Random effect	Branch	B(1)	B(2)	B(...)	B(n/2)	B(1)	B(2)	B(...)	B(n/2)	B(n/2+1)	B(n/2+2)	B(...)	B(n)	B(n/2+1)	B(n/2+2)	B(...)	B(n)												
Subsamples	Stem	a	b	c	(...)	a	b	c	d	e	f	(...)	d	e	f	a	b	c	(...)	a	b	c	d	e	f	(...)	d	e	f

Experiment 3. Model: PLC ~ Branch + Treatment

The measurements were performed on 10 independent replicates (n = 10). Within each replicate (branch) 3 stem were excised, one per treatment (a, native; b, relaxed; c, girdled).

		Levels								
Random effect	Branch	B(1)			B(...)			B(n)		
Fixed effect	Treatment	Native			Relaxed			Girdled		
Subsamples	Stem	a			b			c		

Experiment 4. Model: PLC ~ Branch + Treatment

The measurements were performed on 4 independent replicates (branches). Within each branch 3 stems were excised with native (a, b, c) and 3 with positive pressure (d, e, f) treatment.

		Levels																							
Fixed effect	Treatment	Native												Positive pressure											
Random effect	Branch	B(1)			B(2)			B(3)			B(4)			B(1)		B(2)		B(3)		B(4)					
Subsamples	Stem	a	b	c	a	b	c	a	b	c	a	b	c	d	e	f	d	e	f	d	e	f	d	e	f