***New Phytologist* Supporting Information**

Article title: **A small-scale MRI scanner and complementary imaging method to visualize and quantify xylem embolism formation**
Authors: Marco Meixner, Martina Tomasella, Petra Foerst and Carel W. Windt
Article acceptance date: 12 January 2020

The following Supporting Information is available for this article:

Fig. S1. The data points of all three beech trees (*Fagus sylvatica*) were grouped together for analysis, to compare the four methods shown in Fig. 6 by means of the fitPLC package (sigmodial model and 1000 resamples).

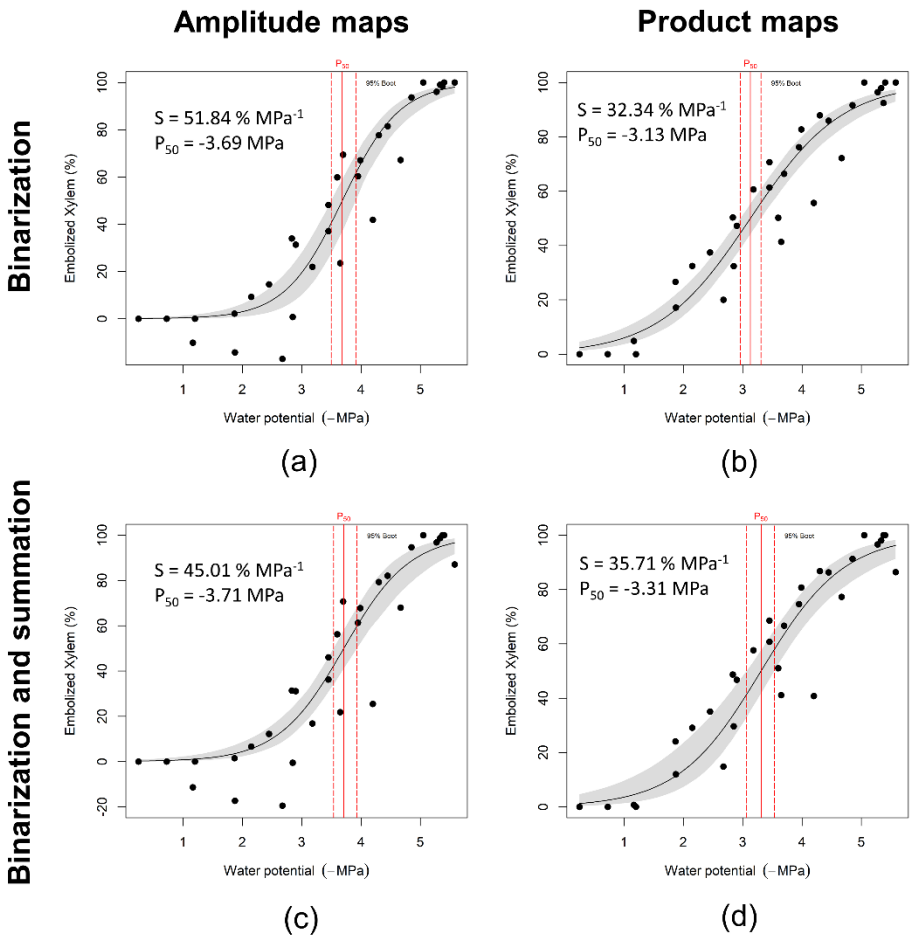

Fig. S2. Conduit diameter distributions of the microscopic cross sections of beech (*Fagus sylvatica*) shown in Fig. 1. The respective mean conduit diameters of B1, B2 and B3 are 28.5, 24.9 and 20.2 µm, respectively.

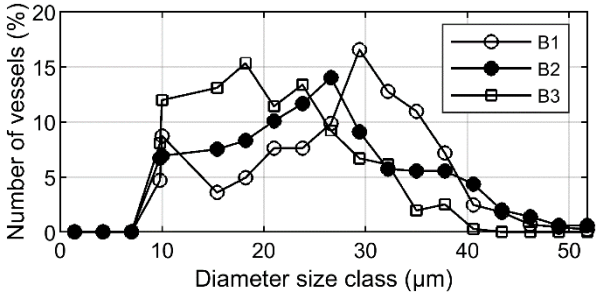

Table S1. r^2, slopes and Ψ_{50} of vulnerability curves of three beech (*Fagus sylvatica*) trees shown in Fig. 6.

		r^2	S (% MPa^{-1})	Ψ_{50} (MPa)
(a)	B1	0.98	-44.07 ± 2.45	-3.58 ± 0.09
	B2	0.87	-48.59 ± 11.17	-4.12 ± 0.18
	B3	0.96	-44.63 ± 1.85	-3.47 ± 0.07
(b)	B1	0.99	-33.42 ± 1.03	-2.84 ± 0.02
	B2	0.96	-29.48 ± 1.94	-3.74 ± 0.06
	B3	0.98	-29.67 ± 1.01	-2.97 ± 0.08
(c)	B1	0.97	-48.37 ± 4.72	-3.62 ± 0.07
	B2	0.84	-47.49 ± 20.90	-4.29 ± 0.32
	B3	0.96	-46.92 ± 6.82	-3.47 ± 0.09
(d)	B1	0.99	-34.06 ± 0.98	-2.93 ± 0.05
	B2	0.92	-30.50 ± 4.02	-3.86 ± 0.16
	B3	0.99	-31.21 ± 3.71	-3.02 ± 0.07

Videos S1–S3. Videos of embolism formation in beech (Fagus sylvatica). Shown are time series of magnetic resonance product (A*T2) images of the stem of three beech trees, acquired during progressive dry down.