plants

MDPI

Supplementary material

Article title: No evidence for light-induced embolism repair in cut stems of drought-resistant Mediterranean species under soaking

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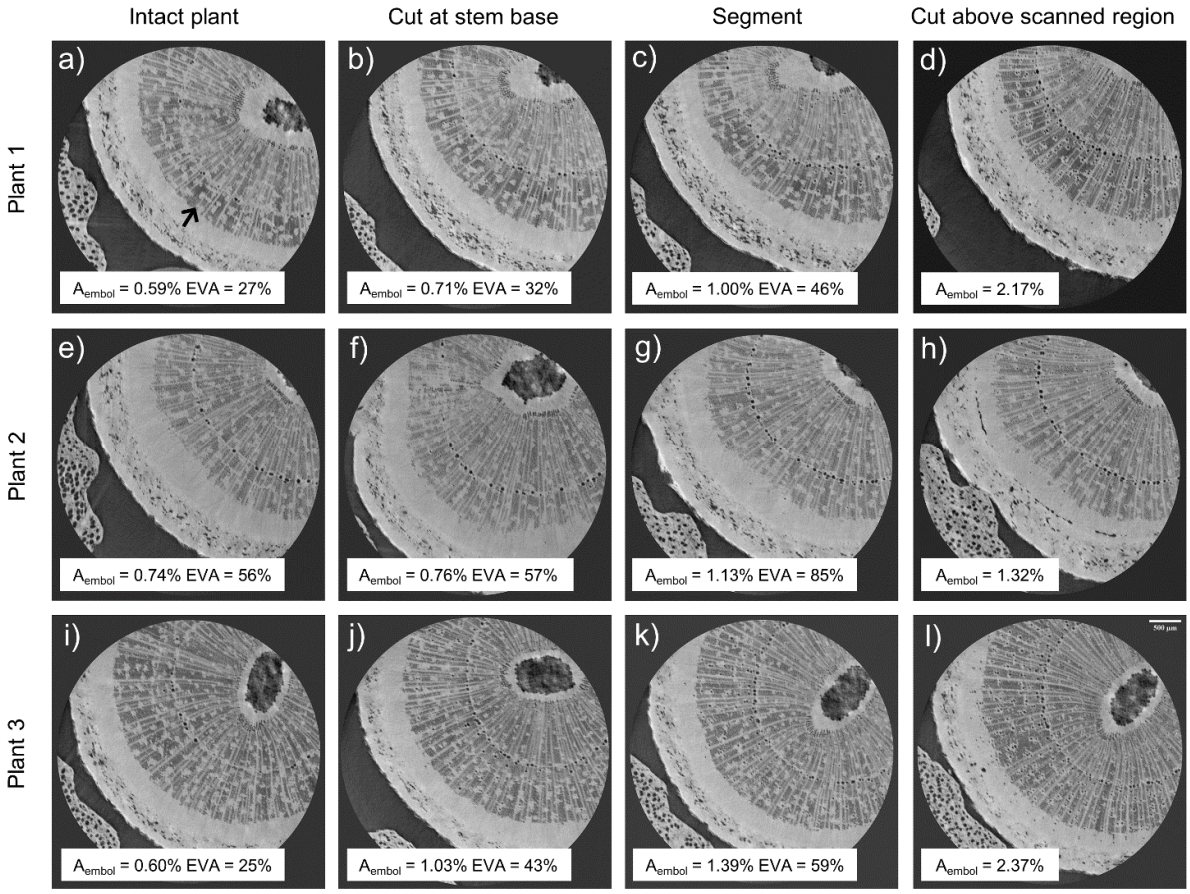

Figure S1. X-ray Micro-CT transverse images of drought stressed 2-year-old *F. ornus* saplings (n=3). Scans were performed in drought-stressed intact plants (a,e,i), after subsequent cut underwater at the base of the stem (b,f,j), after a second cut underwater to obtain a stem segment (c,g,k) and after cutting above the scanned region to embolize all mature conduits (d,h,l). A_{embol} = percentage of embolized sapwood area; EVA = percentage of embolized vessell area, all calculated excluding the immature sapwood close to the cambium (see arrow delimiting mature-immature sapwood in a).

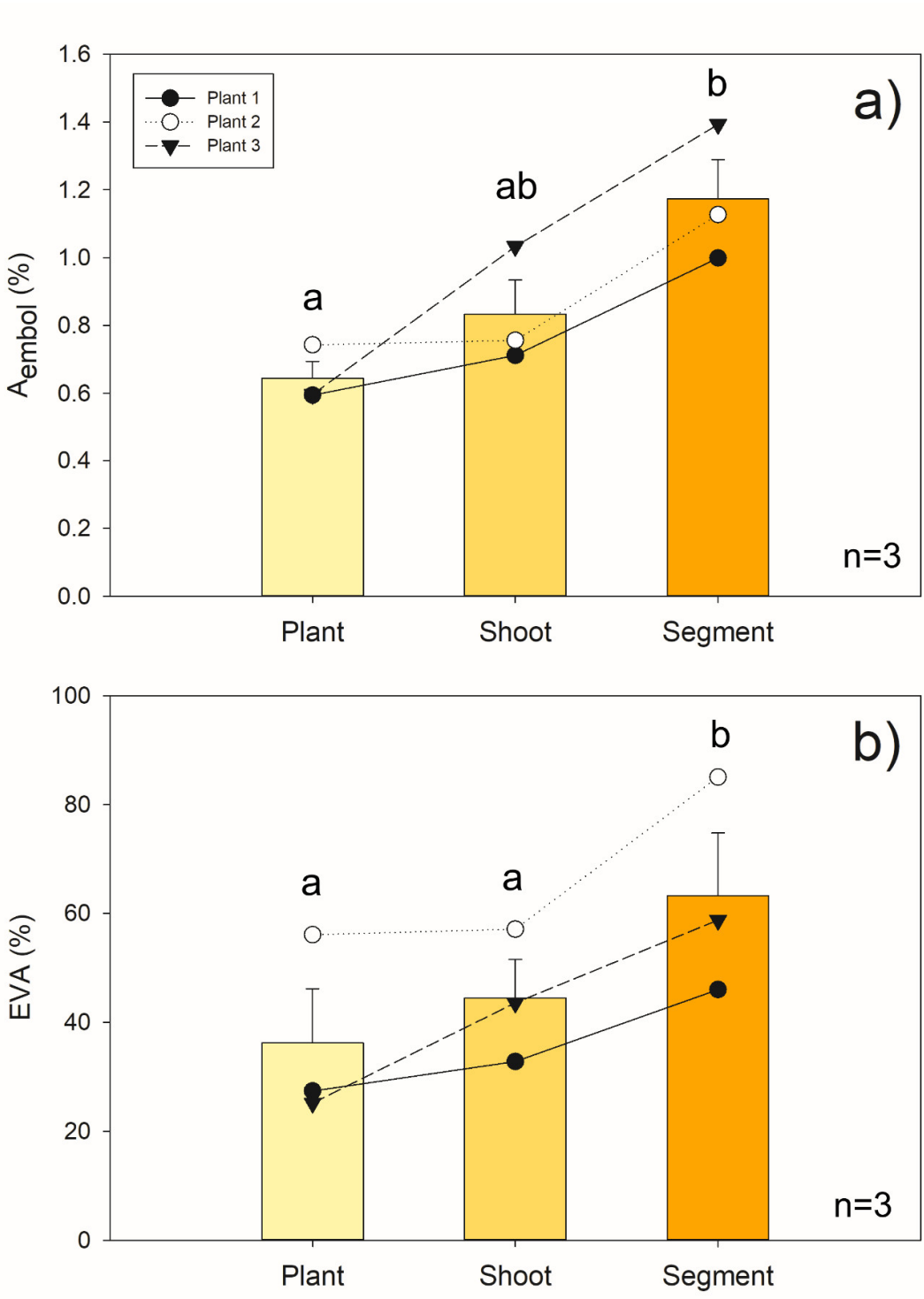

Figure S2. Cutting effect on embolism formation in *F. ornus* potted saplings visualized with Micro-CT. **a**) Percentage of embolized sapwood area (A_{embol}) and **b)** percentage of embolized vessel area (EVA) measured in Micro-CT transverse images of drought-stressed saplings. Plants (1-3, indicated by symbols, n=3) were consecutively scanned when intact (Plant), after subsequent cut underwater at the base of the stem (Shoot) and after a second cut underwater to obtain a stem segment (Segment). Values are means ± SE. Different letters denote statistically significant differences among Plant, Shoot and Segment ($P < 0.05$).

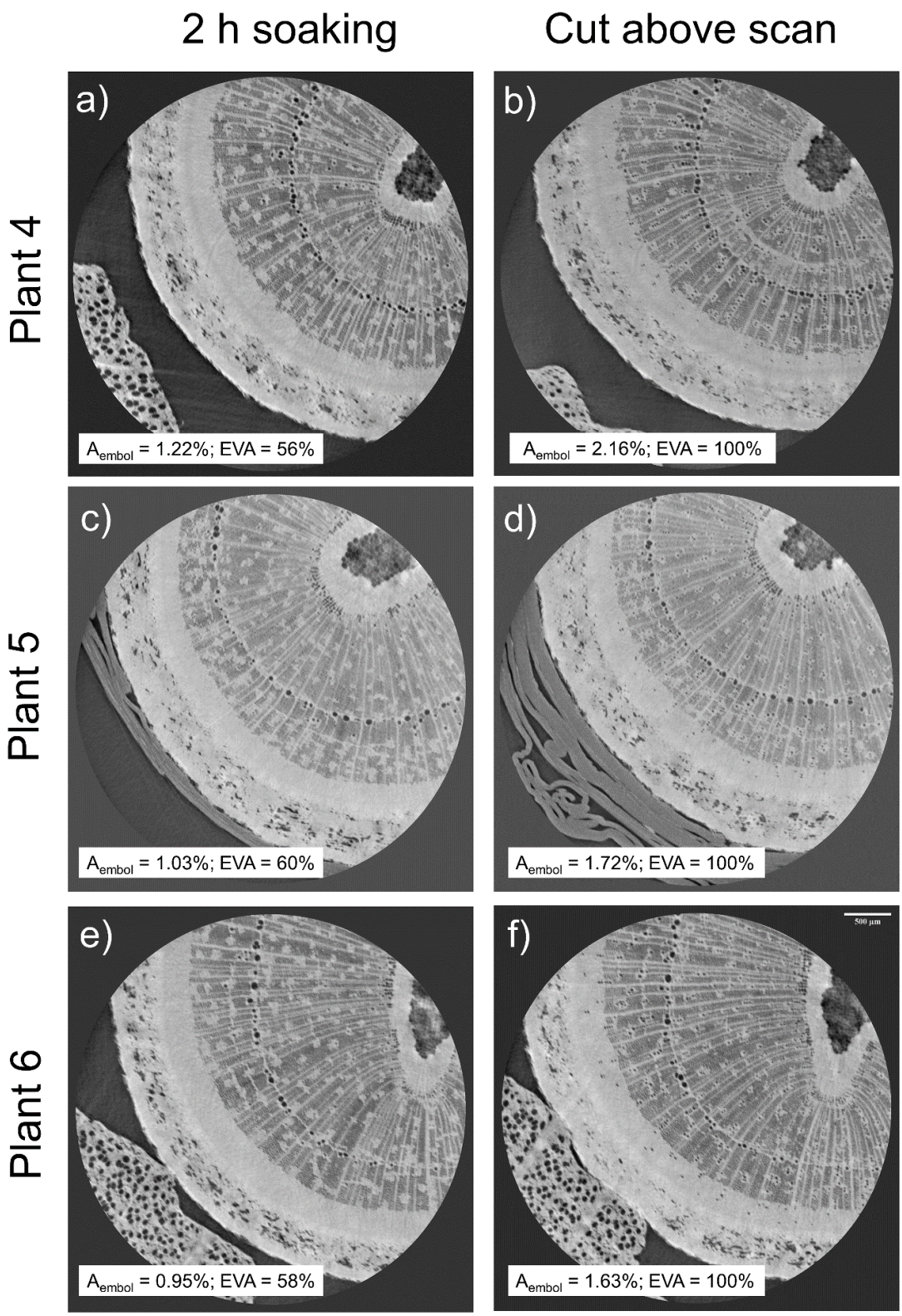

Figure S3. X-ray Micro-CT transverse images of 2-year-old *F. ornus* stem segments after the soaking treatment (S_{2h}, n=3). Scans were performed in drought-stressed segments soaked under light for 2

hours (a,c,e) and after cutting above the scanned region to embolize all mature conduits (b,d,f). A_{embol} = percentage of embolized sapwood area; EVA = percentage of embolized vessell area.