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*Functional Plant Biology*

### Supplementary Material

#### **Effects of arbuscular mycorrhizal fungi in the rhizosphere of two olive (*Olea europaea*) varieties Arbequina and Barnea under water deficit conditions**

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## **Effects of arbuscular mycorrhizal fungi present in the rhizosphere of olive orchards on two olive varieties Arbequina and Barnea under water deficit conditions**

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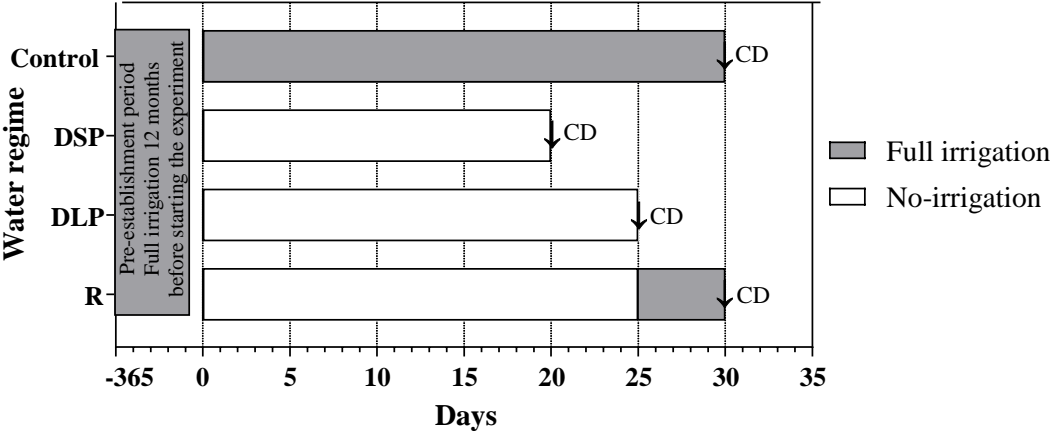
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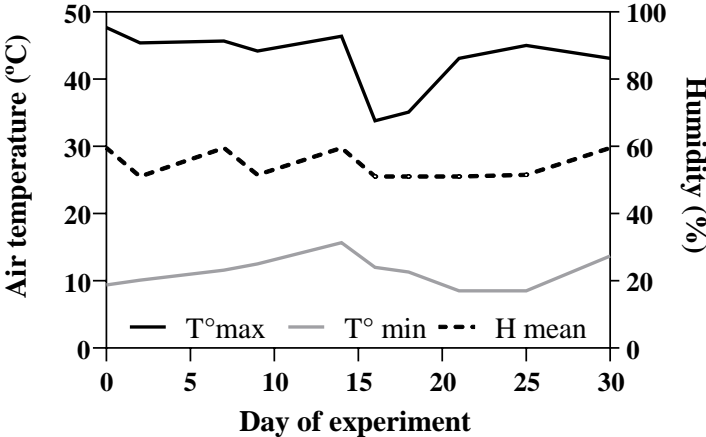
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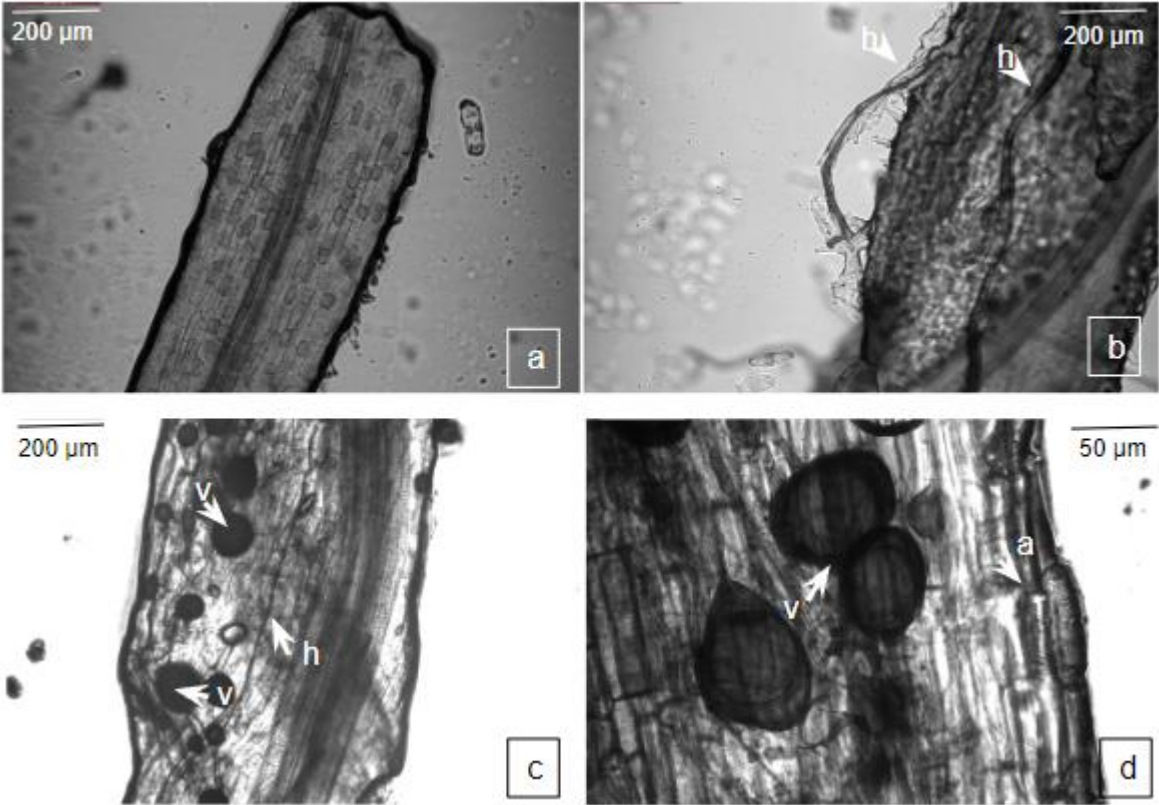
**Fig. S1.** Experimental design, including the four water regimes. The ↓CDs indicate the end of irrigation treatment and the vegetal material collection date of each treatment. CD: collection day, C: control, DSP: short drought treatment (20 days), DLP: long drought treatment (25 days). R: rewatering treatment (R).



**Fig. S2.** Minimum and maximum daily air temperature and daily mean relative humidity along the experiment.



**Fig. S3.** Intraradical roots structures. In the plant roots that grow in soils without AMF, no presence of fungal structures was recorded (a). The olive roots inoculated by olive grove rhizosphere soil showed the characteristic structures of arbuscular mycorrhizal colonization (image b, c and d): (h) hyphae, (a) arbuscules and (v) vesicles. Microscopic observations at 10X and 40X.



**Fig. S4.** Morphospecies of AMF identified from the spores found in this study: a) *Ambispora leptoticha*, b) *Entrophospora etunicata*, c) y d) *E. infrequens*, e) y f) *Glomus melanosporum*, g) *G. sinosum*, h) *Rhizoglomus microaggregatum*. - 50  $\mu$ m

