

Table S1. Monthly meteorological parameters in the study site during the period of preconditioning treatment (July-September) and subsequent water deprivation experiment (October-April). Data was obtained from a meteorological station located at the Canchones experimental field.

| Parameter | Value | Month | | | | | | | | | | | | |
|--|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------------|
| | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Average |
| Temperature (°C) | Max | 31.3 | 31.6 | 31.1 | 31.0 | 28.5 | 27.7 | 28.9 | 31.1 | 31.5 | 32.5 | 31.7 | 31.4 | 30.7 |
| | Mean | 21.5 | 19.9 | 19.5 | 17.7 | 14.4 | 12.5 | 12.9 | 16.0 | 17.4 | 18.5 | 18.3 | 19.7 | 17.4 |
| Relative Humidity (%) | Min | 12.8 | 8.7 | 9.2 | 6.4 | 2.1 | -0.3 | -1.0 | 2.4 | 4.7 | 5.6 | 5.5 | 8.6 | 5.4 |
| | Max | 68.9 | 66.6 | 70.9 | 69.6 | 70.0 | 66.5 | 50.9 | 47.1 | 60.9 | 59.1 | 68.8 | 65.7 | 63.8 |
| VPD (kPa) | Mean | 50.6 | 46.0 | 51.4 | 48.8 | 47.6 | 43.7 | 32.5 | 29.8 | 37.1 | 34.6 | 42.9 | 44.0 | 42.4 |
| | Min | 29.7 | 23.0 | 27.3 | 21.1 | 20.1 | 16.5 | 12.5 | 12.3 | 14.6 | 13.3 | 16.2 | 20.4 | 18.9 |
| Wind Speed (m s ⁻¹) | Mean | 1.29 | 1.27 | 1.11 | 1.06 | 0.88 | 0.84 | 1.04 | 1.31 | 1.27 | 1.42 | 1.23 | 1.30 | 1.17 |
| | Max | 4.7 | 4.5 | 4.3 | 3.1 | 2.2 | 1.8 | 1.8 | 2.9 | 3.7 | 4.1 | 4.2 | 4.6 | 4.7 |
| Precipitation (mm) | Mean | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| Solar Radiation (W m ⁻²) | Max | 1129 | 1150 | 1087 | 987 | 880 | 786 | 840 | 960 | 1091 | 1117 | 1158 | 1168 | 1029.4 |
| | Mean | 327.6 | 348.7 | 311.1 | 257.4 | 219.6 | 203.7 | 218.5 | 242.3 | 289.9 | 325.1 | 352.9 | 340.1 | 286.4 |
| Irradiance (μmol photons m ⁻² s ⁻¹) | Max | 2508.89 | 2555.56 | 2415.56 | 2193.33 | 1955.56 | 1746.67 | 1866.67 | 2133.33 | 2424.44 | 2482.22 | 2573.33 | 2595.56 | 2287.59 |
| | Mean | 728 | 774.89 | 691.33 | 572 | 488 | 452.67 | 485.55 | 538.44 | 644.22 | 722.44 | 784.22 | 755.78 | 636.46 |
| Reference ETo (mm/month) | Mean | 272.1 | 261.0 | 254.0 | 209.2 | 173.4 | 151.2 | 170.8 | 210.0 | 244.3 | 282.1 | 285.8 | 288.4 | 233.53 |

25% FC before water deprivation



25% FC after water deprivation

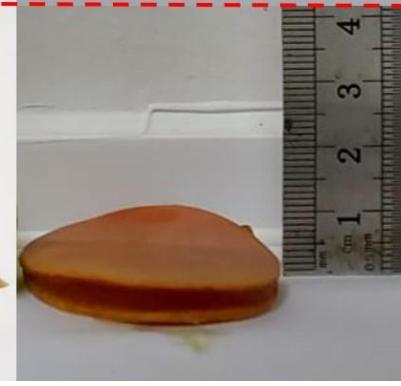


Figure S1. Transversal section of a leaf blade (left) and leaf discs of 10 cm^2 (right) from a plant preconditioned at 25% FC, before (above the red dashed line) and after (below the red dashed line) 222 days of water deprivation. Change in hydrenchyma thickness is evident, as well as the change from green to reddish color, likely due to the accumulation of “sunscreen” pigments such as anthocyanins and rhodoxanthin.