

Article

Biochemical Response of Maize Plants Grown in the Field Under Different Water Availability: Evaluating the Influence of Leaf Position and Growth Stage

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Supplementary Materials

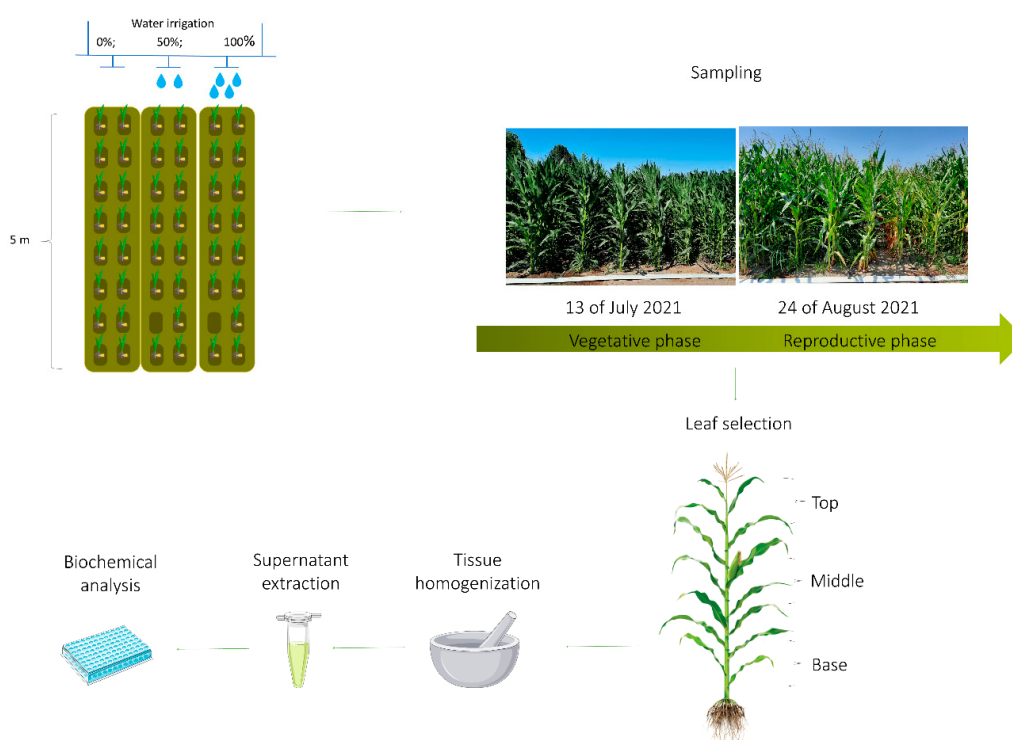


Figure S1. Workflow of the methodology.

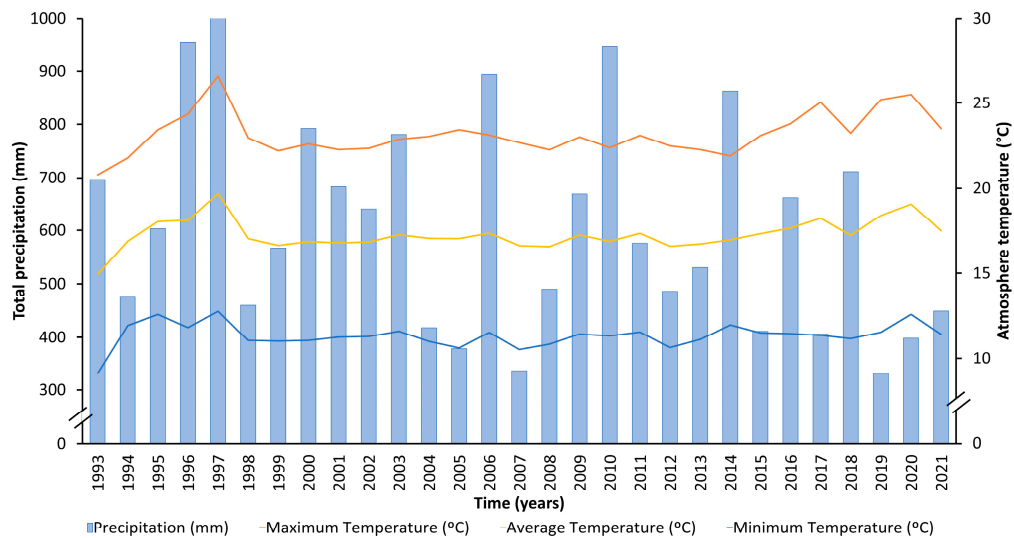


Figure S2. Temperature and precipitation variation between 1993 and 2021 in Santarém District, Portugal. The bar graph represents the median value of total precipitation (blue) in millimeters each year. The line graph illustrates the maximum (red), average (yellow), and minimum (blue) values of atmospheric temperature in °C occurring each year.

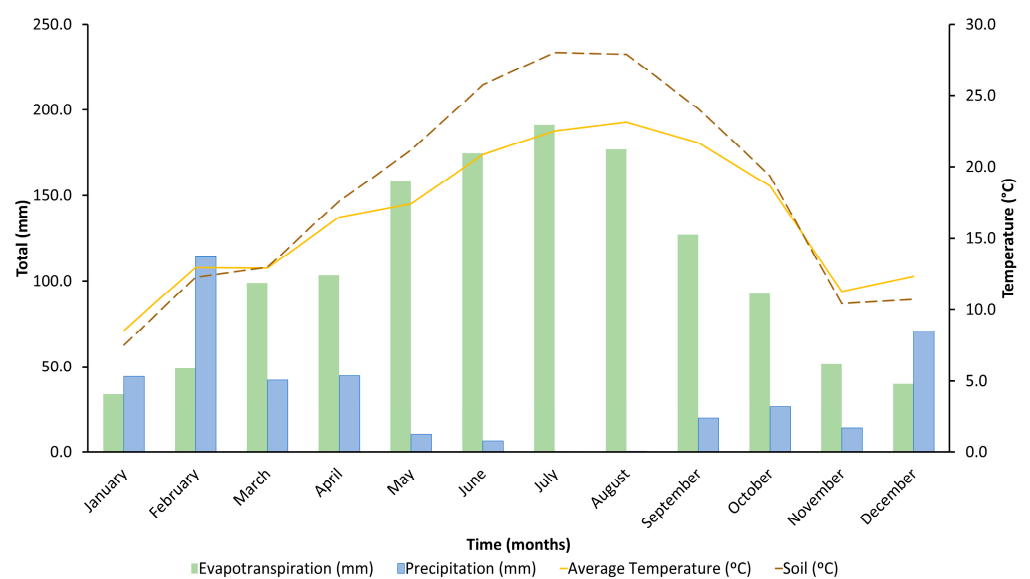


Figure S3. Temperature, evapotranspiration, and precipitation variation during 2021 in Coruche, Santarém District, Portugal. The bar graph represents the total evapotranspiration (green) and total precipitation (blue) in millimeters for each month in 2021. The line graph illustrates the average atmospheric (yellow) and soil (brown) temperature in °C occurring each month in 2021.

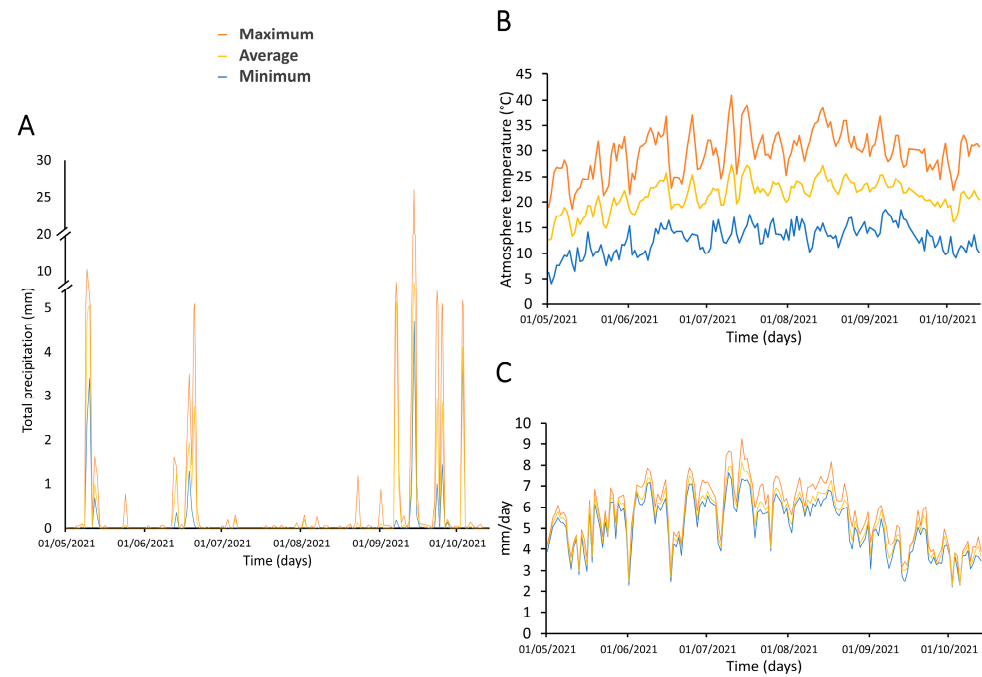


Figure S4. Meteorological variations in Coruche, Santarém District, Portugal, between May and October 2021. (A) Total precipitation (mm), (B) atmospheric temperature (°C), and (C) evapotranspiration (mm/day) occurring on each day of the trial. Red represents the maximum (red), yellow the average, and blue the minimum value.

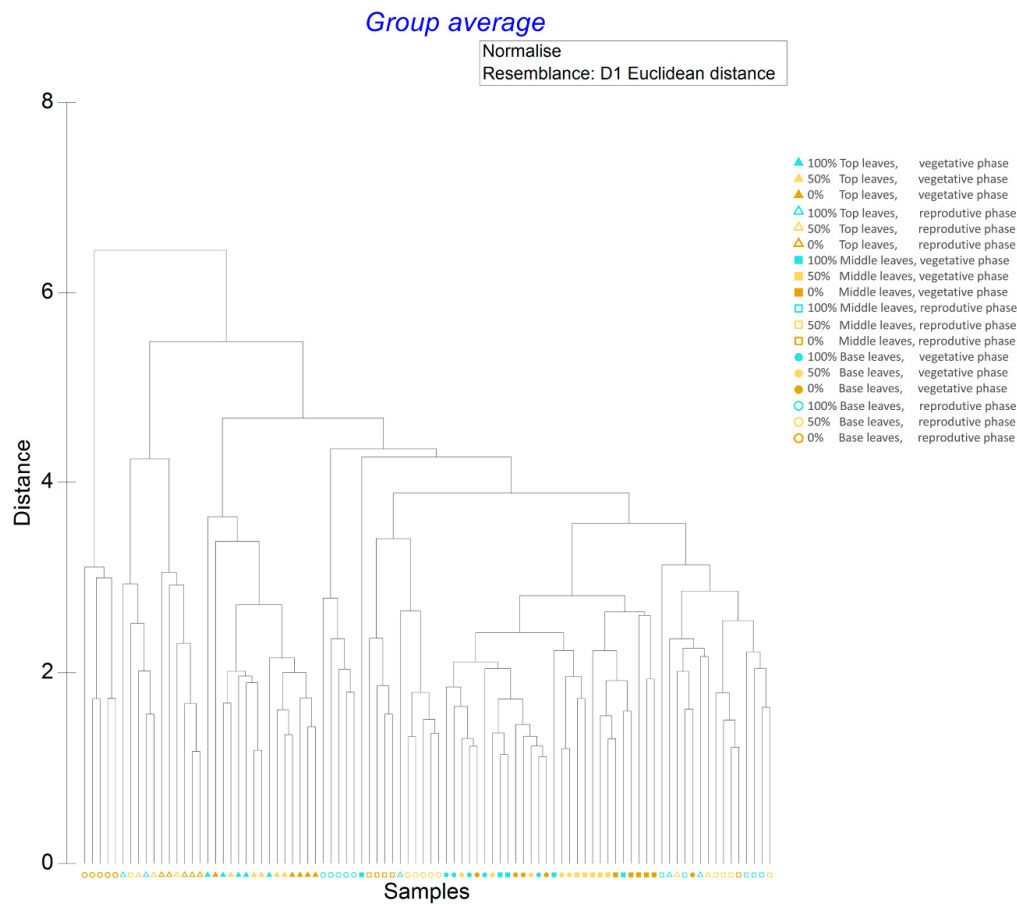


Figure S5. Clustering analysis (dendrogram) of the biochemical determinants for each condition. Leaves from three sections of maize plant (top (triangle), middle (square), and base (circle)) at two growth phases: vegetative (filled symbol) and reproductive (empty symbol). Maize plants were simultaneously exposed to three water irrigations: 100% irrigation (blue), 50% irrigation (light brown), and 0% (darker brown); the detailed symbol scheme is shown in the figure.

Table S1. Physico-chemical properties of the soil of the experimental site (Estação Experimental António Teixeira, Coruche, Portugal).

Sand (%)	Silt (%)	Clay (%)	P (mg/kg)	N (mg/kg)	Ca (meq/100 g)	Mg (meq/100 g)	K (meq/100 g)	Na (meq/100 g)	pH	EC (μS/cm a 20°C)
67.5	21.5	11.0	100.2	681.5	3.92	0.94	0.2	48.18	6.07	99.65