

SUPPLEMENTARY MATERIALS

S1: Gas Exchange

A Portable Photosynthesis Measurement System LCpro-SD (ADC BioScientific Ltd, Hoddesdon, UK) was used to determine the net photosynthetic rate (P_N), transpiration rate (E), stomatal conductance (g_s), and intercellular CO_2 concentration (C_i) on fully expanded leaves. In the determination process, the light intensity was $1500 \text{ mol m}^{-2} \text{ s}^{-1}$ and the leaf chamber temperature was 28°C . Two leaves were analyzed for each pot. The following parameters were measured: net photosynthetic rate (P_N), transpiration rate (E) and stomatal conductance (g_s).

S2: Relative chlorophyll content (CCI)

Measurement of the relative amount of chlorophyll within leaf was conducted using a Chlorophyll Content Meter CCM-200plus (Opti-Sciences, Hudson, NH, USA). Five leaves were analyzed for each pot.

S3: Chlorophyll Fluorescence

The chlorophyll fluorescence measurements were performed by using an analyser fluorimeter (Pocket PEA, Hansatech Instruments, King's Lynn, Norfolk, UK). The fluorescence signal was collected in the red actinic light with peak wavelength of 627 nm light diode source and applied for 1 s at the maximal available intensity of $3500 \text{ } \mu\text{mol m}^{-2} \text{ s}^{-1}$. Fluorescence measurements were assessed in dark-adapted (30 min) leaves, using the leaf-clips which were put on the adaxial leaf blades away from the leaf vein. Two measurements were made on each pot. The following parameters were recorded during the study: the maximal quantum yield of PSII photochemistry (F_v/F_m), the maximum quantum yield of primary photochemistry (F_v/F_0) and the performance index (PI).