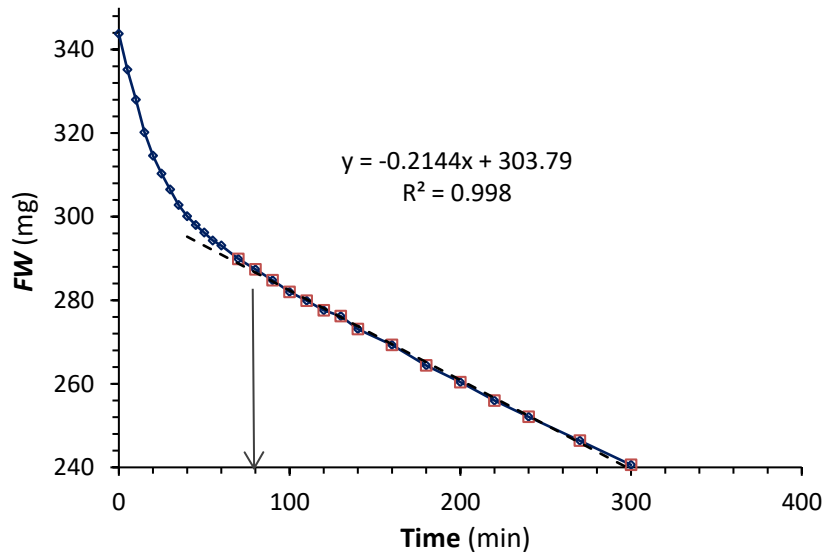


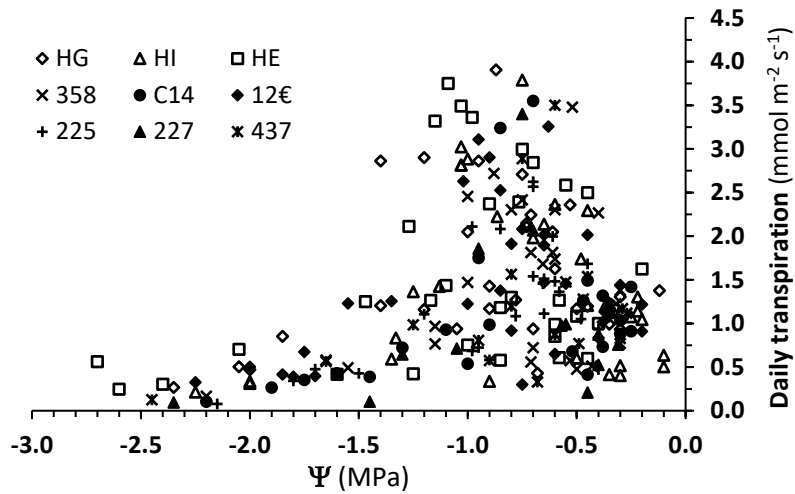
**Figure S1.** (left) Stomata observed on leaf prints taken from the abaxial side of a leaf (400x); (right) Cross section of a leaf sampled in the summer of 2017, showing the adaxial side to the right and the abaxial side to the left (400x). Regarding the cross-section of the leaf, four leaves per clone were analysed in summer 2017 and no significant differences were detected between clones in these four parameters measured: cross-sectional thickness ( $p = 0.111$ ;  $267.56 \pm 27.4 \mu\text{m}$ ); thickness of the adaxial epidermis ( $p = 0.160$ ;  $20.6 \pm 2.1 \mu\text{m}$ ); thickness of the abaxial epidermis ( $p = 0.370$ ;  $17.1 \pm 1.6 \mu\text{m}$ ); and palisade parenchyma thickness ( $p = 0.500$ ;  $76.7 \pm 7.5 \mu\text{m}$ ).



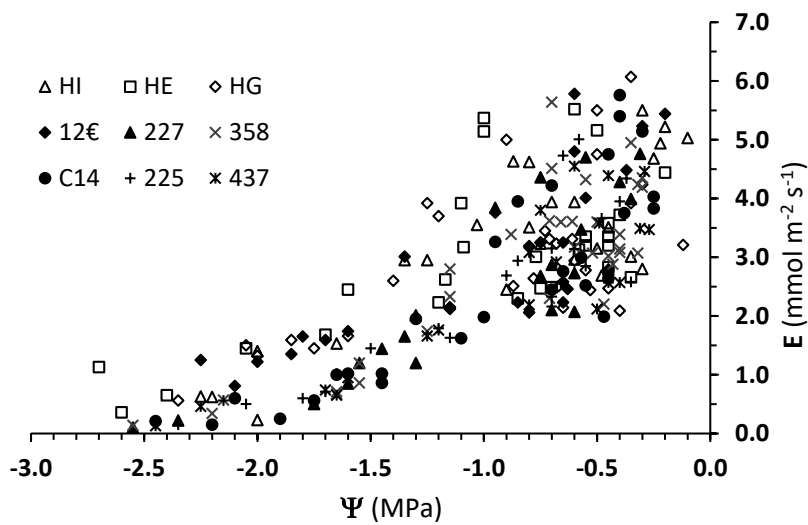
**Figure S2.** The graph generated by all the pairs of values, fresh weight (*FW*) vs. time (continuous line, rhombuses) and the regression line generated with the points marking a leaf's constant weight drop (dashed line, squares). The cut-off point between the curve and the regression line is assumed to be the the time elapsed until stomata closure,  $t_c$  (arrow). The slope of the regression line reflects the loss of water over time, from which cuticular transpiration ( $E_c$ ) can be deduced.



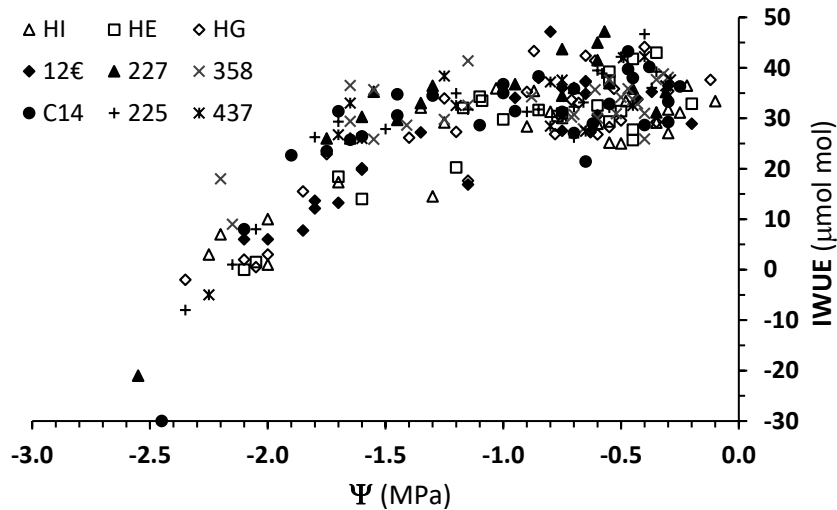
**Figure S3.** Plants of the nine clones under study, used to measure daily transpiration (by weighing), and instantaneous transpiration using a portable infrared gas analyser (Model LCI, ADC, London, UK). Daily transpiration was calculated based on the difference in weight between two measurements taken 24 h apart, measured 1 h after dawn on two consecutive days. The containers were wrapped with white plastic to avoid direct evaporation from the substrate. The total *LA* was measured for each plant. The assay started with plants watered to field capacity, but subsequently, they were watered, every day, with half of the water transpired the previous day, to subject the plants to a slow and progressive process of water stress for 30 days.  $\Psi$  was measured exactly at dawn (PMS 1000, Corvallis, USA). The instantaneous transpiration rate (*E*) was measured 2 h after dawn, when plants show maximum daily transpiration rates. This test was carried out during the summer of 2017, using 3 plants per clone from the additional plants left over from the main assay.



**Figure S4.** Relationship between daily transpiration rate over a 24-hour period, and the water potential at dawn of the first day of each measurement date, for the nine clones studied.



**Figure S5.** Relationship between the transpiration rate ( $E$ ) measured 2 h after dawn and the water potential at dawn, for the nine clones studied.  $E$  was significantly correlated with stomatal conductance,  $g_s$  ( $E = 9.036 g_s + 5.547$ ,  $r = 0.963$ ,  $p < 0.001$ ) and net photosynthetic rate,  $A$  ( $A = 0.038 E^4 - 0.661 E^3 + 3.446 E^2 - 2.525 E + 0.619$ ,  $r = 0.962$ ,  $p < 0.001$ ).  $E$  ( $\text{mmol m}^{-2} \text{s}^{-1}$  of  $\text{H}_2\text{O}$ ),  $g_s$  ( $\text{mol m}^{-2} \text{s}^{-1}$  of  $\text{H}_2\text{O}$ ),  $A$  ( $\mu\text{mol m}^{-2} \text{s}^{-1}$  of  $\text{CO}_2$ ).



**Figure S6.** Relationship between the intrinsic water use efficiency (IWUE =  $A/g_s$ ) measured 2 h after dawn and the water potential at dawn, for the nine clones studied.  $A$  ( $\mu\text{mol m}^{-2} \text{s}^{-1}$  of  $\text{CO}_2$ ),  $g_s$  ( $\text{mol m}^{-2} \text{s}^{-1}$  of  $\text{H}_2\text{O}$ ).

**Table S1.** Mean value ( $\pm$ SE) of the osmotic potential at full turgor ( $\Psi_{s100}$ ) and at the point of turgor loss ( $\Psi_{s0}$ ), the  $RWC_0$  and  $RWC_{cs}$  of the nine studied clones. The measurements were made on two dates, first in well-watered plants and then after the plants were subjected to a progressive water stress test for 30 days in the summer of 2017 (see Figure S3), by means of the construction of isothermal pressure-volume curves, using the methodology described by Tyree and Richter (1981) [73].  $p$ : level of significance. Different letters in each column indicate significant differences between clones. \*: for each clone, asterisk indicates significant differences between  $RWC_0$  and  $RWC_{cs}$  ( $p < 0.001$ , Dunnett's T3 test).

Clone	$\Psi_{s100}$ (MPa)	$\Psi_{s0}$ (MPa)	$RWC_0$ (%)	$RWC_{cs}$ (%)
12€	$-1.53 \pm 0.03$ ab	$-1.96 \pm 0.07$ ab	$87.3 \pm 1.3$ abc	$75.7 \pm 2.1$ a *
HE	$-1.36 \pm 0.08$ bc	$-1.71 \pm 0.08$ c	$86.7 \pm 2.8$ abc	$75.3 \pm 3.6$ a *
HG	$-1.69 \pm 0.07$ a	$-1.99 \pm 0.07$ a	$88.9 \pm 0.8$ c	$76.7 \pm 2.5$ a *
HI	$-1.37 \pm 0.09$ bc	$-1.65 \pm 0.11$ c	$87.9 \pm 0.9$ bc	$83.3 \pm 1.5$ b
225	$-1.31 \pm 0.05$ c	$-1.72 \pm 0.06$ bc	$84.9 \pm 0.7$ abc	$83.2 \pm 2.5$ b
227	$-1.39 \pm 0.03$ bc	$-1.83 \pm 0.05$ abc	$81.1 \pm 1.4$ a	$79.6 \pm 3.0$ ab
C14	$-1.25 \pm 0.05$ c	$-1.82 \pm 0.05$ abc	$82.3 \pm 1.2$ ab	$80.1 \pm 2.3$ ab
358	$-1.38 \pm 0.04$ bc	$-1.79 \pm 0.07$ abc	$83.1 \pm 1.3$ abc	$85.4 \pm 2.2$ b
437	$-1.30 \pm 0.05$ c	$-1.81 \pm 0.08$ abc	$82.8 \pm 1.4$ abc	$82.3 \pm 3.2$ b
$p$	<0.001	0.003	<0.001	<0.001