**Table S1.** Correlation matrix (Pearson correlation coefficient) for water relations parameters (Transpiration rate-Tr, Stomatal conductance- gs, Root, xylem and shoot water potential- Ψr, Ψx, Ψs, respectively), hormone concentration (abscisic acid -ABA, jasmonic acid -JA, *trans*-zeatin –*t*Z, salicylic acid –SA, indoleacetic acid –IAA, 1-aminocyclopropane-1-carboxylic acid -ACC) in root xylem sap (Hormonex), upper (Hormoneu) and lower (Hormoned) roots, and pH (pHx) and ion sulphate (SO4x) in xylem sap. Asterisks denote significant correlations (\*: 0.01<P<0.05; \*\*: 0.001<P<0.01; \*\*\*: P<0.001).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Tr | gs | Ψr | Ψx | Ψs | ABAx | JAx | *t*Zx | SAx | IAAx | pHx | SO4x | ABAu | ABAd | JAu | JAd | *t*Zu | *t*Zd | SAu | SAd | IAAu | IAAd | ACCu | ACCd |
| Tr |  | +0.55\*\* | +0.64\*\* | +0.73\*\*\* | +0.11 | -0.82 \*\*\* | -0.12 | -0.23 | +0.29 | -0.17 | -0.53 \*\* | -0.64 \*\* | -0.41 | -0.52 \* | -0.62 \*\* | -0.37 | -0.39 | +0.12 | +0.32 | +0.21 | -0.20 | +0.08 | +0.23 | -0.25 |
| gs |  |  | +0.57 \*\* | +0.56 \*\* | +0.49 \* | -0.70 \*\*\* | -0.58 \*\* | -0.35 | +0.08 | -0.52 \* | -0.56 \*\* | -0.38 | -0.41 \* | -0.63 \*\* | -0.33 | -0.51 \* | -0.56 \*\* | -0.06 | +0.11 | +0.18 | -0.13 | -0.02 | +0.12 | -0.09 |
| Ψr |  |  |  | +0.8 3 \*\*\* | +0.40 | -0.70 \*\*\* | -0.01 | -0.29 | +0.22 | -0.28 | -0.42 \* | -0.25 | -0.23 | -0.43 | -0.22 | -0.47 \* | -0.32 | +0.15 | +0.16 | +0.17 | +0.09 | +0.39 | -0.10 | -0.15 |
| Ψx |  |  |  |  | +0.47 \* | -0.64 \* | -0.28 | -0.37 | 0.22 | -0.11 | -0.5\* | -0.27 | -0.06 | -0.30 | -0.20 | -0.23 | -0.42 \* | 0.04 | 0.33 | 0.25 | -0.02 | 0.19 | 0.03 | -0.24 |
| Ψs |  |  |  |  |  | -0.30 | -0.36 | -0.53 \* | -0.06 | -0.26 | -0.14 | -0.18 | -0.07 | -0.12 | -0.03 | -0.40 | -0.27 | -0.10 | 0.04 | 0.04 | -0.07 | -0.07 | 0.16 | -0.04 |
| ABAx |  |  |  |  |  |  | +0.21 | +0.21 | -0.16 | +0.36 | +0.57 \*\* | +0.42 | +0.52 \*  | +0.66 \*\* | +0.66 \*\* | +0.67 \*\* | +0.42 | -0.17 | -0.23 | -0.20 | -0.08 | -0.20 | -0.21 | +0.16 |
| JAx |  |  |  |  |  |  |  | +0.43 \* | +0.00 | +0.15 | +0.51 \* | -0.03 | -0.11 | +0.18 | +0.08 | +0.02 | +0.35 | +0.16 | -0.24 | -0.17 | +0.25 | +0.20 | -0.23 | -0.20 |
| tZx |  |  |  |  |  |  |  |  | +0.44 \* | +0.40 | 0.21 | 0.42 | -0.14 | -0.11 | +0.01 | +0.35 | -0.02 | -0.25 | +0.20 | +0.26 | -0.07 | +0.29 | -0.09 | -0.14 |
| SAx |  |  |  |  |  |  |  |  |  | -0.04 | -0.02 | -0.19 | -0.29 | -0.07 | -0.22 | -0.04 | -0.14 | -0.03 | +0.45 \* | +0.43 | +0.11 | +0.20 | +0.34 | +0.20 |
| IAAx |  |  |  |  |  |  |  |  |  |  | -0.22 | +0.49 \* | +0.26 | +0.02 | +0.19 | +0.64 \*\* | -0.03 | -0.34 | +0.16 | +0.03 | -0.08 | +0.33 | -0.40 | -0.31 |
| pHx |  |  |  |  |  |  |  |  |  |  |  | +0.11 | +0.24 | +0.61 \*\* | +0.37 | +0.12 | +0.42 \* | +0.21 | -0.17 | +0.20 | +0.12 | -0.25 | +0.07 | +0.17 |
| SO4x |  |  |  |  |  |  |  |  |  |  |  |  | +0.47 \* | -0.15 | +0.64 \*\* | +0.50 \* | -0.01 | -0.31 | +0.06 | +0.10 | -0.10 | -0.54 \* | -0.55 \* | -0.15 |
| ABAu |  |  |  |  |  |  |  |  |  |  |  |  |  | +0.41 | +0.38 | +0.34 | +0.24 | -0.14 | +0.08 | -0.25 | +0.14 | -0.09 | -0.19 | +0.15 |
| ABAd |  |  |  |  |  |  |  |  |  |  |  |  |  |  | +0.38 | +0.30 | +0.53 \* | +0.25 | +0.09 | -0.11 | +0.03 | -0.22 | +0.24 | +0.43 \* |
| JAup |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | +0.46 \* | +0.19 | -0.01 | -0.13 | -0.14 | -0.05 | +0.46 \* | -0.27 | -0.07 |
| JAd |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | -0.07 | -0.40 | +0.02 | +0.00 | -0.20 | +0.08 | -0.28 | -0.17 |
| tZu |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | +0.67\*\* | -0.40 | -0.19 | +0.31 | +0.01 | +0.08 | +0.15 |
| tZd |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | -0.19 | +0.09 | +0.48 \* | -0.01 | +0.31 | +0.06 |
| SAu |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | +0.65\*\* | +0.06 | -0.20 | +0.44 \* | +0.29 |
| SAd |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | -0.21 | -0.06 | +0.38 | +0.12 |
| IAAu |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | -0.07 | +0.04 | +0.24 |
| IAAd |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | -0.40 | -0.29 |
| ACCu |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | +0.48\* |