**Table S2** Bivariate genotypic correlations

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Fecundity** | **Stem**  **Diameter** | **Plant**  **Height** | **Petiole Length** | **Leaf**  **Size** | **Branch Number** | **Head**  **Total** | **Head**  **Diameter** | **Days to**  **Flower** | **Leaf PP** | **Water**  **Content** |
| **Fecundity** |  | 0.37 | 0.36 | 0.46 | 0.30 | **0.60** | **0.60** | 0.21 | 0.21 | -0.26 | -0.08 |
| **Stem**  **Diameter** | 0.32 |  | **0.92** | **0.88** | **0.96** | **0.82** | **0.84** | **0.78** | **0.80** | -0.13 | -0.20 |
| **Plant**  **Height** | 0.37 | **0.79** |  | **0.84** | **0.89** | **0.80** | **0.88** | **0.83** | **0.74** | -0.04 | -0.13 |
| **Petiole**  **Length** | 0.19 | **0.84** | **0.76** |  | **0.92** | **0.88** | **0.83** | **0.70** | **0.77** | -0.15 | -0.19 |
| **Leaf**  **Size** | 0.41 | **0.76** | **0.74** | **0.75** |  | **0.81** | **0.79** | **0.75** | **0.82** | -0.11 | -0.25 |
| **Branch Number** | 0.36 | **0.58** | 0.31 | 0.49 | 0.45 |  | **0.92** | **0.58** | **0.73** | -0.21 | -0.21 |
| **Head**  **Total** | 0.34 | **0.65** | 0.42 | 0.54 | 0.44 | **0.82** |  | **0.65** | **0.65** | -0.20 | -0.16 |
| **Head**  **Diameter** | **0.56** | **0.68** | **0.81** | **0.68** | **0.77** | 0.28 | 0.31 |  | **0.68** | 0.02 | -0.11 |
| **Days to**  **Flower** | 0.11 | 0.37 | **0.48** | 0.26 | 0.22 | 0.05 | 0.07 | 0.42 |  | -0.19 | -0.25 |
| **Leaf**  **PP** | -0.02 | 0.01 | 0.04 | 0.08 | -0.07 | -0.18 | -0.09 | -0.03 | 0.09 |  | 0.00 |
| **Water**  **Content** | -0.07 | 0.11 | -0.03 | 0.13 | -0.03 | 0.23 | 0.14 | -0.11 | -0.38 | 0.15 |  |

Bivariate genotypic correlations measured in sunflower cultivar (cmsHA89) x wild (ann1238) hybrids recombinant inbred lines (RILs) exposed to two watering treatments. Pearson correlation coefficients for the control and low water treatments are shown in the upper and lower portions, respectively. Significant relationships (*P* < 0.05) are bolded after adjustment using the Holm-Bonferroni method.