Supplementary Material

Extremophiles as a Model of a Natural Ecosystem: Transcriptional Coordination of Genes Reveals Distinct Selective Responses of Plants Under Climate Change Scenarios

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**Supplementary Table 5.** Loci selected from the assembled transcriptome for qRT-PCR validation of differential expression analysis results.

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| **Putative homologous gene symbol in the reference species** | **Putative homologous gene name in the reference species** | **Reference species** | **Left Primer sequence** | **Right Primer sequence** | **Annealing Temperature (°C)** | **Tissue** | **Product size (bp)** |
| DBR | 2-alkenal reductase (NADP(+)-dependent) | *Nicotiana tabacum* | AAACAGATCCACGGTCCTGATC | ACAGGGACAACTTCTGACCAC | 60.0  | Leaf | 133 |
| CesA | Cellulose synthase A catalytic subunit 6 [UDP-forming] | *Arabidopsis thaliana* | TGCCCACAGTGCAAAACAAG | ATAGCCTCCGCAATTTGCTC | 60.0 | Leaf | 149  |
| Fbox Protein | F-box protein At1g78100 (conserved protein) | *Arabidopsis thaliana* | AGATAATGCCTCGCTGATGC | TTGCGTGATTCTCGGGTTTG | 60.0 | Leaf | 135 |
| TBL11 | Protein trichome birefringence-like 11 | *Arabidopsis thaliana* | GCCTCGCTAACCTTTTCCAATC | GCAGTCAGACATTCTCGCAAC | 60.0 | Leaf | 90 |
| EXPA11 | Expansin A1, ALPHA 1.2,EXPA1; Expansin-A1  | *Theobroma cacao; Arabidopsis thaliana* | TCGCTGCAGTTTTCATGGTG | TTCCATACCCACAAGCTCCAC | 60.0 | Leaf | 147 |
| OFP7 | Ovate family protein; Transcription repressor OFP7 | *Vitis vinifera*; *Arabidopsis thaliana* | TTCACTCGTTCTGTGGAGAGC | TATTCCAGTTGCCCGAAACC | 60.0 C | Leaf | 127 |
| IDD5 | Protein indeterminate-domain 5, chloroplastic | *Arabidopsis thaliana* | ATTCCCTGCCAGTTATTGCC | AACAGCGTGGCATGGATATG | 60.0  | Root | 137 |
| ALFIN7 | PHD finger protein ALFIN-LIKE 7 | *Arabidopsis thaliana* | GGAGACCAACTCTGTTGTTGTAC | CCAAAACATTTTGTGGCCCATG | 60.0  | Root  |  96 |
| GID1B | Gibberellin receptor GID1B | *Arabidopsis thaliana* | TAGTTGTTGTGGCCGGTTTG | AGTGATCGTTGTTCGGCAAG | 60.0  | Root  | 144 |
| SK2 | SKP2A\_ARATH - F-box protein SKP2A | *Arabidopsis thaliana* | TGCAGCTTTCATGCATCCAC | ATGCATTAGCCCATGGTTGC | 60.0  | Root  | 143 |
| ERD4 | CSC1-like protein ERD4 | *Brassica juncea* | TTCAGACCTCAAGCTCATCCTC | AGCTCTTGAAGTTGCTTGCC | 60.0 | Root | 119 |