

## Supplemental Materials and Methods S2 The primers used for Rt-qPCR

| Gene name                                 | Size of products |   | Sequence                |
|-------------------------------------------|------------------|---|-------------------------|
| Actin                                     | 155              | F | GTAAGGGACATCAAGGAGAAGC  |
|                                           |                  | R | ACCTCAGGGCAACGGAAC      |
| Sucrose synthase type 3                   | 147              | F | AACCCTAAGCTAAGGGAGAACG  |
|                                           |                  | R | CCAACGGAACTGCCCCAAC     |
| aquaporin PIP1-1                          | 186              | F | GGATGAGCGGGAGGTAAGTT    |
|                                           |                  | R | CGTGGTTGCGTAGAGCGT      |
| Coproporphyrinogen oxidase                | III 135          | F | TGAAGCATTTTCATTCTGTCCA  |
|                                           |                  | R | ATATTCGCCAAGCCCAC       |
| ATP-dependent metalloprotease FTSH 8      | zinc 121         | F | CTCTGCGGGAAGGATAGGA     |
|                                           |                  | R | TGATTGGAAGAATCTCGACTGG  |
| ruBisCO                                   | large 145        | F | GCCCCAGAAAATCAGTCCC     |
| subunit-binding subunit beta              | protein          | R | ACCAAGAGTAACCCCAACCAG   |
| protoporphyrinogen oxidase                | 173              | F | CCCTGTATTTGTAGCACCCC    |
|                                           |                  | R | TTAGAAAAGAATGCCTTGTTGG  |
| cytochrome f                              | 134              | F | CTCCTCCCAGGCAAAATAAGA   |
|                                           |                  | R | AAGCTGTGCTCCCCGATAC     |
| Photosystem II polypeptide                | 10 kDa 166       | F | TCCTTGAAATCCGCTCCTC     |
|                                           |                  | R | TCATGGCTTCGTTGGCTC      |
| polyphenol oxidase                        | 118              | F | TCTCGTACTTGTCCAGGTACTGC |
|                                           |                  | R | AACTGCTGCCCAGCGTTC      |
| glucan                                    | 139              | F | CGACTACGCCCTCTTCACC     |
| endo-1,3-beta-glucosidase, acidic isoform |                  | R | AACGATGCCGACGTTTCC      |