**Supplementary Table 2. Primer sequences and combinations used in qPCR analysis.**

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| --- | --- | --- | --- |
| Target gene | Primer sequence (5’-3’)  Forward | Primer sequence (5’-3’)  Reverse | Gene type |
| ELF | ACGATCCTGCCAAGGGAGCAGCC | CGTCCCAATGGAGGGTACTCGGAGA | Reference gene |
| PAL1 | AGGGAAATGGCACAAAATCCCCGGGA | AATGGCGGCGGCAACAACGCTCTTA | Flavonoid-related biosynthetic genes |
| PAL2 | CATCACGAGAACGGGTCGTTATGTGTGAGTC | GACAGCTCCACCGTGACATCCAATTCACTAG |
| C4H | ACGCCGTGTTGGGAGTAGGCCA | GCCAGCCACCAAGCGTTGACCA |
| 4CL1 | CTCCCGAATTGTCCGGAATTCGTGCTGGC | CGGTAATCAGTTTCACGTCGTTTTCCGTTGCG |
| 4CL2 | CGCTTTCCCCAATAAACCGGCGCTG | GGCGATTTTGTCGGCCAATTCGGGGACG |
| CHS1 | GTTCAAGCCTTTAGGCATCTCAGATTGGAACTCAC | CTCCTGTTGTCTCGAGCCCATCTTCTTTTGACTTCC |
| CHS2 | GTTTTCGCCGATCGGAATCAACGACTGG | CCGGTGGTTCTTTTCCCTTCCTCCAGCGAT |
| CHI | TGCTGTAGGGACAGATTGGCTGCT | TGCTGAGAGGTTGTTGGCCAGGGA |
| F3H1 | GAACTCGAGCAGGTTGTCAATTGCAACGTTC | GGATTTGTTCCAGAGGCTTGGCATGAGG |
| F3H2 | CAATAGCAGGTTATCCATAGCTACATTCCAGAACCC | CTCAATTGGCTTAGGATCCAACTTAGCCTTCTCC |
| F3’5’H | TGCCGCAGCCGCCCTCTTTT | GGCGGCATCCGGTGTGGAGG |
| DFR1 | GCATGTCTCACATATACCTCTTCGAGCACCC | CTTCTTTTCCCTGCAAGTTTCCACCGCC |
| DFR2 | TCCTTTCCTCATGTCCTCAATGCCTCCAAGC | TCGGGGTATTTCTTCTTAAGCATTCTCGAGATATCG |
| FLS | ACGAGGTTCCGGGCCTCCAAGTT | ACCATCAACTCCCCTGGCGGCT |
| LAR1 | ATTCTCCTCCGTCCCACCACCGCTCTCAA | GGAAGTTGGTCCAATAACGTTCCCCCACC |
| LAR2 | CCGTTTCCGAGGATGACCTTCTCCAAAGAG | CATGCCGTTCATGGTGACTGCCGGCTT |
| ANS | GCGGCCACAGATTGGGGCGT | CCCACTCGAGCTGCCCGCTAGT |
| ANR | CCGGACTGCCTTTTTCCCGCTATGC | CCAGAGCATCGCGTGGGGTTTTCC |
| ACO1 | GGGCCTTAGGGCACATACTGATGCAGGA | GGGCATTTTTATCAGTCTCAAGCAAAGTTGGTGCTG | Ethylene biosynthetic genes |
| ACO2 | ATCAAAGGGCTGCGTGCCCACAC | CAATGGACATCCTTCCGGAGCCTTGAGTC |
| ACCS | AGCCACAAGGCGCAAGGTCTTCACT | TCCGAGCAGTGGAAAGAGGAGCCG |
| SAMS | CGCCATTGGTGTCCCCGAGCC | GGGGCTTCACGACCTCCCAGGTG |
| ERS | GCGCCTTGTGGATGCCAACTCGT | ACGCACAGCGACCACCTCTCCT |
| Mbox1 | GAAAACAGCGTCGAGCGCGAAACACAG | CAGAGTCCTTGAACTGGTTTAAAGCTTTGTCCTTC | Transcription factors |
| Mbox2 | GGGAGAAACCAGCTCCAAGTATCATGGGATGG | GACTTGTTGTTGACCATGGGAATGGGATGGAC |
| Mbox3 | ATTCTCCACAGAGGAAATCTGCTGGGAGGG | CCATTGTTGGAGGTGTCTGCGCAAGAC |
| Mbox4 | GCTGGAAGCATCCTTGAAGCAGATAAGGTCTAC | GCTGCCGTCCCATGTTAGTTGAAGAGGA |
| MYB1 | GCAGGGAGATTGCCTGGACGCAC | TGGCACCACCCGTGGAATTCGGA |
| MYB2 | GCTGCAGGGCTCCATCGTTGCG | AGGGCGGAGGGTCACCAAACGG |
| MYB3 | CCCCCAGACTCACCGCCCCC | TTCTGCTCCCGCCTCCGCCC |
| MYB4 | TTGCGGGGAGGCTACCGGGG | TGGGCAAGTGGCTTGGTCCGGT |
| MYB5 | GGTCCCTACTTCGACACCATCTACATCATCATC | CAAAAGGAGAGCCCATACGTCCAATAATCTTGATC |
| MYB6 | GCTCCTCCTGCTTCCCCGGCT | TGGCATCGAGGCTCCGGCCAA |
| BHLH1 | TGCAGCAGTCTGTGAACGGCTTGAG | TGTGTCGGGCTTGGGAGGACGA |
| BHLH2 | TGACGAACGCAGTCATGGCGCT | TGTTCTGTGGCACCCCGGGACT |
| BHLH3 | CCGCCGCCGGGAGAAGCTG | TGCGGCCCGACCACGATCCG |
| BHLH4 | CCCCGCCACCTCCTCCGACC | GCCGCCGCGGATTGAGCGTT |
| BHLH5 | GCCGCGCTGGCTGGTCAGTCT | TGGCAGCATCGCAGAGCAACCG |
| MYB12\_1 | ATCCGCGACGACAAAGACAACGCC | ACCACGCTTAACGGATGGCCGGA |
| MYB12\_2 | CAGCGGAGAAGCCCGGCCC | ACCCTTCTCCGTCGTCATCAACGCC |
| SPBP1 | GCGTCGTCGCCGCCTTCTTGT | GCCTGCGACAGCTCCTCTTCGC |
| SPBP2 | TCCGGTGGATCTACGGCGCCAC | TCCGGCCTTTCGTCTCCGGCA |
| TTG | GGCCAACGCATCGCTCTGGGG | ATTCCCGAACCTCCCAAAGGCGGA |