**Table S1** Designed primers for sequencing of *PPO* gene.

|  |  |  |
| --- | --- | --- |
| **Gene** | **Forward Primer (5’- 3’)** | **Reverse Primer (5’- 3’)** |
| *PPO* | GGCTCTTCTTCCCCTTCCA | ACGAGCGGCGGAGTAGAA |

**Table S2** PCR conditions of *PPO* gene amplification for sequencing.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Gene** | **Denaturation** | **Annealing** | **Elongation** | **Final extension** | **No. of cycle** |
| *PPO* | 94 °C  for  1 min | 53 °C  for  1 min | 72 °C  for  1min 30 sec | 72 °C  for  10 min | 35 |

**Table S3** Primers for expression analysis

|  |  |  |
| --- | --- | --- |
| **Gene** | **Forward Primer (5’- 3’)** | **Reverse Primer (5’- 3’)** |
| *PPO* | CCCAAAAGCCAGTCCTCCAT | AGAACCACGCTCGGGATGAC |
| *PAL* | AAGAACGGCGAACATGAGAAG | GATCCGATTCGCGATTGCT |
| *β-actin* | ATCATGAAGTGTGATGTTGA | ACCTTAATCTTCATGCTGCC |

**Table S4** Reaction conditions for expression analysis

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Gene** | **Reverse Transcription** | **Initial Denaturation** | **Denaturation** | **Annealing** | **Elongation** | **Final extension** | **No. of cycle** |
| *PPO* | 50 °C,  30 min | 95 °C,  15 min | 94 °C,  1 min | 60 °C,  1 min | 72 °C,  1 min | 72 °C,  10 min | 40 |
| *PAL* | 50 °C,  30 min | 95 °C,  15 min | 94 °C,  1 min | 60 °C,  1 min | 72 °C,  1 min | 72 °C,  10 min | 40 |
| *β-actin* | 50 °C,  30 min | 95 °C,  15 min | 94 °C,  1 min | 60 °C,  1 min | 72 °C,  1 min | 72 °C,  10 min | 40 |