**Table S6.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Gene** | **Primer sequences** | **Tm (°C)** | **Product size (bp)** |
| *pe35* | pe35F: CGAGCCTCCAGAAGAAGTGTT pe35R: GAAAGCGTCTGCCATCCC  | 55 | 622  |
| *pe11* | pe11F: TTGTGACCGAAGCCGTTAT pe11R: CGTAGCTCAGCTCGTTGGA  | 55 | 558  |
| *pe3* | pe3F: CTGATGAGTGGCGGTCTCG pe3R: GTACATCGGGATGACGCTG  | 63 | 1724 |
| *pe\_pgrs16* | pe\_pgrs16F: TGGGATCGGCGACGCTACCAACCAA pe\_pgrs16R: GCCCGCTGCAGACGCCCCTTC pe\_pgrsseqF: GGCAACGGCGGGCTGCTATTCG (internal sequencing primer)pe\_pgrs16seqR: GAGGCCGATGTTGCCGTTGTG (internal sequencing primer) | 64 | 2891 [20] |
| *pe\_pgrs18* | pe\_pgrs18F: GCAGGGATCGTCCGAATAAA pe\_pgrs 18R: CGGTCACGCCCACAAGGTG pe\_pgrs 18seqF: CAGGGCCTACCCTTTGAG (internal sequencing primer) | 55 | 1561  |
| *pe\_pgrs26* | pe\_pgrs 26F: AGACCTGCATTTGCAGCAGTC pe\_pgrs26R: GCTGTTCGTTACCGGCATCTG pe\_pgrs26seqF: CCGTCCCCGCCAGCCCT (internal sequencing primer) | 55 | 1797 [20] |
| *pe\_pgrs33* | pe\_pgrs33F: CTACGGTAACCCGTTCATCCC pe\_pgrs33R: GCGCCCGCCGAAGTGTAAG PGRS33seqF: GACGGCGGAATCTTGATC (internal sequencing primer) | 55 | 1649 [18] |
| *pe\_pgrs62* | pe\_pgrs62F: TCACATTCTGGCTTTTGCG pe\_pgrs62R: CCCATGCGTGGCTACGAC  | 55 | 1780  |
| *ppe68* | ppe68F: ATGAGGTCTCCGCCCAAGC ppe68R: TCTTTACCTTCCTCGCCAAAA  | 55 | 1383  |
| *ppe2* | ppe2F: ACGCTCCAAACCTTGTCTAGC ppe2R: GCGTCGCTTGTCGTACCC  | 55 | 1828 |
| *ppe44* | ppe44F: TGGCGAGCGTGGTGCCTACGCTGGC ppe44R: GGGTTAGCGCAATGTGGC ppe44seqF: GACCTTGATGGAATAATGG (internal sequencing primer) | 62 | 1292  |
| *ppe10* | ppe10F: GCGTCGGTGCTTGCCATA ppe10R: CAGGTAAGCGAACGGGTAGTC  |  | 1757  |
| *ppe42* | ppe42F: GGGCGAAGTTTGACGGAA ppe42R: TTGCAACTAGGCGAGCTGTT  | 60 | 2017  |
| *ppe62* | ppe62F: CCGTAACGCATTGACGACACC ppe62R: CAACGAACTGGGACTG  | 60 | 1936  |