

Table S1 The primers used in this study.

| Primer   | Primer Sequence (5'-3')                         |
|----------|---|
| AX543-F  | GGGGAATTCATGCCGCCCCTCATTACCTCC                  |
| AX543-R  | CCGCTCGAGAATCTGCCTTTGTCGTGATGATCCTACC           |
| Xyl43A-F | GACGAATTCATGGCTCCATTGATCACCAAC                  |
| Xyl43A-R | CCGCTCGAGATTCAGGTTTTTCAGTAACAATTTTCC            |
| Q201R-F  | GCCAGCCCGAGAGCTCCTCATTC                         |
| Q201R-R  | ATGAGGAGCTCTCGGGCTGGCGAC                        |
| K285R-F  | CGAGTACAAGGGCAGGACATATCTTCTTCTC                 |
| K285R-R  | GAAGAAGAGATATGTCCTGCCCTTGTAACG                  |
| G110S-F  | GTGGCCGTGAGTGACAAGCCCG                          |
| G110S-R  | CGGGCTTGTCACCTCACGGCCAC                         |
| G216A-F  | GAACCCATTCTCGCCGACGACCAC                        |
| G216A-R  | GTGGTCGTCGGCGAGAATGGGTTC                        |
| A119P-F  | CTTCACCCCAGACCCAGAGCCCATC                       |
| A119P-R  | GCTCTGGGTCTGGGGTGAAGGGG                         |
| K125P-F  | CAGAGCCCATCCCAGGCAGCTACTCC                      |
| K125P-R  | GGAGTAGCTGCCTGGGATGGGCTCTG                      |
| L1-F     | CGCGAGACGGACATTCAATTCAACGACAATG                 |
| L1-R     | CATTGTCGTTGAATTGAATGTCCGTCTCGCG                 |
| L2-F     | CTCGACTCCCTCGACCCCCCTTCCGAGGTGGACCGACCACGGCGTC  |
| L2-R     | GGGGGGTCGAGGGAGTCGAGGGAGAAGACATGGTAGTCGGCCATGTC |

|      |  |
|------|--|
| L3-F | CCCAAGGAACCCAGCGGCTCCGGGGCCAAGGCGCTCGGCCCTCGCGCC<br>GCCAAGTTGACAG    |
| L3-R | GAGCCGCTGGGTTCCTTGGGGCCGGACCATTCCGCGTCGAACGTGTCGT<br>CGCCCTTTTGGTAGC |
| L4-F | TACCATGTCTTCTCCCTCGACTCCCTGACC                                       |
| L4-R | GTGGTCGGTCACCTCGGAAGGGGGGTCGA  |

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