**SUPPLEMENTARY TABLE S2 |** Primers and barcode sequences used for library preparation in the multiplex strategy. Primers used are shown for the first- **(A)** and second-step PCR **(B)**.

**(A) Plate tagging (first PCR)**

**Forward primers**

| Primer_ID | Nextera transposase sequence | MT-FS | Linker | Forward rRNA primer | Complete sequence (5' to 3') |
|---|---|---|---|---|---|
| 008f_MT | TCGTCGGCAGCGTCAGATGTGTATAAGAGACAG | NNNNNNNN | AC | AGAGTTTGATCMTGGC | TCGTCGGCAGCGTCAGATGTGTATAAGAGACAGNNNNNNNNNACAGAGTTTGATCMTGGC |

**Reverse primers (plate tagging)**

| Primer_ID | Nextera transposase sequence | MT-FS | Barcodes (plate tagging) | Linker | Reverse rRNA primer | Complete sequence (5' to 3') |
|---|---|---|---|---|---|---|
| 1492r_MT_bc1 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TTACCGACG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTTACCGACGCGTACCTTGTTACGACTT |
| 1492r_MT_bc2 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | ATTGGACAC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNATTGGACACCGTACCTTGTTACGACTT |
| 1492r_MT_bc3 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TCGCATGGA | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTCGCATGGACGTACCTTGTTACGACTT |
| 1492r_MT_bc4 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | AGCGAACCT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNAGCGAACCTCGTACCTTGTTACGACTT |
| 1492r_MT_bc5 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | AGCTTCGAC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNAGCTTCGACCGTACCTTGTTACGACTT |
| 1492r_MT_bc6 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GTCAGCCGT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGTCAGCCGTCGTACCTTGTTACGACTT |
| 1492r_MT_bc7 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TCCAGATAG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTCCAGATAGCGTACCTTGTTACGACTT |
| 1492r_MT_bc8 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GAGAGTCCA | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGAGAGTCCACGTACCTTGTTACGACTT |
| 1492r_MT_bc9 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GCTCACAAT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGCTCACAATCGTACCTTGTTACGACTT |
| 1492r_MT_bc10 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TTGACGACA | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTTGACGACACGTACCTTGTTACGACTT |
| 1492r_MT_bc11 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CTTAGAACG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCTTAGAACGCGTACCTTGTTACGACTT |
| 1492r_MT_bc12 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CGGTTCACA | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCGGTTCACACGTACCTTGTTACGACTT |
| 1492r_MT_bc13 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CGATAGGCC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCGATAGGCCCGTACCTTGTTACGACTT |
| 1492r_MT_bc14 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GCTATATCC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGCTATATCCCGTACCTTGTTACGACTT |
| 1492r_MT_bc15 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GTCTTCAGC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGTCTTCAGCCGTACCTTGTTACGACTT |
| 1492r_MT_bc16 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TAGACACCG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTAGACACCGCGTACCTTGTTACGACTT |
| 1492r_MT_bc17 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TCAGCTGAC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTCAGCTGACCGTACCTTGTTACGACTT |
| 1492r_MT_bc18 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TAAGTCGGC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTAAGTCGGCCGTACCTTGTTACGACTT |
| 1492r_MT_bc19 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GCTCCTTAG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGCTCCTTAGCGTACCTTGTTACGACTT |
| 1492r_MT_bc20 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | ATGGCCTGA | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNATGGCCTGACGTACCTTGTTACGACTT |
| 1492r_MT_bc21 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TTGCAAGTA | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTTGCAAGTACGTACCTTGTTACGACTT |
| 1492r_MT_bc22 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CCTAGTAAG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCCTAGTAAGCGTACCTTGTTACGACTT |
| 1492r_MT_bc23 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CTAGGATCA | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCTAGGATCACGTACCTTGTTACGACTT |
| 1492r_MT_bc24 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TATGAACGT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTATGAACGTCGTACCTTGTTACGACTT |
| 1492r_MT_bc25 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CTTGTGCGA | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCTTGTGCGACGTACCTTGTTACGACTT |
| 1492r_MT_bc26 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CACGATGGT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCACGATGGTCGTACCTTGTTACGACTT |
| 1492r_MT_bc27 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | ACGTGCCTT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNACGTGCCTTCGTACCTTGTTACGACTT |
| 1492r_MT_bc28 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TGAACTAGC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTGAACTAGCCGTACCTTGTTACGACTT |
| 1492r_MT_bc29 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TATTCAGCG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTATTCAGCGCGTACCTTGTTACGACTT |
| 1492r_MT_bc30 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TAATCGGTG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTAATCGGTGCGTACCTTGTTACGACTT |
| 1492r_MT_bc31 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GCGTCCATG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGCGTCCATGCGTACCTTGTTACGACTT |
| 1492r_MT_bc32 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CGTAAGATG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCGTAAGATGCGTACCTTGTTACGACTT |
| 1492r_MT_bc33 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CTGTTACAG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCTGTTACAGCGTACCTTGTTACGACTT |
| 1492r_MT_bc34 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | ACGATCATC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNACGATCATCCGTACCTTGTTACGACTT |
| 1492r_MT_bc35 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GTAACGGCT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGTAACGGCTCGTACCTTGTTACGACTT |
| 1492r_MT_bc36 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CCATGCTTA | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCCATGCTTACGTACCTTGTTACGACTT |
| 1492r_MT_bc37 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GTACGCACA | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGTACGCACACGTACCTTGTTACGACTT |
| 1492r_MT_bc38 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TTAGAGCCA | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTTAGAGCCACGTACCTTGTTACGACTT |
| 1492r_MT_bc39 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | ATAAGGTCG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNATAAGGTCGCGTACCTTGTTACGACTT |
| 1492r_MT_bc40 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | AGTGGCACT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNAGTGGCACTCGTACCTTGTTACGACTT |
| 1492r_MT_bc41 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CCAGAAGTG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCCAGAAGTGCGTACCTTGTTACGACTT |
| 1492r_MT_bc42 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CTACTAGCG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCTACTAGCGCGTACCTTGTTACGACTT |
| 1492r_MT_bc43 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TAGCGTTCC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTAGCGTTCCCGTACCTTGTTACGACTT |
| 1492r_MT_bc44 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GTGAGTCAT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGTGAGTCATCGTACCTTGTTACGACTT |
| 1492r_MT_bc45 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TGGTCCTAC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTGGTCCTACCGTACCTTGTTACGACTT |
| 1492r_MT_bc46 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TACGCGTAC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTACGCGTACCGTACCTTGTTACGACTT |
| 1492r_MT_bc47 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GAGCCATCT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGAGCCATCTCGTACCTTGTTACGACTT |
| 1492r_MT_bc48 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CGTCCGTAT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCGTCCGTATCGTACCTTGTTACGACTT |
| 1492r_MT_bc49 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | GATACGTTC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNGATACGTTCCGTACCTTGTTACGACTT |
| 1492r_MT_bc50 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CAGCTGGTT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCAGCTGGTTCGTACCTTGTTACGACTT |
| 1492r_MT_bc51 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TTAAGCGCC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTTAAGCGCCGTACCTTGTTACGACTT |
| 1492r_MT_bc52 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CCTGCGAAG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCCTGCGAAGCGTACCTTGTTACGACTT |
| 1492r_MT_bc53 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TTGTAGCCG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTTGTAGCCGCGTACCTTGTTACGACTT |
| 1492r_MT_bc54 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | TCTGTAGAG | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNTCTGTAGAGCGTACCTTGTTACGACTT |
| 1492r_MT_bc55 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CTATTAAGC | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCTATTAAGCCGTACCTTGTTACGACTT |
| 1492r_MT_bc56 | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAG | NNNN | CTCTGAGGT | CG | TACCTTGTTACGACTT | GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGNNNNCTCTGAGGTCGTACCTTGTTACGACTT |

**(B) Well tagging (second PCR)**

**Forward primers (row tagging)**

| Primer_ID | Forward Illumina adapter | Barcode (row tagging) | Nextera transposase sequence | Complete sequence (5' to 3') |
|---|---|---|---|---|
| S501 | AATGATACGGCGACCACCGAGATCTACAC | TAGATCGC | TCGTCGGCAGCGTC | AATGATACGGCGACCACCGAGATCTACACTAGATCGCTCGTCGGCAGCGTC |
| S502 | AATGATACGGCGACCACCGAGATCTACAC | CTCTCTAT | TCGTCGGCAGCGTC | AATGATACGGCGACCACCGAGATCTACACCTCTCTATTCGTCGGCAGCGTC |
| S503 | AATGATACGGCGACCACCGAGATCTACAC | TATCCTCT | TCGTCGGCAGCGTC | AATGATACGGCGACCACCGAGATCTACACTATCCTCTTCGTCGGCAGCGTC |
| S504 | AATGATACGGCGACCACCGAGATCTACAC | AGAGTAGA | TCGTCGGCAGCGTC | AATGATACGGCGACCACCGAGATCTACACAGAGTAGATCGTCGGCAGCGTC |
| S505 | AATGATACGGCGACCACCGAGATCTACAC | GTAAGGAG | TCGTCGGCAGCGTC | AATGATACGGCGACCACCGAGATCTACACGTAAGGAGTCGTCGGCAGCGTC |
| S506 | AATGATACGGCGACCACCGAGATCTACAC | ACTGCATA | TCGTCGGCAGCGTC | AATGATACGGCGACCACCGAGATCTACACACTGCATATCGTCGGCAGCGTC |
| S507 | AATGATACGGCGACCACCGAGATCTACAC | AAGGAGTA | TCGTCGGCAGCGTC | AATGATACGGCGACCACCGAGATCTACACAAGGAGTATCGTCGGCAGCGTC |
| S508 | AATGATACGGCGACCACCGAGATCTACAC | CTAAGCCT | TCGTCGGCAGCGTC | AATGATACGGCGACCACCGAGATCTACACCTAAGCCTTCGTCGGCAGCGTC |

**Reverse primers (column tagging)**

| Primer_ID | Reverse Illumina adapter | Barcode (column tagging) | Nextera transposase sequence | Complete sequence (5' to 3') |
|---|---|---|---|---|
| N701 | CAAGCAGAAGACGGCATACGAGAT | TCGCCTTA | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATTCGCCTTAGTCTCGTGGGCTCGG |
| N702 | CAAGCAGAAGACGGCATACGAGAT | CTAGTACG | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATCTAGTACGGTCTCGTGGGCTCGG |
| N703 | CAAGCAGAAGACGGCATACGAGAT | TTCTGCCT | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATTTCTGCCTGTCTCGTGGGCTCGG |
| N704 | CAAGCAGAAGACGGCATACGAGAT | GCTCAGGA | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATGCTCAGGAGTCTCGTGGGCTCGG |
| N705 | CAAGCAGAAGACGGCATACGAGAT | AGGAGTCC | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATAGGAGTCCGTCTCGTGGGCTCGG |
| N706 | CAAGCAGAAGACGGCATACGAGAT | CATGCCTA | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATCATGCCTAGTCTCGTGGGCTCGG |
| N707 | CAAGCAGAAGACGGCATACGAGAT | GTAGAGAG | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATGTAGAGAGGTCTCGTGGGCTCGG |
| N708 | CAAGCAGAAGACGGCATACGAGAT | CCTCTCTG | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATCCTCTCTGGTCTCGTGGGCTCGG |
| N709 | CAAGCAGAAGACGGCATACGAGAT | AGCGTAGC | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATAGCGTAGCGTCTCGTGGGCTCGG |
| N710 | CAAGCAGAAGACGGCATACGAGAT | CAGCCTCG | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATCAGCCTCGGTCTCGTGGGCTCGG |
| N711 | CAAGCAGAAGACGGCATACGAGAT | TGCCTCTT | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATTGCCTCTTGTCTCGTGGGCTCGG |
| N712 | CAAGCAGAAGACGGCATACGAGAT | TCCTCTAC | GTCTCGTGGGCTCGG | CAAGCAGAAGACGGCATACGAGATTCCTCTACGTCTCGTGGGCTCGG |

doi: 10.3389/fpls.2017.02191