

Table S1 Distribution of the major SSR types identified from the genome sequence of *B. oleracea*

| SSR motif | Number | Proportion (%) | Frequency (loci/Mb) |
|------------------------|---------------|----------------|---------------------|
| Mononucleotide | 62204 | 49.59 | 110.88 |
| A/T | 57629 | 45.94 | 102.72 |
| C/G | 4575 | 3.65 | 8.15 |
| Dinucleotide | 41560 | 33.13 | 81.57 |
| AT/AT | 27267 | 21.74 | 48.60 |
| AG/CT | 12321 | 9.82 | 21.96 |
| AC/GT | 1968 | 1.57 | 3.51 |
| CG/CG | 4 | 0.00 | 0.01 |
| Trinucleotide | 13652 | 10.88 | 30.38 |
| AAG/CTT | 4436 | 3.54 | 7.91 |
| AAT/ATT | 2548 | 2.03 | 4.54 |
| AAC/GTT | 1338 | 1.07 | 2.38 |
| ACC/GGT | 875 | 0.70 | 1.56 |
| ACG/CGT | 520 | 0.41 | 0.93 |
| AGG/CCT | 1604 | 1.28 | 2.86 |
| ATC/GAT | 2156 | 1.72 | 3.84 |
| CCG/CGG | 175 | 0.14 | 0.31 |
| Tetranucleotide | 4884 | 3.89 | 10.49 |
| AAAC/GTTT | 457 | 0.36 | 0.81 |
| AAAG/CTTT | 567 | 0.45 | 1.01 |
| AAAT/AAAT | 1992 | 1.59 | 3.55 |
| AACT/AGTT | 238 | 0.19 | 0.42 |
| AATT/AATT | 458 | 0.37 | 0.82 |
| ATAC/GTAT | 126 | 0.10 | 0.22 |
| ATAG/CTAT | 304 | 0.24 | 0.54 |
| others | 742 | 0.59 | 3.12 |
| Pentanucleotide | 1781 | 1.42 | 3.82 |
| AAAAC/GTTTT | 145 | 0.12 | 0.26 |
| AAAAT/ATTTT | 327 | 0.26 | 0.58 |
| AACCG/CGGTT | 382 | 0.30 | 0.68 |
| ACTGG/CCAGT | 17 | 0.01 | 0.03 |
| others | 910 | 0.73 | 2.27 |
| Hexanucleotide | 1362 | 1.09 | 1.99 |
| AAAAAC/GTTTTT | 58 | 0.05 | 0.10 |
| AAAAAG/CTTTTT | 70 | 0.06 | 0.12 |
| AAAAAT/ATTTTT | 86 | 0.07 | 0.15 |
| AAAACC/GGTTTT | 19 | 0.02 | 0.03 |
| AAAGAG/CTCTTT | 20 | 0.02 | 0.04 |
| AAATAT/ATATTT | 30 | 0.02 | 0.05 |
| others | 1079 | 0.86 | 1.50 |
| total | 125443 | 100.00 | 223.60 |