

Table S4. Microsatellite loci used to examine genetic distance among the donor plants (HV04; HV05; HV10; HV13; HV18) of *Helianthus verticillatus*.

Locus	Forward (F) and Reverse (R) Primers 5'-3'	Repeat Motif	Number of Alleles	Allele Size Range (bp)
HV006 ^a	F: CATGGGTGATCAATGGAGTG R: CGGCACATAACAAGTGCTTC	(gtga) ₃	2	227–267
HV017 ^a	F: ACTTACCGTTGCATTTGGTG R: GCTTATCCCTAGAACACGATTACAG	(taa) ₄	2	109–112
HV021 ^a	F: AAGTCGCACAGGAAGGAGATAG R: TTGCTTGGAAGCCAATGAG	(ttgt) ₃	2	101–105
HV037 ^a	F: GGTTAGGGTGAGGGTGGTG R: AAGCCATAGTAAGTTCCTCTTACAAAC	(tgca) ₃	3	155–179
HV042 ^a	F: GGTTACAACGGTGGAAGTCCG R: TCCGGTTCACCAATTCATTC	(ggc) ₄	2	367–373
Hvert002 ^b	F: ATTCAGGGTTTCTGCCAGTGG R: GAACTGATACCGACGCAAACC	(ca) ₂	3	234–258
Hvert005 ^b	F: GTCTTCAACTCAAACCACTAGCC R: CAAGTTGTGCCCCGATTTGTAGG	(ag) ₇	2	215–233
Hvert015 ^b	F: GGTTCTTACAACCTCGAGGTGG R: AACATCCAGTTGGGCTAACC	(ta) ₉	3	155–185
Hvert026 ^b	F: TTCCAGAGGCCGACTTCAAGG R: ATAGGTGTGTGGAAGCCATGG	(gaa) ₆	2	237–249
Hvert028 ^b	F: GCGGATGATTCTTAGCACTAACC R: TGGAAATAGAAAGAATTCCGGGC	(cca) ₆	2	244–280
Hvert030 ^b	F: CAACCATGCTGTCATCACTGG R: GAGAATGGTGGTGTCCAGACC	(tcc) ₆	3	170–179
Hvert033 ^b	F: GTGGGTGAAAGGAAAGTGTGG R: GATCTCTCCATCTCTCGGTGC	(gaa) ₇	2	130–136
Hvert042 ^b	F: TTGGAAACAGCCTCTCTATCG R: CGTCGCCATTAGAGACTTTGG	(gttt) ₇	2	200–208
Hvert045 ^b	F: ATGTTCCCTGCTCTTCGATCG R: TTAATCCGCCCTGCAGTTAGG	(catt) ₅	2	133–145
Hvert046 ^b	F: ATGAGAAACCAGCTGTCGTCC R: ACCCTCAAATCTCTTCTAAACC	(agaa) ₅	3	282–318

^a Loci renamed by Edwards et al. [65] and taken from Pashley et al. [64];

^b Loci obtained from our transcriptome experiments (The reads were deposited in the Sequence Read Archive (SRA) database of the U.S. National Center for Biotechnology Information (NCBI) -PRNJA778959).