

# Supplementary Materials: Morphological, Genome and Gene Expression Changes in Newly Induced Autopolyploid *Chrysanthemum lavandulifolium* (Fisch. ex Trautv.) Makino

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## 1. Primer Combination of SRAP (Sequence-Related Amplified Polymorphism) (77)

em #4 plus me #4 (abbreviated "E4+M4")

M4+E4, M4+E6, M4+E11, M4+E12, M4+E13, M4+E18, M6+E2, M6+E4, M6+E5, M6+E9, M6+E10, M6+E12, M6+E14, M6+E15, M6+E17.

M7+E2, M7+E3, M7+E5, M7+E12, M7+E15, M7+E18, M8+E2, M8+E3, M8+E4, M8+E9, M8+E10, M8+E11, M8+E12, M8+E14, M8+E18.

M10+E2, M10+E3, M10+E4, M10+E5, M10+E9, M10+E10, M10+E11, M10+E12, M10+E17, M10+E18, M21+E2, M21+E3, M21+E4, M21+E5, M21+E10, M21+E11, M21+E12, M21+E14, M21+E15, M21+E17, M21+E18.

M22+E2, M22+E10, M22+E12, M22+E18, M23+E2, M23+E3, M23+E5, M23+E6, M23+E10, M23+E11, M23+E12, M23+E15, M23+E18, M25+E2, M25+E3, M25+E4, M25+E5, M25+E6, M25+E9, M25+E10, M25+E11, M25+E12, M25+E14, M25+E15, M25+E17, M25+E18.

**Table S1.** Sequences of primers for SRAP analysis.

Primer	Sequence (5'-3')	Primer	Sequence (5'-3')
em2	GACTGCGTACGAATTGC	me4	TGAGTCAAACCGGACC
em3	GACTGCGTACGAATTGAC	me6	TGAGTCAAACCGGTAG
em4	GACTGCGTACGAATTGA	me7	TGAGTCAAACCGGTTG
em5	GACTGCGTACGAATTAAC	me8	TGAGTCAAACCGGTGT
em6	GACTGCGTACGAATTGCA	me10	TGAGTCAAACCGGATG
em9	GACTGCGTACGAATTACG	me21	GTACATAGAACCGGAGT
em10	GACTGCGTACGAATTAG	me22	TACGACGAATCCGGACT
em11	GACTGCGTACGAATTTCG	me23	CACAGTCATGCCGGAAT
em12	GACTGCGTACGAATTGTC	me25	CAGGACTAAACCGGATA
em14	GACTGCGTACGAATTCA		
em15	GACTGCGTACGAATTCTG		
em16	GACTGCGTACGAATTCCG		
em17	GACTGCGTACGAATTCCA		
em18	GACTGCGTACGAATTGAT		

"em#" and "me#" indicates name of forward primers and reverse primers.

## 2. Primer Combination of AFLP (Amplified Fragment Length Polymorphism) (56)

*Eco*RI selective primer #2 plus *Mse*I selective primer #5 (abbreviated "E2+M5")

E2+M5, E2+M6, E2+M3, E2+M9, E2+M7, E2+M2, E7+M4, E7+M5, E7+M6, E7+M3, E7+M7, E7+M8, E4+M9, E4+M6, E4+M5, E4+M4, E4+M2, E4+M7, E4+M8.

E9+M8, E3+M8, E3+M7, E3+M2, E3+M4, E3+M5, E3+M6, E3+M3, E3+M9, E5+M7, E5+M4, E5+M5, E5+M6, E5+M3, E5+M9, E9+M7, E9+M2, E9+M4, E9+M5, E9+M6, E9+M3.

E8+M2, E8+M9, E8+M3, E8+M6, E8+M5, E8+M4, E8+M7, E6+M9, E6+M3, E6+M6, E6+M5, E6+M4, E6+M2, E6+M7, E6+M8, E8+M2.

### 3. Primer Combination of MSAP (Mthylation Sensitive Amplified Polymorphism)

*Eco*RI selective primer #9 plus *Hpa*II/*Msp*I selective primer #2 (abbreviated “E9+M2”)  
 E9+H2, E9+H4, E9+H5, E9+H6, E9+H7, E9+H8, E9+H9  
 E6+H6, E6+H8, E6+H9, E8+H5, E8+H6, E8+H7, E8+H8, E8+H9,  
 E8+H2, E8+H3, E8+H4, E6+H2, E6+H3, E6+H4,  
 E4+H3, E4+H5, E4+H6, E4+H7, E4+H8

**Table S2.** Sequences of adaptors and primers used for pre-amplification and selective amplification in AFLP and MSAP analysis.

Primer	Sequence (5'-3')
<i>Eco</i> RI adaptor-F	CTCGTAGACTGCGTACC
<i>Eco</i> RI adaptor-R	AATTGGTACGCAGTCTAC
<i>Mse</i> I adaptor-F	GACGATGAGTCCTGAG
<i>Mse</i> I adaptor-R	TACTCAGGACTCAT
<i>Hpa</i> II/ <i>Msp</i> I adaptor-F	GATCATGAGTCCTGCT
<i>Hpa</i> II/ <i>Msp</i> I adaptor-R	CGAGCAGGACTCATGA
<i>Eco</i> RI pre-selective primer-1	GACTGCGTACCAATTCA
<i>Mse</i> I pre-selective primer-1	GATGAGTCCTGAGTAAC
<i>Hpa</i> II/ <i>Msp</i> I pre-selective primer-1	ATCATGAGTCCTGCTCGG
<i>Eco</i> RI selective primer-2	GACTGCGTACCAATTCAAC
<i>Eco</i> RI selective primer-3	GACTGCGTACCAATTCAAG
<i>Eco</i> RI selective primer-4	GACTGCGTACCAATTCAACA
<i>Eco</i> RI selective primer-5	GACTGCGTACCAATTCACT
<i>Eco</i> RI selective primer-6	GACTGCGTACCAATTCAACC
<i>Eco</i> RI selective primer-7	GACTGCGTACCAATTCAACG
<i>Eco</i> RI selective primer-8	GACTGCGTACCAATTCAAGC
<i>Eco</i> RI selective primer-9	GACTGCGTACCAATTCAAGG
<i>Mse</i> I selective primer-2	GATGAGTCCTGAGTAACAA
<i>Mse</i> I selective primer-3	GATGAGTCCTGAGTAACAC
<i>Mse</i> I selective primer-4	GATGAGTCCTGAGTAACAG
<i>Mse</i> I selective primer-5	GATGAGTCCTGAGTAACAT
<i>Mse</i> I selective primer-6	GATGAGTCCTGAGTAACTA
<i>Mse</i> I selective primer-7	GATGAGTCCTGAGTAACTC
<i>Mse</i> I selective primer-8	GATGAGTCCTGAGTAAC TG
<i>Mse</i> I selective primer-9	GATGAGTCCTGAGTAAC TT
<i>Hpa</i> II/ <i>Msp</i> I selective primer-2	ATCATGAGTCCTGCTCGGTAA
<i>Hpa</i> II/ <i>Msp</i> I selective primer-3	ATCATGAGTCCTGCTCGGTCC
<i>Hpa</i> II/ <i>Msp</i> I selective primer-4	ATCATGAGTCCTGCTCGGTTC
<i>Hpa</i> II/ <i>Msp</i> I selective primer-5	ATCATGAGTCCTGCTCGGTAC
<i>Hpa</i> II/ <i>Msp</i> I selective primer-6	ATCATGAGTCCTGCTCGGTGC
<i>Hpa</i> II/ <i>Msp</i> I selective primer-7	ATCATGAGTCCTGCTCGGTAG
<i>Hpa</i> II/ <i>Msp</i> I selective primer-8	ATCATGAGTCCTGCTCGGTTG
<i>Hpa</i> II/ <i>Msp</i> I selective primer-9	ATCATGAGTCCTGCTCGGTCA

### 4. AFLP Marker

#### 4.1. Protein AE7 (*Daucus carota* subsp. *Sativus*)

GAATGCGTACCAATTCAACAATTCTATTCACCTGAGCTTATTGATCAGCTTGAGATATTGA  
 ACATATTAGAGATATTAAGGATCCTGAGCATTCTCTAGAAGATTGAAAGTTATTAC  
 AAAGATGCTATTGAGGTAATGATAAGCGCGTATGTGCGTGTACTTTACCCAACAGTTGA  
 GCACTCAGTATGGCAACGATTATTGGCTTGTGCGGGTTAACTTATGCGTAGCCTCCTTC

CCGTTCAAGGTGACATCAGGGTAGCGCCTGGGACTCATGCAACTGAAGATGCAGTGAAC  
AAACAGTTGAACGATAATATGTTACTCAG

*4.2. Myb Domain Protein 73, Putative (*Theobroma cacao*)*

GACTGCGTACCAATTACAAAATTACGACCCGCCACCTCGTTGACTTGTGCGCTCCTGG  
GCGGAGTCGAGTGAGGCTCCTCGCGCTGTACAGTGCCTGCCTCCGCCTGCCGTGG  
CGCGCCACCAGCTTTGATGCGGAGTTTGGCGGTGATGCAAGAGATGATTAGAATGGA  
AGTGAGGAATTATATTAGTGGTATGGTTAGGGTGGCGCTGTGGAAATAGGGAGAG  
TCGTGGTTAGTTATTTATTTGTTATGGTAAAACAAATTAAATTGTTGATGGTGAT  
GATCAACATTAGTTACTCAGGACTCATC

*4.3. No Apical Meristem (NAM) Protein (*Cynara cardunculus var. scolymus*)*

GATGACTCCTGAGTAACCTTCTCTATTTCTTGCACGACACAAAATTATCCATT  
GGGATGAGCATGAAACCAAACACAAACAGAAATGACATGGTGTAAACGATGAAAACG  
ATACCCTCCGAACCTCTCAACTCTCAAGGAATCTCAAGAATAGTATCACAAAGTCATGT  
CCTTCATGTGGACATGACATAACAACCTCAAGCTAACGGTTGATTGATTTGCCGGGATT  
ACCAAGCTGGAGTGAAGTCGACCCGACTGATCAAGAAATTCTTGAGCATTGAAAGCCAAG  
GTTGGATGTGATGCAGAAGAGCTTCATCCCCTATCGATGAATTCAACTATTGAAGG  
TGAAACTGGAATATGTTACTCATCCTGAAAAATTACCTGGAGTTAGCAACGATGCCAG  
ATTGCCATTCTTCAACCGTCCATCCAAGGCTTACACCACAGGCACACGAAAGCGAAGAA  
AGGTGCACAAATTGACTGCGTACCAATTCAAC

*4.4. Transcription Factor, Teosint-Like1, Cycloidea and Proliferating Cell Factor( TCP ) (*Cynara cardunculus var. scolymu*)*

GACTGCGTACCAATTACAAAATTGCCGCATCACTTCATGGCGCTTGGCGCTTGCTCCTC  
ATCATCATCCTTGAAGAAGGGTTCTCAAATGATGGCTTCATCAGGCCATGGTCAG  
GGGCAGGTTCATGGTCAAGGGCAGCATATTATGACTGCTGACCAGATACTGAGGCGATT  
CGAGTGGTGGGGTAATAATGGTGGAAATGGTGATGGAGTGGAGTGAGAATTATGAGGAAAA  
GGTATAGGGAGGATTGTTAAGGATGAGGGTGGTCAGAACAAACGAGGTGGCGTTGGAT  
CACCGTCACCTCGCCGTCTAACAAAGGAGGGAAACTGGTGGAGCAGGAAATAGTA  
TGCTCCGGCACCATGGGGTATGATGCTTGTACTCAGGACTCATC

*4.5. Pol-Polyprotein (*Silene Latifolia*)*

TGAGTCCAAACCGGTGTTGGTAAAAAAAGAGTGACGGAGGATGGCGCATGTGCGTGGATTTC  
ACTGACATCAACAAAGCATGCCCTAACGGATTGCTACCCCTACCGAATTGTCACGCAGTC