

Table S1. Effect of media composition on callus and somatic embryo formation during anther culture of *Citrus aurantium* (sour orange)

Treatment	Number of anthers	Anthers with callus cells		Anthers with somatic embryo formation	
		n	%	n	%
N6 solid medium	100	24–26	25	2–3	2.3
N6 solid medium and/ add N6 liquid ^z	100	36–37	36	10–12	11
MS solid medium	100	24–25	25	1–2	1.3
MS solid medium/ add N6 liquid	100	34–36	35	10–12	11

^z N6 Liquid medium supplemented with GA₃ (1 mg·L⁻¹) and spermidine (200 µM).

Table S2. Occurrence rate of haploid-derived plants obtained from anther culture of *Citrus aurantium* (sour orange)

SSR marker	Number of plants	Number of haploid-derived plants					
		Number of heterozygous plants ^y		Number of homozygous plants		Number of putative aneuploid plants ^z	
		n	%	n	%	n	%
CiSSR-P1	271	228	84	43	16	ND	-
CiSSR-P2	271	228	84	43	16	ND	-
CiSSR-43	271	228	84	43	16	ND	-
CiSSR-226	271	228	84	35	13	8	3
CiSSR-253	271	228	84	35	13	8	3
CiSSR-246	271	228	84	35	13	ND	-
CiSSR-254	271	228	84	35	13	8	3
CiSSR-260	271	228	84	35	13	8	3

^y control plants^zThe occurrence of hetero amplification products in a pattern different from that of the control plants. ND, Not detected.

Table S3. Ploidy analysis of regenerated plants identified through genetic analysis

Number of plants	Ploidy analysis					
	Haploid ^y		Diploid		Putative aneuploids ^z	
	n	%	n	%	n	%
41	2	5	33 (homozygous)	80	6	15
68	ND	-	66 (heterozygous)	97	2	3
109 ^x	2	2	99	91	8	7

^y Two specimens were lost due to contamination

^z The ploidy verification pattern different from that of the diploid plants

^x The ploidy verification pattern the number of total plants. ND, Not detected.

Table S4. Chromosome number of regenerated plants

Number of plants	Number of chromosomes							
	2n:18		2n:19		2n:20		2n:21	
	n	%	n	%	n	%	n	%
30	22	73	5	17	2	7	1	3