

## Supplementary data

**Appendix A.** Gene identity within the cultivated species, and between the cultivated species and different wild species in tomato.

gene	Cultivated species		Wild species				
	<i>S. Lycopersicum</i>	<i>S. Cheesmaniae</i>	<i>S. Habrochaites</i>	<i>S. Pimpinellifolium</i>	<i>S. Peruvianum</i>	<i>S. Pennellii</i>	<i>S. Chmielewskii</i>
1	54%	54%-99%	53%-96%				
2	100%	98%	93%	98%	95%	91%	
3	100%	89%	85%	93%			90%
4	89%	96%		91%-93%	92%-95%		86%-88%
5	100%		87%	99%			92%
6	100%		97%				98%
7	100%			98%	91%	91%	
8	98%-99%			98-99%	74%	93-94%	
9	99%				99%		
10	100%			98%	99%	97%	
11	100%			97%		94%	
12	100%			99%			
13	100%			98%			
14	100%			91%			

gene	<u>Cultivated species</u>		<u>Wild species</u>				
	<i>S. Lycopersicum</i>	<i>S. Cheesmaniae</i>	<i>S. Habrochaites</i>	<i>S. Pimpinellifolium</i>	<i>S. Peruvianum</i>	<i>S. Pennellii</i>	<i>S. Chmielewskii</i>
15	100%			63%			
16	100%			100%			
17	100%			99%			
18	97%		98%				
19	100%		92%				
20	100%		90%				
21	100%					99%	

Note: 1: ASR2 gene; 2: fw2.2 gene and ORF44 gene; 3: HT-A pseudogene for HT-A protein; 4: 5.8S rRNA gene, internal transcribed spacer 1 (ITS1) and internal transcribed spacer 2 (ITS2); 5: HT-B pseudogene for HT-B protein; 6: farnesyl-protein transferase, beta subunit gene, intron 10, partial sequence; 7: pathogenesis-related protein PR1a2 gene, promoter region and partial cds; 8: osmotin gene, promoter region; 9: tRNA-Glu (trnE) and tRNA-Thr (trnT) genes, partial sequence; chloroplast genes for chloroplast products; 10: receptor-like protein kinase (PRK2) mRNA, partial cds; 11: cysteine protease (Rcr3) gene; 12: chloroplast atpB-rbcL intergenic spacer region, partial sequence; 13: partial mRNA for vacuolar-type H<sup>+</sup>-pyrophosphatase (vp1 gene); 14: Hcr2 gene; 15: serine/threonine protein kinase (Fen) mRNA, complete cds; 16: gene for vacuolar invertase; 17: beta-fructosidase mRNA for vacuolar invertase; 18: fructokinase (Frk) mRNA, complete cds; 19: sesquiterpene synthase 2 (SSTLH2) mRNA, partial cds; 20: sesquiterpene synthase 1 (SSTLH1) mRNA, complete cds; 21: receptor-like protein kinase (PRK3) mRNA, partial cds.