

Supplementary Materials: Two ω -3 FADs Are Associated with Peach Fruit Volatile Formation

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Table S1. Nucleic acid sequence identity between peach six fatty acid desaturases (FADs).

Genes	<i>PpFAD2</i>	<i>PpFAD3-1</i>	<i>PpFAD3-2</i>	<i>PpFAD6</i>	<i>PpFAD7</i>	<i>PpFAD8</i>
<i>PpFAD2</i>	1	–	–	–	–	–
<i>PpFAD3-1</i>	52.08%	1	–	–	–	–
<i>PpFAD3-2</i>	50.63%	76.94%	1	–	–	–
<i>PpFAD6</i>	49.02%	51.16%	53.58%	1	–	–
<i>PpFAD7</i>	52.60%	70.32%	73.43%	52.11%	1	–
<i>PpFAD8</i>	48.42%	70.73%	72.32%	48.77%	76.30%	1

Table S2. Primers used for amplifying the ORFs of *PpFADs*.

Genes	Primers' Name	Sequence (5'–3')
<i>PpFAD2</i>	PpFAD2-SK-FP	TATGGATCCATGGGTGCCGGTGAAGAAT
	PpFAD2-SK-RP	CGCGAATTCCGGGCAATTTTGATAATCAC
<i>PpFAD6</i>	PpFAD6-SK-FP	CGTGGATCCATTTCTGCAATTTCTGCTC
	PpFAD6-SK-RP	GGCGAATTCTCAAGCATAATCAGGCATC
<i>PpFAD3-1</i>	PpFAD3-1-SK-FP	TCAGGATCCATGGAGACTAGTGTGACCAG
	PpFAD3-1-SK-RP	GCCGAATTCTTACGAGGATTTCATCTTCTC
<i>PpFAD3-2</i>	PpFAD3-2-SK-FP	ATATCTAGAATGGTGGAGGCTCAGAGCA
	PpFAD3-2-SK-RP	GGCGAATTCTCAACTAGACTTGCTCTTAAG
<i>PpFAD7</i>	PpFAD7-SK-FP	ATAGGATCCATGGCAAGTTGGGTTCTCTC
	PpFAD7-SK-RP	GGCGAATTCTCATTCTGATGTCACAGAC
<i>PpFAD8</i>	PpFAD8-SK-FP	TTATCTAGAATGGCGGCGAGTTGGGTTC
	PpFAD8-SK-RP	GGCGAATTCGGTTGTCTTTGTGGTCATC

Table S3. Primers used for identifying transgenic tobacco plants overexpressing *PpFADs*.

Genes	Primers' Name	Sequence (5'–3')
<i>pGreen 0062 SK</i>	SK-FP	AATCCCACTATCCTTCGCAAGACCCCTC
	SK-RP	AGAGACTGGTGATTTCAGCGAATTGGTAC

Table S4. Primers used for detecting expression of *PpFADs* in transgenic tobacco plants.

Genes	Primers' Name	Sequence (5'–3')
<i>PpFAD2</i>	TG-PpFAD2-FP	AGAACGCTGAAACCGACAAC
	TG-PpFAD2-RP	GTCACCCTCATCTCGCTCAAC
<i>PpFAD6</i>	TG-PpFAD6-FP	CATTGGTTGCTAGTCCACTTCG
	TG-PpFAD6-RP	GGCCATCCAATCCCCATAAAC
<i>PpFAD3-1</i>	TG-PpFAD3-1_FP	TTATGGCTGCTTTGCTTTTCC
	TG-PpFAD3-1_RP	GTATGTGACAATGTCCAACCAC
<i>PpFAD3-2</i>	TG-PpFAD3-2_FP	ATGAGTCTTGGGTTCTCTGAC
	TG-PpFAD3-2_RP	GAGAACCTTGCTTTCCTGGAC
<i>PpFAD7</i>	TG-PpFAD7-FP	GAACGGCCTAACATCAAAGAC
	TG-PpFAD7-RP	GCCCAATTTGTCCCTCGAATC
<i>PpFAD8</i>	TG-PpFAD8-FP	ACCATGACATAGGCACCCATG
	TG-PpFAD8-RP	CAAGCAGGTGAAACGGTAGAG
<i>NtEF1α</i>	NtEF1 α -FP	GCCCAACACTTCTTGATGCTC
	NtEF1 α -RP	GACACCAGTTTCCACACGAC