

Contribution of the different omega-3 fatty acid desaturases to the modifications of glycerolipid fatty acid composition in response to cold in soybean

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Supplementary Material

Table S1. Gene specific primers used in this study

Gene	Forward/ Reverse	Primer sequence 5'→3'	Size (bp)	Tm (°C)
<i>GmFAD3</i> A+B	F	GCAATGGTTAAAGACACAAAGCCT	1142	59
	R	ACTCAGTCTCGGTGCGAGTG		
<i>GmFAD3C</i>	F	GAGGATCCAAATGGTTCAAGCACAG	1154	70
	R	GAActCGAGTTTAGTTGGACTGGGTCC		
<i>GmFAD7-1</i>	F	GGATATTATCAGAATGTGGCTTGAAGC	767	52
	R	CCTACTAAAAAGGTACACAGGAAA		
<i>GmFAD7-2</i>	F	GGA/GTATTATCAGAATGTA/GGCTTGA	765	56
	R	CCCCAAAGGTACACGGGATATGC		
<i>GmFAD8-1</i>	F	AAGTTGTGTTCTGTTGTGAATATCT	512	57
	R	TCCTCAACAACCCATTAGC		
<i>GmFAD8-2</i>	F	TATACCAGTTGTCAATTTGTCATATC	507	57
	R	CTCACCAACCCATTATTAGC		
<i>GmACTIN</i>	F	ATTGTAGGTCGTCCTCGTC	334	46
	R	TTGCATAAAGTGAAAGAACAG		
<i>GmSCOF-1</i>	F	CCGCTACAGCCACAGCCACA	344	59
	R	CCTTCCGAGGCGACGGTGAC		

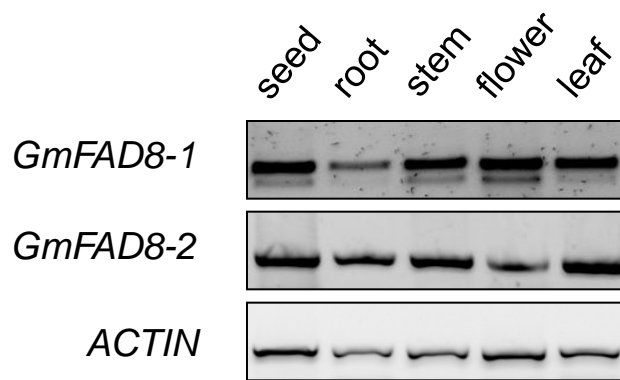


Fig. S1. Tissue-specific expression of *GmFAD8-1* and *GmFAD8-2* genes in soybean plants. Total RNA was extracted from seed, root, stem, flower and leaf. PCR reactions were performed with the gene specific primers of TableS1. *ACTIN* was used as housekeeping gene.

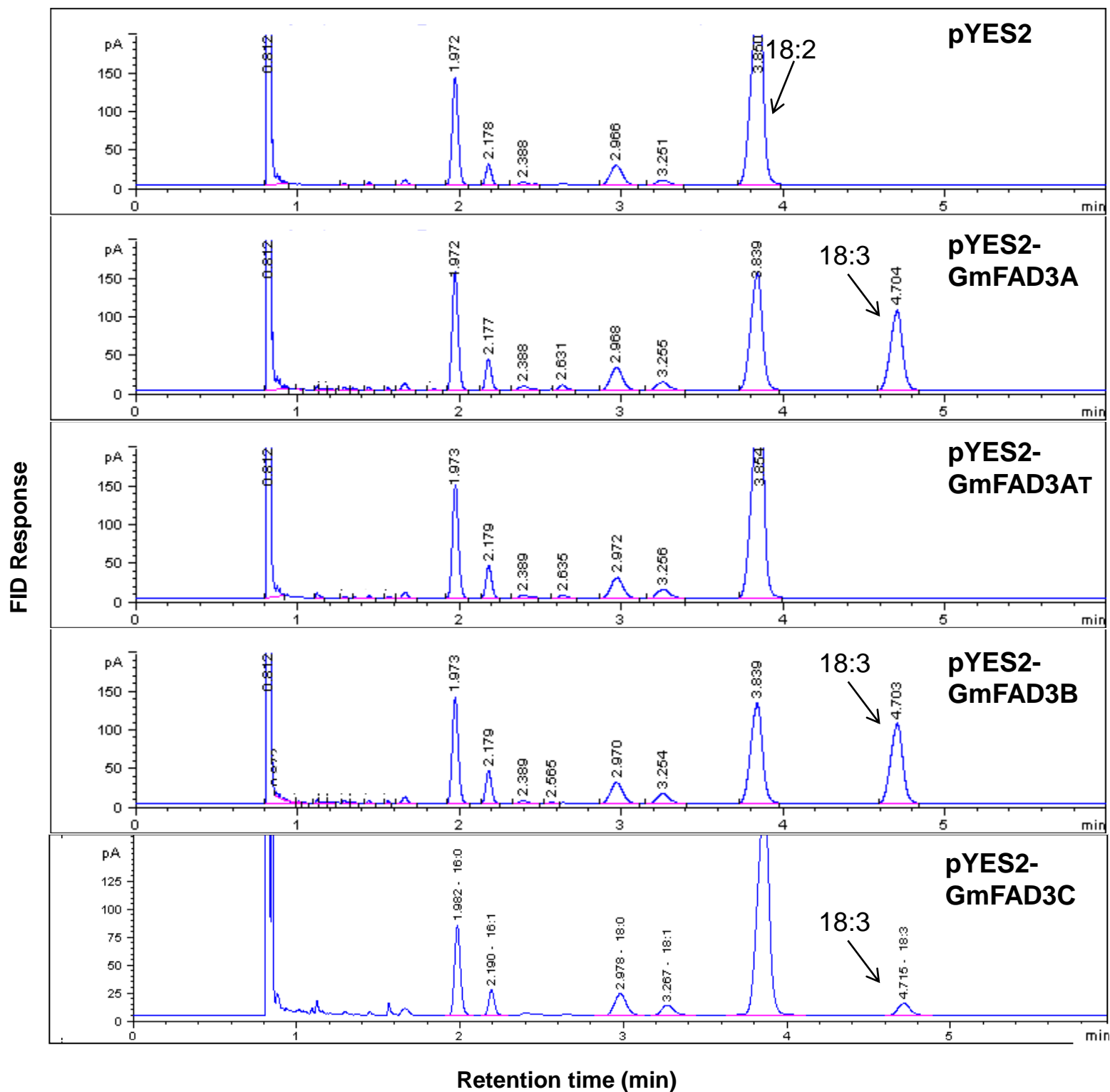


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Fig. S2. GC-FID chromatograms showing the fatty acid profile obtained in yeast transformants containing the different constructions corresponding to each of the *GmFAD3* isoforms detected in the soybean genome as well as the truncated form of *GmFAD3A*. The peak corresponding to 18:3 is indicated with an arrow.