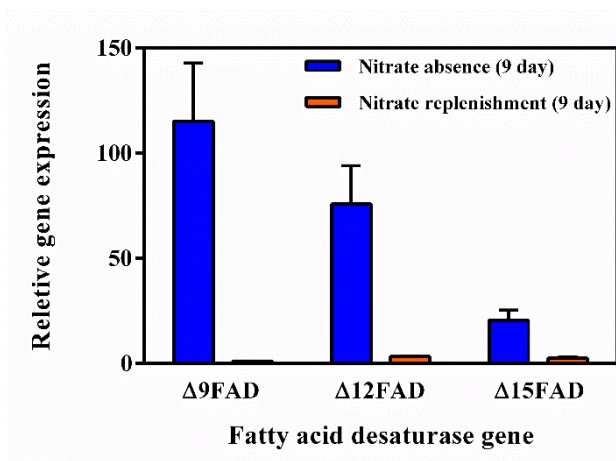


1. Relative gene expression of $\Delta 9$ FAD, $\Delta 12$ FAD and $\Delta 15$ FAD under nitrate absence and nitrate replenishment

	Nitrate absence			Nitrate replenishment		
delta9	147	99	99	1	1	1
delta12	96.7	65.1	65.1	3.2	2.7	3.6
delta15	26.1	17.6	17.6	2.9	1.95	2.5



2. Relative gene expression in response to different nitrate concentrations. The expressions of three genes $\Delta 9$ FAD (a), $\Delta 12$ FAD (b) and $\Delta 15$ FAD (c) in three different growth phases lag (Lag), logarithmic (Log) and stationary phase (S) were detected by real time PCR.

Delta 9 FAD

	0 g L ⁻¹			1.5 g L ⁻¹		
lag	1	1	1	0.28	0.22	0.34
logarithmic	3.07	3.39	3.44	0.73	0.57	0.886
stationary	3.458	2.034	1.85	1.22	0.96	1.49

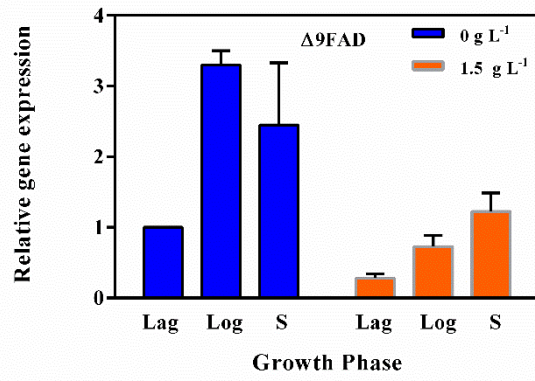
Delta 12 FAD

	0 g L ⁻¹			1.5 g L ⁻¹		
lag	1	1	1	0.1207	0.04	0.06
logarithmic	1.301	1.11	1.09	0.178	0.059	0.08805
stationary	0.666	0.965	0.75	0.37	0.125	0.188

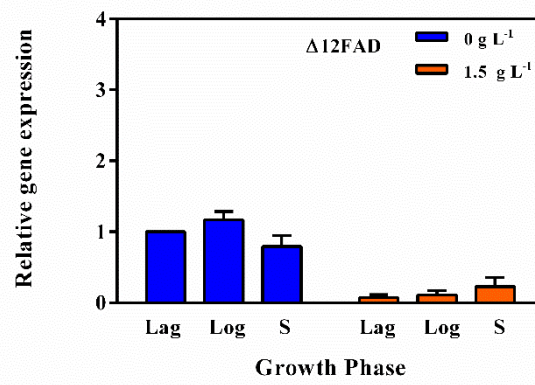
Delta 15 FAD

	0 g L ⁻¹			1.5 g L ⁻¹		
lag	1	1	1	0.148	0.186	0.05
logarithmic	0.927	0.83	0.841	0.2294	0.2883	0.0775
stationary	0.66	0.48	0.463	0.43	0.54	0.14

(a)



(b)



(c)

