

Variation patterns of the volatiles during germination of the foxtail millet (*Setaria italic*): The relationship between the volatiles and fatty acids in model experiments

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Table S1 Calibration curves for quantification of the fatty acids

Fatty acid methyl esters	Calibration curve	R ²	Linear range µg/mL
palmitic acid	$y = 122318.9x + 81530$	0.9999	1.64-246.3
palmitoleic acid	$y = 136875.8x - 3022$	0.9985	0.16-24.63
stearic acid	$y = 125247.4x - 97267$	0.9986	0.77-114.94
oleic acid	$y = 134372.8x - 365317$	0.9996	5.47-336.61
linoleic acid	$y = 137537.5x - 48965$	0.9985	0.38-57.5
linolenic acid	$y = 135542.2x - 12588$	0.9993	0.16-24.63

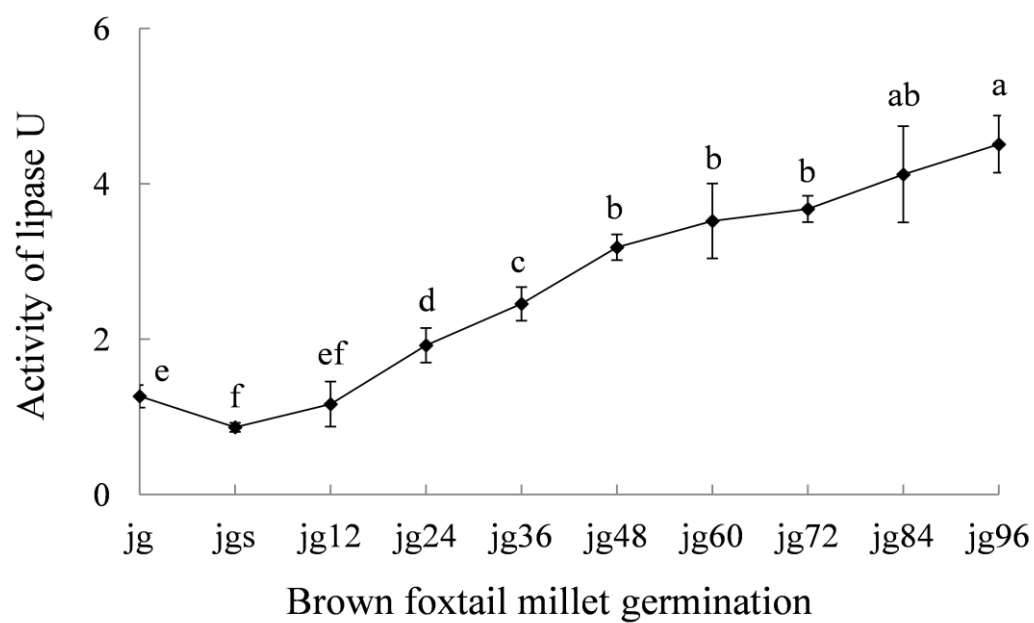


Figure S1. Variation pattern of the lipase activity during foxtail millet germination. jg, jgs, and jg12-96 represent the raw brown millet, soaked brown millet, and germinated millet, respectively. Different letter means significant different ($P < 0.05$) in data during germination of foxtail millet.

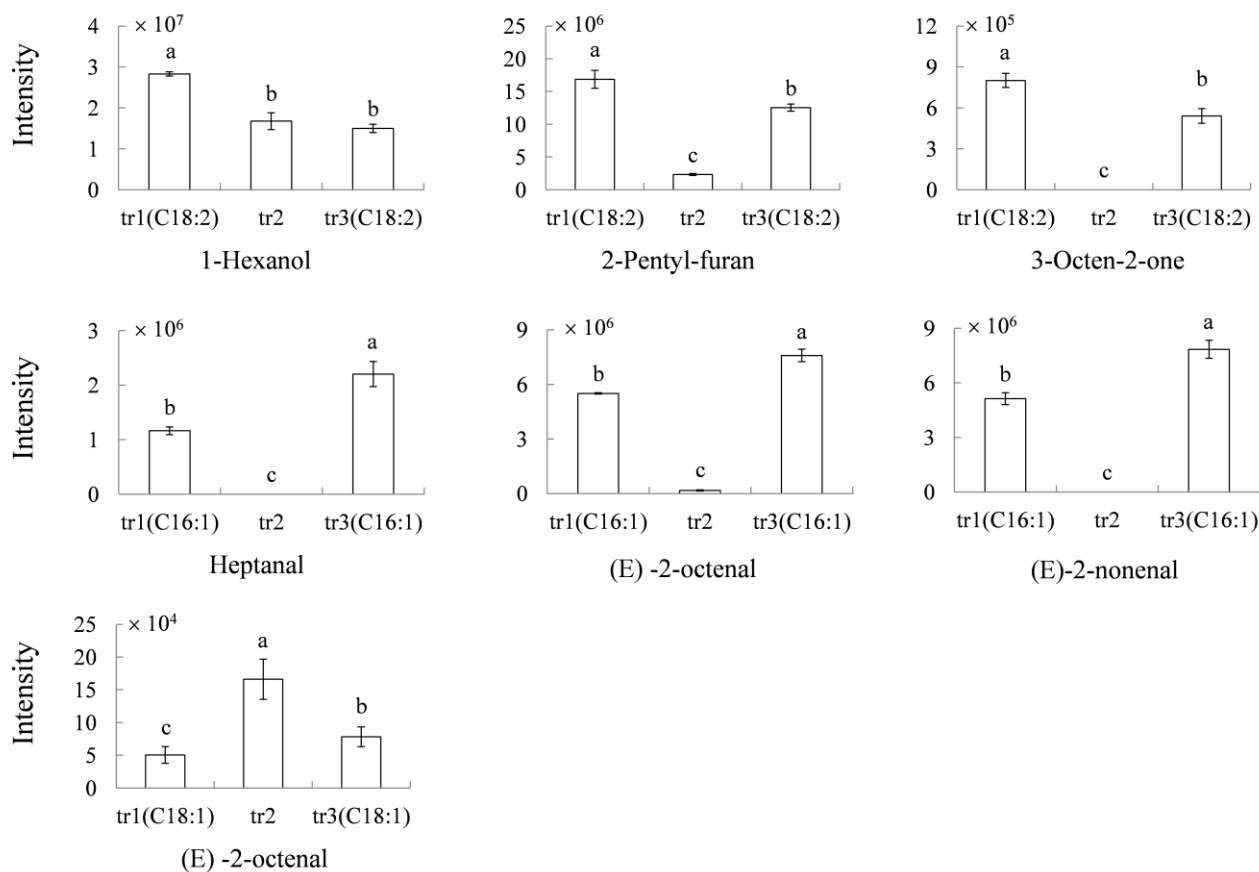


Figure S2. Volatiles are produced by the autoxidation of palmitoleic acid, linoleic acid, and oleic acid. tr1, tr2, and tr3 represent the treatment 1, treatment 2 and treatment 3, respectively. C16:1, C18:1, and C18:2 represent palmitoleic acid, oleic acid, and linoleic acid, respectively. The significance of the differences (different letters) is determined at $P < 0.05$. Data are the mean $\pm$ SD values ($n = 3$).

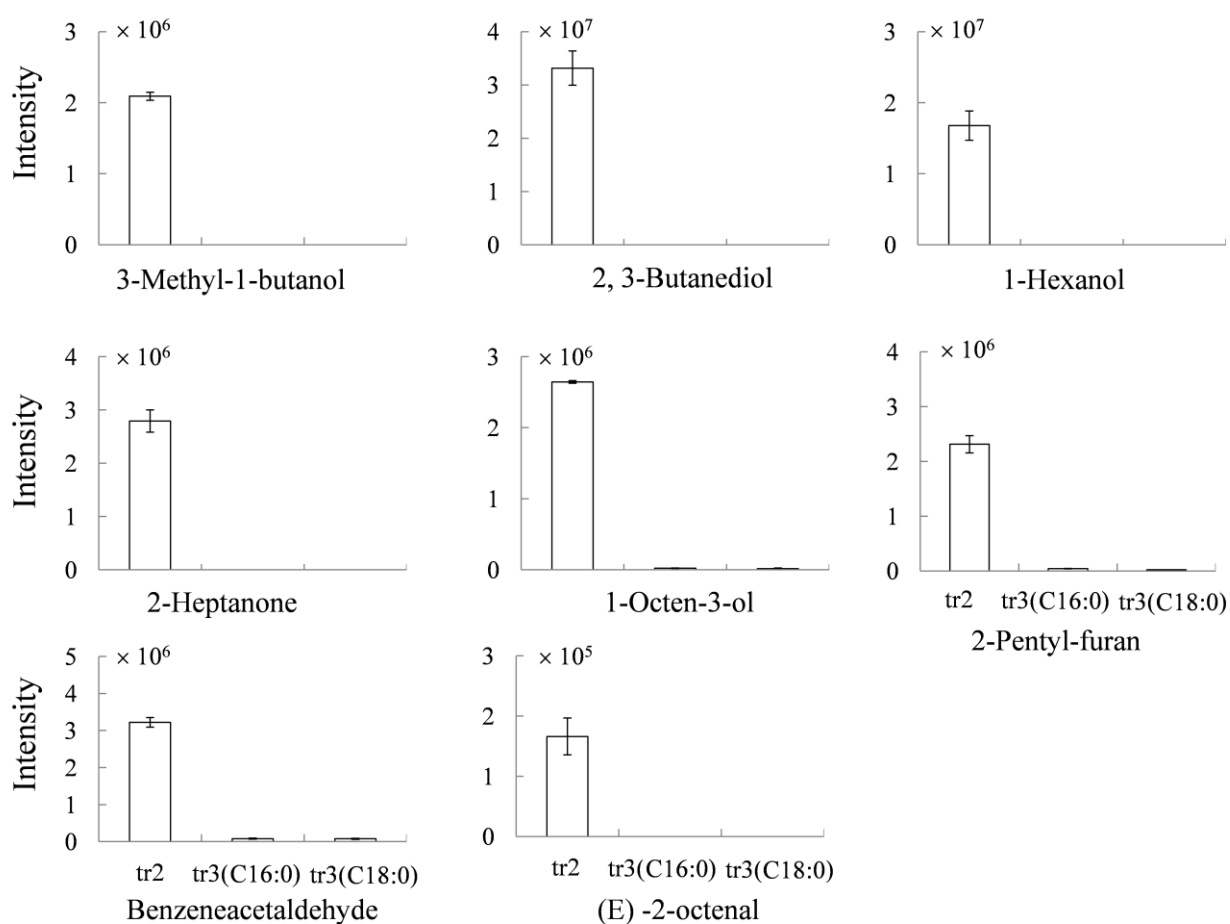


Figure S3. Volatiles are produced by the enzymatic oxidation of palmitic acid, and stearic acid. tr2 and tr3 represent the treatment 2 and treatment 3, respectively. C16:0 and C18:0 represent palmitic acid and stearic acid, respectively. The volatiles in treatment 3 are far less than in treatment 2. Data are the mean $\pm$ SD values (n = 3).

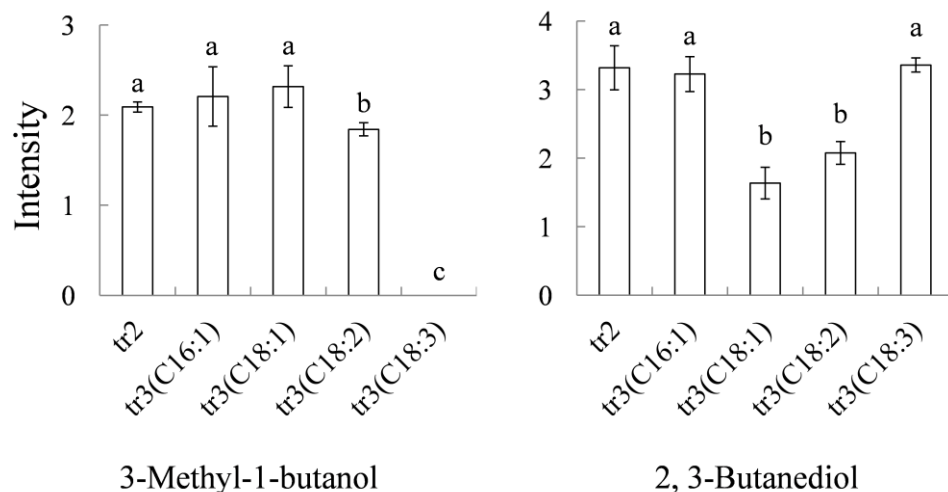


Figure S4. 3-Methyl-butanol and 2,3-Butanediol are not produced by the enzymatic oxidation of the palmitoleic acid, oleic acid, linoleic acid, and linolenic acid. tr2 and tr3 represent the treatment 2 and treatment 3, respectively. C16:1, C18:1, C18:2 and C18:3 represent palmitoleic acid, oleic acid, linoleic acid, and linolenic acid, respectively. The significance of the differences (different letters) is determined at $P < 0.05$. Data are the mean $\pm$ SD values ($n = 3$).