

Supplement to Point-by-point response to the issues raised by Referee 2

p-values for pairwise multiple comparison procedures	Comparison for factor	Comparison	Fisher LSD	Tukey	
$\delta^{13}\text{C-CH}_4$	fungi	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	<0.001	<0.001	
	substrate	corn vs. pine	<0.001	<0.001	
		corn vs. grass	<0.001	<0.001	
		grass vs. pine	0.049	0.113	
	substrate within <i>P. sapidus</i>	corn vs. pine	<0.001	<0.001	
		corn vs. grass	<0.001	<0.001	
		grass vs. pine	<0.001	<0.001	
	substrate within <i>L. sulphureus</i>	corn vs. pine	<0.001	<0.001	
		corn vs. grass	<0.001	<0.001	
		grass vs. pine	<0.001	<0.001	
	fungi within pine wood	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.021	0.022	
	fungi within grass	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	<0.001	<0.001	
	fungi within corn	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	<0.001	<0.001	
	$\delta^{13}\text{C-CO}_2$	fungi	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.008	0.009
		substrate	corn vs. pine	<0.001	<0.001
corn vs. grass			<0.001	<0.001	
grass vs. pine			<0.001	<0.001	
substrate within <i>P. sapidus</i>		corn vs. pine	<0.001	<0.001	
		corn vs. grass	<0.001	<0.001	
		grass vs. pine	<0.001	<0.001	
substrate within <i>L. sulphureus</i>		corn vs. pine	<0.001	<0.001	
		corn vs. grass	<0.001	<0.001	
		grass vs. pine	<0.001	<0.001	
fungi within pine wood		<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.164	0.164	
fungi within grass		<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.020	0.020	
fungi within corn		<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.223	0.224	
CH₄ emission rates		fungi	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.026	0.026
		substrate	corn vs. pine	0.700	0.919
	corn vs. grass		<0.001	0.001	
	grass vs. pine		<0.001	0.003	
	substrate within <i>P. sapidus</i>	corn vs. pine	0.003	0.008	
		corn vs. grass	<0.001	0.001	

		grass vs. pine	0.277	0.510
	substrate within <i>L. sulphureus</i>	corn vs. pine	0.008	0.020
		corn vs. grass	0.093	0.203
		grass vs. pine	<0.001	<0.001
	fungi within pine wood	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	<0.001	<0.001
	fungi within grass	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.254	0.254
	fungi within corn	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.089	0.089
CO₂ emission rates	fungi	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	<0.001	<0.001
	substrate	corn vs. pine	<0.001	<0.001
		corn vs. grass	<0.001	<0.001
		grass vs. pine	<0.001	0.003
	substrate within <i>P. sapidus</i>	corn vs. pine	0.346	0.602
		corn vs. grass	0.010	0.026
		grass vs. pine	0.002	0.005
	substrate within <i>L. sulphureus</i>	corn vs. pine	<0.001	<0.001
		corn vs. grass	<0.001	<0.001
		grass vs. pine	0.054	0.123
	fungi within pine wood	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.482	0.483
	fungi within grass	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.267	0.267
	fungi within corn	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	<0.001	<0.001
CH₄ : CO₂ emission ratio	fungi	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.474	0.474
	substrate	corn vs. pine	0.190	0.378
		corn vs. grass	0.023	0.057
		grass vs. pine	0.249	0.470
	substrate within <i>P. sapidus</i>	corn vs. pine	<0.001	0.002
		corn vs. grass	0.618	0.867
		grass vs. pine	0.001	0.004
	substrate within <i>L. sulphureus</i>	corn vs. pine	<0.001	<0.001
		corn vs. grass	0.001	0.003
		grass vs. pine	0.035	0.083
	fungi within pine wood	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	<0.001	<0.001
	fungi within grass	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	0.329	0.329
	fungi within corn	<i>P. sapidus</i> vs. <i>L. sulphureus</i>	<0.001	<0.001