

Supplementary Material 1

The spatial distribution of tree-tree interaction effects on soil microbial biomass and respiration

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Table S1: Description of variables

Variables	Code	Unit	Calculation
<i>Tree variables</i>			
Plot	plot	none	Treatment
Diameter at breast height	dbh	m	Measured
Basal Area	ba	m ²	$ba = \frac{(dbh)^2}{4\pi}$
Distance to closest tree	close_distance	cm	Measured
Diameter of closest tree	close_dbh	cm	Measured
Biomass of closest tree	close_biomass	kg _{carbon}	Estimated from ba
Closest tree species	close_species	none	Measured
Distance to tree 1	distance_T_1	cm	Measured
Distance to tree 2	distance_T_2	cm	Measured
Distance to each tree with soil core 3 as the center point	dist.T1.center	cm	Measured
Distance to closest <i>L. formosana</i>	dist.liqu	cm	Measured
Distance to closest <i>S. mukorossi</i>	dist.sapi	cm	Measured
Tree species combination of the tree pair	species_mix	none	Measured
<i>Soil microbial community</i>			
Soil microbial biomass	cmic	μg C _{microbial} g ⁻¹ dry weight	Measured
Soil microbial biomass overyielding	cmic_over		Calculated from observed cmic
Soil microbial respiration	bas_res	μl O ₂ g ⁻¹ dry weight h ⁻¹	Measured
Soil microbial respiration overyielding	bas_over		Calculated from observed bas_res
<i>Environmental variables</i>			
Soil depth	depth	cm	Measured
Root biomass	root_biomass	g m ⁻³	Measured from soil cores
Distance to closest understory plant	plant_distance	cm	Measured
Soil water content	rh	%	Measured