**Supplementary Table 7.** Pairwise comparison between genotypes in each substrate type in the greenhouse experiment for fungal functions relative abundance. Two-way ANOVAs were used to discern how substrate type, genotype and their interaction influenced fungal functions relative abundance. Additional analyses were performed for each substrate type separately and between substrate types to better assess the indivudial effects of genotype and substrate type.

Anova		Ectomycorrhizae	Saprotroph	Plant pathogen	Ericoid mycorrhizae	Brown rot			
	Genotype	0.718	0.896	0.171	0.144	0.071			
	Substrate type	< 0.001	< 0.001	0.029	< 0.001	0.310			
	Interaction	0.093	0.450	0.594	0.099	0.558			
Pairwise comparison between substrate types									
	Control	41.3% A	24.3% A	6.7% A	0.1% B	0.4% A			
	Tailings	28.4% B	19.1% B	4.7% B	0.1% B	0.3% A			
	Waste rock	49.6% A	23.6% A	5.0% AB	2.8% A	0.5% A			
	p-value	< 0.001	< 0.001	0.019	0.001	0.245			
Pairwise comparison by substrate type									
Control	W08	36.8% A	19.4% A	5.4% A	0.2% A	0.5% A			
	W09	37.8% A	23.3% A	7.2% A	0.2% A	0.4% A			
	W10	37.0% A	26.0% A	7.0% A	0.3% A	0.2% A			
	W13	36.8% A	26.2% A	8.4% A	0.2% A	0.1% A			
	N16	55.9% A	24.6% A	6.7% A	0.1% A	0.0% A			
	C21	49.8% A	24.1% A	3.3% A	0.0% A	0.5% A			
	C23	33.9% A	23.9% A	7.4% A	0.2% A	0.5% A			
	C25	35.3% A	27.9% A	7.8% A	0.1% A	0.4% A			
	C29	58.7% A	19.8% A	4.7% A	0.1% A	0.0% A			
	N33	38.5% A	27.5% A	8.1% A	0.1% A	0.9% A			
	p-value	0.390	0.686	0.207	0.362	0.063			
Tailngs	W08	24.0% A	22.3% A	3.5% A	0.1% A	0.7% A			
	W09	34.8% A	17.2% A	6.7% A	0.0% A	0.1% A			
	W10	8.4% A	21.9% A	7.3% A	0.7% A	0.2% A			
	W13	38.9% A	17.0% A	4.5% A	0.0% A	0.2% A			
	N16	26.8% A	17.3% A	9.9% A	0.1% A	0.1% A			
	C21	22.0% A	26.2% A	3.3% A	0.0% A	0.3% A			
	C23	32.2% A	17.6% A	4.6% A	0.0% A	0.2% A			
	C25	28.7% A	14.5% A	3.4% A	0.0% A	0.1% A			
	C29	40.6% A	19.5% A	2.6% A	0.0% A	0.2% A			
	N33	25.6% A	17.2% A	2.9% A	0.0% A	0.7% A			
	p-value	0.148	0.229	0.516	0.414	0.730			
Waste rock	W08	53.3% A	18.8% A	4.5% A	2.7% AB	0.5% A			
	W09	45.1% A	27.1% A	6.8% A	0.8% B	0.3% A			
	W10	63.4% A	21.8% A	2.4% A	3.4% AB	0.1% A			
	W13	52.7% A	25.7% A	6.6% A	0.3% AB	0.9% A			
	N16	57.5% A	25.3% A	2.4% A	2.7% AB	0.2% A			
	C21	57.5% A	21.1% A	1.3% A	2.6% AB	0.2% A			
	C23	40.4% A	27.9% A	5.9% A	2.5% AB	0.8% A			
	C25	55.3% A	23.5% A	6.0% A	0.5% B	1.1% A			
	C29	35.2% A	21.1% A	8.7% A	0.5% B	0.7% A			
	N33	41.7% A	24.8% A	4.7% A	9.7% A	0.4% A			
	p-value	0.380	0.907	0.484	0.005	0.348			

**Supplementary Table 7.** Pairwise comparison between genotypes in each substrate type in the greenhouse experiment for fungal functions relative abundance. Two-way ANOVAs were used to discern how substrate type, genotype and their interaction influenced fungal functions relative abundance. Additional analyses were performed for each substrate type separately and between substrate types to better assess the indivudial effects of genotype and substrate type.

Anova		White rot	Lichenized mycorrhizae	Arbuscular mycorrhizae				
	Genotype	0.472	0.063	0.696				
	Substrate type	< 0.001	0.997	0.384				
	Interaction	0.885	0.270	0.931				
Pairwise comparison between substrate types								
	Control	0.2% A	0.0% A	0.0% A				
	Tailings	0.0% B	0.0% A	0.0% A				
	Waste rock	0.1% B	0.0% A	0.0% A				
	p-value	< 0.001	0.998	0.281				
Pairwise co	omparison by sul	bstrate type						
Control	W08	0.2% A	0.0% A	0.0% A				
	W09	0.3% A	0.0% A	0.0% A				
	W10	0.2% A	0.0% A	0.0% A				
	W13	0.1% A	0.0% A	0.0% A				
	N16	0.2% A	0.0% A	0.0% A				
	C21	0.1% A	0.0% A	0.0% A				
	C23	0.2% A	0.0% A	0.0% A				
	C25	0.2% A	0.0% A	0.0% A				
	C29	0.1% A	0.0% A	0.0% A				
	N33	0.2% A	0.0% A	0.0% A				
	p-value	0.717	0.622	0.999				
Tailngs	W08	0.0% A	0.0% A	0.0% A				
	W09	0.0% A	0.0% A	0.0% A				
	W10	0.1% A	0.0% A	0.0% A				
	W13	0.1% A	0.0% A	0.0% A				
	N16	0.0% A	0.0% A	0.0% A				
	C21	0.0% A	0.0% A	0.0% A				
	C23	0.1% A	0.0% A	0.0% A				
	C25	0.0% A	0.0% A	0.0% A				
	C29	0.0% A	0.0% A	0.0% A				
	N33	0.1% A	0.0% A	0.0% A				
	p-value	0.668	0.049	0.781				
Waste rock	W08	0.1% A	0.0% A	0.0% A				
	W09	0.2% A	0.0% A	0.0% A				
	W10	0.1% A	0.0% A	0.0% A				
	W13	0.1% A	0.0% A	0.0% A				
	N16	0.1% A	0.0% A	0.0% A				
	C21	0.0% A	0.0% A	0.0% A				
	C23	0.1% A	0.0% A	0.0% A				
	C25	0.0% A	0.0% A	0.0% A				
	C29	0.1% A	0.0% A	0.0% A				
	N33	0.1% A	0.0% A	0.0% A				
	p-value	0.645	0.150	0.999				