

SUPPLEMENTAL MATERIAL

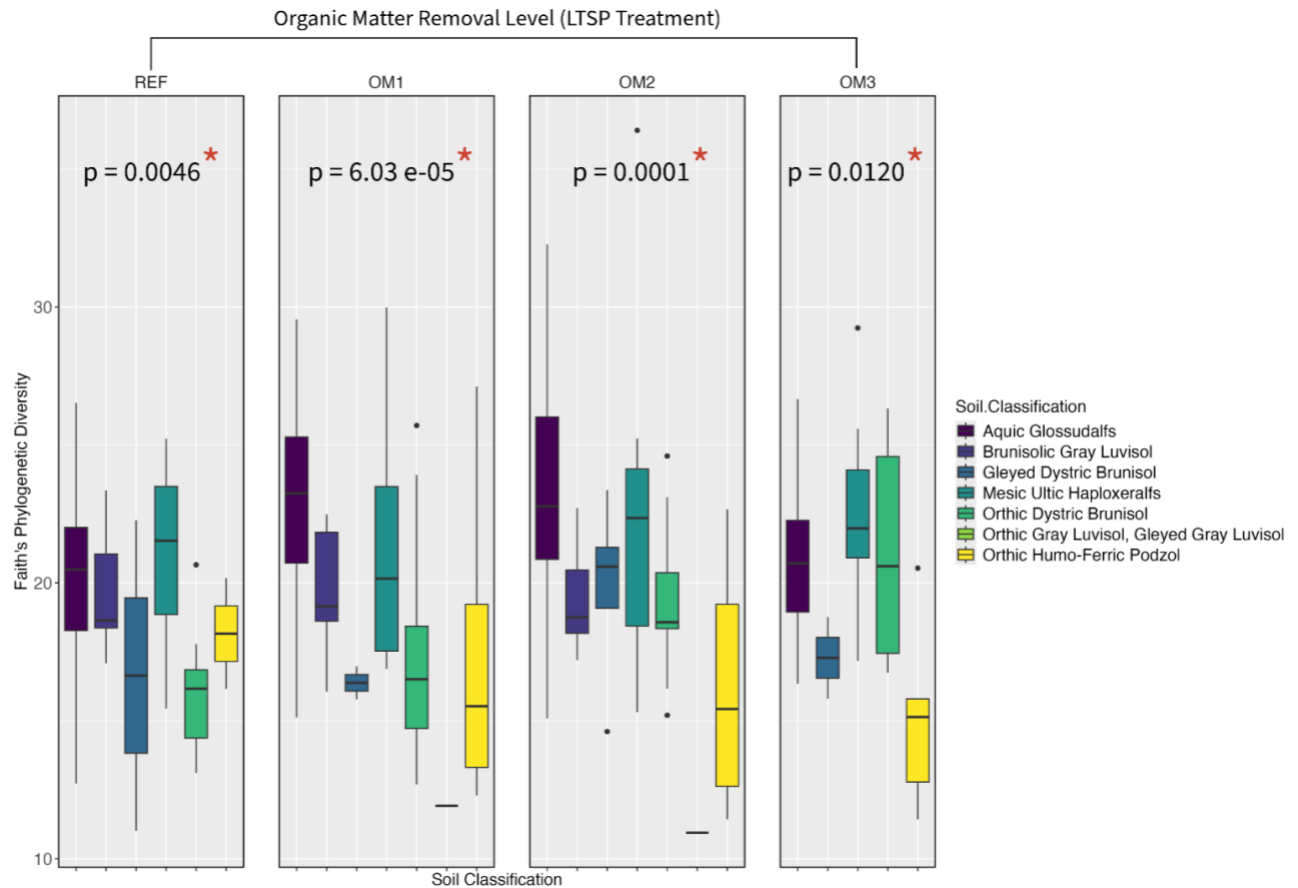


FIG. S1 Organic matter removal significantly impacts phylogenetic distance of the soil microbial community. Faith's phylogenetic diversity was measured across seven soil classifications among the four organic removal levels (REF, OM1, OM2, OM3). Faith's Phylogenetic diversity provides a measurement of alpha-diversity with respect to richness, abundance, and phylogenetic distance; the quantified metric makes up the y-axis. A Kruskal-Wallis statistical analysis was performed, and significance was determined as $p < 0.05$ as indicated by the asterisk (*).

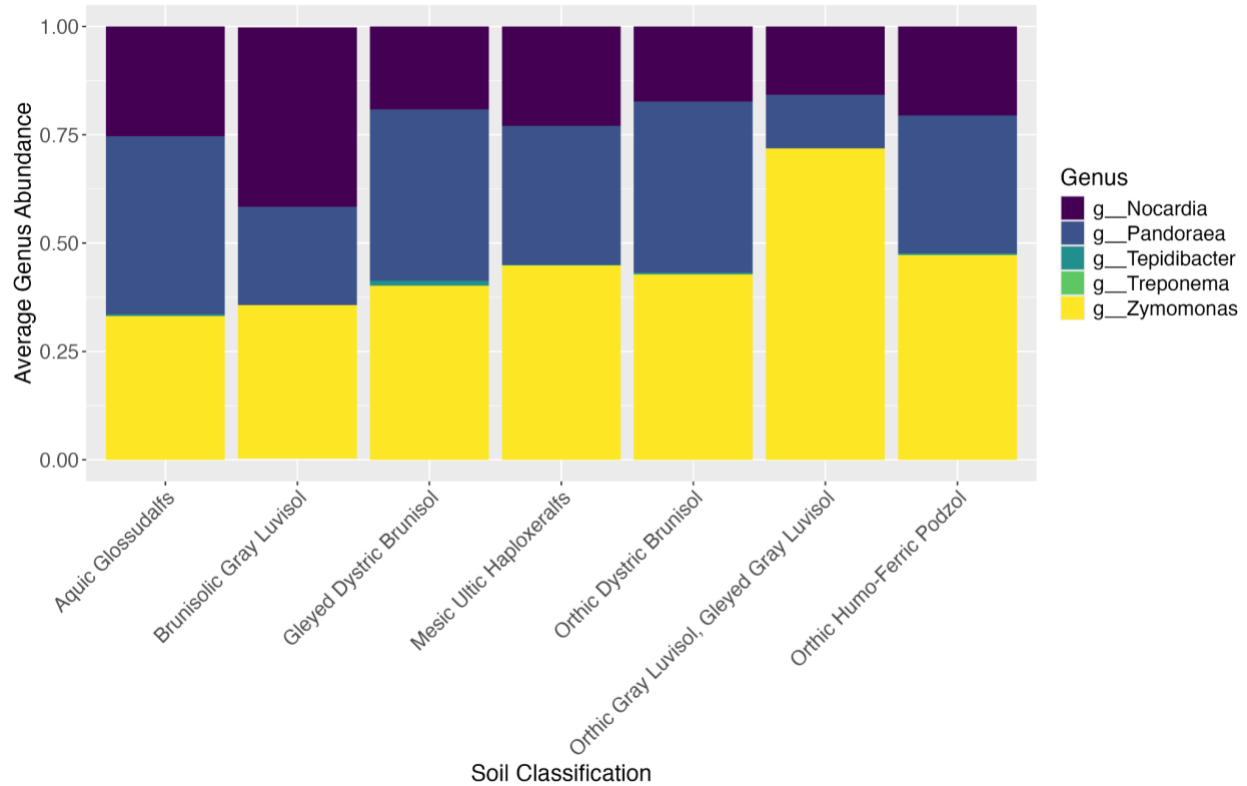


FIG. S2 Average genus abundance in each soil classification. Orthic Gray Luvisol and Gleyed Gray Luvisol have been grouped into one. 5 genera are found in the soil types with all soil classification containing *Nocardia* (dark purple), *Pandoraea* (dark blue), and *Zymomonas* (yellow). Three soil types, Aquic Glossudalfs, Orthic Dystric Brunisol, and Orthic Humo-Ferric Podzol contain *Treponema* (light green). Gleyed Dystric Brunisol is the only soil classification which contains *Tepidibacter* (dark green). The average genus abundance makes up the y-axis.

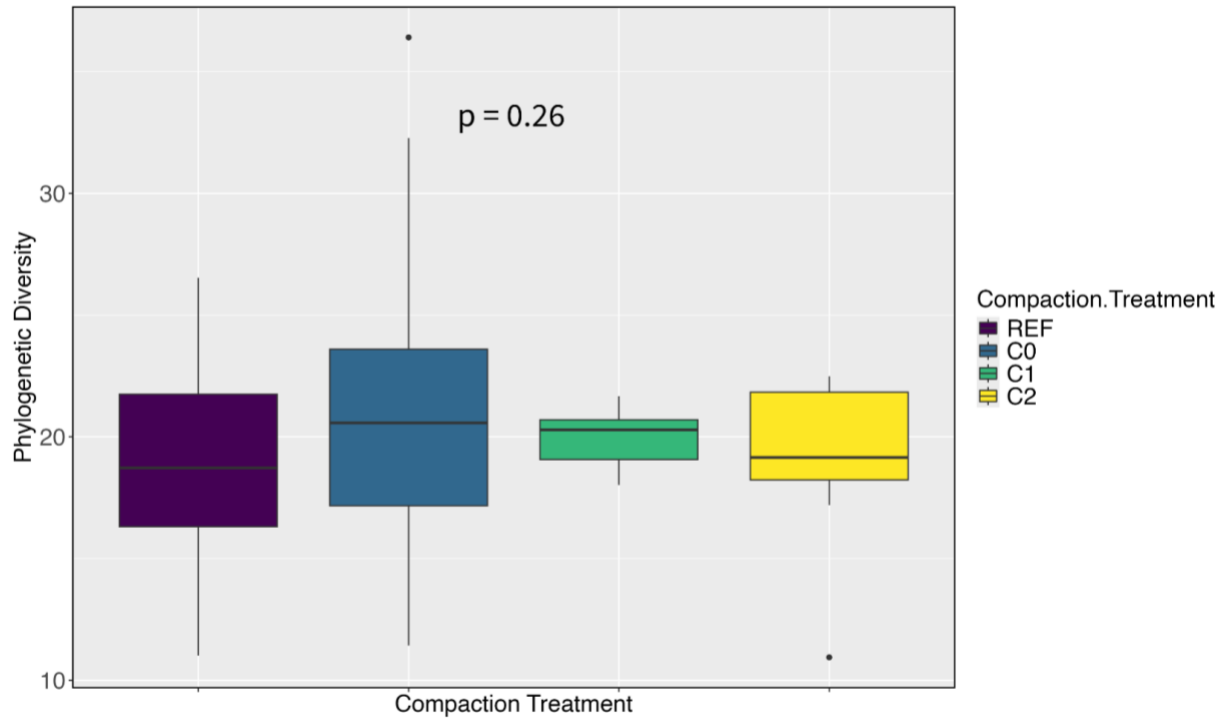


FIG. S3 Compaction Treatment does not have an impact on biodiversity. Phylogenetic diversity was measured across each compaction treatment (C0-C2) as well as the reference plot. Significance was determined at $p < 0.05$ and there was no significance between compaction treatments found.