

Priority Effect of Endophyte Community in Newly Fallen Leaves of *Quercus acutissima* Carruth. on Litter Decomposition and Saprotrophic Microbial Community

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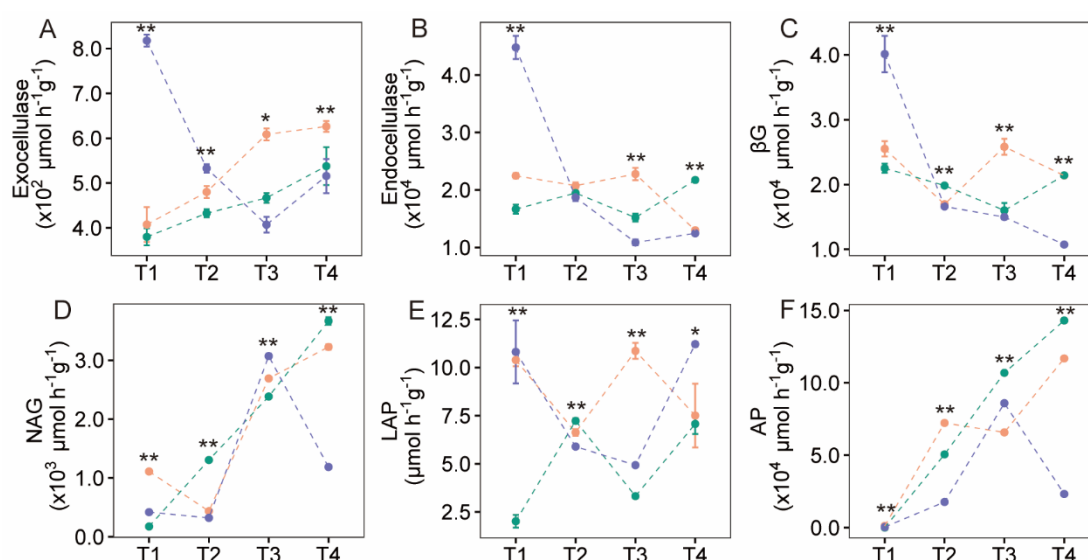


Figure S1. Extracellular enzyme activity in the litter decomposition process (T1, T2, T3, and T4) under three treatments (natural state (NS, orange), surface sterilization (SS, green), and irradiation sterilization (IS, purple)). βG, β-1,4-glucosidase; NAG, β-1,4-N-acetylglucosaminidase; LAP, leucine aminopeptidase; AP, acid phosphatase. * and ** indicate statistical significance at the P < 0.05 and P < 0.01 levels (Duncan's test), respectively.

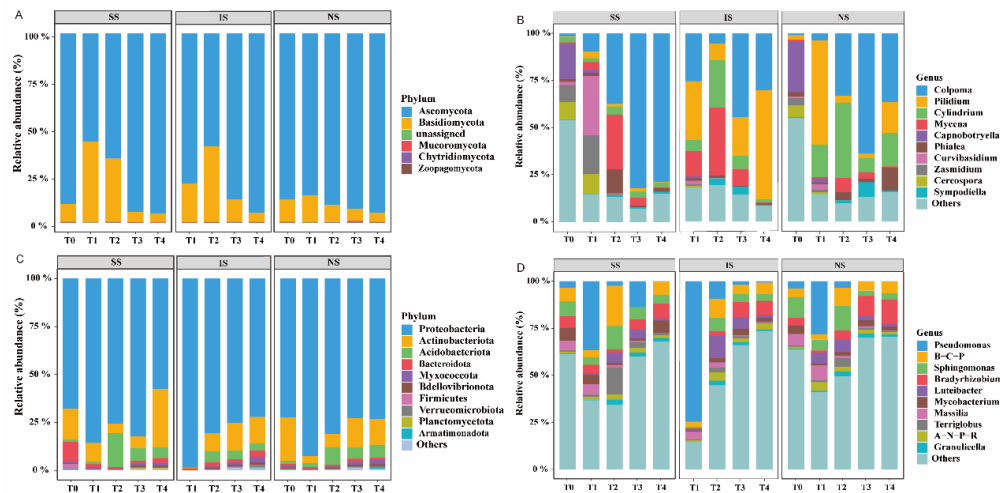


Figure S2. Fungal and bacterial species composition in litter under three treatments (natural state (NS), surface sterilization (SS), and irradiation sterilization (IS)) at newly-fallen leaf stages (initial period T0) and at litter decomposition stages (T1, T2, T3, and T4). The changes in relative abundance of the top 10 fungal communities at the phylum level (A) and genus level (B). The changes in relative abundance of the top 10 bacterial communities at the phylum level (C) and genus level (D).

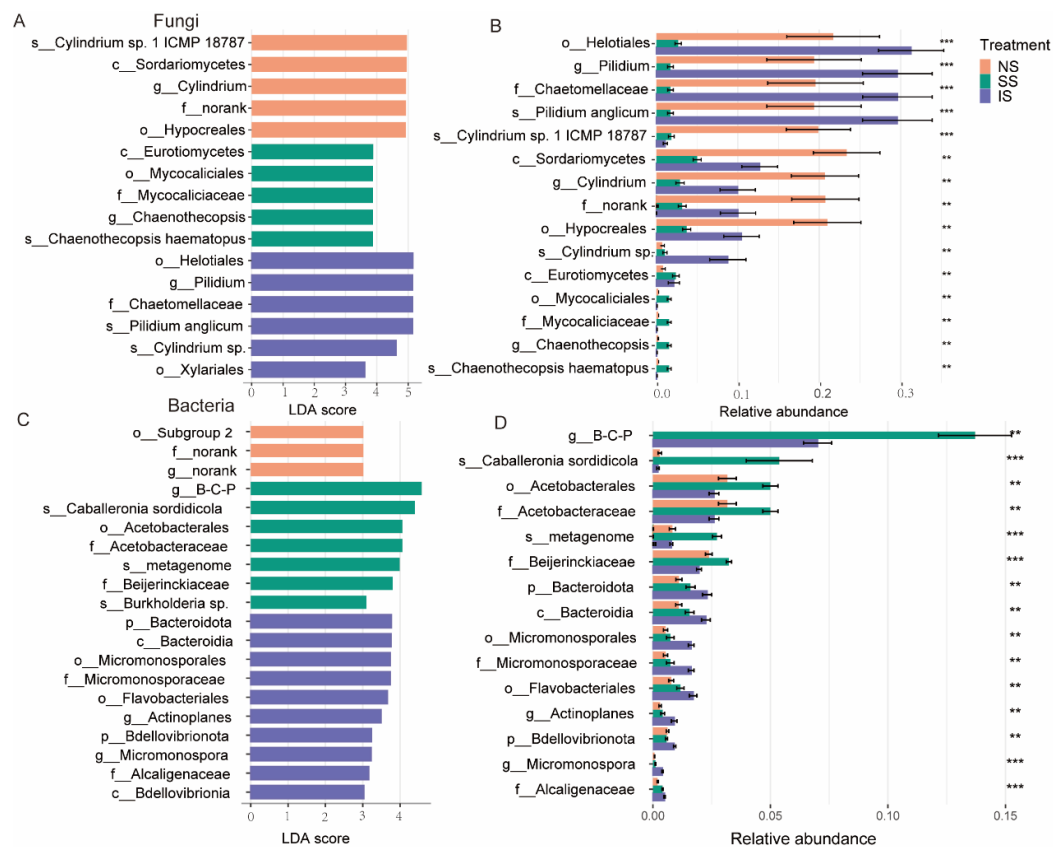


Figure S3. LefSe analysis of microbial communities in litter under three treatments (natural state (NS, orange), surface sterilization (SS, green), and irradiation sterilization (IS, purple)). Histogram of the LDA scores computed for features

differentially abundant between litter treated with natural state, surface sterilization, and irradiation sterilization for fungi (A) and bacteria (B). Histogram of the relative abundance of the top 10 features by LDA value for fungi (B) and bacteria (D) in litter under three treatments.

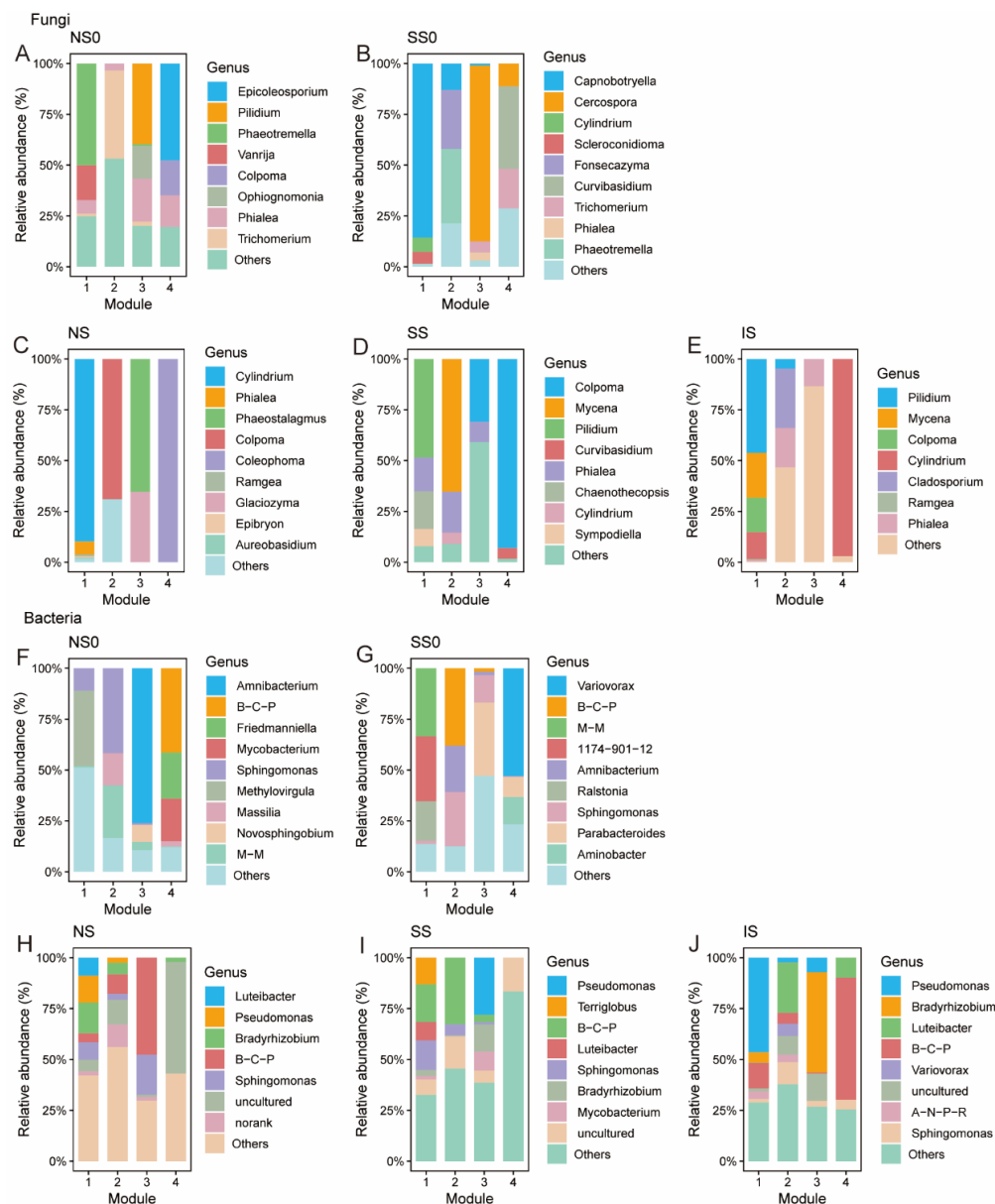


Figure S4. Species composition within network modules of fungal and bacterial communities. The figure shows the relative abundance of the top 10 OTUs at the genus level within the top four modules in litter under three treatments (natural state (NS, orange), surface sterilization (SS, green), and irradiation sterilization (IS, purple)).

B-C-P, *Burkholderia-Caballeronia-Paraburkholderia*;

C-M-M, *Methylobacterium-Methylorubrum*;

D-A-N-P-R, *Allorhizobium-Neorhizobium-Pararhizobium-Rhizobium*.