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## **Fungi determine increased soil organic carbon more than bacteria through their necromass inputs in conservation tillage croplands**

*presented by*

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**ABSTRACT:** Microbial necromass is a significant source of SOC stock and unequivocally controlled by the microbial community. Yet, a complete link that spans from agricultural practices to microbial community features, to soil necromass C, and eventually to SOC is poorly understood. Here, we investigated how SOC dynamics and stabilization processes were associated with microbial community features and necromass by using biomarkers and genomic approaches. This is essential for optimizing soil practices that promote C sequestration against climate change by modifying soil microbial community.

**KEY WORDS :** Soil organic carbon, 4 per 1000, tillage, stover mulching, microbial community, microbial necromass carbon

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