

Changes in biochemical characteristics of extractable organic matter during litter decomposition

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Litter decomposition is an important process maintaining productivity in terrestrial ecosystems. Litter decomposition begins on the surface of litter rather than the inside of litter, and quality change of extractable organic matter is rapid than that of bulk litter. However, little is known about the characteristics of organic matter on the litter surface and its changes in litter decomposition. The objective of this study is to clarify the differences in changes in quality of extractable organic matter during litter decomposition. Especially, in this presentation, we report the changes in biochemical characteristics of extractable organic matter during litter decomposition. In the early stages of decomposition of *Quercus* litter, variable distribution of molecular weight was observed for extractable organic matter, and it changed considerably with decomposition. Other species also showed similar pattern of molecular weight distribution. In this presentation, we also report the changes in biomoleculars of organic matter extracted from microorganisms as well as other plant species.

Keywords: litter decomposition, soil organic matter, extractable organic matter, molecular weight distribution, amino acid