Changes in Trace Elements on Biodegradation of Wood -III-

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Abstract

Wood meals of *Fugus crenata* were decayed by five wood-rotting fungi *in vivo*, and then, changes in trace elements were analyzed with PIXE method. The fungi used in this study were three white-rot fungi; *Phanerochaete chrysosporium*,*Coriolus versicolor*,*Pleurotus* ostreatus and one bwoun-rot fungi *Lentinus*. During the cultivation of the fungi, the high accumulation of Zn and Al were observed in the cultures of all fugi used in this study. The white-rot fungi were also found to accumulate Cu in the wood meal cultures. After cultivation for long period (15months), both decomposition of wood and accumulation of three metal elements (Mn, Fe and Cu) were observed in the culture of *P. chrysosporium* under metal-deficient condition on the EDTA treated wood-medium, suggesting the translocation of these elements.