



Transition I - II

In the first chapter, my colleagues and I highlighted the positive effects of tree species richness on leaf litter decomposition. We showed that tree diversity enhanced litter decomposition by promoting the litter susceptibility to decompose (i.e., litter decomposability). Tree litter decomposability was explained by the litter composition itself driven at plot level by tree biomass and tree plantation patterns. We demonstrated the key role of soil microbial community to carry out litter decomposition; therefore, in my second chapter, I explored the consequences of tree species richness on the linkages between soil microbial community facets (i.e., biomass, taxonomic and functional profiles) and functions (i.e., soil heterotrophic respiration).