Impact of intensive residue removal on the fertility of forest soils and on their biodiversity

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ABSTRACT

This PhD deals with the impact of logging residues removal on forest soil fertility and biodiversity. It takes place into an energy environment characterised by a policy of reducing fossil energy consumption and developing renewable energies market, particularly the fuel wood sector. This study focuses on two aspects: the interactions between carbon and nitrogen cycling in forest soils and the impacts of these types of forest management on soil microbial and fungal communities. It is conducted on an 18-site long-term monitoring network called Matières Organiques des Sols (MOS). Three tree species are studied: oak, beech and Douglas fir. The PhD mostly consists in devising and establishing the baseline characteristics of the MOS network.

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