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BGD

Interactive comment

Interactive comment on "Vertical partitioning of CO₂ production in a Dystric Cambisol" *by* Patrick Wordell-Dietrich et al.

Anonymous Referee #2

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The present study investigated the contribution of fresh litter-derived C to CO2 production in the three soil profiles, the design and the methodology adopted was adequate, and the MS. is well written. However, the contribution of new C to CO2 emissions can't be fully assessed by the 13C labelling experiment. And the conclusion of the importance of roots and the rhizosphere for CO2 production, should be evidenced by input of labelled root or root exudate analog in additional treatments. This study is a two-year experiment. How to reduce the cross-feeding effect? Especially, the young beech litter can be assimilated into microbial biomass C. Did the formulas already take into account the cross-feeding effects between different C decomposition stages?



Discussion paper



Interactive comment on Biogeosciences Discuss., https://doi.org/10.5194/bg-2019-143, 2019.