

Interactive comment on “Dynamics of microbial communities during decomposition of litter from pioneering plants in initial soil ecosystems” by J. Esperschütz et al.

Anonymous Referee #2

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General comments:

The study is focusing on the dynamic of microbial communities during decomposition of *Lotus corniculatus* and *Calamagrostis epigejos* litter in an initial soil ecosystem. Composition of microbial community was studied by fatty acid profiling which is in combination with ¹³C labelled litter material excellent approach.

The topic is interesting and manuscript well written. The only remark I have are the potential effects of the two different pioneering plants on the composition of microbial community in the initial (nutrients poor) soil ecosystems which should be discussed. From that aspect the two plants have been well chosen (Fabaceae vs. Poaceae).

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Specific comments:

Additional information on soil substrate characteristics would be beneficial. Soil nutrient status (e.g. available N, P, K), more detailed soil texture (% of sand, silt, clay), carbonates (as soil pH is relatively high), soil water status during experiment (range, constant or fluctuating conditions?).

Typing errors:

- 14983 / 24: of highly important
- 14984 / 26 considerd
- 14986 / 18 Soil texture
- 14992 / 5 significant degradation rates (improve sentence)
- 14992 / 8 undegraded degraded
- 14998 / 12 incoperation

Interactive comment on Biogeosciences Discuss., 9, 14981, 2012.

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