Interactive comment on “Root growth of *Lotus corniculatus* interacts with P distribution in young sandy soil” by B. Felderer et al.

Anonymous Referee #1

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This manuscript presents data on the response of the root system of *Lotus corniculatus*, a pioneer plant in revegetation of disturbed soils, on heterogeneous distribution of P in restored soil. The authors conducted laboratory and field experiments and collected soil and roots in the field. They conclude that this plant tends to grow roots into patches of high P availability, however not only roots but also mycorrhizal fungi where important for overall growth success of the plants.

This paper is a valuable contribution of data to the understanding of plant establishment on restored sites with a sound experimental concept and a high quality in data presentation and interpretation.

I have only a few, minor comments:
The German translation of Lusatia should be given at the first mention of Lusatia or the original German name should be used throughout the whole manuscript without English translation. Latin names should be given for all plant species, also those that are mentioned in relation to cited work. The description of the ingrowth experiment should be clarified, it would help here to include a sketch of the experimental setup. ‘HOM P 750’ and ‘HET P 2.5’ are mentioned as experimental labels late in the text, but not in the M&M section. Either omit these labels or use them throughout the text consistently. Which kind of instrument did you use? Inductively coupled plasma mass spectrometry or inductively coupled plasma optical emission spectroscopy? Specify.

Interactive comment on Biogeosciences Discuss., 9, 9637, 2012.