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Interactive comment on "Speciation and distribution of P associated with Fe and Al oxides in aggregate-sized fraction of an arable soil" *by* X. Jiang et al.

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AC: We thank the referee for the supportive evaluation for this manuscript. As suggested, we added two of references proposed by the reviewer and further revised the manuscript as follows:

Page 9881 Line 23: Long-terms soil management and development (e.g., cultivation, fertilized management, and forest growth and development) affect soil chemistry, such as the transformation of Fe oxides (Li, et al., 2008). Inevitably, the ecosystem-driven transformation of Fe oxides alters the related P retention and bioavailability in soil. Therefore, the study of various P/Fe-oxides relationship is helpful for understanding

soil P dynamics in long time scales.

Page 9882 Line 14 Richter et al. (2006) indicated that recalcitrant P as slowly cycling P did still contribute to P bioavailability on decadal time scales.

Page 9882 Line 25. It is in order to provide further information on the partition and quantification of these (unavailable) P forms especially for the P/Fe-oxide fraction of the arable soil, which may help to improve current soil P sustainable development management strategies.

Li, J., D. Richter, A. Mendoza, and P. Heine. 2008. Four-decade responses of soil trace elements to an aggrading old-field forest: B, Mn, Zn, Cu, and Fe. Ecology 89: 2911-2923. Richter, D., H.L. Allen, J. Li, D. Markewitz, and J. Raikes. 2006. Bioavailability of slowly cycling soil phosphorus: major restructuring of soil P fractions over four decades in an aggrading forest. Oecologia 150: 259-271. doi:10.1007/s00442-006-0510-4.

Interactive comment on Biogeosciences Discuss., 12, 9879, 2015.