Interactive comment on “Effects of precipitation on soil acid phosphatase activity in three successional forests in Southern China” by W. Huang et al.

A. Neftel (Referee)
albrecht.neftel@art.admin.ch

Received and published: 29 May 2011

The paper treats a not widely investigated aspect of global change, the potential alteration of the phosphate availability due to precipitation changes. As an outsider of this field I will not discuss the scientific details. Many important aspects have been raised by reviewer 1. Certainly the fact that the determination of the phosphate in the laboratory was done at a much higher pH than that of the forest soil is a weakness and its effects on the interpretation of the data must be carefully discussed.

The main message of the paper is that decreasing precipitation decreases activity also decreases phosphate supply, while increasing precipitation has a much smaller effect. A covariance of phosphate activity and water availability is not surprising as in dry conditions water is mainly controlling the growth. In this respect I suggest that in the discussion the interplay between potential phosphate activity measured in the laboratory and phosphor concentrations in the soil is better explained.

I am looking forward to see a revised manuscript taking into account the suggestions by the reviewer.

Albrecht Neftel, Handling editor for this paper

Interactive comment on Biogeosciences Discuss., 8, 157, 2011.