Biogeosciences Discuss., https://doi.org/10.5194/bg-2017-484-RC1, 2018 © Author(s) 2018. This work is distributed under the Creative Commons Attribution 4.0 License.



BGD

Interactive comment

Interactive comment on "Shrub type dominates the vertical distribution of leaf C : N : P stoichiometry across an extensive altitudinal gradient" by Wenqiang Zhao et al.

E. Bui (Referee)

elisabeth.bui@csiro.au

Received and published: 10 January 2018

Earlier work by Zhao et al. (2014) concluded that plant growth form, climate and soil regulate leaf CâĹűNâĹűP stoichiometry along an altitudinal gradient on Changbai Mountain, in NE China. This new work focuses on leaf CâĹűNâĹűP of shrubs in the Tibetan plateau and whether the leaf C, N, P, and stoichiometric ratios of different shrub types responds to climate and soil so it adds to the data on leaf (and soil) nutrients in China and to the body of knowledge of environmental stoichiometric patterns.

In the Discussion, landform should be acknowledged as an explanatory factor; montane and valley ecosystems occupy overlapping elevations but different landforms. Also



Discussion paper



I think a key missing factor is the nutrient acquisition process of the shrubs-this may be why shrub type accounts for more of leaf nutrient variation than climate or soil. Is there a mycorrhizal association that helps Rhododendron telmatium acquire nutrients? Are there rhizobial nodules on Bauhinia brachycarpa?

I. 441, N-limited instead of N-limiting?

Interactive comment on Biogeosciences Discuss., https://doi.org/10.5194/bg-2017-484, 2017.

Interactive comment

Printer-friendly version

Discussion paper

