

## ***Interactive comment on “Variations in leaf physiological properties within Amazon forest canopies” by J. Lloyd et al.***

**J. Lloyd et al.**

Received and published: 14 March 2010

We thank Prof. Grace for his comments. In what follows we specifically address his two main points:

EDITOR: My main problem with the work is that I would like to see how the N:P ratio of leaves in the rain forest compares with other leaves in other biomes. This would help to give context. There is an excellent review paper on the topic: Gusewell, S. 2004. N: P ratios in terrestrial plants: variation and functional significance. *New Phytologist* 164:243-266. It would be useful to see where the present data fall in relation to the data points of Fig 7 of that paper.

RESPONSE: This issue is dealt with in some detail in an accompanying paper in the same special issue (Fyllas et al.)

S1438

EDITOR: I have another, smaller, issue. The title of the paper is not entirely appropriate. The term ‘physiological properties’ suggests such processes as photosynthesis and respiration, whilst the paper mostly presents elemental analysis (albeit with an ecophysiological interpretation). The title could be improved upon.

RESPONSE: We would like to suggest

The optimisation of canopy carbon gain as related to gradients in nutrients and associated leaf traits within Amazon rain forest canopies.

---

Interactive comment on Biogeosciences Discuss., 6, 4639, 2009.

S1439