

Interactive comment on “Soils of amazonia with particular reference to the rainfor sites” by C. A. Quesada et al.

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Received and published: 9 March 2011

This paper has received two positive reviews, with both making only minor suggestions to improve the paper. All suggestions have been welcomed and as appropriate taken under consideration and included in the final version of this manuscript.

Both reviewers suggested that more detail on geology and parent material of Amazonian soils would have being a valuable inclusion on the text. This suggestion is a good one and has been taken on board through a new map of maximum geological age included and with an expanded discussion and new references on Amazon geology, parent material and substrate age, the later being of major importance to explain the large differences in soil development and fertility in Amazonia.

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The reviewer #1 also requested that the geographical locations of the soil profiles showed in this paper were shown in a map. Again this is a good idea and for the benefit of our readers we have included all the profile locations in an existing map (Fig. 1a).

Reviewer #2 suggested that more detail should be included about the forests in our study sites and also about the relationships between soils and vegetation. However, this information has been exhaustively discussed in a companion paper (Quesada et al. 2009) in the same issue. For that reason only the information on soil – vegetation interactions that were relevant to the present discussion were included in this manuscript. Though more specific references were made to the relevant companion paper.

Reviewer #2 also has suggested that more information on variance within soil groups could be included in the text. Again this has been the subject of another companion paper in the same issue (Quesada et al. 2010). Some information on variance between and within soil groups is also given on section 3.1 of this manuscript, and again we now make more references to the other relevant paper in our series of three.

Reviewer #2 suggested that information on anthropogenic factors as well as on man-made soils could be included in the text. We have now included some information and references on anthropogenic soil occurring in Amazonia (Terra Preta soils) but this discussion was limited to prevent escaping from the main objective of this manuscript, which is to review the main soil aspects of interest to ecologists and to give a pedogenic approach for soils under pristine forests in Amazonia.

As suggested by Reviewer #1, discussion on Arenosols now makes reference to giant Podzols, this being something that was previously overlooked in our review.

Interactive comment on Biogeosciences Discuss., 6, 3851, 2009.

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