Biogeosciences
Open Access
Discussions

**Interactive
Comment**

Interactive comment on "Microbial and metabolic profiling reveal strong influence of water table and land-use patterns on classification of degraded tropical peatlands" *by* S. Mishra et al.

S. Mishra et al.

dbsss@nus.edu.sg

Dear Editor and Reviewer 1,

Thanks for the comments during the review process of the manuscript (MS No.: bg-2013-366).

We have addressed all the specific points systematically. These changes are described in the accompanied document.

We hope that these changes have improved the clarity of the manuscript. We have uploaded the following documents: (i) Author's response to comments from Reviewer

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

1, attached as bg-2013-366-supplement file. (ii) Revised Fig. 3 (iii) Revised Fig. 5 (iv) Revised Suppl. Fig. S1

We look forward to your further comments and will be happy to make further amendments, as needed.

Sincerely, Sanjay

Sanjay SWARUP (PhD) Associate Professor, Department of Biological Sciences | National University of Singapore | 14 Science Drive 4, Singapore 117543 | DID: +65 6516 7933 | FAX: +65 6779 2486 | Email: sanjay@nus.edu.sg | www.dbs.nus.edu.sg/staff/sanjay.htm &

Deputy Director, NUS Environmental Research Institute (NERI) | National University of Singapore | T-Lab Building (TL) |5A Engineering Drive 1 #05-01, L5-R-04 | Singapore 117411 | Tel: 6601 1343 | Fax: 65-6872 1320 | www.nus.edu.sg/neri

Director, Graduate Program & Deputy Cluster Head, Engineering Systems | Singapore Centre for Environmental Life Sciences Engineering (SCELSE) | Nanyang Technological University | SBS-01n-15, 60 Nanyang Drive, Singapore 637551 | Tel: (65) 6316-2820 GMT+8h | Fax: (65) 6791-3856

Please also note the supplement to this comment:
http://www.biogeosciences-discuss.net/10/C7538/2013/bgd-10-C7538-2013-supplement.pdf

---

Interactive comment on Biogeosciences Discuss., 10, 14009, 2013.

A)

B) Above water table (oxic) zones

2D Stress: 0.15

○ Medium peat (3-7m) - Low water table
◆ Deep peat (>7m)   - High water table
● Medium peat (3-7m) - High water table
▲ Shallow peat (<3m) - High water table
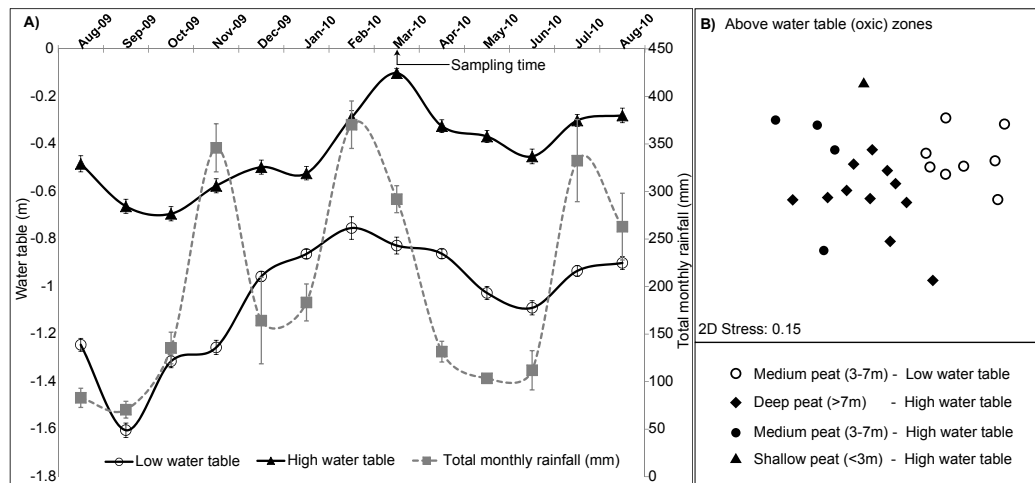
Fig. 3 (A) Rainfall and water table data from August 2009 to August 2010 at all sampling locations from Site A and Site B. The locations are shown in Fig. 1. Water table levels were averaged across locations with high water table (between 0–45 cm) and low water table (> 45 cm),respectively. The averaged values are represented as "high water table" and "low water table", respectively. (B) Nonmetric multidimensional scaling (nMDS) ordination plot, based on Bray–Curtis similarities calculated from presence/absence data of 16S rDNA TRFs abundances, showing variation between bacterial community across different water table depth and peat thickness from above (oxic zones) water table positions. Low water table (LWT), high water table (HWT) and different peat thickness samples are represented by open symbols, closed symbols and different shapes, respectively.

Fig. 1.
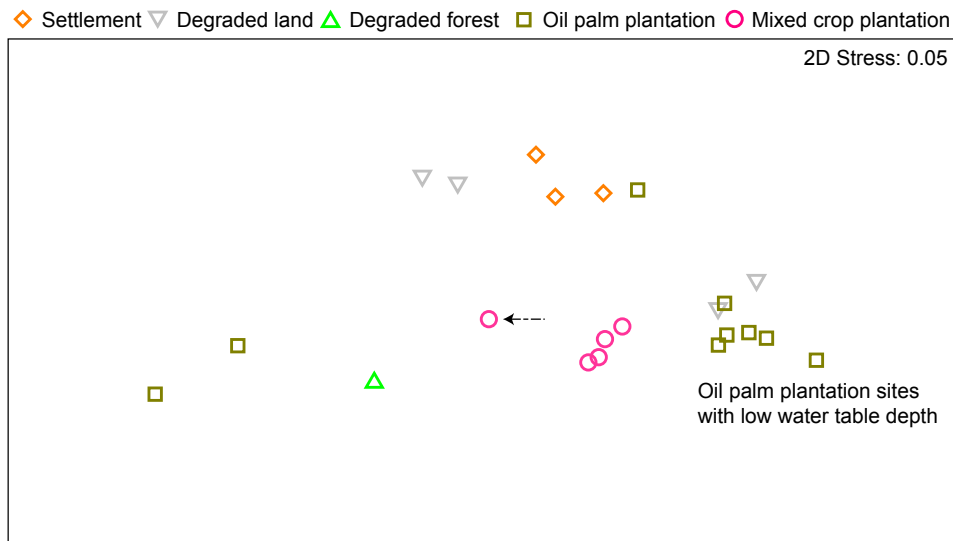
Fig. 5. Nonmetric multidimensional scaling (nMDS) ordination plot, based on Euclidean distance calculated from intensity of metabolites extracted from peat water of different land-use patterns. The arrow represents the flooded site with mixed crop plantations
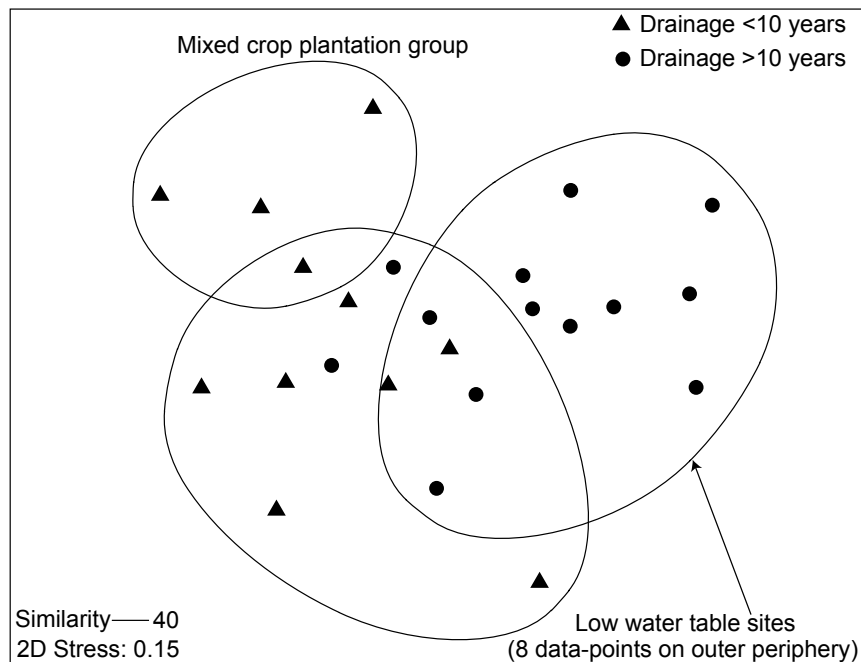
Fig. 2.

Fig. S1: Nonmetric multidimensional scaling (nMDS) ordination plot, based on Bray-Curtis similarity indices calculated from presence/absence data of 16S rDNA TRFs abundance from above water table (oxic) zones showing variation based on age of drainage.

Fig. 3.