

Effects of acidity on dissolved organic carbon in organic soil extracts, pore water and surface litters

Article

Supplemental Material

Creative Commons: Attribution-Noncommercial-No Derivative Works 4.0

Pschenycky, C. M., Clark, J. M. ORCID:
<https://orcid.org/0000-0002-0412-8824>, Shaw, L. J., Griffiths,
R. I. and Evans, C. D. (2020) Effects of acidity on dissolved
organic carbon in organic soil extracts, pore water and surface
litters. *Science of the Total Environment*, 703. 135585. ISSN
0048-9697 doi: <https://doi.org/10.1016/j.scitotenv.2019.135585>
Available at <https://centaur.reading.ac.uk/87810/>

It is advisable to refer to the publisher's version if you intend to cite from the work. See [Guidance on citing](#).

To link to this article DOI: <http://dx.doi.org/10.1016/j.scitotenv.2019.135585>

Publisher: Elsevier

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the [End User Agreement](#).

www.reading.ac.uk/centaur

CentAUR

Central Archive at the University of Reading

Reading's research outputs online

Supplementary Information

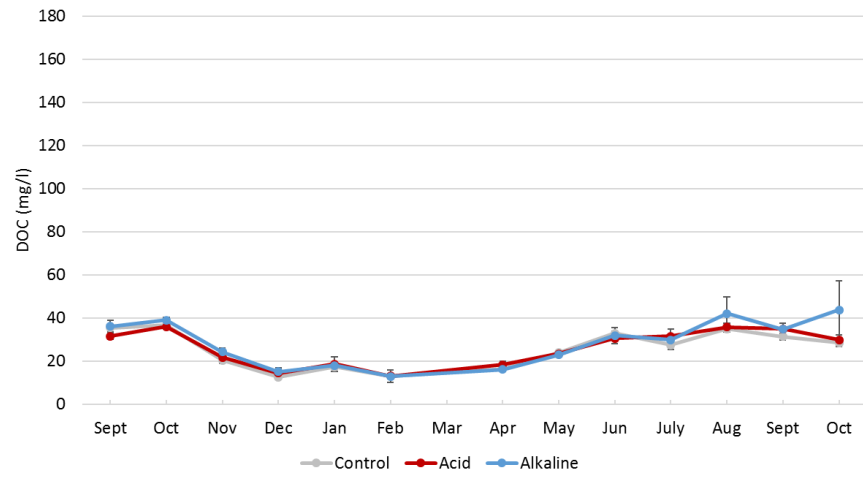
Table S1: Percentage moisture content used in the calculations for peat and surface litter extracted DOC, at each site.

Site	Peat	Litter
Migneint Peat	1298.23	913.45
Migneint Podzol	604.85	531.74
Peaknaze Peat	311.89	685.61
Peaknaze Podzol	287.12	521.81

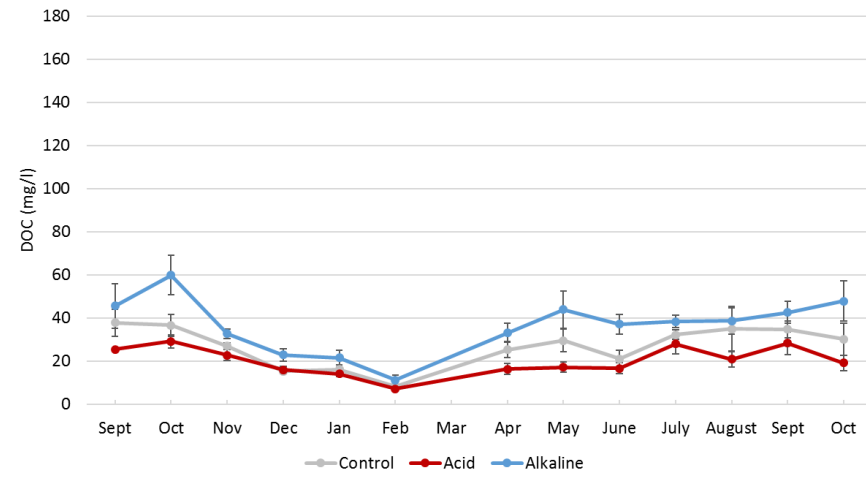
Table S2: Details of ANOVA tests run on different datasets. Site had four levels, sample had two levels, treatment had three levels and month had three levels (unless in italics, meaning there were thirteen levels). 'sqrt' refers to square root transformation.

ANOVA	Sample	Data	Transformation	Figure
Site*Sample*Month	Litter & Organic Soil	DOC	log	1a
Site*Sample*Month	Litter & Organic Soil	SUVA	log	1b
Site*Month	Litter	DOC	log	2a
Site*Month	Litter	SUVA	sqrt	2b
Site*Month	Organic Soil	DOC	log	2c
Site*Month	Organic Soil	SUVA	sqrt	2d
Site*Month	Pore Water	DOC	sqrt	2e
Site*Month	Pore Water	SUVA	none	2f
Site*Treatment*Month	Litter	pH	boxcox	3a
Site*Treatment*Month	Litter	DOC	log	3b
Site*Treatment*Month	Organic Soil	pH	boxcox	3c
Site*Treatment*Month	Organic Soil	DOC	log	3d
Site*Treatment* <i>Month</i>	Pore Water	pH	none	3e
Site*Treatment* <i>Month</i>	Pore Water	DOC	none	3f
Site*Treatment*Month	Litter	SUVA	log	Table 2
Site*Treatment*Month	Organic Soil	SUVA	log	Table 2
Site*Treatment* <i>Month</i>	Pore Water	SUVA	none	Table 2

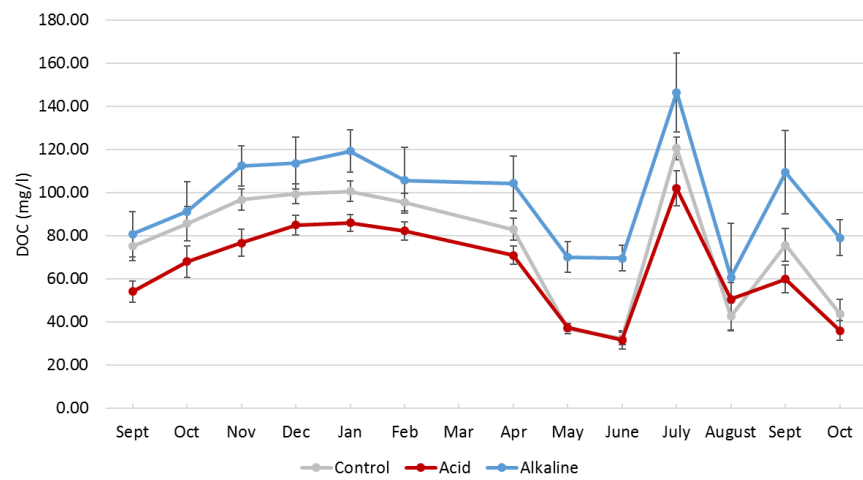
Migneint Peat



Migneint Podzol



Peaknaze Peat



Peaknaze Podzol

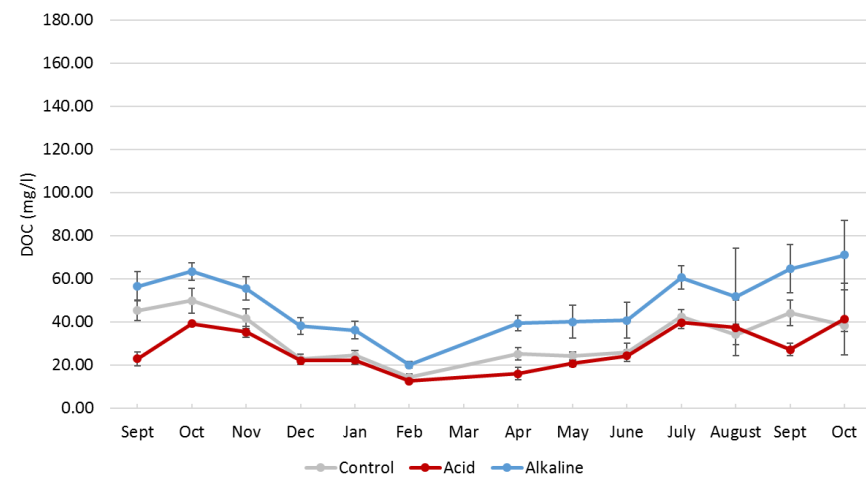


Figure S1: DOC concentrations in pore water samples, collected monthly from September 2015 until October 2016 from control, acid and alkaline plots at each of the four sites.

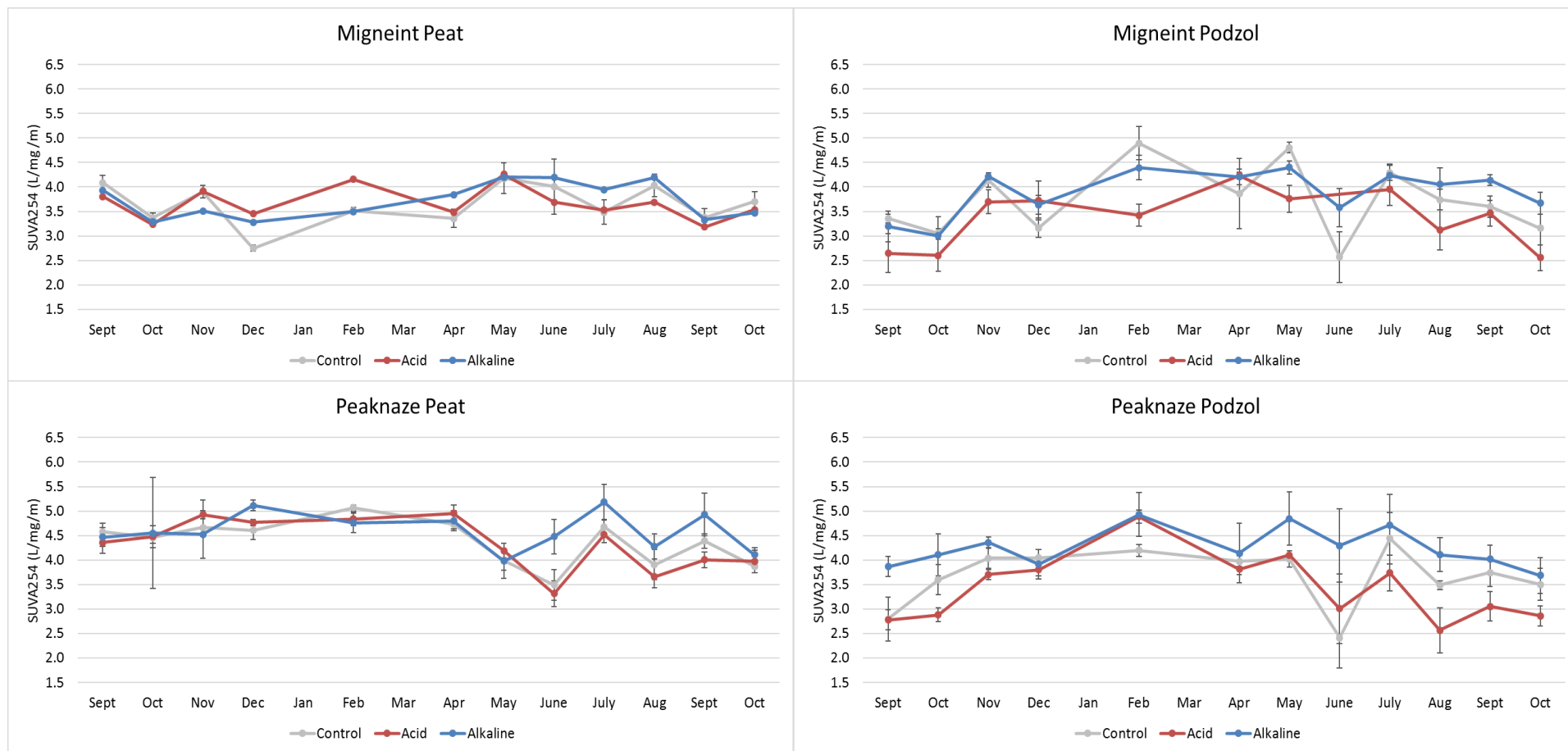


Figure S2: SUVA₂₅₄ of DOM in pore water samples, collected monthly from September 2015 until October 2016 from control, acid and alkaline plots at each of the four sites.