

Interactive comment on “Vascular plants affect properties and decomposition of moss-dominated peat, particularly at elevated temperatures” by Lilli Zeh et al.

Lilli Zeh et al.

lilli.zeh@tu-dresden.de

Received and published: 7 April 2020

Please read our response in the supplement.

Please also note the supplement to this comment:

<https://www.biogeosciences-discuss.net/bg-2019-503/bg-2019-503-AC1-supplement.pdf>

Interactive comment on Biogeosciences Discuss., <https://doi.org/10.5194/bg-2019-503>, 2020.

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Discussion paper



Parameter	Unit	Indication	Interpretation in <i>Sphagnum</i> -dominated peat
C/N	-	preferential decomposition of C over N	aerobic decomposition
$\delta^{13}\text{C}$	[‰]	preferential decomposition of ^{12}C over ^{13}C isotope	aerobic decomposition
$\delta^{15}\text{N}$	[‰]	preferential decomposition of ^{14}N over ^{15}N isotope	aerobic decomposition
sum of G and S lignin products	[% TIC ^a]	lignin	vascular plants (van Smeerdijk and Boon, 1987)
sum of <i>n</i> -alkenes and <i>n</i> -alkanes	[% TIC ^a]	cutan, suberan, leaf waxes	ericoid shrubs (Schellekens and Buurman, 2011; van Smeerdijk and Boon, 1987)
C ₉ G/G	-	intact lignin	ericoid shrubs (Schellekens et al., 2012)
4-vG/G	-	ferulic acid	sedges (van Smeerdijk and Boon, 1987; Schellekens et al., 2012)
4-isopropenylphenol (Ph6)	[% TIC ^a]	sphagnum acid	aerobic decomposition of <i>Sphagnum</i> tissues (preferential loss of polyphenols over polysaccharides; Schellekens et al., 2015b)
levoglucosan/sum of polysaccharides	-	cellulose	aerobic decomposition of <i>Sphagnum</i> tissues (preservation of <i>Sphagnum</i> polysaccharides; Schellekens et al., 2015b) ^b

^a total ion current

^b interpretation refers to relatively low values

Fig. 1.