

Supplement of Biogeosciences, 14, 1617–1630, 2017  
<http://www.biogeosciences.net/14/1617/2017/>  
doi:10.5194/bg-14-1617-2017-supplement  
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Biogeosciences  Open Access

*Supplement of*

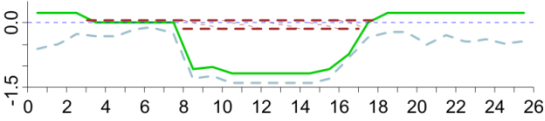
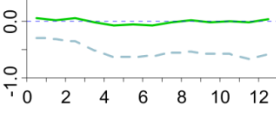
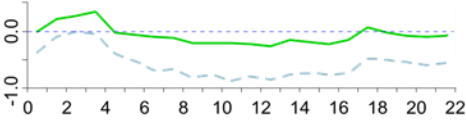
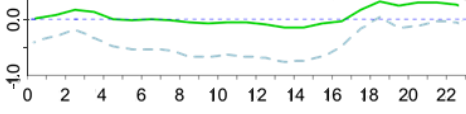
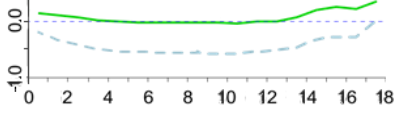
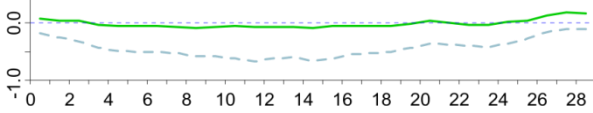
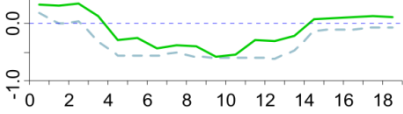
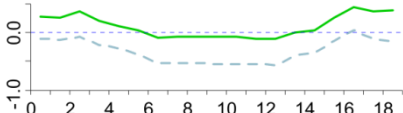
**C / N ratio, stable isotope ( $\delta^{13}\text{C}$ ,  $\delta^{15}\text{N}$ ), and *n*-alkane patterns of brown mosses along hydrological gradients of low-centred polygons of the Siberian Arctic**

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**Table S1:** Brief description of studied polygons. (For further information see Zibulski et al., 2016)

polygon cross section, (length of transect = polygon size)	<div style="display: flex; flex-direction: column; gap: 5px;"> <span style="color: red;">- - -</span> moss layer <span style="color: green;">—</span> surface height <span style="color: blue;">- - -</span> permafrost table <span style="color: purple;">- - -</span> water level </div>	coordinates	short description vegetation type; additional information
	06/P	70.666° N, 97.708° E	open forest; swinging bog (mat of mosses)
	17/P	72.243° N, 102.233° E	forest-tundra intersection; shallow and sparsely vegetated
	P3/I	72.149° N, 102.693° E	forest-tundra intersection; a complex of three individual polygons: P3/I - deep, open water body
	P3/II		P3/II - shallow, open water body
	P3/III		P3/III - shallow completely vegetated
	12/P	72.431° N, 102.373° E	tundra; shallow and vegetated
	LP1	72.375° N, 126.483° E	tundra; deep polygon without thaw depth below the water body
	LP2	72.370° N, 126.481° E	tundra; shallow and vegetated

**Table S2:**  $C/N_{(m)}$  ratio,  $\delta^{13}C$  and  $\delta^{15}N$  data of individual mosses depending on their position relative to the water-level (cm).

Species	$C/N_{(m)}$ ratio		n	$\delta^{13}C$ [‰]		n	$\delta^{15}N$ [‰]	
	median	range		median	range		median	range
<i>H. splendens</i> (Hyl_spl)	47.1	29.5 to 67.9	34	-29.4	-32.1 to -25.6	31	-2.7	-5.0 to +1.2
<i>T. nitens</i> (Tom_nit)	52.9	30.1 to 66.6*	46	-29.0	-30.9 to -24.5	30	-2.8	-6.4 to +0.4
<i>A. turgidum</i> (Aul_tur)	52.4	29.9 to 64.3	41	-27.8	-30.4 to 24.3	24	-3.2	-6.1 to -1.2
<i>A. palustre</i> (Aul_pal)	49.6	22.5 to 66.9	40	-27.1	-30.1 to -24.2	30	-2.7	-6.6 to +0.4
<i>H. lapponicus</i> (Ham_lap)	46.5	28.3 to 56.1	10	-24.8	-26.6 to -23.2	9	-0.1	-1.2 to +0.4
<i>W. exannulata</i> (War_exa)	38.4	17.3 to 70.4	20	-26.8	-34.5 to -22.6	19	-1.4	-4.5 to 0.0
<i>M. triquetra</i> (Mee_tri)	37.1	25.8 to 50.7	45	-26.1	-37.0 to -22.5*	34	-1.3	-3.2 to +1.4
<i>D. revolvens</i> (Dre_rev)	42.6	17.5 to 64.1	72	-28.7	-34.9 to -22.5*	67	-2.3	-5.2 to +1.6**
<i>S. scorpioides</i> (Sco_sco)	38.9	15.4 to 62.8	69	-27.2	-33.0 to -22.8***	65	-1.5	-4.5 to +1.7**
<i>C. giganteum</i> (Cal_gig)	42.6	28.6 to 58.7	23	-29.2	-34.7 to -22.8	17	-2.9	-6.1 to +1.2**

Stars designate significant linear regressions between parameter and the plant position relative to water-level (\*  $p \leq 0.01$ , \*\*  $p \leq 0.05$ , \*\*\*  $p \leq 0.001$ ).