



## Correction to: Biochemical determinants of litter quality in 15 species of *Sphagnum*

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**Correction to: Plant Soil (2018) 425, 161–176**  
<https://doi.org/10.1007/s11104-018-3579-8>

There were mistakes in the data of three variables used in this study. The corrections listed below have minor effects on statistics and *p*-values, but do not change any conclusions. Correct data are stored in the Dryad repository (<https://doi.org/10.5061/dryad.4f8d2.2>).

### Loss in the lab

Most samples of the variable “labloss2b” differed 0.6–0.7% from the correct values. The errors in two samples were larger (MG2 decrease 1.3%, and TE3 increase 4.9%).

### Loss in the field

One sample of *S. fuscum*, FU13, had a value for “lossfield” that should have been excluded due to in-growth of roots in the litterbag.

### CN ratio

Some C:N ratio values had been sorted wrongly within species. Because some numbers have moved between the bog and fen samples of *S. fuscum*, and between the open bog and pine bog samples of *S. magellanicum*, these have changes in averages (*S. fus.* Bog –27.1; *S. fus.* Fen +27.1; *S. mag.* Open –1.1; *S. mag.* Pine +1.1).

*Specific changes in the text:*

**Abstract**, right column, line 9 “0.57” should read “0.56”  
**p. 167**

left column, line 44 “0.57” should read “0.56”.

right column, line 2 “0.48” should read “0.38”.

line 3 “0.006” should read “0.009”, and “59” should read “57”.

line 28 “93” should read “96” and “–1.67” should read “–1.74”.

line 36 “0.56” should read “0.55”, “0.59” should read “0.58”.

line 45 “0.005” should read “0.002”, “0.5” should read “0.7”.

line 47 “0.003” should read “0.0004”, and “0.6” should read “0.9”.

line 48- “...carbon concentration, CN ratio and phosphorus concentration ( $r = -0.33, -0.28, 0.31$ , respectively).” should read “carbon concentration and phosphorus concentration ( $r = -0.31$  and  $0.32$ , respectively).”

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The online version of the original article can be found at  
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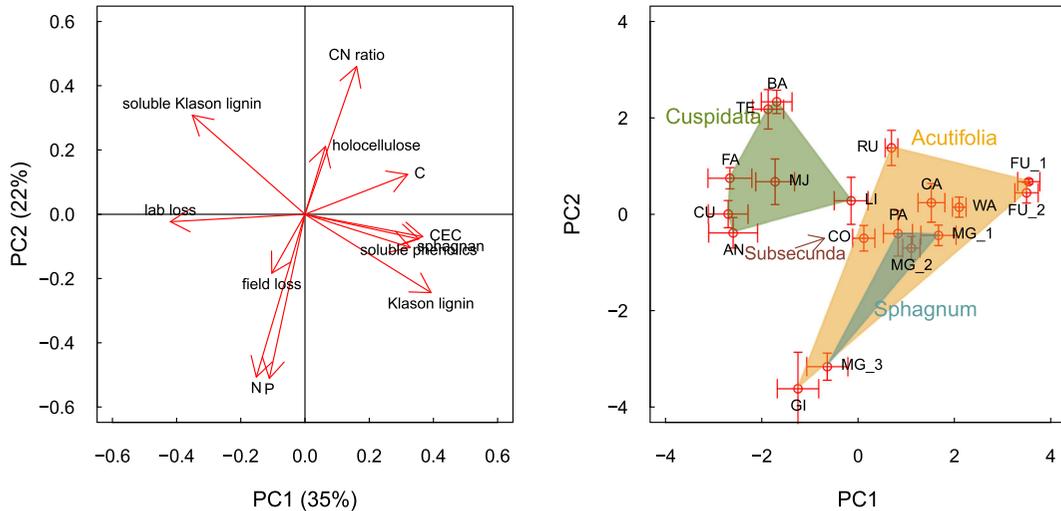
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p. 168 left column, line 3 “0.004” should read “0.008”.

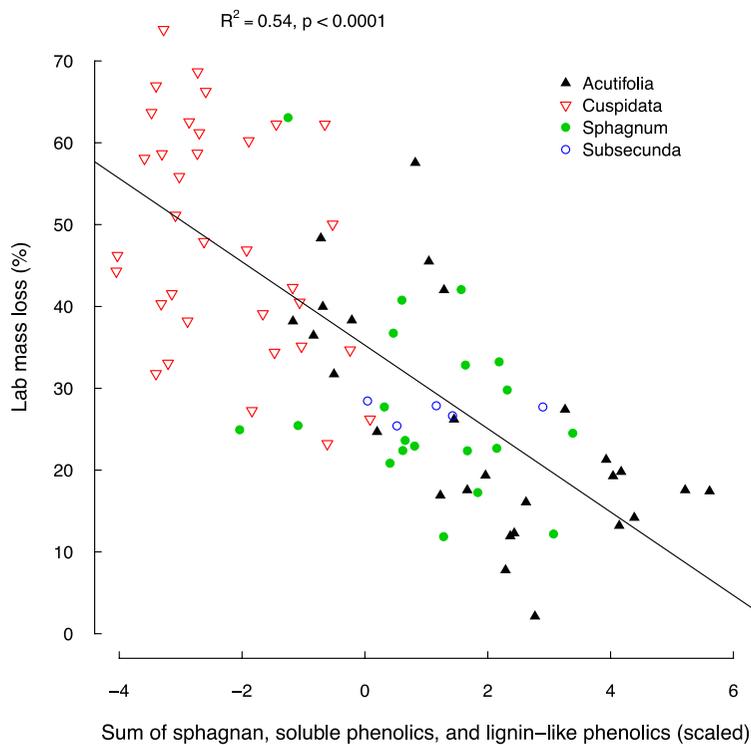
p. 169 right column, line 1” 0.47” should read “0.49”.

p. 171 left column, line 5 “–0.38” should read “–0.37”.

Figures with changes:



**Fig. 3** The variance explained for PC1 is 36% (not 35%), for PC2 22% (not 23%). The noticeable change in the figure is that FU\_1 and FU\_2 come closer together



**Fig. 4** Two samples have moved along the y-axis, but  $R^2$ - and  $p$ -values did not change

**Changes in Table 3.** The correlations between lab mass loss and other variables were practically the same using the correct data. There were more changes in correlations with CN ratio. Correlations with KL and Total KL changed from positive to negative, but remained insignificant; the

correlation with soluble phenolics that was reported not significant ( $r = 0.082$ ), became significant ( $r = 0.23$ ); other changes were with HC (from  $r = 0.31$  to  $r = 0.21$ ), CEC (from  $r = 0.32$  to  $r = 0.21$ ) and N (from  $r = -0.94$  to  $r = -0.70$ ). Other changes were even smaller.

**Table 3** Correlations (showing  $r =$ ) among variables describing lab mass loss and concentrations of metabolites and nutrients; bold denotes significant correlation ( $P < 0.05$ )

	Sphagnum mg g <sup>-1</sup>	Soluble phenolics mg g <sup>-1</sup>	Klason lignin mg g <sup>-1</sup>	Soluble KL% of total KL	Total Klason lignin mg g <sup>-1</sup>	CEC μeq g <sup>-1</sup>	C mg g <sup>-1</sup>	N mg g <sup>-1</sup>	C:N ratio	PO <sub>4</sub> -P μg g <sup>-1</sup>	Lab litter mass loss %
Holocellulose mg g <sup>-1</sup>	<b>0.268</b>	-0.071	-0.027	0.113	-0.004	<b>0.268</b>	-0.103	<b>-0.330</b>	<b>0.210</b>	-0.160	-0.074
Sphagnum mg g <sup>-1</sup>		<b>0.448</b>	<b>0.459</b>	<b>-0.400</b>	<b>0.471</b>	<b>0.568</b>	0.152	-0.088	0.087	0.085	<b>-0.614</b>
Soluble phenolics mg g <sup>-1</sup>			<b>0.518</b>	<b>-0.489</b>	<b>0.524</b>	<b>0.457</b>	<b>0.490</b>	-0.050	<b>0.230</b>	-0.048	<b>-0.568</b>
Klason lignin mg g <sup>-1</sup>				<b>-0.940</b>	<b>0.998</b>	<b>0.573</b>	<b>0.468</b>	0.012	-0.038	0.046	<b>-0.588</b>
Soluble KL% of total KL					<b>-0.927</b>	<b>-0.504</b>	<b>-0.389</b>	-0.108	0.133	-0.140	<b>0.488</b>
Total KL mg g <sup>-1</sup>						<b>0.586</b>	<b>0.480</b>	-0.003	-0.019	0.026	<b>-0.601</b>
CEC μeq g <sup>-1</sup>							<b>0.279</b>	<b>-0.229</b>	<b>0.213</b>	0.093	<b>-0.619</b>
C mg g <sup>-1</sup>								<b>-0.233</b>	<b>0.263</b>	<b>-0.429</b>	<b>-0.539</b>
N mg g <sup>-1</sup>									<b>-0.698</b>	<b>0.699</b>	<b>0.237</b>
C:N ratio										<b>-0.546</b>	<b>-0.280</b>
PO <sub>4</sub> -P μg g <sup>-1</sup>											<b>0.223</b>

Corrected values for C:N ratio and Lab litter mass loss in Supplementary Table 1.

Species	C:N ratio	Lab litter mass loss %
<i>S. angustifolium</i>	70.8 ± 4	63.2 ± 1.6
<i>S. balticum</i>	99.3 ± 1.5	44.4 ± 3.9
<i>S. capillifolium</i>	88.8 ± 5.2	17.2 ± 3.7
<i>S. contortum</i>	64 ± 4.9	27.2 ± 0.5
<i>S. cuspidatum</i>	63.6 ± 7.6	63.1 ± 1.6
<i>S. fallax</i>	80.7 ± 3.5	47.1 ± 3.3
<i>S. fuscum</i> - bog	87.2 ± 4.5	9.0 ± 2.1
<i>S. fuscum</i> - fen	115 ± 4.6	17.4 ± 1.2
<i>S. girgensohnii</i>	49 ± 4.9	45.9 ± 3.5
<i>S. lindbergii</i>	71.1 ± 6	29.1 ± 2.3
<i>S. magellanicum</i> -open bog	76.2 ± 4.6	24.2 ± 2.5
<i>S. magellanicum</i> -pine bog	68.3 ± 6.4	18.0 ± 2.5
<i>S. magellanicum</i> -spruce forest	48.3 ± 2.4	39.4 ± 6.6
<i>S. majus</i>	74 ± 7.5	48.1 ± 5.2
<i>S. papillosum</i>	73.8 ± 6.7	29.8 ± 3.3
<i>S. rubellum</i>	97.1 ± 4.8	38.7 ± 2.2
<i>S. tenellum</i>	89 ± 4.8	45.3 ± 7.4
<i>S. warnstorffii</i>	74.9 ± 1.8	20.3 ± 2

Corrected models and R<sup>2</sup>-values in Supplementary Table 3. Models predicting decomposition of *Sphagnum* litter (mass loss (%)) after 14 months incubation in lab).

Predictors*	Model (intercept+predictor coefficients)	R <sup>2</sup>
sphagnum	80.2–1.13x	R <sup>2</sup> = 0.38
soluble phenolics	66.4–3.88x	R <sup>2</sup> = 0.32
total Klason lignin	76.5–0.14x	R <sup>2</sup> = 0.36
sphagnum+soluble phenolics+total KL	95.9–0.65x <sub>1</sub> –1.74x <sub>2</sub> –0.071x <sub>3</sub>	R <sup>2</sup> <sub>adj</sub> = 0.53
sphagnum+soluble phenolics	88.2–0.82x <sub>1</sub> –2.49x <sub>2</sub>	R <sup>2</sup> <sub>adj</sub> = 0.48
sphagnum+total KL	93.6–0.78x <sub>1</sub> –0.10x <sub>2</sub>	R <sup>2</sup> <sub>adj</sub> = 0.49
sphagnum+soluble phenolics+total KL + N	86.0–0.62x <sub>1</sub> –1.69x <sub>2</sub> –0.074x <sub>3</sub> + 1.47x <sub>4</sub>	R <sup>2</sup> <sub>adj</sub> = 0.55
sphagnum+soluble phenolics+total KL + P	92.1–0.71x <sub>1</sub> –1.55x <sub>2</sub> –0.073x <sub>3</sub> + 15.3x <sub>4</sub>	R <sup>2</sup> <sub>adj</sub> = 0.58
CEC	94.4–0.083x	R <sup>2</sup> = 0.38
CEC + soluble phenolics+total KL	101.5–0.046x <sub>1</sub> –1.92x <sub>2</sub> –0.062x <sub>3</sub>	R <sup>2</sup> <sub>adj</sub> = 0.51
CEC + soluble phenolics	99.0–0.061x <sub>1</sub> –2.48x <sub>2</sub>	R <sup>2</sup> <sub>adj</sub> = 0.48
CEC + total KL	99.4–0.055x <sub>1</sub> –0.088x <sub>2</sub>	R <sup>2</sup> <sub>adj</sub> = 0.46
CEC + soluble phenolics+total KL + N	90.1–0.039x <sub>1</sub> –1.92x <sub>2</sub> –0.069x <sub>3</sub> + 1.36x <sub>4</sub>	R <sup>2</sup> <sub>adj</sub> = 0.53
CEC + soluble phenolics+total KL + P	97.9–0.051x <sub>1</sub> –1.72x <sub>2</sub> –0.062x <sub>3</sub> + 16.25x <sub>4</sub>	R <sup>2</sup> <sub>adj</sub> = 0.57
Sum of sphagnum, soluble phenolics and total KL (each scaled and centered and used as one predictor)	35.3–5.1x	R <sup>2</sup> = 0.54

\*Predictor units: CEC in  $\mu\text{eq g}^{-1}$ , all other predictors in  $\text{mg g}^{-1}$

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