Optimization of the Biomonitoring Technique with the Aquatic Moss *Fontinalis Antipyretica* Hedw.: Selection of Shoot Segment Length for Determining Trace Element Concentrations

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Table S1. Kendall correlations between position on the shoot and fresh weight concentrations of the elements. Kendall's τ correlation coefficient was calculated for each combination SS/element and testing them against $\tau = 0$. n= 15; p is the probability of $\tau = 0$. $p > 0.05$ labelled as not significant (n. s.).

	SS1		SS2		SS3		SS4	
Element	τ	p	τ	p	τ	p	τ	p
Al	0.898	<0.001	0.772	<0.001	0.668	0.001	0.073	n. s.
Cr	0.814	<0.001	0.678	0.001	0.605	0.003	-0.021	n. s.
Mn	0.918	<0.001	0.939	<0.001	0.939	<0.001	0.637	0.002
Fe	0.918	<0.001	0.793	<0.001	0.751	<0.001	0.365	n. s.
Ni	0.898	<0.001	0.939	<0.001	0.939	<0.001	0.689	0.001
Cu	0.584	0.004	0.584	0.004	0.772	<0.001	0.167	n. s.
Zn	0.918	<0.001	0.939	<0.001	0.939	<0.001	0.835	<0.001
As	0.918	<0.001	0.939	<0.001	0.918	<0.001	0.438	0.033
Cd	0.814	<0.001	0.939	<0.001	0.939	<0.001	-0.668	0.001
Ba	0.918	<0.001	0.939	<0.001	0.939	<0.001	0.177	n. s.
Hg	0.000	n. s.	0.501	0.015	0.522	0.011	0.334	n. s.
Pb	0.918	<0.001	0.793	<0.001	0.877	<0.001	0.188	n. s.

Table S2. Kendall correlations between elements (fresh weight concentrations). The lower diagonal contains the τ values and the upper diagonal the probabilities of $\tau = 0$. n= 15. $p > 0.05$ labelled as not significant (n. s.).

	Al	Cr	Mn	Fe	Ni	Cu	Zn	As	Cd	Ba	Hg	Pb
SS1												
Al		<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	n. s.	<0.001
Cr	0.848		<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	n. s.	<0.001
Mn	0.905	0.752		<0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	n. s.	<0.001
Fe	0.981	0.829	0.924		<0.001	0.002	<0.001	<0.001	<0.001	<0.001	n. s.	<0.001
Ni	0.810	0.695	0.829	0.829		0.006	<0.001	<0.001	<0.001	<0.001	n. s.	<0.001
Cu	0.600	0.638	0.543	0.581	0.524		0.004	0.003	0.001	0.004	0.027	0.003
Zn	0.905	0.752	1.000	0.924	0.829	0.543		0.000	<0.001	<0.001	n. s.	<0.001
As	0.924	0.771	0.981	0.943	0.810	0.562	0.981		<0.001	<0.001	n. s.	<0.001
Cd	0.790	0.638	0.886	0.810	0.752	0.619	0.886	0.867		<0.001	n. s.	<0.001
Ba	0.905	0.752	1.000	0.924	0.829	0.543	1.000	0.981	0.886		n. s.	<0.001
Hg	0.105	0.143	0.086	0.086	0.105	0.429	0.086	0.105	0.200	0.086		n. s.
Pb	0.924	0.771	0.981	0.943	0.848	0.562	0.981	0.962	0.867	0.981	0.067	
SS2												
Al		<0.001	<0.001	<0.001	<0.001	0.011	<0.001	<0.001	<0.001	<0.001	0.036	<0.001
Cr	0.771		<0.001	<0.001	<0.001	0.021	0.001	<0.001	<0.001	0.001	n. s.	0.001
Mn	0.752	0.600		<0.001	<0.001	n. s.	<0.001	<0.001	<0.001	<0.001	0.016	<0.001
Fe	0.867	0.714	0.848		<0.001	0.016	<0.001	<0.001	<0.001	<0.001	0.016	<0.001
Ni	0.714	0.638	0.848	0.771		n. s.	<0.001	<0.001	<0.001	<0.001	0.016	<0.001
Cu	0.486	0.448	0.352	0.467	0.314		n. s.	0.046	n. s.	n. s.	0.004	n. s.
Zn	0.848	0.619	0.905	0.829	0.867	0.371		<0.001	<0.001	<0.001	0.021	<0.001
As	0.790	0.676	0.924	0.886	0.886	0.390	0.905		<0.001	<0.001	0.004	<0.001
Cd	0.790	0.638	0.924	0.848	0.886	0.352	0.943	0.962		<0.001	0.008	<0.001

Ba	0.790	0.600	0.962	0.848	0.848	0.352	0.943	0.924	0.924		0.016	<0.001
Hg	0.410	0.371	0.467	0.467	0.467	0.543	0.448	0.543	0.505	0.467		0.006
Pb	0.810	0.619	0.714	0.829	0.676	0.371	0.771	0.790	0.790	0.752	0.524	
SS3												
Al		<0.001	0.002	<0.001	0.002	0.004	0.002	<0.001	0.004	<0.001	n. s.	<0.001
Cr	0.867		0.006	<0.001	0.006	0.006	0.006	0.001	0.011	0.003	n. s.	<0.001
Mn	0.581	0.524		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.008	<0.001
Fe	0.771	0.714	0.657		<0.001	<0.001	<0.001	<0.001	0.001	<0.001	n. s.	<0.001
Ni	0.581	0.524	1.000	0.657		<0.001	<0.001	<0.001	<0.001	<0.001	0.008	<0.001
Cu	0.543	0.524	0.810	0.695	0.810		<0.001	<0.001	<0.001	<0.001	0.002	<0.001
Zn	0.581	0.524	0.962	0.657	0.962	0.810		<0.001	<0.001	<0.001	0.004	<0.001
As	0.695	0.638	0.886	0.771	0.886	0.848	0.886		<0.001	<0.001	0.016	<0.001
Cd	0.543	0.486	0.962	0.619	0.962	0.848	0.924	0.848		<0.001	0.004	<0.001
Ba	0.657	0.562	0.886	0.657	0.886	0.771	0.924	0.886	0.848		0.016	<0.001
Hg	0.162	0.143	0.505	0.314	0.505	0.581	0.543	0.467	0.543	0.467		n. s.
Pb	0.810	0.752	0.733	0.924	0.733	0.695	0.733	0.848	0.695	0.733	0.314	
SS4												
Al		<0.001	0.011	<0.001	0.004	n. s.	0.046	<0.001	n. s.	<0.001	0.001	n. s.
Cr	0.657		n. s.	0.011	0.027	n. s.	n. s.	0.006	n. s.	<0.001	0.021	0.011
Mn	0.486	0.295		<0.001	<0.001	n. s.	<0.001	<0.001	0.021	0.004	0.002	<0.001
Fe	0.752	0.486	0.657		<0.001	n. s.	0.001	<0.001	n. s.	<0.001	<0.001	0.008
Ni	0.543	0.429	0.676	0.790		n. s.	<0.001	<0.001	n. s.	0.001	0.001	0.003
Cu	0.086	0.314	0.029	0.257	0.276		n. s.	n. s.	n. s.	n. s.	n. s.	n. s.
Zn	0.390	0.276	0.752	0.600	0.771	0.238		0.001	0.016	0.021	0.006	0.003
As	0.714	0.524	0.733	0.848	0.752	0.143	0.638		n. s.	<0.001	<0.001	0.004
Cd	-0.086	-0.048	-0.448	-0.219	-0.314	0.105	-0.467	-0.257		n. s.	n. s.	n. s.
Ba	0.943	0.676	0.543	0.771	0.600	0.105	0.448	0.771	-0.143		<0.001	0.046
Hg	0.638	0.448	0.581	0.695	0.600	0.029	0.524	0.657	-0.295	0.657		0.004
Pb	0.333	0.486	0.657	0.505	0.562	0.257	0.562	0.543	-0.448	0.390	0.543	