

Table S1. Spearman rank-order correlation coefficients of the chemical composition of the samples.

Variables	Moisture	C	N	C/N	NH ₄ ⁺ -N	NO ₃ -N	P	K	Na	Cu	Ca	Fe	Mg	Zn	Mn	Ash	pH	EC
Moisture	1.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	0.671**	1.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N	-0.311	-0.289	1.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C/N	0.439	0.475	-0.957**	1.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NH ₄ ⁺ -N	-0.320	0.041	0.570*	-0.477	1.000	-	-	-	-	-	-	-	-	-	-	-	-	-
NO ₃ -N	-0.828**	-0.862**	0.574*	-0.737**	0.218	1.000	-	-	-	-	-	-	-	-	-	-	-	-
P	-0.300	-0.450	0.668**	-0.693**	-0.113	0.583*	1.000	-	-	-	-	-	-	-	-	-	-	-
K	-0.518*	-0.511	-0.043	-0.129	-0.277	0.463	0.300	1.000	-	-	-	-	-	-	-	-	-	-
Na	-0.586*	-0.589*	-0.075	-0.096	0.148	0.454	-0.179	0.593*	1.000	-	-	-	-	-	-	-	-	-
Cu	-0.879**	-0.579*	-0.079	-0.075	0.236	0.594*	-0.093	0.468	0.725**	1.000	-	-	-	-	-	-	-	-
Ca	-0.864**	-0.379	0.432	-0.489	0.667**	0.676**	0.111	0.257	0.421	0.761**	1.000	-	-	-	-	-	-	-
Fe	-0.693**	-0.679**	-0.257	0.061	0.041	0.528*	-0.189	0.432	0.732**	0.907**	0.514*	1.000	-	-	-	-	-	-
Mg	-0.921**	-0.646**	0.114	-0.275	0.282	0.730**	0.057	0.461	0.639*	0.936**	0.811**	0.825**	1.000	-	-	-	-	-
Zn	-0.871**	-0.591*	-0.047	-0.129	0.246	0.657**	-0.104	0.48	0.728**	0.950**	0.792**	0.875**	0.935**	1.000	-	-	-	-
Mn	-0.849**	-0.882**	0.505	-0.667**	0.188	0.969**	0.566*	0.556*	0.516*	0.670**	0.674**	0.609*	0.771**	0.680**	1.000	-	-	-
Ash	-0.993**	-0.668**	0.321	-0.454	0.345	0.826**	0.304	0.511	0.604*	0.879**	0.871**	0.689**	0.929**	0.878**	0.846**	1.000	-	-
pH	-0.680**	-0.974**	0.317	-0.513	-0.038	0.864**	0.490	0.506	0.613*	0.588*	0.386	0.669**	0.618*	0.584*	0.885**	0.680**	1.000	-
EC	0.000	-0.102	0.854**	-0.745**	0.648**	0.275	0.385	-0.317	-0.217	-0.297	0.195	-0.360	-0.143	-0.282	0.210	-0.004	0.093	1.000

* $p < 0.05$, ** $p < 0.01$.

Table S2. Component Matrix^a of the variables

Variables	Component			
	1	2	3	4
Moisture	-0.989	-0.059	-0.104	-0.033
C	-0.842	0.297	0.208	0.371
N	0.490	-0.813	0.190	0.232
C/N	-0.416	0.857	0.015	0.221
NH ₄ ⁺ -N	0.079	-0.490	0.837	-0.133
NO ₃ -N	0.785	-0.467	-0.217	0.323
P	0.391	-0.703	-0.538	0.224
K	0.540	0.211	-0.536	0.119
Na	0.775	0.253	0.075	-0.483
Cu	0.577	0.778	0.226	0.049
Ca	0.712	-0.128	0.536	0.423
Fe	0.403	0.878	0.230	-0.076
Mg	0.920	0.201	0.198	0.034
Zn	0.854	0.483	0.053	0.173
Mn	0.909	-0.103	-0.378	0.037
Ash	0.948	0.176	0.210	0.154
pH	0.825	-0.013	-0.219	-0.492
EC	0.062	-0.871	0.409	-0.217

Extraction Method: Principal Component Analysis. ^a Four components extracted.