

Environmental Science and Pollution Research

Multivariate Analysis of Mineral Constituents of Edible Parasol Mushroom (*Macrolepiota Procera*) and Soil beneath to Fruiting Bodies Collected from Northern Poland

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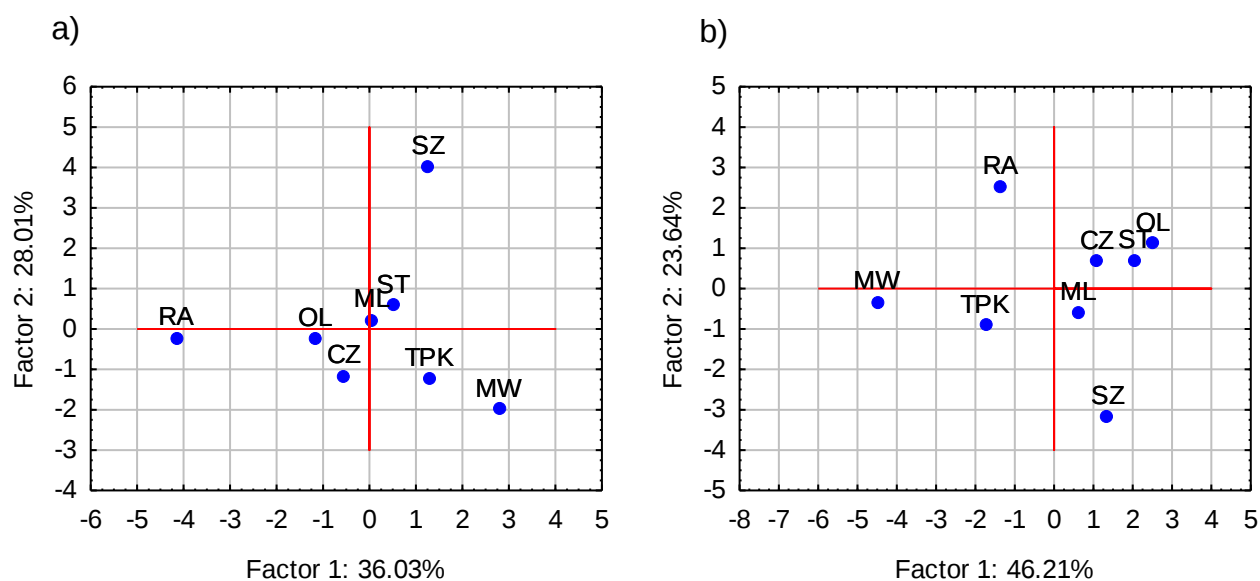


Fig. A.1 Score plots of the sampling sites for the caps (a) and stipes (b) of Parasol Mushroom in space of first and second factors (SZ – Szczecinek, CZ – Czarne, TPK – Trójmiejski Park Krajobrazowy, ML – Mierzeja Wiślana, ML – Morąg and Łukta, OL – Olsztynek, ST – Szczytno, RA – Rafa)

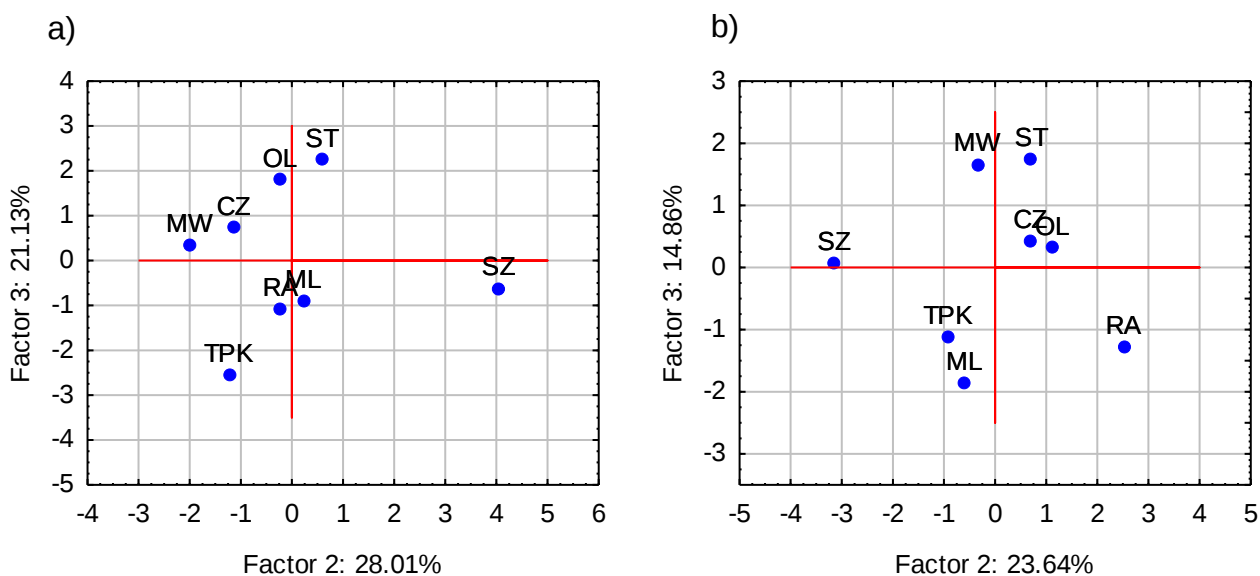


Fig. A.2 Score plots of the sampling sites for the caps (a) and stipes (b) of Parasol Mushroom in space of second and third factors (SZ – Szczecinek, CZ – Czarne, TPK – Trójmiejski Park Krajobrazowy, ML – Mierzeja Wiślana, ML – Morąg and Łukta, OL – Olsztynek, ST – Szczytno, RA – Rafa)

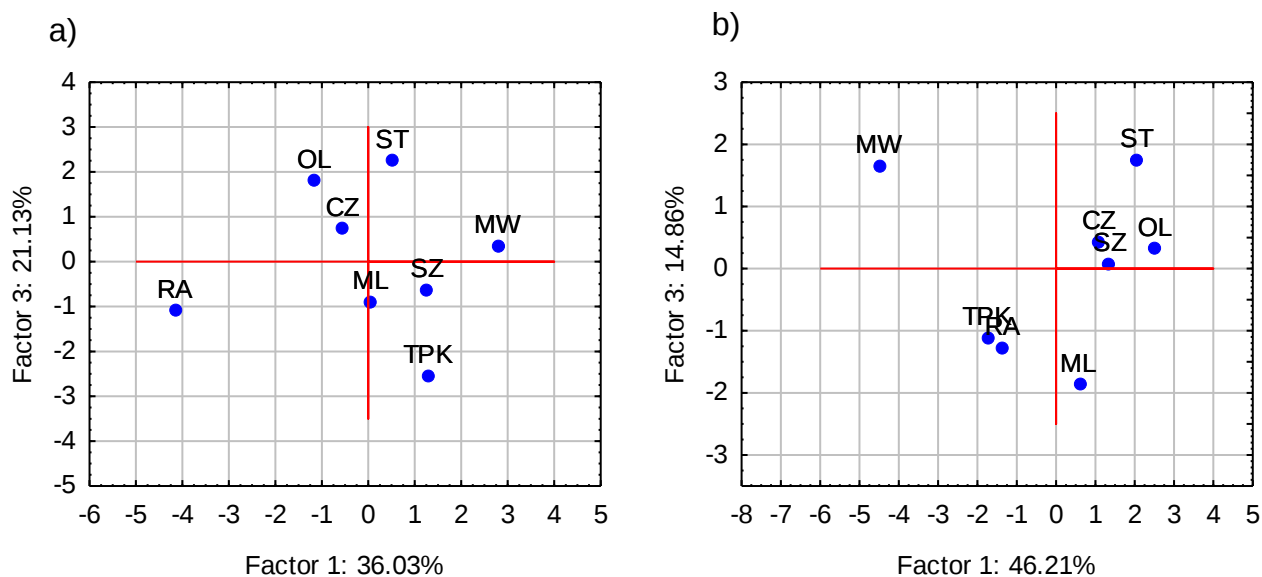


Fig. A.3 Score plots of the sampling sites for the caps (a) and stipes (b) of Parasol Mushroom in space of first and third factors (SZ – Szczecinek, CZ – Czarne, TPK – Trójmiejski Park Krajobrazowy, ML – Mierzeja Wiślana, ML – Morąg and Łukta, OL – Olsztynek, ST – Szczytno, RA – Rafa)

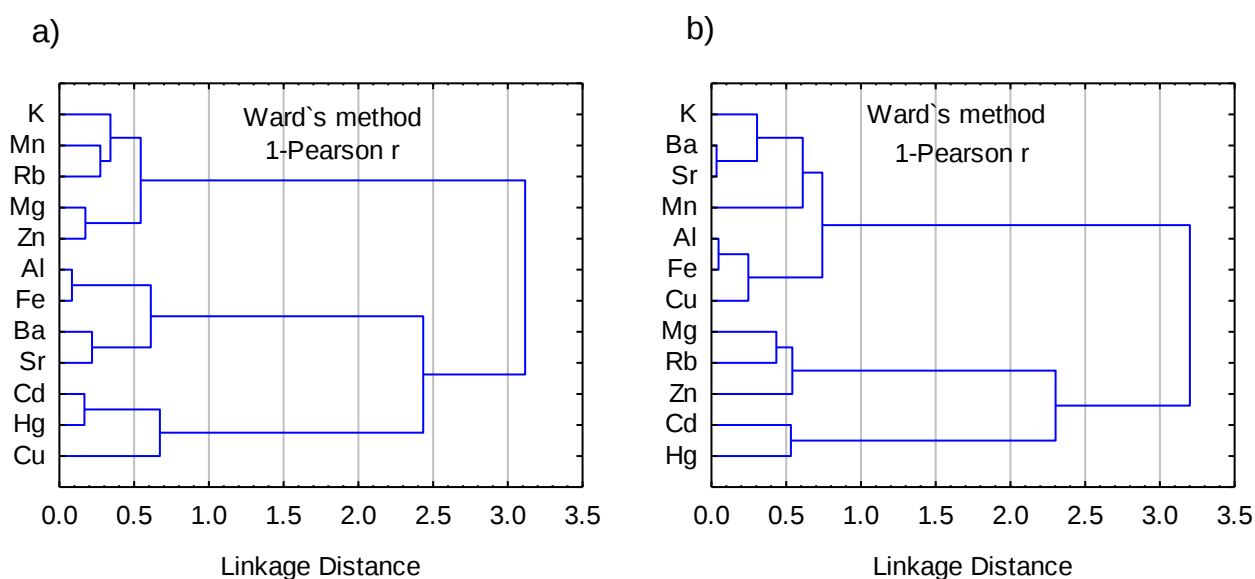


Fig. A.4 Cluster analysis diagram of the elements concentration similarity for the caps (a) and stipes (b) of Parasol Mushroom

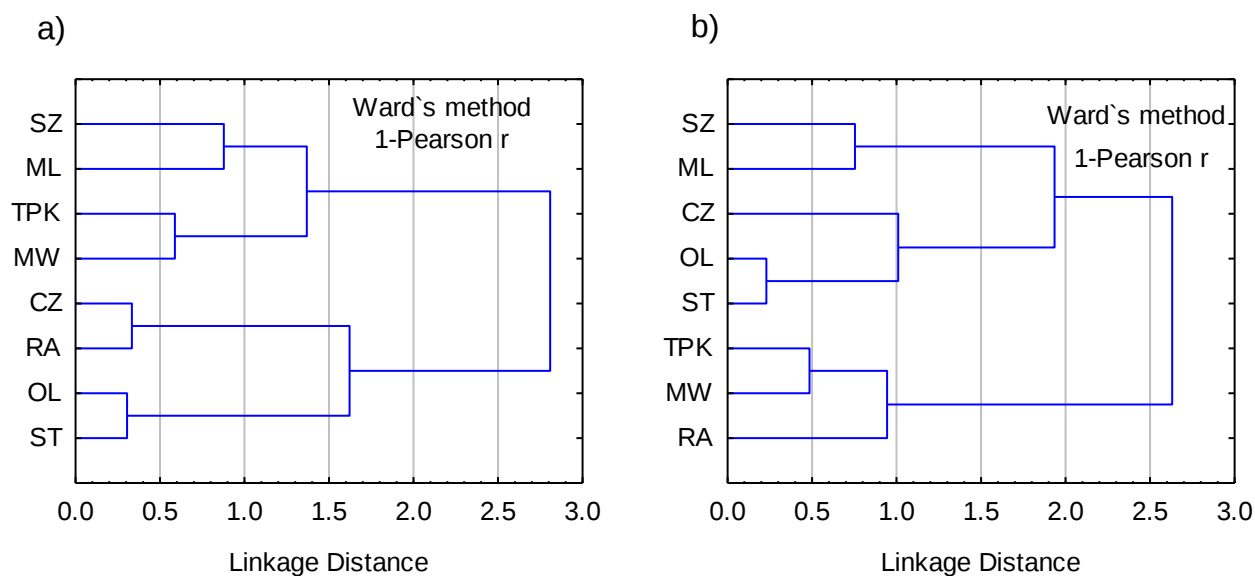


Fig. A.5 Bundle diagram of similarity of minerals composition between the caps (a) and stipes (b) of Parasol Mushroom from eight spatially distant sites (SZ – Szczecinek, CZ – Czarne, TPK – Trójmiejski Park Krajobrazowy, ML – Mierzeja Wiślana, ML – Morąg and Łukta, OL – Olsztynek, ST – Szczytno, RA – Rafa)

Table A.1 Elements content of the caps and stipes of *Macrolepiota procera* and soil substrate, and elements' bioconcentration factor values (mean, SD, median value – in parentheses and range)

Element	Matrix	Site										
		Szczecinek,	Czarne,	Darżłubska	TPK,	Mierzeja	Kętrzyn,	Morąg and	Olsztynek,	Szczytno,	Rafa,	Bydgoszcz,
		2003	2003	Forest,	1995	Wiśłana,	2000	Łukta,	2003	2003	2002	2000
		<i>n</i> = 15	<i>n</i> = 16	2000 <i>n</i> = 6	<i>n</i> = 8	2001 <i>n</i> = 10	<i>n</i> = 16	2002 <i>n</i> = 9	<i>n</i> = 16	<i>n</i> = 15	<i>n</i> = 15	<i>n</i> = 15
mg g ⁻¹ dw												
K	Cap	40±4	36±5	36±6	45±4	49±14	41±8	35±8	31±4	39±4	26±4	26±4
		(41)	(36)	(34)	(45)	(47)	(38)	(37)	(30)	(41)	(26)	(25)
		33-50	27-46	30-45	42-54	38-86	32-48	21-46	26-37	28-43	17-34	21-33
	Stipe	28±7	30±10	22±8	35±5	41±9	29±6	24±3	15±5	27±6	24±11	21±8
		(29)	(28)	(21)	(35)	(43)	(28)	(24)	(16)	(27)	25	(20)
		16-38	13-53	16-37	30-43	26-50	20-44	18-29	12-23	18-40	5.9-38	6.4-35
	Q _{C/S}	1.3±0.2	1.3±0.6	1.7±0.4	1.3±0.2	1.2±0.4	1.4±0.3	1.4±0.2	1.6±0.9	1.5±0.3	1.3±0.7	1.6±1.1
		(1.3)	(1,2)	(1.6)	(1.3)	(1.1)	(1.3)	(1.4)	(2.1)	(1,5)	(1.1)	(1.1)
		1.0-1.6	0.65-2.9	1.2-2.3	0.99-1.8	0.77-1.8	1.0-2.3	1.1-1.9	1.6-2.6	1.0-2.1	0.70-2.9	0.82-5.2
	Soil	0.11±0.03	0.090±0.023	0.15±0.19	0.14±0.02	0.34±0.21	NA ^a	0/19±0.03	0.17±0.08	0.11±0.03	0.18±0.11	NA
		(0.13)	(0.080)	(0.074)	(0.15)	(0.25)		(0.20)	(0.14)	(0.11)	(0.18)	
		0.069-0.15	0.073-0.13	0.060-0.54	0.12-0.16	0.17-0.71		0.14-0.23	0.097-0.29	0.065-0.14	0.059-0.33	
BCF _C	550±350	410±110	390±180	300±34	190±110	NA	180±46	200±76	390±130	220±160	NA	
	(300)	(410)	(500)	(290)	(210)		(180)	(190)	(360)	(120)		
	260-1100	230-620	83-550	260-350	54-340		110-260	92-370	220-650	70-520		
BCF _S	340±150	360±140	300±160	240±31	160±87	NA	130±28	91±43	280±130	180±160	NA	

		(270)	(330)	(300)	(220)	(140)		(120)	(96)	(250)	(130)	
		180-630	100-650	70-580	190-280	60-290		97-190	12-170	140-610	73-540	
P	Cap	15±2	11±2	NA	12±1	12±3	NA	NA	11±2	14±1	NA	NA
		(16)	(11)		(12)	(11)			(10)	(14)		
		11-18	7.9-14		11-14	9.8-18			8.4-16	12-15		
	Stipe	8.0±1.4	6.9±1.4	NA	6.8±0.8	6.6±1.0	NA	NA	4.7±0.8	6.2±1.1	NA	NA
		(7.5)	(6.9)		(6.9)	(6.2)			(4.7)	(6.0)		
		5.5-10	4.3-9.2		5.9-8.1	5.1-8.4			3.5-6.2	4.7-7.9		
	Q _{C/S}	2.0±0.4	1.7±0.4	NA	1.8±0.3	1.9±0.5	NA	NA	2.3±0.3	2.3±0.5	NA	NA
		(1.9)	(1.7)		(1.8)	(1.7)			(2.3)	(2.2)		
		1.1-2.8	1.1-2.3		1.4-2.3	1.3-2.8			1.6-3.0	1.7-3.1		
	Soil	0.19±0.08	0.16±0.02	0.13±0.03	0.14±0.04	0.28±0.07	NA	0.26±0.05	0.28±0.06	0.18±0.05	0.23±0.09	NA
		(0.19)	(0.16)	(0.12)	(0.13)	(0.26)		(0.28)	(0.28)	(0.17)	(0.25)	
		0.12-0.28	0.14-0.20	0.093-0.18	0.10-0.20)	0.21-0.41		0.18-0.31	0.18-0.34	0.10-0.26	0.11-0.33	
	BCF _C	85±33	71±17	NA	100±29	47±20	NA	NA	38±8	86±29	NA	NA
		(68)	(70)		(100)	(45)			(38)	(78)		
		47-130	39-90		57-130	25-87			27-61	51-150		
	BCF _S	44±17	44±11	NA	56±18	25±4	NA	NA	18±6	37±7	NA	NA
		(43)	(40)		(59)	(24)			(17)	(37)		
		20-75	26-65		30-77	20-31			12-33	20-47		
Mg	Cap	2.0±0.2	1.5±0.2	1.4±0.1	1.6±0.1	1.7±0.3	1.2±0.1	1.4±0.3	1.4±0.2	1.6±0.1	1.0±0.1	0.86±0.09
		(2.0)	(1.5)	(1.4)	(1.6)	(1.5)	(1.1)	(1.5)	(1.4)	(1.6)	(1.0)	(0.84)

		1.4-2.2	1.1-1.9	1.3-1.7	1.6-1.8	1.4-2.3	1.0-1.4	0.89-1.7	1.2-1.7	1.3-1.7	0.86-1.3	0.75-1.1
	Stipe	1.2±0.2	0.89±0.23	0.69±0.14	1.3±0.2	1.1±0.2	0.82±0.10	0.94±0.15	0.64±0.14	0.77±0.09	0.70±0.12	0.50±0.07
		(1.2)	(0.89)	(0.71)	(1.3)	(1.1)	(0.80)	(1.0)	(0.67)	(0.75)	(0.72)	(0.53)
		0.79-1.7	0.41-1.2	0.47-0.88	1.0-1.6	0.67-1.3	0.54-1.0	0.62-1.1	0.25-0.83	0.59-0.95	0.52-0.85	0.34-0.59
	Q _{C/S}	1.7±0.4	1.8±0.6	2.1±0.4	1.3±0.2	1.6±0.4	1.4±0.2	1.5±0.2	2.3±0.9	2.1±0.3	1.5±0.3	1.8±0.4
		(1.6)	(1.6)	(2.0)	(1.3)	(1.6)	(1.4)	(1.4)	(2.1)	(2.1)	(1.5)	(1.6)
		1.0-2.5	0.99-3.3	1.7-2.7	0.99-1.6	1.1-2.5	1.1-1.9	1.2-1.8	1.8-5.5	1.6-2.8	1.1-1.9	1.4-2.8
	Soil	0.28±0.13	0.14±0.02	0.18±0.06	0.26±0.07	0.31±0.09	NA	0.26±0.05	0.65±0.51	0.24±0.06	0.16±0.05	NA
		(0.27)	(0.13)	(0.15)	(0.23)	(0.30)		(0.27)	(0.36)	(0.24)	(0.16)	
		0.16-0.41	0.12-0.17	0.13-0.31	0.22-0.39	0.18-0.48		0.19-0.31	0.27-1.4	0.14-0.29	0.093-0.23	
	BCF _C	7.8±3.7	11±2	8.0±2.9	6.3±1.4	5.8±1.6	NA	5.5±1.2	3.0±1.8	7.1±2.4	7.3±3.2	NA
		(5.6)	(11)	(8.4)	(6.6)	(5.3)		(5.2)	(3.3)	(6.1)	(5.9)	
		4.0-13	8.0-14	4.3-13	4.2-8.0	2.9-8.4		3.6-7.9	0.86-5.9	5.2-12	3.9-12	
	BCF _S	4.7±2.2	6.5±1.9	5.1±2.9	5.0±1.6	3.7±0.8	NA	3.7±0.9	1.4±0.8	3.4±1.2	4.9±1.6	NA
		(3.9)	(6.3)	(4.5)	(5.2)	(3.5)		(3.6)	(0.92)	(3.1)	(4.6)	
		1.2-9.1	3.1-9.3	2.9-11	3.2-7.3	2.7-5.1		2.6-5.7	0.40-2.5	2.5-6.9	3.0-8.2	
		μg g⁻¹ dw										
Ag	Cap	3.9±1.4	1.8±1.4	NA	0.63±0.22	1.3±0.7	5.5±3.4	NA	1.5±0.5	3.8±2.5	NA	0.77±0.22
		(3.5)	(1.4)		(0.65)	(1.1)	(4.8)		(1.3)	(4.4)		(0.76)
		1.8-5.9	0.58-5.9		0.36-0.95	0.50-3.0	0.74-11		0.88-3.0	0.76-8.0		0.34-1.2
	Stipe	2.3±1.1	3.9±3.2	NA	1.1±0.4	4.9±2.5	2.4±1.2	NA	1.6±0.6	2.3±0.7	NA	1.2±0.3
		(2.4)	(2.9)		(1.0)	(3.9)	(2.2)		(1.6)	(2.2)		(1.2)
		0.73-4.0	1.2-11		0.71-1.8	2.4-10	0.71-4.7		0.31-3.0	1.4-3.7		0.79-1.8
	Q _{C/S}	2.0±1.0	0.56±0.25	NA	0.65±0.27	0.25±0.06	2.4±0.9	NA	0.99±0.36	1.7±1.1	NA	0.65±0.19

		(1.8)	(0.56)		(0.48)	(0.26)	(2.5)		(0.96)	(1.2)		(0.65)
		0.88-4.7	0.16-1.1		0.43-1.1	0.16-0.37	0.86-3.9		0.52-1.8	0.47-3.8		0.30-1.0
	Soil	0.0080±0.0014	0.0069±0.0015	0.029±0.019	0.0098±0.0027	0.040±0.031	NA	0.010±0.006	0.020±0.010	0.0094±0.0010	0.018±0.007	NA
		(0.0081)	(0.0062)	(0.024)	(0.010)	(0.038)		(0.0076)	0.021	(0.0088)	(0.017)	
		0.0059-0.0094	0.0055-0.0092	0.0082-0.053	0.0066-0.014	0.005-0.092		0.0050-0.017	0.0061-0.031	0.0084-0.011	0.0095-0.031	
	BCF _C	500±190	290±240	NA	61±26	64±68	NA	NA	91±62	410±280	NA	NA
		(420)	(190)		(67)	(33)			(64)	(420)		
		270-780	63-990		26-99	8.0-170			35-240	88-820		
	BCF _S	310±170	640±600	NA	98±37	240±260	NA	NA	100±69	250±86	NA	NA
		(260)	(440)		(88)	(110)			(85)	(230)		
		78-610	130-2100		53-160	38-670			19-270	150-440		
Al	Cap	23±17	180±120	37±16	280±230	260±260	140±65	76±26	54±50	45±23	110±160	82±46
		(15)	(130)	(31)	(180)	(180)	(130)	(73)	(25)	(35)	(51)	(67)
		6.4-67	47-440	22-61	120-790	36-900	45-310	37-110	9.4-160	19-88	21-650	24-170
	Stipe	23±11	150±84	36±10	590±670	500±410	170±110	100±91	55±45	34±12	500±420	55±23
		(21)	(130)	(36)	(240)	(320)	(130)	(66)	(43)	(31)	(64-1800)	(54)
		11-47	24-310	23-49	100-1900	31-1100	44-460	25-290	15-180	23-68	400	24-100
	Q _{C/S}	1.1±1.0	1.3±0.4	1.0±0.4	0.77±0.51	0.62±0.36	1.2±0.8	1.2±0.6	0.93±0.40	1.3±0.5	0.28±0.27	1.8±1.2
		(0.86)	(1.1)	(1.0)	(0.78)	(0.50)	(1.2)	(1.2)	(0.92)	(1.2)	(0.16)	(1.6)
		0.23-4.2	0.58-2.0	0.60-1.6	0.11-1.6	0.19-1.2	0.15-2.6	0/17-2.0	0.38-2.0	0.75-2.8	0.028-0.79	0.35-4.6
	Soil	1600±160	1600±120	2100±720	1100±170	570±150	NA	1400±290	2500±350	2200±180	1300±320	NA
		(1600)	(1600)	(1900)	(1000)	(570)		(1500)	(2700)	(2300)	(1300)	
		1300-1800	1500-1800	1700-3600	990-1400	360-720		990-1700	2100-2800	1900-2300	870-1700	

Ba	BCF _C	0.016±0.012	0.12±0.08	0.017±0.011	0.24±0.25	0.55±0.40	NA	0.054±0.016	0.023±0.022	0.021±0.011	0.11±0.19	NA
		(0.011)	(0.091)	(0.013)	(0.13)	(0.62)		(0.050)	(0.011)	(0.016)	(0.038)	
		0.004-0.051	0.031-0.28	0.004-0.033	0.094-0.80)	0.095-1.3		0.031-0.083	0.003-0.072	0.008-0.041	0.012-0.75	
	BCF _S	0.015±0.007	0.093±0.052	0.017±0.005	0.56±0.62	1.1±0.7	NA	0.076±0.073	0.023±0.018	0.016±0.006	0.40±0.28	NA
		(0.013)	(0.087)	(0.017)	(0.25)	(1.4)		(0.043)	(0.018)	(0.014)	(0.37)	
		0.007-0.030	0.016-0.17	0.012-0.025	0.074-1.7	0.086-2.1		0.016-0.23	0.008-0.063	0.010-0.030	0.064-1.1	
	Cap	1.3±2.0	1.1±0.6	0.37±0.19	1.7±1.1	3.7±3.4	1.3±0.8	1.7±1.0	0.80±0.34	0.72±0.18	0.68±0.81	0.56±0.24
		(0.45)	(0.91)	(0.35)	(1.3)	(2.7)	(1.2)	(1.5)	(0.75)	(0.69)	(0.30)	(0.52)
		0.10-7.0	0.39-2.1	0.19-0.73	0.83-4.3	0.75-11	0.62-3.7	0.52-3.8	0.39-1.7	0.50-1.1	0.11-3.1	0.18-1.2
	Stipe	1.0±0.6	0.99±0.56	0.60±0.34	3.3±2.6	7.3±4.5	2.2±3.1	1.4±0.6	0.87±0.35	0.84±0.22	3.0±1.5	0.47±0.19
		(1.1)	(0.84)	(0.59)	(2.4)	(7.0)	(1.4)	(1.6)	(0.91)	(0.77)	(2.6)	(0.41)
		0.41-2.2	0.22-2.3	0.21-1.1	0.90-7.6)	1.6-14	0.64-13	0.72-2.1	0.37-1.4	0.61-1.3	0.65-7.0	0.23-0.87
	Q _{C/S}	1.1±1.3	1.2±0.3	0.80±0.54	0.73±0.43	0.47±0.21	1.1±0.6	1.3±0.8	0.95±0.30	0.91±0.33	0.23±0.22	1.4±0.9
		(0.49)	(1.1)	(0.63)	(0.73)	(0.43)	(1.0)	(1.2)	(0.90)	(0.82)	(0.17)	(1.2)
		0.14-4.6	0.67-1.8	0.25-1.7	0.21-1.4)	0.17-0.88	0.086-3.7	0.31-3.0	0.66-1.8	0.57-1.8	0.034-0.70)	0.29-3.2
	Soil	13±2	8.6±1.3	23±11	10±1	24±13	NA	21±2	15±3	13±2	14±4	NA
		(13)	(8.9)	(23)	(10)	(16)		(21)	(16)	(12)	(16)	
		10-15	7.2-10	12-39	8.3-12	11-42		19-24	11-20	11-16	13-15	
	BCF _C	0.10±0.15	0.13±0.07	0.25±0.62	0.17±0.13	0.26±0.29	NA	0.079±0.043	0.055±0.026	0.058±0.019	0.064±0.093	NA
		(0.033)	(0.11)	(0.015)	(0.12)	(0.13)		(0.069)	(0.053)	(0.056)	(0.028)	
		0.008-0.53	0.043-0.28	0.005-0.17	0.086-0.44	0.024-0.74		0.028-0.16	0.019-0.11	0.035-0.091	0.008-0.35	
	BCF _S	0.079±0.037	0.12±0.07	0.032±0.017	0.33±0.26	0.42±0.30	NA	0.066±0.027	0.062±0.032	0.067±0.025	0.24±0.12	NA
		(0.072)	(0.092)	(0.027)	(0.25)	(0.37)		(0.075)	(0.066)	(0.059)	(0.22)	

		0.037-0.15	0.025-0.25	0.009-0.064	0.087-0.73	0.14-0.93		0.035-0.097	0.024-0.14	0.040-0.12	0.070-0.51	
Ca	Cap	190±190	90±39	110±68	210±110	320±280	130±67	200±85	NA	99±33	68±61	78±15
		(100)	(87)	(73)	(180)	(230)	(120)	(170)		(97)	(54)	(76)
		52-610	40-160	61-220	84-390	80-970	54-270	91-320		42-180	18-170	41-99
	Stipe	170±82	77±41	170±110	340±200	820±430	160±230	210±84	NA	180±76	400±310	78±27
		(160)	(70)	(120)	(350)	(860)	(100)	(220)		(160)	(350)	(77)
		68-360	19-180	81-370	120-590	280-1600	41-960	100-370		96-380	87-1400	35-120
	Q _{C/S}	1.0±0.6	1.4±0.8	0.79±0.59	0.95±1.1	0.36±0.14	1.3±0.6	1.0±0.3	NA	0.58±0.19	0.23±0.19	1.1±0.5
		(0.88)	(1.3)	(0.63)	(0.58)	(0.37)	(1.3)	(1.0)		(0.60)	(0.19)	(1.1)
		0.34-2.4	0.33-3.2	0.25-1.9	0.16-3.3	0.089-0.60	0.078-2.3	0.43-1.4		0.27-0.85	0.045-0.73	0.34-2.1
	Soil	1900±1300	240±63	3100±1800	600±120	2300±1300	NA	680±100	2900±3900	340±180	840±590	NA
		(1800)	(200)	(2900)	(650)	(2000)		(620)	(360)	(300)	(810)	
		780-3300	190-320	1500-6300	410-710	780-5100		550-870	170-8800	200-660	210-1600	
	BCF _C	0.19±0.27	0.41±0.19	0.031±0.014	0.34±0.19	0.25±0.26	NA	0.30±0.14	NA	0.36±0.17	0.18±0.24	NA
		(0.036)	(0.44)	(0.036)	(0.26)	(0.20)		(0.29)		(0.34)	(0.086)	
		0.16-0.78	0.14-0.76	0.005-0.048	0.15-0.61	0.031-0.71		0.14-0.54		0.089-0.60	0.017-0.81	
	BCF _S	0.14±0.015	0.34±0.19	0.065±0.030	0.58±0.35	0.58±0.48	NA	0.32±0.16	NA	0.67±0.48	0.65±0.47	NA
		(0.047)	(0.37)	(0.059)	(0.62)	(0.45)		(0.29)		(0.56)	(0.43)	
		0.021-0.45	0.060-0.72	0.025-0.10	0.18-1.1	0.082-1.5		0.17-0.62		0.22-2.0	0.17-1.7	
Cd	Cap	1.1±1.6	3.2±3.0	4.9±3.0	1.1±0.8	1.8±1.0	1.9±3.3	2.5±2.9	3.2±1.8	2.8±1.4	2.4±1.2	1.6±1.3
		(0.54)	(2.1)	(3.7)	(0.9)	(1.8)	(0.49)	(1.0)	(2.8)	(2.9)	(1.8)	(1.2)
		0.36-6.0	0.77-11	2.3-10	0.40-3.1	0.75-3.8	0.29-9.0	0.72-8.7	1.4-8.1	0.88-5.1	0.74-4.3	0.69-5.5

	Stipe	0.31±0.19	1.2±1.4	1.7±1.1	0.14±0.21	0.32±0.19	0.43±0.78	0.89±0.77	0.88±0.77	0.99±0.47	0.84±0.34	0.74±0.31
		(0.26)	(0.67)	(1.2)	(0.10)	(0.31)	(0.19)	(0.43)	(0.60)	(1.1)	(0.68)	(0.72)
		0.094-0.75	0.22-5.9	0.67-3.5	0.01-0.60	0.075-0.70)	0.68-3.1	0.18-2.2	0.22-3.1	0.39-1.8	0.32-1.4	0.25-1.4
	Q _{C/S}	4.2±6.1	4.4±2.8	3.1±0.3	8.7±1.2	6.7±3.7	3.4±1.3	3.1±1.9	4.6±2.1	2.8±0.5	2.7±0.4	2.2±0.2
		(2.1)	(4.1)	(3.1)	(9.8)	(3.3)	(3.8)	(2.7)	(4.3)	(2.7)	(2.8)	(2.0)
		0.57-25	0.35-9.6)	2.6-5.4	5.1-52	3.5-15	0.29-5.5	0.87-7.2	2.3-11	2.0-4.1	2.0-3.5	0.98-3.8
	Soil	0.17±0.06	0.088±0.009	0.19±0.08	0.070±0.018	0.13±0.04	NA	0.10±0.01	0.10±0.06	0.070±0.016	0.097±0.032	NA
		(0.16)	(0.083)	(0.16)	(0.68)	(0.12)		(0.10)	(0.083)	(0.083)	(0.10)	
		0.11-0.24	0.082-0.10	0.11-0.28	0.044-0.094	0.087-0.19		0.088—0.12	0.057-0.21	0.003-0.051	0.062-0.15	
	BCF _C	6.0±7.4	38±37	26±15	22±22	13±10	NA	24±26	35±33	43±26	28±20	NA
		(3.3)	(21)	(29)	(14)	(9.1)		(11)	(24)	(36)	(25)	
		1.7-29	9.3-140	8.1-48	5.3-69	6.3-34		6.1-72	12-140)	9.6-90	5.0-64	
	BCF _S	1.7±0.8	14±18	11±6	2.9±4.8	1.7±0.7	NA	8.9±8.4	11±13	15±8	9.8±6/3	NA
		(1.5)	(9.0)	(12)	(1.5)	(1.6)		(4.5)	(6.2)	(15)	(8,9)	
		0.83-3.3	2.1-71	2.4-18	0.087-14	0.87-2.8		1.8-28	1.1-54	4.8-30	2.2-23	
Co	Cap	0.22±0.07	0.11±0.11	NA	0.20±0.06	0.19±0.07	0.29±0.17	NA	0.10±0.10	0.16±0.15	NA	0.17±0.03
		(0.20)	(0.06)		(0.19)	(0.20)	(0.23)		(0.11)	(0.11)		(0.16)
		0.10-0.40	0.01-0.39		0.15-0.32	0.10-0.30	0.01-0.56		0.01-0.33	0.01-0.44		0.11-0.23
	Stipe	0.36±0.12	0.14±0.18	NA	0.28±0.13	0.30±0.16	0.27±0.16	NA	0.18±0.26	0.14±0.13	NA	0.12±0.03
		(0.37)	(0.06)		(0.25)	(0.28)	(0.19)		(0.11)	(0.11)		(0.12)
		0.20-0.65	0.01-0.50		0.15-0.54	0.10-6.3	0.094-0.52		0.01-1.0	0.01-0.45		0.064-0.17
	Q _{C/S}	0.68±0.31	1.0±0.4	NA	0.75±0.24	0.71±0.19	1.1±0.4	NA	0.78±0.36	1.1±0.4	NA	1.5±0.4
		(0.61)	(1.0)		(0.75)	(0.69)	(1.2)		(1.0)	(1.0)		(1.4)

		0.23-1/6	0.25-2.4		0.37-1.0	0.40-1.0	0.034-1.7		0.091-1.3	0.48-2.0		1.1-2.3
	Soil	0.48±0.03 (0.48)	0.39±0.05 (0.39)	0.52±0.16 (0.48)	0.73±0.09 (0.72)	0.84±0.93 (0.41)	NA)1.0)	0.96±0.19 (0.94)	1.1±0.5 (0.66)	0.63±0.17 (0.60)	0.60±0.11 (0.60)	NA
		0.45-0.52	0.33-0.46	0.39-0.81	0.64-0.87	0.22-2.6		0.65-1.1	0.67-1.8	0.39-0.84	0.45-0.73	
	BCF _C	0.40±0.38 (0.22)	0.30±0.29 (0.14)	NA (0.26)	0.26±0.11 (0.46)	0.48±0.35 (0.46)	NA (0.11)	NA (0.26)	0.12±0.13 (0.11)	0.26±0.24 (0.26)	NA (0.26)	NA
		0.10-1.0)	0.016-1.0		0.17-0.49	0.074-0.97			0.003-0.49	0.006-0.77		
	BCF _S	0.23±0.10 (0.20)	0.36±0.42 (0.14)	NA (0.38)	0.39±0.18 (0.46)	0.69±0.55 (0.46)	NA (0.10)	NA (0.17)	0.25±0.41 (0.10)	0.23±0.20 (0.17)	NA (0.17)	NA
		0.13-0.62	0.015-1.6		0.17-0.68	0.14-1.8			0.003-1.6	0.006-0.64		
Cr	Cap	0.52±0.08 (0.50)	0.44±0.12 (0.44)	NA (0.70)	0.80±0.54 (0.52)	0.62±0.28 (0.24)	0.26±0.10 (0.01_	NA (0.01_	0.10±0.16 (0.01_	< 0.01 (0.01_	NA (0.14)	0.13±0.05 (0.14)
		0.44-0.70	0.22-0.72		0.49-1.6	0.35-1.2	0.15-0.59		0.01-0.44			0.077-0.21
	Stipe	0.26±0.11 (0.23)	0.32±0.10 (0.33)	NA (0.80)	1.2±1.0 (0.65)	0.76±0.43 (0.33)	0.42±0.27 (0.19)	NA (0.19)	0.20±0.06 (0.19)	< 0.01 (0.19)	NA (0.10)	0.11±0.03 (0.10)
		0.18-0.63	0.11-0.54		0.45-3.1	0.20-1.4	0.16-1.1		0.11-0.38			0.071-0.16
	Q _{C/S}	2.2±0.5 (2.1)	1.5±0.6 (1.3)	NA (0.84)	0.91±0.46 (0.86)	0.94±0.38 (0.89)	0.90±0.57 (0.031)	ND (0.031)	0.43±0.74 (0.031)	ND (0.031)	ND (0.031)	1.3±0.5 (1.2)
		1.1-3.6	0.87-3.5		0.29-1.5	0.54-1.8	0.19-2.1		0.022-2.0			0.53-2.2
	Soil	1.4±0.3 (1.4)	1.4±0.1 (1.4)	1.9±0.7 (1.7)	1.5±0.3 (1.4)	0.92±0.18 (0.95)	NA (1.8)	1.7±0.4 (1.8)	2.6±0.3 (2.6)	2.0±0.2 (2.1)	1.1±0.3 (1.1)	NA
		1.1-1.8	1.2-1.5	1.5-3.3	1.2-1.9	0.60-1.1		1.1-2.1	2.2-3.0	1.7-2.2	0.81-1.4	
	BCF _C	0.26±0.06	0.33±0.11	NA	0.58±0.34	0.75±0.30	NA	NA	0.041±0.069	<0.01	NA	NA

		(0.24)	(0.32)		(0.54)	(0.65)			(0.0021)			
		0.20-0.38	0.14-0.58		0.29-1.3	0.32-1.3			0.002-0.20			
	BCF _S	0.13±0.06	0.23±0.04	NA	0.91±0.77	0.94±0.42	NA	NA	0.076±0.027	<0.01	NA	NA
		(0.12)	(0.22)		(0.67)	(1.1)			(0.075)			
		0.082-0.34	0.090-0.44		0.23-2.3	0.33-1.4			(0.037-0.14)			
Cu	Cap	130±50	200±60	140±54	100±48	170±76	110±27	150±42	160±43	140±35	180±71	130±30
		(100)	(200)	(120)	(94)	(170)	(110)	(150)	(140)	(140)	(150)	(140)
		93-250	120-340	100-240	63-210	94-360	43-140	97-220	54-260	67-190	95-320	81-180
	Stipe	77±23	150±62	100±32	100±20	210±60	61±15	96±25	78±14	91±11	160±46	100±20
		(67)	(150)	(110)	(100)	(190)	(58)	(97)	(68)	(90)	(150)	(100)
		53-120	61-310	61-140)	71-130	130-310	30-90	62-140	54-140	71-110	110-270	76-140
	Q _{C/S}	1.7±0.6	1.4±0.5	1.4±0.3	1.0±0.3	0.82±0.17	1.9±0.4	1.6±0.4	1.9±0.6	1.5±0.3	1.1±0.2	1.3±0.3
		(1.7)	(1.3)	(1.4)	(0.94)	(0.81)	(1.8)	(1.5)	(1.7)	(1.6)	(1.0)	(1.3)
		1.0-3.1	0.57-2.6	1.1-1.7	0.71-1.6	0.61-1.2	1.1-2.6	1.1-2.3	0.9-2.9	0.87-2.0	0.71-1.4	0.76-1.9
	Soil	5/7±1.1	1.1±0.6	1.6±0.9	1.3±0.3	5.6±2.6	NA	2.2±3.1	2.2±1.4	0.95±0.14	1.1±0.4	NA
		(5.8)	(0.80)	(1.3)	(1.2)	(5.6)		(0.80)	(1.6)	(0.93)	(1.1)	
		4.2-6.9	0.69-2.0	0.88-3.2	1.0-1.6	1.5-9.2		0.66-7.8	1.0-4.4	0.81-1.1	0.64-1.7	
	BCF _C	25±13	210±110	98±43	83±24	41±40	NA	170±89	72±38	150±36	200±150	NA
		(22)	(170)	(110)	(77)	(27)		(220)	(70)	(150)	(140)	
		14-53	80-420	49-150	65-130	13-130		24-280	28-160	59-190	58-500	
	BCF _S	15±6	170±110	96±60	83±19	45±37	NA	110±45	34±16	98±18	170±100	NA
		(13)	(150)	(87)	(81)	(33)		(99)	(29)	(110)	(99)	
		7.9-27	45-450	34-210	62-120	21-130		19-180	14-67	62-120	19-180	

Fe	Cap	41±18	140±56	77±11	260±170	210±170	82±40	97±18	86±23	80±10	82±50	84±22
		(36)	(140)	(78)	(200)	(140)	(71)	(99)	(83)	(81)	(62)	(76)
		28-93	79-320	60-93	130-660	63-610	41-190	72-120	52-130	61-97	50-290	57-120
	Stipe	32±10	110±50	48±13	480±570	330±250	100±75	86±60	71±36	49±10	260±190	52±14
		(29)	(110)	(45)	(180)	(240)	(77)	(59)	(59)	(48)	(200)	(52)
		19-58	110-200	38-72	65-1600	28-750	35-280	37-200	28-170	35-80	48-870	29-80
	QC/S	1.4±0.5	1.3±0.5	1.6±0.3	1.0±0.6	0.83±0.59	1.2±0.8	1.6±0.8	1.4±0.6	1.7±0.4	0.44±0;32	1.7±0.8
		(1.2)	(1.3)	(1.6)	(0.95)	(0.67)	(1.2)	(1.6)	(1.4)	(1.6)	(0.34)	(1.6)
		0.52-3.2	0.61-2.1	1.3-2.1	0.16-2.0	0.30-2.3	0.17-3.3	0.43-3.1)	0.57-2.4	1.0-2.5	0.092-1.2	0.86-3.9
	Soil	2400±640	1400±160	1800±270	1400±300	1100±550	NA	2000±160	2900±580	2400±330	1300±260	NA
		(2300)	(1400)	(2100)	(1300)	(1100)		(2000)	(2800)	(2300)	(1300)	
		1800-3100	1300-1700	1800-2100	1200-1900	540-2100		1700-2100	2300-3700	2000-2900	940-1500	
	BCF _C	0.017±0.007	0.11±0.06	0.039±0.015	0.18±0.16	0.24±0.18	NA	0.050±0.01	0.030±0.012	0.034±0.007	0.073±0.068	NA
		(0.015)	(0.10)	(0.042)	(0.12)	(0.15)		(0.049)	(0.028)	(0.034)	(0.053)	
		0.0083-0.035	0.046-0.25	0.0075-0.057)	0.078-0.53	0.065-0.57		0.034-0.059	0.015-0.058	0.024-0.049	0.034-0.31	
	BCF _S	0.013±0.002	0.080±0.009	0.025±0.005	0.35±0.41	0.36±0.21	NA	0.044±0.030	0.026±0.015	0.021±0.005	0.21±0.13	NA
		(0.013)	(0.076)	(0.026)	(0.14)	(0.32)		(0.031)	(0.025)	(0.020)	(0.19)	
		0.009-0.019	0.028-0.15	0.019-0.032	0.046-1.1	0.051-0.70		0.019-0.095	0.007-0.081	0.015-0.035	0.047-0.57	
Hg	Cap	3.7±0.7	5.7±1.1	NA	3.3±1.2	8.4±7.4	4.3±1.7	3.3±0.7	6.5±2.1	6.5±2.1	3.0±1.1	1.2±0.7
		(3.7)	(5.7)		(2.9)	(5.2)	(4.6)	(3.5)	(6.5)	(7.0)	(2.7)	(1.3)
		2.8-4.4	3.6-8.6		2.3-6.0	2.9-22	1.1-6.7	2.0-4.3	3.8-10	2.5-9.4	1.6-4.8	0.21-2.6
	Stipe	3.0±0.4	3.0±0.6	NA	2.1±0.5	6.8±7.1	2.3±1.2	2.3±0.6	3.6±0.6	3.9±1.6	2.2±0.6	0.53±0.27

		(3.2)	(3.0)		(2.3)	(3.4)	(2/0)	(2.4)	(3.6)	(4.0)	(2.1)	(0.50)
		2.4-3.7	1.7-4.4		1.6-2.9	2.1-20	0.92-5.8	1.7-3.6	2.1-5.1	1.5-8.5	1.4-3.5	0.078-1.0
	Q _{C/S}	1.2±0.2	1.9±0.1	NA	1.5±0.3	1.4±0.2	2.2±0.8	1.4±0.3	1.8±0.8	1.8±0.4	1.3±0.2	2.4±0.8
		(1.2)	(1.9)		(1.5)	(1.4)	(2.2)	(1.4)	(1.8)	(1.8)	(1.3)	(2.4)
		0.88-1.6	1.8-2.3		1.3-2.0	1.1-1.7	0.85-3.6	1.1-1.9	1.6-2.0	0.56-2.1	0.87-1.7	1.3-4.3
	Soil	0.15±0.07	0.033±0.006	0.061±0.024	0.17±0.01	0.036±0.016	NA	0.032±0.006	0.034±0.017	0.039±0.012	0.022±0.011	NA
		(0.14)	(0.033)	(0.060)	(0.17)	(0.040)		(0.033)	(0.028)	(0.029)	(0.022)	
		0.077-0.22	0.022-0.039	0.036-0.10	0.16-0.18	0.011-0.54		0.027-0.041	0.013-0.058	0.043	0.010-0.036	
	BCF _C	27±13	1800±48	NA	20±8	190±120	NA	100±27	220±110	170±67	180±130	NA
		(19)	(170)		(18)	(150)		(97)	(220)	(160)	(140)	
		14-51	130-310		13-37	79-420		75-160	94-470	69-300	46-460	
	BCF _S	22±10	93±25	NA	12±3	150±110	NA	75±26	120±63	100±42	130±96	NA
		(17)	(90)		(13)	(97)		(63)	(120)	(87)	(110)	
		12-38	75-17		9.5-18	56-370		47-130	54-270	40-200	43-340	
Mn	Cap	25±10	22±9	11±2	22±12	32±31	33±31	29±16	22±14	21±6	15±8	15±3
		(22)	(19)	(11)	(17)	(23)	(24)	(21)	(20)	(23)	(11)	(15)
		13-41	13-44	9.5-15	13-50	7.3-110	14-150	15-56	8.8-60	10-28	7/2-31	9.3-20
	Stipe	32±13	23±9	11±6	33±22	55±39	52±59	53±25	29±21	39±18	51±33	12±6
		(30)	(20)	(9.3)	(37)	(45)	(36)	(46)	(28)	(36)	(43)	(11)
		17-56	14-42	7.2-22	5.8-59	17-150	16-260	24-93	4.4-80	8.0-64	14-120	5.2-25
	Q _{C/S}	0.82±0.29	1.0±0.5	1.1±0.2	0.97±0.70	0.54±0.19	0.93±0.91	0/56±0.17	0.98±0.52	0.62±0.25	0.33±0.14	1.5±1.0
		(0.74)	(0.96)	(1.2)	(0.84)	(0.42)	(0.71)	(0.60)	(0.75)	(0.56)	(0.30)	(1.2)
		0.46-1.6	0.38-2.2	0.68-1.3	0.31-2.2	0.38-0.93	0.80-4.1	0.27-0.85	0.36-2.5	0.36-1.2	0.15-0.65	0.52-3.8

	Soil	140±82	110±18	160±82	95±16	140±63	NA	240±30	170±89	130±61	190±66	NA	
		(130)	(110)	(170)	(94)	(150)		(250)	(160)	(130)	(180)		
		65-220	85-130	74-290	78-110	73-220		190-260	67-310	68-220	110-310		
	BCF _C	0.25±0.21	0.20±0.08	0.079±0.046	0.20±0.11	0.28±0.28	NA	0.12±0.06	0.18±0.21	0.19±0.10	0.091±0.058	NA	
		(0.15)	(0.19)	(0.055)	(0.16)	(0.15)		(0.094)	(0.094)	(0.17)	(0.063)		
		0.065-0.63	0.13-0.40	0.037-0.15	0.14-0.44	0.076-0.69		0.063-0.22	0.046-0.89	0.043-0.38	0.041-0.24		
	BCF _S	0.33±0.30	0.22±0.10	0.12±0.11	0.31±0.16	0.41±0.30	NA	0.22±0.10	0.23±0.29	0.36±0.23	0.30±0.18	NA	
		(0.15)	(0.19)	(0.078)	(0.33)	(0.22)		(0.18)	(0.16)	(0.30)	(0.29)		
		0.078-0.86	0.11-0.50	0/034-0.34	0.071-0.52	0.20-0.92		0.10-0.37	0.038-1.2	0.036-0.61	0.078-0.67		
	Na	Cap	80±120	170±200	72±27	140±52	150±92	80±110	120±94	NA	250±140	190±200	59±35
			(20)	(77)	(71)	(140)	(120)	(37)	(60)		(290)	(45)	(49)
			15-440	36-580	43-110	84-160	75-380	16-220	38-300		54-510	10-560	25-160
Stipe		150±140	400±430	210±150	570±400	740±300	82±63	160±180	NA	650±390	710±870	490±440	
		(79)	(210)	(150)	(420)	(740)	(56)	(55)		(670)	(180)	(310)	
		45-460	77-1600	71-460	280-1400	240-1100	29-240	37-480		87-1300	28-3100	86-1400	
Q _{C/S}		0.86±1.4	0.59±0.88	0.45±0.29	0.27±0.08	0.22±0.13	0.78±0.92	1.2±0.9	NA	0.41±0.13	0.26±0.08	0.21±0.13	
		(0.42)	(0.40)	(0.33)	(0.30)	(0.14)	(0.49)	(1.2)		(0.41)	(0.25)	(0.19)	
		0.036-5.6	0.16-3.8	0.25-1.0	0.10-0.36	0.12-0.47	0.20-3.9	0.21-3.2		0.21-0.77	0.16-0.43	0.042-0.45	
Soil		15±2	6.9±0.6	24±22	8.7±2.5	11±4	NA	7.2±1.2	9.7±5.8	5.7±1.4	3.4±0.8	NA	
		(14)	(6.9)	(15)	(9.4)	(12)		(6.5)	(7.2)	(5.0)	(3.2)		
		13-18	6.1-7.8	13-70	8.2-12	4.7-17		6.3-8.9	3.7-17	4.5-7.8	2.6-4.6		
BCF _C	5.5±8.6	23±30	4.1±2.3	14±5	14±9	NA	17±14	NA	45±27	62±69	NA		
	(1.4)	(10)	(3.9)	(13)	(13)		(8.2)		(44)	(16)			

		0.81-32	4.6-95	0.61-6.8	7.7-23	5.1-32		5.5-48		12-100	2.4-200	
	BCF _S	9.8±8.8	53±64	17±13	68±70	67±21	NA	22±25	NA	120±81	230±290	NA
		(5.3)	(28)	(12)	(44)	(67)		(8.8)		(110_	(64)	
		3.3-29	10-260	1.6-38	33-230	43-97		5.8-76		19-280	6.6-1100	
Pb	Cap	2.3±0.9	3.5±1.5	NA	4.2±0.8	5.1±1.3	1.9±1.4	NA	2.8±4.8	NA	NA	8.5±2.4
		(2.5)	(3.3)		(4.1)	(5.2)	(1.5)		(1.4)			(8.9)
		1.0-3.6	1.4-6.4		2.7-5.6	3.3-6.9	0.81-6.8		0.02-18			0.85-10
	Stipe	2.5±0.3	1.4±0.8	NA	3.0±0.9	3.8±1.1	0.89±0.49	NA	1.5±1.2	NA	NA	5.2±2.1
		(2.4)	(1.2)		(3.1)	(3.9)	(0.84)		(1.2)			(5.2)
		2.1-3.1	0.66-3.2		1.8-4.2	2.1-5.1	0.33-1.9		0.49-4.7			0.10-8.0
	Q _{C/S}	0.94±0.40	3.0±1.5	NA	1.5±0.5	1.4±0.4	2.5±1.2	NA	1.4±1.3	NA	NA	2.1±1.8
		(0.86)	(3.1)		(1.3)	(1.4)	(2.5)		(1.2)			(1.7)
		037-1.6	0.43-5.6		1.1-2.3	0.77-2.0	0.80-4.3		0.02-3.8			1.1-8.4
	Soil	13±3	8.3±2.1	16± 6	6.8±1.4	8.6±3.3	NA	7.1±1.4	12±4	10±1	7.9±1.6	NA
		(12)	(7.4)	(17)	(6.1)	(7.6)		(7.4)	(10)	(10)	(7.8)	
		11-16	6.9-12	11-21	6.9-9.3	5.4-16		5.0-8.4	7.9-16	8.9-11	5.9-10	
	BCF _C	0.17±0.07	0.45±0.22	NA	0.69±0.15	0.63±0.27	NA	NA	0.16±0.27	NA	NA	NA
		(0.16)	(0.44)		(0.67)	(0.51)			(0.13)			
		0.075-0.32	0.19-0.93		0.44-0.92	0.34-0.99			0.001-1.1			
	BCF _S	0.19±0.05	0.18±0.11	NA	0.49±0.15	0.49±0.19	NA	NA	0.12±0.08	NA	NA	NA
		(0.19)	(0.12)		(0.51)	(0.44)			(0.083)			
		0.13-0.28	0.086-0.46		0.29-0.66	0.32-0.87			0.030-0.29			

Rb	Cap	300±150	120±48	NA	130±69	190±55	NA	41±16	110±46	180±67	26±21	NA
		(230)	(120)		(110)	(210)		(38)	(100)	(180)	(18)	
		150-660	41-200		56-290	100-280		26-71	41-220	40-280	5.5-62	
	Stipe	140±37	69±39	NA	76±48	110±46	NA	24±8	37±14	80±24	14±10	NA
		(150)	(59)		(66)	(120)		(22)	(35)	(85)	(12)	
		79-200	19-180		37-180	49-200		14-38	16-71	23-120	5.2-42	
	Q _{C/S}	2.4±1.6	2.0±0.7	NA	1.7±0.2	1.8±0.6	NA	1.8±0.3	3.1±0.7	2.2±0.6	1.7±1.1	NA
		(1.8)	(1.7)		(1.6)	(1.6)		(1.7)	(3.1)	(2.0)	(1.4)	
		1.0-7.3	0.87-3.5		1.5-1.9	1.0-2.9		1.1-2.3	2.2-4.4	1.3-3.3	0.76-4.2	
	Soil	1.4±0.2	1.9±0.2	3.0±3.2	3.0±0.6	3.5±1.3	NA	4.1±1.1	5.9±2.6	3.3±0.8	2.9±0.9	NA
		(1.4)	(1.8)	(1.6)	(2.9)	(2.8)		(4.5)	(5.4)	(3.4)	(2.9)	
		1.2-1.7	1.8-2.2	1.3-10	2.5-4.0	2.2-5.9		2.3-5.1	2.9-9.2	2.1-4.3	1.7-3.9	
	BCF _C	210±110	65±27	NA	47±32	57±16	NA	11±4	23±14	56±26	12±12	NA
		(170)	(66)		(42)	(53)		(11)	(19)	(54)	(10)	
		120-490	23-110		14-110	37-75		5.9-18	6.5-54	9.2-120	1.4-36	
	BCF _S	97±29	38±22	NA	28±20	37±20	NA	6.4±2.8	7.1±3.5	26±11	6.3±5.5	NA
		(97)	(34)		(22_	(32)		(4.8)	(8.8)	(25)	(5.1)	
		53-140	11-100		9,2-70	13-72		3.2-11	2.7-15	5.4-49	1.4-21	
Sr	Cap	0.44±0.47	0.37±0.19	0.25±0.18	0.80±0.36	1.3±1.1	0.49±0.25	0.59±0.25	0.67±0.12	0.61±0.14	0.23±0.23	0.30±0.07
		(0.20)	(0.32)	(0.18)	(0.73)	(0.89)	(0.45)	(0.56)	(0.69)	(0.56)	(0.19)	(0.38)
		0.05-1.5	0.17-0.83	0.10-0.58	0.39-1.6	0.30-3.4	0.23-1.1	0.23-0.90	0.50-0.88	0.50-0.99	0.058-0.96	0.11-0.41
	Stipe	0.65±0.40	0.30±0.16	0.29±0.20	1.5±1.0	2.9±1.6	0.68±0.83	0.72±0.25	0.66±0.14	0.72±0.15	1.2±0.6	0.29±0.14
		(0.43)	(0.27)	(0.20)	(1.3)	(2.4)	(0.43)	(0.79)	(0.63)	(0.67)	(1.1)	(0.23)

		0.26-1.4	0.11-0.61	0.11-0.61	0.55-3.0	0.70-4.9	0.17-3.6	0.38-1.2	0.48-0.99	0.56-1.1	0.46-2.5	0.12-0.55
	Q _{C/S}	0.58±0.32	1.3±0.5	1.2±1.1	0.69±0.51	0.42±0.16	1.1±0.5	0.83±0.26	1.0±0.2	0.89±0.28	0.23±0.20	1.3±0.7
		(0.55)	(1.3)	(0.62)	(0.59)	(0.39)	(1.1)	(0.93)	(1.0)	(0.82)	(0.18)	(1.2)
		0.14-1.2	0.45-2.3	0.26-3.2	0.23-1.7	0.15-0.71	0.082-2.3	0.28-1.1	0.69-1.8	0.59-1.6	0.039-0.71	0.25-3.0
	Soil	4.5±1.3	0.96±0.20	4.8±1.7	2.3±0.8	3.7±1.1	NA	2.0±0.3	4.2±4.2	1.1±0.6	2.5±1.1	NA
		(4.2)	(0.83)	(5.1)	(2.2)	(6.1)		(1.9)	(1.5)	(0.90)	(2.8)	
		3.2-6.0	0.80-1.2	2.8-6.7	1.4-3.4	3.6-6.7		1.7-2.4	0.76-9.0	0.82-2.3	1.1-3.8	
	BCF _C	0.13±0.15	0.41±0.24	0.054±0.058	0.38±0.27	0.31±0.29	NA	0.30±0.14	0.36±0.32	0.63±0.28	0.16±0.23	NA
		(0.034)	(0.33)	(0.034)	(0.34)	(0.23)		(0.29)	(0.41)	(0.61)	(0.076)	
		0.008-0.47	0.18-1.0	0.001-0.20	0.15-0.94	(0.052-0.82		0.11-0.50	0.055-1.0	0.24-1.2	0.018-0.87	
	BCF _S	0.17±0.14	0.33±0.18	0.063±0.027	0.78±0.57	0.62±0.40	NA	0.37±0.15	0.38±0.35	0.73±0.30	0.57±0.39	NA
		(0.072)	(0.27)	(0.064)	(0.79)	(0.60)		(0.37)	(0.38)	(0.72)	(0.47)	
		0.050-0.42	0.092-0.71	0.022-0.099	0.19-1.6	0.12-1.4		0.20-0.63	0.054-1.1	0.30-1.3	0.19-1.7	
Zn	Cap	190±45	93±24	110±35	100±11	120±22	92±21	140±57	92±20	120±20	74±6	75±13
		(200)	(90)	(100)	(100)	(120)	(98)	(150)	(95)	(120)	(73)	(77)
		73-240	67-140	83-180	93-120	85-170	54-120	51-220	64-120	91-170	64-85	70-100
	Stipe	110±17	57±12	54±7	65±12	67±16	67±20	87±24	48±12	58±11	49±8	46±12
		(110)	(57)	(54)	(60)	(64)	(60)	(100)	(47)	(55)	(52)	(49)
		71-140	29-75	43-62	53-80	43-96	45-100	44-100	31-69	42-79	34-65	22-62
	Q _{C/S}	1.7±0.5	1.7±0.4	2.2±1.0	1.6±0.3	1.8±0.3	1.5±0.3	1.5±0.4	2.0±0.4	2.1±0.6	1.5±0.3	1.7±0.4
		(1.9)	(1.7)	(1.8)	(1.8)	(1.8)	(1.5)	(1.5)	(1.9)	(2.0)	(1.4)	(1.6)
		0.62-2.8	0.94-2.6	1.4-4.2	1.2-2.0	1.4-2.3	0.93-2.2	0.87-2.3	1.2-2.6	1.3-3.4	1.2-2.0	1.3-2.8
	Soil	13±5	6.7±0.9	18±8	10±2	46±28	NA	12±2	17±10	7.3±1.0	10±4	NA

	(13)	(6.4)	(16)	(9.6)	(45)		(12)	(11)	(7.1)	(10)	
	7.9-18	5.9-7.7	11-30	9.0-14	15-100		10-15	8.0-30	6.0-8.7	5.4-17	
BCF _C	16±9	14±4	6.8±4.9	10±1	3.3±1.8	NA	11±5	6.5±3.2	16±4	8.7±4.3	NA
	(12)	(14)	(6.1)	(10)	(3.7)		(12)	(7.5)	(15)	(7.0)	
	4.3-30	8.9-21	2.6-17	8.9-13	1.1-6.6		4.9-18	2.4-13	11-25	4.0-16	
BCF _S	9.4±4.3	8.6±2.3	4.0±2.2	6.5±1.0	1.7±0.8	NA	7.2±2.0	3.8±2.2	8.0±1.9	5.5±2.1	NA
	(7.7)	(7.5)	(3.6)	(6.5)	(0.50-2.8)		(7.6)	(4.5)	(7.5)	(4.8)	
	3.9-16	4.5-12	1.9-8.4	5.2-7.7	1.8		3.9-10	1.1-7.0	5.2-11	3.1-9.4	

^aNot analyzed

Table A.2 Factor loadings obtained with unrotated factor matrix^a

Eigenvalues	4.3232	3.3614	2.5352	5.5447	2.8365	1.7828
Total variance (%)	36.0263	28.0119	21.1264	46.2054	23.6378	14.8563
	Factors					
Variables	Caps			Stipes		
	PC 1	PC 2	PC 3	PC 1	PC 2	PC 3
K	0.9548	-0.0666	-0.1449	-0.8286	-0.3607	0.3076
Mg	0.7496	0.5901	0.0082	-0.4598	-0.8188	-0.1767
Al	0.4665	-0.7451	-0.4006	-0.8386	0.4260	-0.1777
Ba	0.6765	-0.5799	-0.0830	-0.9295	-0.0128	0.2448
Cd	-0.2821	-0.3660	0.8523	0.5018	0.6308	0.3995
Cu	-0.2013	-0.5273	0.4587	-0.7739	0.3689	0.1991
Fe	0.4033	-0.7527	-0.3461	-0.9222	0.3224	-0.0173
Hg	0.1871	-0.1347	0.9553	0.3652	-0.0831	0.8952
Mn	0.7986	0.2112	0.5011	-0.6023	0.0640	-0.2769
Rb	0.7608	0.3250	0.3186	-0.1636	-0.7412	0.5957
Sr	0.5912	-0.6018	0.1281	-0.9194	0.0376	0.1904
Zn	0.5392	0.7798	-0.0916	0.1007	-0.8091	-0.3110

^aMinimum eigenvalue = 1, highlight factor loadings > 0.7