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Micro analytical observation of elemental distribution in arbuscular mycorrhizal (AM) roots from mining sites in South Africa and identification of their AM fungi

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APPENDIX 2

Table 4.5 below indicates first, for final average in sample sites that five factors accounted for about 92 % of the total variance. The second group for total concentration of elements in roots from different metal sites accounted for about 95% of the total variance. In practice, a robust solution should account for at least 50% of the variance (Tabachnick & Fidell, 2001b).

Table 4.5(a) indicates the final average in sample sites that five factors accounted for about 92% of the total variance. **Total Variance Explained**

Component		Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
		Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Dimension0	1	5.589	34.934	34.934	5.589	34.934	34.934	4.897	30.609	30.609
	2	3.165	19.779	54.714	3.165	19.779	54.714	3.068	19.177	49.786
	3	2.449	15.309	70.022	2.449	15.309	70.022	2.851	17.821	67.607
	4	2.017	12.603	82.626	2.017	12.603	82.626	2.189	13.679	81.285
	5	1.462	9.136	91.761	1.462	9.136	91.761	1.676	10.476	91.761
	6	.986	6.161	97.922						
	7	.194	1.210	99.132						
	8	.099	.620	99.752						
	9	.040	.248	100.000						
	10	2.995E-16	1.872E-15	100.000						
	11	2.140E-16	1.338E-15	100.000						
	12	7.277E-17	4.548E-16	100.000						
	13	-3.235E-18	-2.022E-17	100.000						

	14	-8.665E-17	-5.416E-16	100.000					
	15	-1.344E-16	-8.399E-16	100.000					
	16	-2.352E-16	-1.470E-15	100.000					

Extraction Method: Principal Component Analysis.

Table 4.5 (b) Indicates the total concentration of elements in roots from different metal sites accounted for about **95%** of the total variance.

Total Variance Explained

Component		Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
		Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Dimension0	1	8.117	81.167	81.167	8.117	81.167	81.167	6.932	69.315	69.315
	2	1.395	13.951	95.118	1.395	13.951	95.118	2.580	25.803	95.118
	3	.296	2.964	98.082						
	4	.135	1.350	99.432						
	5	.042	.420	99.852						
	6	.012	.123	99.975						
	7	.002	.022	99.996						
	8	.000	.003	100.000						
	9	1.657E-5	.000	100.000						
	10	5.515E-6	5.515E-5	100.000						

Extraction Method: Principal Component Analysis.