

Assessment of lithium, macro- and microelements in water, soil and plant samples from karst areas in Romania

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This online resource contains the following data:

The concentration of macro and microelements and standard deviation of the triplicates in water, soil and plant samples presented in Table S1 and Table S2, respectively.

Table S1. Concentration (average \pm standard deviation, n=3) of macroelements in water, soil and plant samples (L=*Lolium* sp., U=*Urtica* sp., M=*Mentha* sp.).

Sample	Fe	Na	Mg	K	Ca
Water ($\mu\text{g/L}$)					
GN	26.3 \pm 1.84	1373 \pm 68.6	5005 \pm 551	1151 \pm 104	119000 \pm 11900
GWR6	20.2 \pm 1.82	9598 \pm 672	6314 \pm 379	1370 \pm 41.1	110700 \pm 8856
GWR27	6.70 \pm 0.54	76390 \pm 5347	50730 \pm 2537	1483 \pm 104	77760 \pm 8554
GWR28	7.50 \pm 0.45	49890 \pm 4490	32550 \pm 977	1345 \pm 121	84390 \pm 3376
GWR29	5.30 \pm 0.58	80600 \pm 2418	98580 \pm 6901	6726 \pm 673	59060 \pm 3544
GWR30	2.30 \pm 0.09	155600 \pm 14004	71790 \pm 2872	3182 \pm 350	31280 \pm 1251
Soil (mg/kg DW)					
GN	5640 \pm 338	78.5 \pm 7.06	5673 \pm 454	2026 \pm 60.8	9733 \pm 681
GWR6	5390 \pm 162	32.2 \pm 1.61	992 \pm 29.8	1345 \pm 121	9537 \pm 1049
GWR27	4347 \pm 304	513 \pm 35.9	7137 \pm 785	2986 \pm 209	57600 \pm 6336
GWR28	4367 \pm 131	360 \pm 32.4	8310 \pm 914	2451 \pm 123	70767 \pm 5661
GWR29	3094 \pm 340	136 \pm 6.82	7987 \pm 479	4333 \pm 217	199733 \pm 15979
GWR30	3940 \pm 315	353 \pm 31.8	10780 \pm 755	4480 \pm 358	110933 \pm 5547
Plant (mg/kg DW)					
GN L	210 \pm 18.9	32.9 \pm 3.30	1256 \pm 62.8	13375 \pm 1070	3974 \pm 318
GN U	123 \pm 11.1	40.6 \pm 3.66	4001 \pm 240	23038 \pm 2304	13113 \pm 656
GWR6 L	206 \pm 8.23	391 \pm 19.5	1866 \pm 112	16775 \pm 1174	11249 \pm 562
GWR6 U	82.9 \pm 5.80	28.4 \pm 2.56	3190 \pm 351	22800 \pm 684	28850 \pm 2020
GWR27 L	515 \pm 56.6	757 \pm 68.1	2170 \pm 217	8084 \pm 485	3751 \pm 150
GWR27 M	680 \pm 408	546 \pm 38.2	4732 \pm 237	12513 \pm 500	13900 \pm 973
GWR28 L	220 \pm 19.8	1290 \pm 51.6	1855 \pm 204	11129 \pm 1113	2674 \pm 134
GWR28 M	406 \pm 24.3	1383 \pm 82.9	3535 \pm 106	14938 \pm 896	13325 \pm 800
GWR29 M	281 \pm 19.6	273 \pm 21.8	4940 \pm 445	14763 \pm 1476	14638 \pm 439
GWR29 U	141 \pm 7.06	269 \pm 10.8	7533 \pm 452	15250 \pm 1525	24813 \pm 2481
GWR30 L	141 \pm 15.5	9838 \pm 984	8024 \pm 401	21450 \pm 2145	7145 \pm 357
GWR30 M	174 \pm 12.1	510 \pm 51.0	5933 \pm 297	16825 \pm 1682	8649 \pm 865

Table S2. Concentration (average \pm standard deviation, n=3) of microelements in water, soil and plant samples (L=*Lolium* sp., U=*Urtica* sp., M=*Mentha* sp.).

Sample	Al	Mn	Ni	Cr	Co	Cu	Zn	Pb	Ba	V	Sr	Li
Water ($\mu\text{g/L}$)												
GN	<0.7	<0.7	5.00	14.8	<0.7	2.12	17.0	<0.7	15.2	<0.7	180	1.46
	ND	ND	± 0.20	± 1.33	ND	± 0.06	± 1.87	ND	± 1.67	ND	± 16.2	± 0.07
GWR6	<0.7	<0.7	4.25	14.1	<0.7	2.56	9.19	<0.7	24.0	<0.7	194	1.40
	ND	ND	± 0.26	± 0.85	ND	± 0.28	± 0.28	ND	± 2.16	ND	± 15.5	± 0.08
GWR27	<0.7	<0.7	3.40	5.02	<0.7	1.06	6.10	<0.7	15.9	<0.7	613	12.2
	ND	ND	± 0.20	± 0.20	ND	± 0.11	± 0.49	ND	± 1.43	ND	± 49.0	± 0.73
GWR28	<0.7	<0.7	3.58	2.27	<0.7	0.98	2.50	<0.7	22.4	<0.7	399	5.60
	ND	ND	± 0.14	± 0.14	ND	± 0.04	± 0.20	ND	± 1.57	ND	± 43.8	0.28
GWR29	<0.7	<0.7	3.03	25.4	<0.7	1.40	5.00	<0.7	60.2	<0.7	609	3.00
	ND	ND	± 0.15	± 0.76	ND	± 0.15	± 0.15	ND	3.01	ND	± 36.5	± 0.24
GWR30	<0.7	<0.7	2.15	52.4	<0.7	1.47	3.40	<0.7	55.3	<0.7	425	3.70
	ND	ND	± 0.17	± 5.24	ND	± 0.09	± 0.31	ND	± 1.66	ND	± 34.0	± 0.15
Soil (mg/kg DW)												
GN	17143	261	13.5	19.1	6.14	7.69	22.5	4.83	35.9	24.7	10.9	9.12
	± 1200	± 28.7	± 0.4	± 0.57	± 0.31	± 0.46	± 2.47	± 0.43	± 1.44	± 2.48	± 0.33	± 0.64
GWR6	6237	219	7.59	7.30	4.06	5.42	20.3	6.54	58.2	10.0	32.8	6.50
	± 499	± 24.1	± 0.46	± 0.73	± 0.20	± 0.60	± 1.22	± 0.52	± 5.82	± 0.90	± 2.95	± 0.26
GWR27	15283	143	9.70	12.5	2.87	12.6	35.7	1.64	36.7	13.3	94.7	9.95
	± 1223	14.3	± 0.58	± 1.37	± 0.26	± 0.88	± 3.21	± 0.11	± 2.57	± 0.40	± 8.52	± 1.00
GWR28	16553	183	4.97	11.6	1.63	12.0	34.7	1.68	40.4	11.5	74.7	10.0
	± 828	± 14.6	± 0.45	± 0.46	± 0.13	± 0.72	± 1.74	± 0.08	± 2.43	± 0.80	± 3.73	± 0.50
GWR29	13853	92.7	4.03	4.33	1.22	10.1	32.8	0.932	15.6	5.46	69.3	11.3
	± 1247	± 7.41	± 0.24	± 0.35	± 0.05	± 0.60	± 2.30	± 0.04	± 0.62	± 0.27	± 7.63	± 0.79
GWR30	18760	173	8.33	12.23	2.08	13.7 \pm	50.4 \pm	2.07	49.8	9.52	73.3	9.85
	± 2064	± 6.93	± 0.42	± 0.98	± 0.08	0.82	5.04	± 0.08	± 4.48	± 0.67	± 4.40	± 0.69
Plant (mg/kg DW)												
GN L	187	25.6	0.80	2.64	5.35	1.74	7.26	0.16	12.2	<0.02	2.63	0.21
	± 13.1	± 2.82	± 0.06	± 0.21	± 0.16	± 0.12	± 0.29	± 0.01	± 0.85	ND	± 0.26	± 0.02
GN U	259	17.8	0.37	0.30	0.20	1.24	1.54	0.13	22.2	<0.02	7.04	0.24
	± 28.5	± 0.53	± 0.01	± 0.03	± 0.01	± 0.11	± 0.05	± 0.01	± 0.89	ND	± 0.42	± 0.03
GWR6 L	466	27.2	0.73	4.56	0.50	1.59	4.93	0.21	6.50	<0.02	7.78	0.45
	± 41.9	± 2.72	± 0.07	± 0.50	± 0.02	± 0.18	± 0.54	± 0.02	± 0.39	ND	± 0.23	± 0.02
GWR6 U	203	19.1	0.49	0.36	0.10	1.27	2.45	0.06	16.8	<0.02	22.9	0.19
	± 12.2	± 0.57	± 0.03	± 0.01	± 0.01	± 0.08	± 0.27	± 0.01	± 1.69	ND	± 0.92	± 0.01
GWR27 L	991	119	2.85	9.01	0.65	4.14	19.6	0.20	9.13	1.26	24.2	8.83
	± 59.5	± 10.7	± 0.20	± 0.54	± 0.05	± 0.41	± 1.96	± 0.01	± 0.64	± 0.13	± 1.94	± 0.88
GWR27 M	1734	58.5	1.60	3.10	0.89	7.59	27.6	0.26	17.5	1.35	64.4	2.84
	± 156	± 4.10	± 0.05	± 0.09	± 0.04	± 0.23	± 2.76	± 0.02	± 1.40	± 0.09	± 5.79	± 0.11
GWR28 L	493 \pm	70.2	0.89	3.20	0.34	2.51	7.34	0.08	11.4	0.53	13.5	11.1
	54.3	± 3.51	± 0.03	± 0.10	± 0.03	± 0.10	± 0.81	± 0.01	± 0.77	± 0.06	± 1.48	± 0.89
GWR28 M	1010	28.8	2.03	4.78	0.86	11.9	23.2	0.12	12.9	0.71	36.4	2.17
	± 70.7	± 3.16	± 0.12	± 0.29	± 0.07	± 1.31	± 1.16	± 0.01	± 1.16	± 0.05	± 3.64	± 0.17
GWR29 M	618	47.5	1.20	1.83	3.65	8.29	11.3	0.09	15.2	0.40	32.3	0.93
	± 61.7	± 1.9	± 0.07	± 0.07	± 0.26	± 0.41	± 0.90	± 0.01	± 1.06	± 0.04	± 0.97	± 0.03
GWR29 U	439	15.9	0.50	0.91	1.20	4.43	5.55	0.05	18.9	0.14	65.8	1.54
	± 21.9	± 1.27	± 0.05	± 0.10	± 0.06	± 0.35	± 0.61	± 0.00	± 1.13	± 0.01	± 3.95	± 0.14
GWR30 L	467	24.2	1.02	1.65	0.58	7.48	43.1	0.06	8.96	0.18	31.3	0.90
	± 51.4	± 2.18	± 0.03	± 0.13	± 0.05	± 0.75	± 3.87	± 0.01	± 0.81	± 0.01	± 1.25	± 0.10
GWR30 M	372	25.7	1.09	1.75	0.36	10.4	28.7	0.07	11.6	0.18	49.0	0.88
	± 33.5	± 1.54	± 0.11	± 0.11	± 0.03	± 0.31	± 3.16	± 0.01	± 0.93	± 0.01	± 3.43	± 0.07

*ND – not determined

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