

Table 1. Profiles locations, classification, physico-chemical characteristics and contents of different potassium forms in Lebanese soils of the studied soils

Profile No.	Location, soil type and texture	Depth	EC	pH	O.M	CaCO ₃	Sand	Silt	Clay	∑ Exch. cations	H ₂ O - Soluble K	Exch. K	Non-exch. K	Mineral K	Total K	Mineral K /total K
		<i>cm</i>	<i>dS m⁻¹</i>			----- % -----				----- Cmol kg ⁻¹ -----						<i>%</i>
165	Jbab el Homer; Calcaric Regosols; clay	0-20	0.54	7.60	1.80	15	15	36	46	33.90	0.0239	0.6225	3.97	21.20	25.82	82.14
		20-60	0.54	7.50	1.00	37	18	30	50	27.85	0.0128	0.2891	0.96	15.69	16.95	92.55
		60-110	0.51	7.70	0.80	34	22	24	50	30.87	0.0043	0.1431	0.86	17.32	18.33	94.48
		110-130	0.50	7.60	0.50	31	32	18	46	28.69	0.004	0.1108	1.05	16.21	17.37	93.30
206	Rachaya; Gleyic Cambisols; silty clay loam	0-25	0.47	7.70	3.10	35	13	48	38	34.20	0.0086	0.2531	0.72	14.60	15.58	93.69
		25-70	0.33	8.10	2.20	39	12	36	50	31.56	0.0039	0.0811	0.36	12.10	12.55	96.44
		70-100	0.40	8.10	1.60	30	19	26	54	33.23	0.0102	0.1016	0.49	13.36	13.97	95.69
		100-130	0.53	8.10	0.70	11	27	16	56	28.60	-	-	-	-	-	-
259	Hasbaya Plain; Calcaric Fluvisols; clay loam	0-20	0.15	7.60	0.60	61	33	38	26	20.43	0.0101	0.0841	0.16	5.95	6.20	95.98
		20-55	0.26	7.50	3.10	58	31	30	36	22.88	-	-	-	-	-	-
		55-80	0.25	7.30	3.30	55	33	36	28	16.45	0.0384	0.262	0.53	3.76	4.59	81.93
		80-150	0.35	7.10	1.90	60	33	38	26	17.26	0.0075	0.0817	0.17	4.70	4.95	94.81
190	Batroun; Gleyic Luvisols; clay	0-10	0.51	6.80	1.60	3	7	40	52	18.79	0.0479	0.5246	1.96	13.02	15.55	83.71
		10-70	0.28	7.10	1.50	2	6	28	64	16.39	0.0079	0.1192	1.01	14.87	16.01	92.90
		70-130	0.29	7.20	0.10	2	5	22	70	18.04	0.0041	0.084	0.92	15.08	16.08	93.75
179	Marjheen; Eutric Arenosols; sandy clay loam	0-30	0.29	7.40	4.90	1	58	18	22	15.96	0.0171	0.2191	1.06	11.14	12.44	89.57
		30-80	0.16	7.70	0.60	1	70	14	16	9.19	0.0079	0.0759	0.60	11.24	11.92	94.30
		80-135	0.21	7.40	0.70	1	60	22	18	12.57	0.0059	0.0837	0.87	10.21	11.17	91.37
		135-180	0.21	7.70	0.80	1	50	18	30	24.64	0.0071	0.1524	1.12	12.68	13.95	90.84
234	El Zayniyeh; Endostagnic-vertic Cambisols; clay	0-10	0.28	7.30	2.10	0	7	32	60	26.01	0.0173	0.6511	3.44	20.97	25.08	83.63
		10-40	0.27	7.60	1.40	0	7	26	66	26.14	0.0212	0.6445	5.01	28.21	33.88	83.26
		40-110	0.33	7.50	0.80	0	8	26	66	28.03	0.0102	0.5634	3.48	27.26	31.32	87.05
49	Tell-Kalakh Tawile; Hypocalcic Vertisols; clay	0-20	0.49	7.80	1.60	0	18	28	54	32.95	0.0056	0.1544	0.65	6.91	7.71	89.56
		20-53	0.45	8.10	1.30	2	18	21	58	30.38	0.0036	0.068	0.41	5.51	6.00	91.89
		53-90	0.41	8.10	1.10	10	20	27	51	29.97	0.0026	0.0632	0.42	5.21	5.69	91.52
		90-120	0.41	8.20	0.60	38	20	34	44	24.86	0.0032	0.0762	0.27	4.28	4.62	92.47
272	Ed Douair; Vertic Clacisols; clay	0-30	0.40	7.10	1.81	55	6	28	64	29.41	0.0237	0.4093	0.67	6.69	7.80	85.85
		30-60	0.46	7.20	2.30	57	11	30	56	24.23	0.0102	0.2655	0.55	6.26	7.09	88.37
		60-150	0.48	7.10	2.30	72	10	34	56	15.54	0.0108	0.0913	0.14	N/A	N/A	N/A
Average										0.0122	0.2324	1.18	12.48	13.95	90.42	
Maximum										0.0479	0.6511	5.01	28.21	33.88	96.44	
Minimum										0.0026	0.0632	0.14	3.76	4.59	81.93	