

Table VI-1. Chemical compositions of A) the weathered latite soil profile from Kiama, Australia (Craig and Loughnan, 1964) and B) the saprolite soil profile from Kauai Island, Hawaii (Patterson, 1971; sample number Ki-64).

A)

Depth (ft)	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	TiO ₂	P ₂ O ₅	MnO	H ₂ O
0.33	52.1	16.3	10.7	0.9	0.3	0.8	1.1	1.7			15.2
1.17	51.4	18.4	11.2	0.7	0.3	0.6	0.9	1.5			14.2
2	51.8	19.2	11.2	0.8	0.3	0.9	1.1	1.4			13.2
3.25	52	18.5	11.2	1.3	0.6	1.2	1.7	1.2			12.1
5.5	54.8	16.9	9.4	3.3	1.9	2.3	3.3	1.1			6.8
7	54.3	15.8	9.2	6.3	3.4	3.6	4.1	1			2.5

B)

Depth (ft)	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	TiO ₂	P ₂ O ₅	MnO	H ₂ O
0-2	16.7	23.7	32.7	0.09	0.09	0.06	0.14	6.2	0.21	0.08	16.9
2-4	16.8	23.6	33.6	0.09	0.14	0.05	0.1	6.2	0.27	0.1	16.9
4-9	15.7	25.7	33.3	0.07	0.12	0.04	0.06	5.3	0.3	0.1	18.3
9-14	15.8	29.4	29.6	0.07	0.18	0.03	0.03	5	0.47	0.19	18.8
14-19	26.1	26.9	25.4	0.06	0.58	0.04	0.02	4	0.4	0.45	16.1
19-24	23	27.7	26.3	0.07	0.47	0.07	0.02	4.4	0.6	0.28	16.8
24-29	23.2	28.1	25.9	0.06	0.52	0.09	0.02	4.3	0.5	0.48	16.8
29-35	25.9	27.2	25.4	0.06	0.43	0.06	0.02	4.2	0.44	0.26	16.4
35-35.5	42.1	14	15.8	6.4	7.9	0.76	0.62	2.4	0.33	0.26	10.2
basalt	42.3	10.9	13.9	11.7	12.8	2.85	0.83	2.7	0.69	0.13	1.3