


## Gypsisol: sample profile

### Profile description:

Profile (OM 3, Oman) described by A.A. Hutcheon, A.R.A. Stapleton and W.B. Kerr



Horizon	Depth (cm)	Description
A	0 - 20	yellowish brown (10YR 5/6, moist) soil; very weak medium subangular blocky; friable; few faint mottles; few fine pores; common fine roots; gradual smooth boundary to
Bw	20 - 38	yellowish brown (10YR 5/4, moist) soil; weak medium subangular blocky; friable; few faint mottles; many fine pores; few coarse roots and fine roots; gradual smooth boundary to
Bkg	38 - 90	10YR 5/5, moist slightly gravelly; weak medium subangular blocky; friable; few faint mottles; many fine pores; few coarse roots; very few irregular hard calcareous concretions; clear wavy boundary to
2Bgy	90 - 115	yellowish brown (10YR 5/6, moist) gravelly; massive; many distinct strong brown (7.5YR 5/8) mottles; irregular hard crystals; weakly cemented; gradual smooth boundary to
3Bgy	115 - 140	very pale brown (10YR 7/3, moist) soil; massive; many distinct strong brown (7.5YR 5/8) mottles; few medium angular hard manganiferous concretion and few crystals; weakly cemented;



### Analytical data:

Horizon	Depth (cm)	Tot. sand (%)	Tot. silt (%)	Tot. clay (%)
A	0 - 5	85	8	7
A	5 - 20	76	14	9
Bw	20 - 38	75	13	12
Bkg	38 - 89	74	14	12
2Bgy	90 - 115	56	24	20

Horizon	Depth (cm)	pH H <sub>2</sub> O	pH KCl	CaCO <sub>3</sub> (%)	Org. C (%)	EC2.5 (dS/m)	EC5 (dS/m)
A	0 - 5	7.9	7.8	36.4	0.2	1.90	0.37
A	5 - 20	8.6	8.1	40.6	0.1	0.18	0.09
Bw	20 - 38	8.7	8.1	41.6	0.1	0.16	0.07
Bkg	38 - 89	8.5	8.1	36.9	0.0	0.21	0.10
2Bgy	90 - 115	7.9	7.5	29.3	0.0	2.00	1.63



Horizon	Ca	Mg	Na	K	sum cat.	CO <sub>3</sub>	HCO <sub>3</sub>	Cl	SO <sub>4</sub>
A	2.1	0.2	0.0	0.1	2.4	0.0	0.3	0.1	2.2
A	0.3	0.0	0.0	0.0	0.4	0.0	0.4	0.0	0.1
Bw	0.2	0.0	0.0	0.0	0.3	0.0	0.4	0.0	0.1
Bkg	0.3	0.1	0.0	0.0	0.5	0.0	0.3	0.0	0.2
2Bgy	15.5	0.1	0.0	0.0	15.7	0.0	0.3	0.1	15.6

Units in cmol(+)/kg

**Futher information:**

**WRB classification:** Calcic Gypsisol

**Diagnostic criteria:** Ochric A, cambic B, gypsic horizon

**Location:** Huwayyah South (Oman), 8 km N of Buriami

**Parent material:** Alluvium, sandy

**Landuse:** Extr. xeromorphic dwarf shrub