ENTISOLS

Soil Profile Description (ID 1)

Information on the site :

Soil Classification: USDA (1990): Mixed, calcareous, thermic Family of Typic Torripsamments (KCBF)
ACSAD: NPR t 1 b : Typic Torripsamment
FAO/UNESCO : Arh : Haplic Arenosol
Location:
Coordinates: Geographical : 35.51600 E/ 29.61259 N
JTM: 356276 E/ 277481 N
Elevation: 850 m asl
Landform: Position: Upper fan
Land System : 6/5 (Aeolian coverplain occuppying valleys between sandstone inselberg)—6.5.1[GIS]
Land Facet: 1 (Middle slope of aeolian-colluvial inactive undulating plains)
Microrelief: Class: Even (< 25 cm)
Type: Sand
Slope: Sloping (6 %), convex to E
Land Use : 3.4 Nat.browse + grazing
Plant /Crop: Halox p/s
Climate:Mean annual precipitation:
Mean annual temperature: Air : 18.6° C / Soil (50cm): 21.6° C
Soil moisture regime: Aridic
Precipitation zone: 50-100 mm p.a.

GENERAL INFORMATON ON THE SOIL:

Geology: Unconsolidated collvium: Sandstone [q5 Fluv.deposits, sand, loess (Bender1968)]
Parent Material: collovium (sandy texture)
Drainage: Surface Runoff: Slow
Soil Drainage Class: Excessive
Surface Cover : Grit (25 %)
Surface Feature : Capping (1 %)
Soil Surface Conditions: Dry
Erosion : Nil
Soil Depth : 170 cm +
Diagnostic Horizon or Property: -

PROFILE DESCRIPTION :

0-17 cm Light brown (7.5YR 6/4) dry and strong brown (7.5YR 5/6) moist; sand; very weak coarse platy; dry soft; common very fine (<0.5) tubular pores; few very fine (<1 mm) vertical cracks; few fine (1-2 mm) woody roots; 2 % rounded quartz fine gravel (2-5 mm); moderate reaction to HCL; clear smooth boundary to:

17-38 cm Light brown (7.5 YR 6/4) dry and strong brown (7.5 YR 5/6) moist; sand very weak medium subangular blocky ; common very fine (<0.5 mm) irregular pores; common very fine (< 1 mm) horizontal cracks; few fine (1-2 mm) woody roots; 5 % irregular quartz fine gravel (2-5 mm); strong reaction to HCl; gradual smooth boundary to :

38-88 cm Reddish yellow (7.5 YR 6/5) dry and strong brown (7.5 YR 5/6) moist; sand very weak medium subangular blocky; dry soft; few very fine (<0.5 mm) irregular pores; common very fine (<1mm) horizontal cracks; few fine (1-2 mm) fibrous and woody roots; 5 % irregular quartz fine gravel (2-5 mm); 5 % small (<5 mm) soft calcareous concretions; violent reaction to HCl; clear smooth boundary to:

88-170+ cm Light brown (7.5 YR 6/4) dry and strong brown (7.5 YR 5/6) moist; sand; massive; dry slightly hard; common very fine (<0.5 mm) tubular pores; few very fine (<1 mm) vertical cracks; few fine (1-2 mm) woody roots; 10 % irregular fine gravel (2-5 mm); 2 % small (<5 mm) moderately hard calcareous concretions; violent reaction to HCl.

Soil Profile Description (ID 2)

Information on the site :

Soil Classification: USDA (1990): Mixed, thermic Family of Typic Torripsamments (KCBF)
ACSAD: NPR t 1 a: Typic Torripsamment
FAO/UNESCO: ARh : Haplic Arenosol
Location: 2.7km Disi
Coordinates: Geographical : 35.53201 E/ 29.67497 N
JTM: 357914 E/ 284376 N
Elevation: 825 m asl
Landform: Position: Upper slope
Land System : 6/7 (Alluvial fans, terraces and plays system)--6.7.2 [GIS]
Land Facet: 8 (Major active wadi lines)
Microrelief: Class: slightly uneven (25-50 cm)
Type:
Slope: Almost flat (1 %) , rectilinear to SW
Land Use : 3.4 Nat.brows + grazing
Plant /Crop: Halox persicum, Halox sal
Climate: Mean annual precipitation:
Mean annual temperature: Air : 18.8° C / Soil (50cm): 21.7° C
Soil moisture regime: Aridic
Precipitation zone: 50-100 mm p.a.

GENERAL INFORMATON ON THE SOIL:

Geology: Unconsolidated colluvium [q5 Fluv.deposits,sand,loess (Bender 1968)]
Parent Material: Colluvium (sandy texture)
Drainage: Surface Runoff: None
Soil Drainage Class: Somewhat excessive
Surface Cover : Stones (1 %)
Surface Feature : Capping (1 %)
Soil Surface Conditions: Loose
Erosion : Nil
Soil Depth : 200 cm +
Diagnostic Horizon or Property: --

PROFILE DESCRIPTION :

0-20 cm Light brown (7.5YR 6/4) dry and reddish yellow (7.5YR 6/6) moist; sand; very weak fine subangular blocky; dry soft; moist loose; non-sticky; non-plastic; few woody roots; strong reaction to HCl; clear smooth boundary to:

20-59 cm Reddish yellow (7.5YR 7/6) dry and reddish yellow (7.5YR 6/6) moist; sand; very weak fine subangular blocky; dry soft; moist loose; non-sticky; non-plastic; few fibrous roots; 4 % irregular sandstone fine gravel (2-5 mm); moderate reaction to HCl; clear smooth boundary to:

59-122 cm Reddish yellow (7.5YR 7/6) dry and reddish yellow (7.5YR 6/6) moist; sand; weak fine platy; dry soft; moist very friable; non-sticky; non-plastic; few tubular pores; few woody roots; 2 % irregular sandstone fine gravel (2-5 mm); strong reaction to HCl; clear smooth boundary to:

122-200+ cm Reddish yellow (7.5YR 7/6) dry and reddish yellow (7.5YR 6/6) moist; sand; weak fine platy; dry soft; moist loose; non-sticky; non-plastic; few fibrous roots; 10 % irregular sandstone fine gravel (2-5 mm); moderate reaction to HCl.

Soil Profile Description (ID 3)

Information on the site :

Soil Classification: USDA (1990): Sandy-skeletal, mixed, calcareous, thermic Family of Typic Torriorthents (KEBN)
ACSAD: NHR t 1 c: Typic Torriorthent
FAO/UNESCO: CMe : Eutric Cambisol
Location: 8km SW of Quweira
Coordinates: Geographical : 35.27069 E/ 29.74466 N
JTM: 332733 E/ 292451 N
Elevation: 840 m asl
Landform: Position: Upper old colluvium
Land System : 5/1 (Dissected hills steep ridge and fans on basement rocks)--5.2.5 [GIS]
Land Facet: 2 (Steep moderate slope on older fill colluvium mantle)
Microrelief: Class: Very uneven (100-200 cm)
Type: Sand
Slope: Sloping (12 %) , convex to W
Land Use : 3.4 Nat.brows + grazing
Plant /Crop: Halox, Shrub
Climate:Mean annual precipitation:
Mean annual temperature: Air : 18.4° C / Soil (50cm): 21.3° C
Soil moisture regime: Aridic
Precipitation zone: 50-100 mm p.a.

GENERAL INFORMATON ON THE SOIL:

Geology: Igneous acid : Granite [q3 Talus, fans (Bender 1968)]
Parent Material: Colluvium (sandy texture)
Drainage: Surface Runoff: Medium
Soil Drainage Class: Excessive
Surface Cover : Boulders (92 %)
Surface Feature :
Soil Surface Conditions: Dry
Erosion : Moderate rill erosion
Soil Depth : 170 cm (Gravel / stones)
Diagnostic Horizon or Property: --

PROFILE DESCRIPTION :

0-34 cm Light yellowish (10YR 6/4) dry and brownish yellow (10YR 6/6) moist; sandy loam; weak fine subangular blocky; dry soft; moist very friable; slightly sticky; non-plastic; common spherical pores; 15 % irregular gravel (5-20 mm); 10 % soft calcareous concretions; violent reaction to HCL; abrupt wavy boundary to:

34-52 cm Very pale brown (10YR 7/4) dry and yellowish brown (10YR 5/8) moist; very gravelly coarse sand; single grain breaking to single grain; dry loose; moist loose; non-sticky; non-plastic; common spherical pores; common fibrous roots; 36 % irregular fine gravel (2-5 mm); 2 % small (<5 mm) hard calcareous concretions; violent reaction to HCL; abrupt wavy boundary to:

52-120 cm Light yellowish brown (10YR 6/4) dry and yellowish brown (10YR 5/8) moist; very gravelly sand; single grain; dry loose; moist loose; non-sticky; non-plastic; common spherical pores; 40 % irregular quartz coarse gravel (20-75 mm); 2 % small (<5 mm) hard calcareous concretions; violent reaction to HCL; abrupt wavy boundary to:

120-170 cm Yellow (10YR 7/8) dry and yellowish brown (10YR 5/8) moist; very gravelly coarse sand; single grain; dry loose; moist loose; non-sticky; non-plastic; common spherical pores; 40 % irregular quartz coarse gravel (20-75 mm); 2 % small (<5 mm) hard calcareous concretions; violent reaction to HCL; abrupt wavy boundary to:

170+ cm Gravel / stones

Soil Profile Description (ID 4)

Information on the site :

Soil Classification: USDA (1990): Clayey-skeletal, mixed, thermic Family of Typic Xerorthents (KECG)
ACSAD: NHX t 4 b: Typic Xerorthent
FAO/UNESCO: CMe : Eutric Cambisol
Location: 0.7km SE of Center Ba'un
Coordinates: Geographical : 35.73433 E/ 32.38158 N
JTM: 380915 E/ 584208 N
Elevation: 755 m asl
Landform: Position: Old terraces
Land System : 18/1 (Dissected limestone plateau on Ajlun and Balqa groups)--18.1.2 [GIS]
Land Facet: 2 (Rounded crests with small plateau areas)
Microrelief: Class: Moderately uneven (50-100 cm)
Type: Terraces
Slope: Sloping (10 %) , irregular to NW
Land Use : 1.1 Cereals and 3.3 Nat.grazing
Plant /Crop: Shibrig (15) : 45 % groundcover
Climate:Mean annual precipitation:
Mean annual temperature: Air : 16.1° C / Soil (50cm): 19.1° C
Soil moisture regime: Xeric
Precipitation zone: 600-650 mm p.a.

GENERAL INFORMATON ON THE SOIL:

Geology: Unconsolidated colluvium:Limestone/chert [c2 Chalky/sandy LSt(Sir,fuh (Bender 1968)]
Parent Material: Colluvium
Drainage: Surface Runoff: Rapid
Soil Drainage Class: Somewhat excessive
Surface Cover : Boulders (80 %)
Surface Feature : Litter (5 %)
Soil Surface Conditions: Dry /Moderately hard
Erosion : Slight undifferentiated erosion
Soil Depth : 67 cm (Boulders)
Diagnostic Horizon or Property: Cambic at 19 cm

PROFILE DESCRIPTION :

Ap 0-19 cm Brown (7.5YR 4/4) dry and yellowish red (5YR 4/6) moist; very gravelly silty clay; moderate medium subangular blocky; dry moderately hard; moist friable; very sticky; moderately plastic; many very fine (<0.5 mm) spherical pores; many fine (1-2 mm) fibrous and woody roots; 40 % irregular chert gravel (5-20 mm); slight reaction to HCL; clear wavy boundary to:

19-45 cm Yellowish red (5YR 4/6) dry and dark red (2.5YR 3/6) moist; extremely gravelly silty clay; moderate medium subangular blocky; dry moderately hard; moist friable; very sticky; moderately plastic; many fine (0.5-2 mm) spherical pores; many very fine (<1 mm) fibrous roots; 60 % irregular chert gravel (5-20 mm); no reaction to HCL; clear broken boundary to:

45-67 cm Dark red (2.5YR 3/6) dry and red (2.5YR 4/6) moist; extremely gravelly clay; moderate medium subangular blocky; dry moderately hard; moist friable; very sticky; moderately plastic; many fine (0.5-2 mm) spherical pores; few very fine (<1 mm) fibrous roots; 65 % irregular chert coarse gravel (20-75 mm); slight reaction to HCL; abrupt irregular boundary to:

67+ cm Boulders

Soil Profile Description (ID 5)

Information on the site :

Soil Classification: USDA (1990): Loamy-skeletal, mixed, hyperthermic Family of Ustic Torrifluvents (KDDG)
ACSAD: NFR i 2/1 b: Ustic Torrifluvent
FAO/UNESCO: FL : Fluvisol
Date of Examination : 10/01/92
Location: 2km SW of Muthallath Arda
Coordinates: Geographical : 35.59942 E/ 32.12226 N
JTM: 367846 E/ 555611 N
Elevation: -245 m asl
Landform: Position: Alluvial fan
Land System : 1/3 (Alluvial fans and terraces, piedmont fans)--1.3.2 [GIS]
Land Facet: 1 (Sloping stony to sandy alluvial fans)
Microrelief: Class: Even (<25 cm)
Type:
Slope: Gently sloping (4 %) , convexoconcave to W
Land Use : 2.2 Other field crops(irr.)
Plant /Crop: Lemon, Orange, Vegetables : 80 % groundcover
Climate:Mean annual precipitation:
Mean annual temperature: Air : 23.1° C / Soil (50cm): 25.9° C
Soil moisture regime: Aridic
Precipitation zone: 250-300 mm p.a.

GENERAL INFORMATON ON THE SOIL:

Geology: Unconsolidated alluvium:Limestone/sandstone [q5 Fluv.deposits,sand,loess(Bender 1968)]
Parent Material: Alluvium
Drainage: Surface Runoff: Slow
Soil Drainage Class: Somewhat excessive
Surface Cover : Gravel (50 %)
Surface Feature :
Soil Surface Conditions: Dry /Moderately hard
Erosion : Nil
Soil Depth : 206 cm +
Diagnostic Horizon or Property: --

PROFILE DESCRIPTION :

0-25 cm Dark yellowish brown (10YR 4/4) moist; gravelly silty clayloam; moderate medium angular blocky; dry slightly hard; moist friable; slightly sticky; non-plastic; many fine (0.5-2 mm) tubular pores; many medium (2-5 mm) fibrous and woody roots; 25 % irregular hard limestone coarse gravel (20-75 mm); weak thin organic matter coating of gravel; strong reaction to HCL; clear wavy boundary to:

25-57 cm Yellow (10YR 7/6) dry and yellowish brown (10YR 5/8) moist; very gravelly sandy loam; weak medium subangular blocky breaking to single grain; dry slightly hard; moist friable; non-sticky; non-plastic; many fine (0.5-2 mm) tubular pores; many fine (1-2 mm) fibrous roots; 40 % sub-rounded hard limestone coarse gravel (20-75 mm); weak thin $CaCO_3$ coating of gravel; strong reaction to HCL; clear irregular boundary to:

57-77 cm Yellow (10YR 7/6) dry and dark yellowish brown (10YR 4/6) moist; extremely gravelly sand ; single grain; dry loose; moist loose; non-sticky; non-plastic; common very fine (<0.5 mm) spherical pores; many fine (1-2 mm) fibrous roots; 50 % hard limestone coarse gravel (20-75 mm); weak thin $CaCO_3$ coating of gravel; strong reaction to HCL; clear irregular boundary to:

77-126 cm Yellowish brown (10YR 5/8) moist; very gravelly sandy loam ; weak medium subangular blocky; dry slightly hard; moist friable; non-sticky; non-plastic; common fine (0.5-2 mm) spherical pores; many fine (1-2 mm) fibrous roots; 45 % hard limestone coarse gravel (20-75 mm); strong reaction to HCL; abrupt irregular boundary to:

126-159 cm Dark yellowish brown (10YR 4/6) moist; very gravelly sandy clayloam; weak medium subangular blocky; dry slightly hard; moist friable; slightly sticky; non-plastic; many very fine(<0.5mm) tubular

pores; many fine (1-2 mm) fibrous roots; 45 % sub-rounded stones (75-250 mm) strong reaction to HCL; abrupt irregular boundary to:

159-206+ cm Dark yellowish brown (10YR 4/6) moist; very gravelly loamy sand; single grain; dry loose moist loose; non-sticky; non-plastic; common fine(0.5-2 mm) spherical pores; 40 % sub-rounded hard limestone coarse gravel (20-75 mm) ; moderate reaction to HCL.

Soil Profile Description (ID 6)

Information on the site :

Soil Classification: USDA (1990): Sandy, mixed, calcareous, hyperthermic Family of Typic Torrifluvents (KDDJ)
ACSAD: NFR t 1/2 a: Typic Torrifluvent
FAO/UNESCO: FL : Fluvisol
Location: 3.8km N of Ghor el Mazra'a
Coordinates: Geographical : 35.51694 E/ 31.28562 N
JTM: 358800 E/ 462950 N
Elevation: -390 m asl
Landform: Position: Undulating alluv.fan
Land System : 2/8 (Piedmont alluvium fans along Dead Sea)—2.8.2 [GIS]
Land Facet: 2 (Alluvial fan plain)
Microrelief: Class: Even (<25 cm)
Type: Undulating
Slope: Gently sloping (2 %) , convexcocave to NW
Land Use : 2.2 Other field crops (irr.)
Plant /Crop: Vegetables, Grasses: 45 % groundcover
Climate:Mean annual precipitation:
Mean annual temperature: Air : 25.1° C / Soil (50cm): 27.8° C
Soil moisture regime: Aridic
Precipitation zone: 50-100 mm p.a.

GENERAL INFORMATON ON THE SOIL:

Geology: Unconsolidated alluvium [q5 Fluv.deposits,sand,loess(Bender 1968)]
Parent Material: Alluvium
Drainage: Surface Runoff: Slow
Soil Drainage Class: Somewhat excessive
Surface Cover : Gravel (15 %)
Surface Feature : Litter (25 %)
Soil Surface Conditions: Dry / Moderately hard
Erosion : Slight undifferentiated erosion
Soil Depth : 220 cm +
Diagnostic Horizon or Property: --

PROFILE DESCRIPTION :

0-20 cm Very pale brown (10YR 7/4) dry and light yellowish brown (10YR 6/4) moist; loamy fine sand; moderate medium subangular blocky; dry moderately hard; moist friable; non-sticky; non-plastic; common fine (0.5-2 mm) spherical pores; many medium (2-5 mm) fibrous and woody roots; 10 % irregular hard limestone coarse gravel (20-75 mm); strong reaction to HCL; clear smooth boundary to:

20-46 cm Very pale brown (10YR 7/4) dry and yellow brown (10YR 7/6) moist; loamy fine sand; moderate medium subangular blocky; dry moderately hard; moist friable; non-sticky; non-plastic; common fine (0.5-2 mm) tubular pores; many fine (1-2 mm) fibrous and woody roots; 5 % sub-rounded hard limestone coarse gravel (20-75 mm); strong reaction to HCL; clear smooth boundary to:

46-87 cm Very pale brown (10YR 7/4) dry and yellow (10YR 7/6) moist; gravelly loamy sand; weak fine subangular blocky; dry slightly hard; moist friable; non-sticky; non-plastic; common fine (0.5-2 mm) spherical pores; common fine (1-2 mm) fibrous roots; 30 % hard limestone coarse gravel (20-75 mm); weak thin $CaCO_3$ coating of gravel; strong reaction to HCL; clear smooth boundary to:

87-132 cm Yellow (10YR 7/6) moist; very fine sandy loam; weak fine subangular blocky; dry soft; moist friable; slightly sticky; non-plastic; common very fine (<0.5 mm) tubular pores; few fine (1-2 mm) fibrous roots; 3 % irregular hard limestone fine gravel (2-5 mm); strong reaction to HCL; clear smooth boundary to:

132-175 cm Brownish yellow (10YR 6/6) moist; fine sandy loam; very weak fine subangular blocky; dry soft; moist friable; non-sticky; non-plastic; few (<2 %) small (<5 mm) distinct mottles (10YR 3/3); common very fine (<0.5 mm) tubular pores; common fine (1-2 mm) fibrous roots;violent reaction to HCL; clear smooth boundary to:

175-202 cm Dark yellowish brown (10YR 4/6) moist; clayloam; weak medium subangular blocky breaking to very fine platy; dry slightly hard; moist friable; very sticky; moderately plastic; many (>20 %) medium (5-15 mm) distinct mottles (10YR 3/3); fine (0.5-2 mm) tubular pores; few very fine (<1 mm) fibrous roots; strong reaction to HCL; clear smooth boundary to:

202-220+ cm Very dark grayish brown (10YR 3/2) moist; silty clayloam; weak medium subangular blocky; dry slightly hard; moist friable; slightly sticky; slightly plastic; common (2-20 %) small (<5 mm) distinct mottles; many fine (0.5-2 mm) tubular pores; weak moderately thic organic matter coating of peds; violent reaction to HCL.

Soil Profile Description (ID 7)

Information on the site :

Soil Classification: USDA (1990): Mixed, calcareous, thermic Family of Typic Torripsamments (KCBF)
ACSAD: NPR t 1 b: Typic Torripsamment
FAO/UNESCO: ARh : Haplic Arensosol
Location:
Coordinates: Geographical : 35.53851 E/ 29.74836 N
JTM: 358646 E/ 292503 N
Elevation: 860 m asl
Landform: Position: Middle slope Fan
Land System : 6/8 (Dissected sandstone plateau on Umm Sahm sandstone)—6.8.4 [GIS]
Land Facet: 4 (Lower/ middle slopes of sandy Aeolian-colluvial mantles)
Microrelief: Class: Slightly uneven (25-50 cm)
Type: Gullies
Slope: Gently sloping (5 %) , rectilinear to W
Land Use : 3.4 Nat.browse + grazing
Plant /Crop: Halox p/s
Climate:Mean annual precipitation:
Mean annual temperature: Air : 18.4° C / Soil (50cm): 21.3° C
Soil moisture regime: Aridic
Precipitation zone: 100-150 mm p.a.

GENERAL INFORMATON ON THE SOIL:

Geology: Unconsolidated colluvium : sandstone/chert [o2 Brownish SSt (sahm) (Bender 1968)]
Parent Material: Aeolian (sandy texture)
Drainage: Surface Runoff: Rabid
Soil Drainage Class: Somewhat excessive
Surface Cover : Gravel (15 %)
Surface Feature : Capping (70 %)
Soil Surface Conditions: Dry
Erosion : Moderate gully erosion
Soil Depth : 167 cm +
Diagnostic Horizon or Property: --

PROFILE DESCRIPTION :

0-25 cm Light yellowish brown (10YR 6/4) dry and yellowish brown (10YR 5/8) moist;loamy fine sand ; weak very coarse massive; dry soft; tubular pores; few vertical cracks; few very fine (<1 mm) fibrous and woody roots; violent reaction to HCL; diffuse wavy boundary to:

25-50 cm Light brown (7.5YR 6/4) dry and strong brown (7.5YR 5/6) moist; fine sand ; weak massive; dry soft; many very fine (<0.5 mm) tubular pores; few vertical cracks; few very fine (<1 mm) fibrous roots; 15% soft calcareous concretions ; violent reaction to HCL; diffuse wavy boundary to:

50-84 cm Brownish yellow (10YR 6/6) dry and yellowish brown (10YR 5/6) moist; fine sand ; weak massive; dry soft; many very fine (<0.5 mm) tubular pores; few vertical cracks; common very fine (<1 mm) fibrous roots; irregular sandstone fragments; 5% soft calcareous concretions ; violent reaction to HCL; diffuse wavy boundary to:

84-167+ cm Reddish yellow (7.5YR 6/6) dry and strong brown (7.5YR 5/6) moist; fine sand; weak massive; dry soft; many very fine (<0.5 mm) tubular pores; few vertical cracks; few very fine (<1 mm) fibrous roots; 1% soft calcareous concretions ; violent reaction to HCL.

Soil Profile Description (ID 8)

Information on the site :

Soil Classification: USDA (1990): Sandy-skeletal; mixed, calcareous, thermic Family of Typic Torriorthents (FBEO)
ACSAD: NHR t 1 b: Typic Torriorthent
FAO/UNESCO: Cme : Eutric Cambisol
Location: W of sadr mulghan
Coordinates: Geographical : 35.19347 E/ 29.67935 N
JTM: 325150 E/ 285325 N
Elevation: 830 m asl
Landform: Position: Middle fan
Land System : 5/2 (Outwash fans and wadis derived from Basement and sandstone rocks)--5.2.5[GIS]
Land Facet: 6 (Younger fill, alluvial fan)
Microrelief: Class: Slightly uneven (25-50 cm)
Type: Undulating
Slope: Sloping (10 %) , convexoconcave to SW
Land Use : 3.4 Nat.browse + grazing
Plant /Crop: Zilla, Retem
Climate:Mean annual precipitation:
Mean annual temperature: Air : 18.4° C / Soil (50cm): 21.4° C
Soil moisture regime: Aridic
Precipitation zone: 50-100 mm p.a.

GENERAL INFORMATON ON THE SOIL:

Geology: Igneous acid [q5 Fluv.deposits ,sand,loess (Bender 1968)]
Parent Material: Alluvium (gravelly texture)
Drainage: Surface Runoff: Medium
Soil Drainage Class: Excessive
Surface Cover : Stones (25 %)
Surface Feature : Capping
Soil Surface Conditions: Soft
Erosion : Moderate gully erosion
Soil Depth : 260 cm +
Diagnostic Horizon or Property: -

PROFILE DESCRIPTION :

0-20 cm Pale brown (10YR 6/3) dry and brown (10YR 4/3) moist;very gravelly sandy loam ; moderate fine subangular blocky; dry soft; common very fine (<0.5 mm) tubular pores; many fine (1-2 mm) fibrous and woody roots; 50% sub-rounded granite coarse gravel (20-75 mm); weak CaCO3 coating ;violent reaction to HCL; clear wavy boundary to:

20-60 cm Light yellowish brown (10YR 6/4) dry and yellowish brown (10YR 5/4) moist; very gravelly loamy coarse sand ; weak fine subangular blocky; dry soft; moist very friable; many fine (1-2 mm) fibrous and woody roots ; 40% sub-rounded granite coarse gravel (20-75 mm); 1% small (< 5 mm) soft calcareous concretions; weak CaCO3 coating; violent reaction to HCL; clear smooth boundary to:

60-205 cm Very Pale brown (10YR 7/4) dry and yellowish brown (10YR 5/4) moist; extremely gravelly coarse sand; very weak massive; dry loose; few medium (2-5 mm) fibrous and woody roots; 65% sub-rounded granite fine gravel (2-5 mm); weak CaCO3 coating ;violent reaction to HCL; abrupt smooth boundary to:

205-260+ cm Very Pale brown (10YR 7/4) dry and yellowish brown (10YR 5/4) moist; very gravelly coarse sand; very weak massive; dry soft; 40% sub-rounded granite coarse gravel (20-75 mm); medium (5-15 mm) concentrations; weak CaCO3 coating ;violent reaction to HCL;

Soil Profile Description (ID 9)

Information on the site :

Soil Classification: USDA (1990): Fine-silty , mixed, calcareous, hyperthermic Family of Ustic Torriorthents (KEBL)
ACSAD: NHR i 3 a: Ustic Torriorthent
FAO/UNESCO: CMe : Eutric Cambisol
Location: 3.2km WSW Suleikhat
Coordinates: Geographical : 35.57056 E/ 32.32078 N
JTM: 365415 E/ 577660 N
Elevation: -260 m asl
Landform: Position: Convex hill terrace
Land System : 1/2 (Plain and badlands on Lisan lacustrine deposits)--1.3.2[GIS]
Land Facet: 2 (Steeply dissected badland slopes)
Microrelief: Class:
Type:
Slope: Flat (0 %)
Land Use : 3.4 Nat.browse + grazing
Plant /Crop: Grasses, Osalan, : 40 % groundcover
Climate:Mean annual precipitation:
Mean annual temperature: Air : 23.0° C / Soil (50cm): 25.8° C
Soil moisture regime: Transition aridic-ustic
Precipitation zone: 250-300 mm p.a.

GENERAL INFORMATON ON THE SOIL:

Geology: Unconsolidated alluvium : Marl/limestone [q2 Lac.LSt,sandy marls(Lis)(Bender 1968)]
Parent Material: Alluvium
Drainage: Surface Runoff: Rapid
Soil Drainage Class: Poor
Surface Cover :
Surface Feature : Capping (80 %)
Soil Surface Conditions: Moist / Slightly hard
Erosion : Severe sheet erosion
Soil Depth : 115 cm (Paralithic contact)
Diagnostic Horizon or Property: --

PROFILE DESCRIPTION :

0-20 cm Olive (5YR 5/3) moist; silty clayloam; weak medium subangular blocky breaking to weak fine subangular blocky; moist friable; very sticky; moderately plastic; few (<2 %) medium (5-15 mm) distinct mottles (10YR 5/8); common fine (0.5-2 mm) tubular pores; many fine (1-2 mm) fibrous roots; strong reaction to HCL; clear smooth boundary to:

20-60 cm Light olive gray (5YR 6/2) moist; silty clayloam; strong medium platy breaking to weak medium subangular blocky; moist firm; moderately sticky; moderately plastic; common (2-20 %) medium (5-15 mm) distinct mottles (10YR 5/8); common fine (0.5-2 mm) tubular pores; few fine (1-2 mm) fibrous roots; strong reaction to HCL; abrupt smooth boundary to:

60-115 cm Light olive gray (5YR 6/2) moist; silty clayloam; strong fine platy breaking to weak fine subangular blocky; moist friable; moderately sticky; moderately plastic; few (<2 %) medium (5-15 mm) distinct mottles (10YR 5/6); few very fine (<1 mm) fibrous roots; strong reaction to HCL; abrupt smooth boundary to:

115+ cm Paralithic contact to Marl / limestone

115-170 cm Light olive gray (5YR 6/2) moist; silty clayloam; strong fine platy breaking to medium subangular blocky; moist friable; moderately sticky; moderately plastic; few (<2 %) medium (5-15 mm) distinct mottles (10YR 5/6); common fine (0.5-2 mm) tubular pores; strong reaction to HCL.

Soil Profile Description (ID 10)

Information on the site :

Soil Classification: USDA (1990): Sandy-skeletal, mixed, calcareous, thermic Family of Typic Torriorthents (KEBN)
ACSAD: NHR t 1 a: Typic Torriorthent
FAO/UNESCO: CMe : Eutric Cambisol
Location: 2.5km W of Mahattat
Coordinates: Geographical : 35.95235 E/ 30.81969 N
JTM: 399770 E/ 410821 N
Elevation: 809 m asl
Landform: Position: Middle slope
Land System : 14/12 (Assoc. of old and recent alluivial/ lacustrine deposits)--14.12.0 [GIS]
Land Facet: 3 (Coalesced fan/pediment of older alluvial plain)
Microrelief: Class: Slightly uneven (25-50 cm)
Type: Undulating
Slope: Gently sloping (2 %), irregular to N
Land Use : 3.4 Nat.browse + grazing
Plant /Crop: Halox sal
Climate:Mean annual precipitation:
Mean annual temperature: Air : 17.8° C / Soil (50cm): 20.7° C
Soil moisture regime: Aridic
Precipitation zone: 50-100 mm p.a.

GENERAL INFORMATON ON THE SOIL:

Geology: [q5 Fluv.deposits,sand ,loess (Bender 1968)]
Parent Material: Alluvium
Drainage: Surface Runoff: Rapid
Soil Drainage Class: Somewhat excessive
Surface Cover : Stones (2%)
Surface Feature :
Soil Surface Conditions: Dry / Soft
Erosion : Slight rill erosion
Soil Depth : 190 cm +
Diagnostic Horizon or Property: --

PROFILE DESCRIPTION :

0-23 cm Light yellowish brown (10YR 6/4) dry and yellowish brown (10YR 5/6) moist; very gravelly sandy clayloam;weak medium subangular blocky; dry slightly hard; moderately plastic; few very fine (<0.5 mm) tubular pores; few very fine (<1 mm) fibrous roots; 40 % sub-rounded chert coarse gravel (20-75 mm); strong reaction to HCL; clear wavy boundary to:

23-50 cm Light yellowish brown (10YR 6/4) dry and yellowish brown (10YR 5/6) moist; extremely gravelly loamy fine sand; many medium (2-5 mm) spherical pores; few very fine (<1 mm) fibrous roots; 90 % rounded chert gravel (5-20 mm); strong reaction to HCL; clear wavy boundary to:

50-70 cm Light yellowish brown (10YR 6/4) dry and yellowish brown (10YR 5/6) moist; extremely gravelly sand; single grain; dry loose; non-plastic; common fine (0.5-2 mm) spherical pores; few very fine (<1 mm) fibrous roots; 60 % rounded chert gravel (5-20 mm); strong reaction to HCL; clear wavy boundary to:

70-124 cm Light yellowish brown (10YR 6/4) dry and yellowish brown (10YR 5/6) moist; extremely gravelly loamy fine sand; single grain; dry loose; non-plastic; many medium (2-5 mm) spherical pores; 90% rounded chert gravel (5-20 mm); strong reaction to HCL; clear wavy boundary to:

124-190+ cm Light yellowish brown (10YR 6/4) dry and yellowish brown (10YR 5/6) moist; extremely gravelly loamy fine sand; single grain; moist compact; 80% chert coarse gravel (20-75 mm); strong reaction to HCL.