

PEDON 14

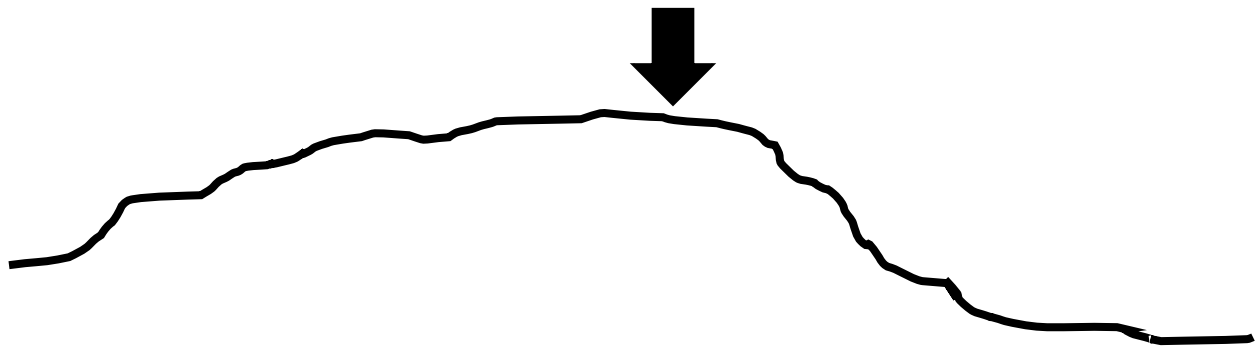
SITE INFORMATION

This soil is found near San German, Puerto Rico. This soil formed in iron-rich residuum weathered from serpentinite bedrock. The climate is humid tropical with a mean annual temperature of about 75 degrees F., and a mean annual precipitation of about 57 inches. The site has mixed forest and an intact thin organic layer that is not described. This site has not been in agriculture. The site has no ponding or flooding.

LANDFORM

This soil is found on a stable mountain tops in humid mountains and valleys region in Puerto Rico. The slope is 5%.

HILLSLOPE POSITION



SOIL MOISTURE AND TEMPERATURE REGIME

Soil moisture regime is udic and the hyperthermic soil temperature regime.

SOIL PIT INFORMATION

Clay films on ped faces were not observed in the 1st, 2nd, 3rd, and 4th horizon. Clay films on ped faces were observed in the 5th and 6th horizons. Fine iron concretions are found in the 4th, 5th, and 6th horizons, which are not easily seen in the pedon image. These are not plinthite and likely weathered from the Serpentinite. The clay in all horizons is slightly sticky and slightly plastic.

PEDON 14

CHARACTERIZATION DATA

| Horizon | Org. C (%) | pH (1N KCl) | Base sat. (%) | CEC (cmol+/kg clay) | ECEC (cmol+/kg clay) | Weatherable minerals* (%) |
|---------|------------|-------------|---------------|---------------------|----------------------|---------------------------|
| 1 | 0.8 | 5.8 | 45 | 8.0 | 5.0 | 12 |
| 2 | 0.4 | 5.4 | 44 | 2.2 | 1.4 | 9 |
| 3 | 0.3 | 5.0 | 40 | 2.0 | 1.3 | 8 |
| 4 | 0.2 | 4.7 | 35 | 1.8 | 1.1 | 6 |
| 5 | 0.1 | 4.5 | 30 | 1.5 | 1.0 | 3 |
| 6 | 0.0 | 5.1 | 28 | 1.0 | 0.5 | 2 |

*measured in the fine and very fine sand fractions

SITE IMAGES



PEDON 14



PEDON 14

PEDON IMAGE



PEDON 14

SCORECARD

SCORECARD VIRTUAL NATIONAL SOIL JUDGING CONTEST APRIL 5-16, 2021

| | |
|-------|-------|
| 1. | _____ |
| 2. | _____ |
| 3. | _____ |
| 4. | _____ |
| 5. | _____ |
| Total | _____ |

Contestant: PRACTICE
 School: _____
 Pedon Number: 14

| 1. Soil Morphology | | | | Score: | | | | | | | | | | | | | | | | | |
|--------------------|-----------------|----------|----------|-----------|---------|----------|----------|--------------|--------|-------------|-----------|-----|-----------|------|-------|---------------|----------------|-------------|-------------|------|--|
| Horizonation | | | Boundary | | Texture | | | | | Color | | | Structure | | Cons. | Soil Features | | Score (35) | | | |
| Master Pre. (5) | Master Let. (5) | Sub. (5) | No. (5) | Dep. (cm) | Dist. | Sand (%) | Silt (%) | Clay (%) (5) | CF (%) | CF mod. (5) | Class (5) | Hue | Value | Chr. | Grade | Shape | Moist Strength | Redox Depl. | Redox Conc. | Eff. | |
| | | | | 12 | C | 22 | 10 | | 1 | | | 10R | 3 | 3 | 3 | 6R | F1 | | | | |
| | | | | 60 | C | 20 | 11 | | 1 | | | 10R | 3 | 3 | 2 | SRK | F1 | | | | |
| | | | | 91 | G | 19 | 12 | | 1 | | | 10R | 3 | 4 | 1 | SRK | F1 | | | | |
| | | | | 130 | G | 16 | 13 | | 2 | | | 10R | 3 | 4 | 1 | SRK | FR | | | | |
| | | | | 160 | G | 16 | 12 | | 3 | | | 10R | 3 | 4 | 1 | SRK | FR | | | | |
| | | | | 200+ | - | 16 | 11 | | 5 | | | 10R | 3 | 4 | 1 | SRK | F1 | | | | |

PEDON 14

2. Soil Profile Characteristics

| | | | | | |
|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hydraulic Conductivity (10) | | Loading Rate at 75 cm (5) | Effective Soil Depth (5) | Water Retention Difference (5) | Soil Wetness Class (5) |
| Surface (5) <input type="checkbox"/> High <input type="checkbox"/> Mod. <input type="checkbox"/> Low | Limiting Layer (5) <input type="checkbox"/> High <input type="checkbox"/> Mod. <input type="checkbox"/> Low | _____ gpd/ft ² (3) Ref. (2) _____ | <input type="checkbox"/> V. shallow (<25 cm) <input type="checkbox"/> Shallow (25 to 49 cm) <input type="checkbox"/> Mod. deep (50 to 99 cm) <input type="checkbox"/> Deep (100 to 149 cm) <input type="checkbox"/> Very deep (≥150 cm) | <input type="checkbox"/> Very low (<7.5 cm) <input type="checkbox"/> Low (7.5 to <15 cm) <input type="checkbox"/> Mod. (15 to <22.5 cm) <input type="checkbox"/> High (≥22.5 cm) | <input type="checkbox"/> (>150 cm) <input type="checkbox"/> (100 to 150 cm) <input type="checkbox"/> (50 to 99 cm) <input type="checkbox"/> (25 to 49 cm) <input type="checkbox"/> (<25 cm) |

Score: _____

3. Site Characteristics

| | | | | | |
|-------------------------|---------------------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parent Material (GIVEN) | Landform (GIVEN) | Slope (GIVEN) | Slope Profile (5) | Surface Runoff (5) | Eros. Pot. (5) |
| RESIDUUM | UPLAND [STARLE MOUNTAIN TOP] | 5% | <input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input type="checkbox"/> Backslope <input type="checkbox"/> Footslope <input type="checkbox"/> Toeslope <input type="checkbox"/> None | <input type="checkbox"/> Ponded <input type="checkbox"/> Very slow <input type="checkbox"/> Slow <input type="checkbox"/> Medium <input type="checkbox"/> Rapid <input type="checkbox"/> Very rapid | <input type="checkbox"/> Very Low <input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <input type="checkbox"/> Very High |

Score: _____

4. Soil Classification

| | | | | |
|--------------|---------------------------------------------------------|------------|---------------|------------------|
| Epipedon (5) | Subsurface horizons and/or diagnostic features (5 each) | Order (10) | Suborder (10) | Great Group (10) |
| | | | | |

Score: _____

5. Interpretations

| | | | | | |
|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Houses with Basements (3) | Septic Tank Abs. Fields (3) | Local Roads and Streets (3) | Corn (3) | Hopyards (3) | Created Wetlands (3) |
| <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason # (2): _____ | <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason # (2): _____ | <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason (2): _____ | <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason (2): _____ | <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason (2): _____ | <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason (2): _____ |

Score: _____