

Pedon 3

The pedon 3 series consists of very deep, well drained saline-sodic soils that formed in granitic alluvium. Pedon 3 soils are on alluvial fans and basin rims and have slopes of 0 to 2 percent. The mean annual precipitation is about 6 inches, and the mean annual temperature is about 64 degrees F.

TYPICAL PEDON: Pedon 3 silt loam, on a slope of less than 1 percent in rangeland at an elevation of 235 feet. Common plants are red brome, atriplex spp., and filaree. (Colors are for dry soil unless otherwise stated. When described on July 24, 1974, the soil was dry throughout the profile.)

_____--0 to ½ inch; pale brown (10YR 6/3) silt loam, yellowish brown (10YR 5/4) strong thin platy structure; slightly hard, friable, nonsticky and slightly plastic; common very fine roots; many very fine interstitial and tubular pores, and common very fine and fine vesicular pores; slightly effervescent, carbonates disseminated; moderately alkaline (pH 8.2); abrupt smooth boundary. (1/2 to 1 inch thick)

_____--1/2 to 2 inches; pale brown (10YR 6/3) silt loam, yellowish brown (10YR 5/4) moist; strong coarse subangular blocky structure; slightly hard, friable, nonsticky and slightly plastic; common very fine roots; many very fine tubular and interstitial pores; strongly effervescent, carbonates disseminated; moderately alkaline (pH 8.2); abrupt smooth boundary. (0 to 2 inches thick)

_____--2 to 5 inches; very pale brown (10YR 8/3) silt loam, dark brown (10YR 3/3) moist; moderate coarse subangular blocky structure; hard, friable, nonsticky and slightly plastic; common very fine roots; many very fine, few fine and medium tubular and many very fine interstitial pores; moderately alkaline (pH 8.2); abrupt wavy boundary. (2 to 10 inches thick)

_____--5 to 9 inches; light yellowish brown (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; strong medium columnar structure; extremely hard, friable, sticky and plastic; many very fine roots; many very fine tubular and interstitial pores; many thin clay films on peds and few thin clay films in pores; slightly effervescent, carbonates disseminated; moderately alkaline (pH 8.4); abrupt smooth boundary. (0 to 8 inches thick)

_____--9 to 23 inches; pale brown (10YR 6/3) loam, brown (10YR 5/3) moist; strong coarse prismatic structure; slightly hard, friable, sticky and plastic; common very fine roots; common very fine tubular and many very fine interstitial pores; few thin clay films on peds and in pores; violently effervescent; carbonates segregated as few fine irregularly shaped soft masses; very strongly alkaline (pH 9.2); gradual smooth boundary. (8 to 20 inches thick)

_____--23 to 37 inches; pale brown (10YR 6/3) loam, brown (10YR 5/3) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular and many very fine interstitial pores; very few thin clay bridges between mineral grains; strongly effervescent, carbonates segregated as few fine irregularly shaped soft masses; very strongly alkaline (pH 9.2); clear smooth boundary. (5 to 23 inches thick)

_____--37 to 55 inches; very pale brown (10YR 7/3) loam, light brownish gray (10YR 6/2) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; few very fine roots; many very fine tubular and interstitial pores; strongly effervescent, carbonates segregated as few fine irregular shaped filaments; very strongly alkaline (pH 9.2); clear smooth boundary. (16 to 34 inches thick)

_____--55 to 60 inches; light gray (10YR 7/2) fine sandy loam, grayish brown (10YR 5/2) moist; massive; slightly hard, friable, nonsticky and nonplastic; many very fine interstitial pores; strongly alkaline (pH 9.0).

TYPE LOCATION: Kern County, California; about 11 miles west of Wasco, about 2.5 miles north of Semitropic School, and 2550 feet south and 1300 feet west of the northeast corner of section 30, T.26 S., R.23 E.

GEOGRAPHIC SETTING: Pedon 3 soils are on alluvial fans and basin rims and have slopes of 0 to 2 percent. The soils formed in alluvium from granitic rock sources. Elevations are 200 to 400 feet. The climate is arid with dry summers and cool, somewhat moist winters. Mean annual precipitation is 5 to 8 inches. Mean January temperature is 45 degrees F.; mean July temperature is 83 degrees F.; mean annual temperature is 62 to 65 degrees F. Frost-free is 250 to 300 days.