

Pedon 18

Pedon 18 consists of very deep, moderately well drained soils that formed in moderately fine and fine textured alluvium derived from mostly sandstone and shale. These soils are on alluvial fans, interfan basins and basin rims. Slopes are 0 to 9 percent. The mean precipitation is about 15 inches and the mean annual air temperature is about 61 degrees F.

_____--0 to 5 inches; dark grayish brown (2.5Y 4/2) clay, very dark grayish brown (10YR 3/2) moist; strong medium granular structure in upper 1 or 2 inches and strong coarse prismatic structure below; very hard, very firm, sticky and very plastic; many fine roots; common very fine tubular pores; slightly acid (pH 6.5); clear smooth boundary. (5 to 8 inches thick).

_____--5 to 21 inches; dark grayish brown (2.5Y 4/2) clay, very dark grayish brown (10YR 3/2) moist; few fine prominent strong brown (7.5YR 5/6) masses of iron accumulations, moist; strong very coarse prismatic structure; very hard, very firm, sticky and very plastic; few fine roots; common very fine tubular pores; strongly effervescent, fine soft masses of lime in lower 4 inches; neutral (pH 7.0); clear wavy boundary. (12 to 16 inches thick).

_____--21 to 32 inches; brown (10YR 5/3) clay, dark brown (10YR 3/3) moist; strong coarse prismatic structure; very hard, very firm, sticky and very plastic; many fine roots; common very fine tubular pores; prominent intersecting slickensides; strongly effervescent, fine soft masses of lime; moderately alkaline (pH 8.0); clear wavy boundary. (8 to 12 inches thick).

_____--32 to 40 inches; brown (10YR 5/3) clay, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3) moist; moderate medium prismatic structure; hard, firm, sticky and very plastic; few fine roots; many very fine tubular pores; distinct intersecting slickensides; slightly effervescent, fine soft masses of lime; moderately alkaline (pH 8.0); gradual smooth boundary. (8 to 10 inches thick).

_____--40 to 50 inches; pale brown (10YR 6/3) clay, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3); moist; weak coarse angular blocky structure; hard, firm, sticky and very plastic; few fine roots, many very fine tubular pores; distinct intersecting slickensides; slightly effervescent; fine soft masses of lime; moderately alkaline (pH 8.0); diffuse boundary. (8 to 10 inches thick).

_____--50 to 62 inches; yellowish brown (10YR 5/6) clay, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3); few fine distinct strong brown (7.5YR 5/6) mottles, yellowish brown (10YR 5/6) moist; weak fine and medium angular blocky structure; hard, firm, sticky and very plastic; many very fine tubular pores; slightly effervescent, fine soft masses of lime; moderately alkaline (pH 8.0).

TYPE LOCATION: Solano County, California; about 2 1/2 miles northeast of Elmira; about 200 feet east and 50 feet north of the SW corner of section 16, T.6 N., R.1 E., MDB&M.
38 degrees North latitude, 21 minutes, 33 seconds, and 121 West longitude, 52 minutes, 38 seconds.

GEOGRAPHIC SETTING: These soils are on alluvial fans, in interfan basins, basin rims and basins at elevations below 1,200 feet. They formed in moderately fine and fine textured alluvium derived from sandstone and shale or other mixed rock sources. Slopes are 0 to 9 percent. The soils are in a dry climate of relatively hot dry summers and cool moist winters. Mean annual precipitation ranges from 9 to 28 inches. Mean January temperature is 47 degrees F., mean July temperature is 72 degrees F, mean annual temperature ranges from 58 degrees to 63 degrees F. Frost-free season is 185 to 300 days.

DRAINAGE AND PERMEABILITY: Moderately well drained; negligible to high runoff, slow to very slow permeability. Also some pedons have a water table between depth of 4 and 6 feet. Some areas are subject to rare, occasional or frequent flooding.

USE AND VEGETATION: Used for growing irrigated crops such as tomatoes, sugar beets, beans or grain sorghum, dry farmed to small grains, and irrigated and dryland pasture. Native vegetation is a dense stand of annual grasses and forbs.

DISTRIBUTION AND EXTENT: Western edge of the Sacramento Valley and intermountain valleys of the Coast Range of northern California.

REMARKS: Redoximorphic features in the A horizon are commonly associated with rice culture.