LOCATION OLANCHA

CA

Tentative Series TBV/ROH/KKC/DJE 9/80

## **OLANCHA SERIES**

The Olancha series consists of moderately deep, somewhat excessively drained soils formed in material weathered from granitic and metamorphic rocks. Olancha soils are on mountain slopes and ridges with slopes of 2 to 50 percent. The mean annual precipitation is 18 inches and the mean annual temperature is 40 degrees F.

**TAXONOMIC CLASS:** Sandy-skeletal, mixed, frigid Entic Ultic Haploxerolls

**TYPICAL PEDON:** Olancha very stony loamy coarse sand - on a southeast facing slope of 25 percent with basin big sagebrush at 8,200 feet elevation. (Colors are for dry soil unless otherwise stated. When described on 6/15/77 the soil was dry).

**01**--1/4 inch to 0; decomposing sagebrush litter.

**A1**--0 to 16 inches; brown (10YR 5/3) extremely stony loam coarse sand, very dark grayish brown (10YR 3/2) moist; single-grain; loose, nonsticky and nonplastic; many very fine and fine roots; many very fine and fine interstitial pores; 10 percent pebbles, 10 percent cobbles, 10 percent stones; neutral (pH 6.6); gradual smooth boundary. (10 to 16 inches thick).

C1--16 to 30 inches; strong brown (7.5YR 5/6) very stony loamy coarse sand, brown (7.5YR 5/4) moist; single-grain and massive; loose, nonsticky and nonplastic; common very fine and fine roots; common very fine and fine interstitial pores; 40 percent pebbles, 5 percent cobbles, 15 percent stones; neutral (pH 6.8); gradual smooth boundary. (10 to 14 inches thick).

C2r--30 inches; strong brown (7.5YR 5/6) weathered granitic material which retains original rock structure.

**TYPE LOCATION:** Tulare County, California; Inyo National Forest, Mt. Whitney Range District. Three-quarters of a mile north of the South Fork Kern River jeep trail and Summit Creek (Mdw.) jeep trail intersection, then 20 feet east of trail in SW 1/4 sec. 17, T.20S., R.36E., MDB&M.

RANGE IN CHARACTERISTICS: Depth to a paralithic contact range from 20 to 40 inches. The mollic epipedon is 10 to 16 inches thick. The soil between a depth of about 23 inches and the paralithic contact is moist in some part from November to mid-July and dry the rest of the year. Soil temperature is greater than 41 degrees F. from mid-April to mid-October. The mean annual soil temperature is 40 degrees to 45 degrees F. The mean summer soil temperature is 60 degrees to 63 degrees F. Cobbles, stones, and gravel cover 50 to 60 percent of the soil surface. Rock fragment content averages 30 to 80 percent throughout the profile.

The A horizon is loamy sand or loamy coarse sand and is modified by 30 to 50 percent rock fragments. Color has not varied.

The C horizon has dry color of 7.5YR 5/6, 10YR 6/3 or 6/4, and moist color of 7.5YR 5/4, 10YR 4/3 or 5/4. It is loamy sand or loamy coarse sand and is modified by 60 to 90 percent rock fragments.

**COMPETING SERIES:** These are the <u>Chesaw</u> and <u>Laycock</u> series in other families. Chesaw soils lack a paralithic contact within 40 inches and have a base saturation of greater than 75 percent. Laycock soils have loamy textures.

**GEOGRAPHIC SETTING:** Olancha soils are on mountain slopes and ridges. Slopes are 2 to 50 percent. They have formed in material weathered from Pre-Cenozoic granitic and metamorphic rocks. Elevations are 8,000 to 9,500 feet. The climate is semiarid with cool moist winters and warm dry summers. Mean annual precipitation is 15 to 18 inches which occurs mostly as snowfall. Mean annual temperature is 35 to 45 degrees F., and the frost-free season is about 75 to 125 days.

**GEOGRAPHICALLY ASSOCIATED SOILS:** These are the <u>Cagwin</u>, <u>Monache</u> (T), and <u>Toem</u> series. All these soils are non-skeletal. In addition, Toem soils are less than 20 inches to bedrock.

**DRAINAGE AND PERMEABILITY:** Somewhat excessively drained; slow runoff, rapid permeability.

**USE AND VEGETATION:** Used for wildlife land, watershed, recreation land and to a limited extent, summer rangeland for livestock. Vegetation is basin big sagebrush, rothrock sagebrush, bitterbrush, mountain mahogany, and gooseberry with scattered western juniper and lodgepole pine.

**DISTRIBUTION AND EXTENT:** The southern mountain area of the Sierra Nevada Mountain Range of California. The soils of this series are not extensive; their total acreage is about 8,000 acres.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

**SERIES PROPOSED:** Sequoia National forest Area, Tulare County, California, 1980. The name is taken from Olancha Peak.

OSED scanned by SSQA. Last revised by state on 9/80.

National Cooperative Soil Survey U.S.A.