

LOCATION CORTINA
Established Series
Rev. SBJ/CAF/JJJ/SBS
4/97

CA

CORTINA SERIES

The Cortina series consists of very deep, somewhat excessively drained soils on alluvial fans and floodplains. These soils formed in gravelly alluvium from mixed rock sources. Slope ranges from 0 to 15 percent. The mean annual precipitation is about 16 inches and the mean annual temperature is about 62 degrees F.

TAXONOMIC CLASS: Loamy-skeletal, mixed, superactive, nonacid, thermic Typic Xerofluvents

TYPICAL PEDON: Cortina very gravelly sandy loam, rangeland. (Colors are for dry soil unless otherwise noted.)

Ap--0 to 8 inches; light brownish gray (2.5Y 6/2) very gravelly sandy loam, dark grayish brown (2.5Y 4/2) moist; massive; slightly hard, friable, nonsticky and nonplastic; common very fine roots; many very fine interstitial pores; gravel is mostly quartzite, chert and sandstone; slightly acid (pH 6.2); clear smooth boundary. (6 to 10 inches thick)

C1--8 to 32 inches; light brownish gray (2.5Y 6/2) very gravelly sandy loam, dark grayish brown (2.5Y 4/2) moist; massive; slightly hard, friable, nonsticky and nonplastic; common very fine roots upper part, few very fine roots lower part; many very fine and fine interstitial pores; slightly acid (pH 6.4); abrupt smooth boundary. (12 to 30 inches thick)

C2--32 to 60 inches; light gray and light brownish gray (2.5Y 7/2, 6/2) very gravelly sand, light brownish gray (2.5Y 6/2) moist; single grained; loose, nonsticky and nonplastic; many very fine and fine interstitial pores; neutral (pH 7.0).

TYPE LOCATION: Glenn County, California; about 2 1/2 miles southeast of Orland and north of Haigh Landing Field; SW1/4 SE1/4 section 25, T.22 N., R.3 W.

RANGE IN CHARACTERISTICS: The mean annual soil temperature is about 60 degrees to 65 degrees F. and the soil temperature usually is not below 47 degrees F. at any time. The soil between depths of about 8 to 25 inches is usually dry all the time from May or early June until early December and is moist in some or all parts the rest of the year. Rock fragments average 35 to 65 percent in all parts of the profile. Individual horizons, particularly near the surface, have less than 35 percent rock fragments in some pedons. Most fragments are of gravel size, though some pedons have up to 20 percent cobbles and a few larger stones. Dominant texture throughout the profile is sandy loam, but individual horizons are loamy sand or loam. In many pedons, lower horizons are loamy sand or sand and rock fragments are more numerous. Some pedons have a distinct A horizon and in other pedons there is little horizon differentiation. Organic matter decreases irregularly with depth. Average organic matter is less than 1 percent to a depth of more than 7 inches. The soil is 10YR 7/3, 6/2, 6/3, 6/4, 5/2, 5/3, 5/4, 4/2; 2.5Y 7/2, 6/2 and 5/2. Moist values are 1 or 2 units darker. The soils are moderately acid to slightly alkaline.

COMPETING SERIES: This is the [Anderson](#) (CA) series. Anderson soils have hue of 7.5YR or 5YR below the surface horizon.

GEOGRAPHIC SETTING: The Cortina soils are nearly level to strongly sloping and are in small valleys and on alluvial fans and floodplains at elevations of 25 to 2,400 feet. They formed in recent gravelly and cobbly alluvium derived from old terrace deposits and a variety of resistant metamorphic and sedimentary rock sources. The climate is dry subhumid mesothermal with warm to hot dry summers and cool moist winters. Mean annual precipitation is 10 to 40 inches. Average January temperature is 45 degrees to 51 degrees F., average July temperature is 67 degrees to 82 degrees F., and mean annual temperature is 58 degrees to 64 degrees F. The frost-free period is about 185 to 325 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Arbuckle](#), [Esparto](#), [Garretson](#), [Maywood](#), [Orland](#), [Yolo](#) and [Zamora](#) soils. All of these soils have less than 35 percent rock fragments. Also, Esparto and Zamora soils have argillic horizons and Garretson, Orland and Yolo soils have more than 18 percent clay.

DRAINAGE AND PERMEABILITY: Somewhat excessively drained; negligible to low runoff; rapid permeability.

USE AND VEGETATION: Used for livestock grazing as irrigated pasture and alfalfa, and for vineyards, fruit orchards, citrus fruits, milo and olives. Vegetation on uncultivated areas is annual grasses, forbs, valley oak, sycamore and black walnuts.

DISTRIBUTION AND EXTENT: Sacramento Valley and smaller valleys in the Coast Range in northern, central and southern California. These soils are moderately extensive in MLRA-14, 15, 17.

MLRA OFFICE RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Tehama County, California, 1962.

REMARKS: Diagnostic horizons and features recognized in this pedon are:

Ochric epipedon - the zone from the surface to a depth of 8 inches (Ap)

Runoff terminology adjusted 4/96 to the adjective criteria of the Soil Survey Manual, 10/93.