Key to Willamette-Umpqua Sub-humid Soils

Old Valley Filling Soils
(Main valley floor)

Derived from basaltic and sedimentary rocks

- Willamette — Brown soil; Brown to light brown subsoil; Drainage good
- Salem — Gravel substratum; Drainage good
- Hillsboro — Friable sandy substratum; Drainage good
- Salkum — Brown to reddish brown soil; Reddish brown to dull red subsoil; Compact, heavy textured subsoil, containing highly weathered, water-worn gravels; Drainage good
- Powell — Brown to light reddish brown soil; Light brown to yellowish brown friable lightly mottled with gray; Drainage good
- Clackamas — Dark brown to dark grayish brown soil; Dark brown to dark grayish brown subsoil; Gravel substratum, moderately compact; Drainage restricted
- Sifton — Brown to dark brown (high inert organic matter content loose and fluffy.); Brown subsoil; Loose water-worn gravel and stratified sand; Drainage free to excess
- Veneta — Light yellowish brown soil. Yellowish brown to dull yellow slightly compact upper subsoil; Yellow to dull yellow compact mottled and variegated with yellow, red, gray and purple and brown from weathered gravels; Yellow and variegated, gravelly and greatly weathered compact; Drainage fair to good
- Amity — Grayish brown to brown soil; Brown, yellow and gray mottled subsoil; Drainage restricted (Half whiteland)
- Dayton — Light brownish gray to gray soil; Drab, compact, impervious upper subsoil; Gray and brown mottled deeper subsoil; Drainage poor
- Concord — Brownish gray soil; Brown, yellow and gray mottled subsoil; Drainage poor (Gray Dayton surface on an Amity subsoil)
- Holcomb — Brown to grayish brown soil; Gray drab subsoil mottled with yellow, plastic compact clay; Drainage poor
- Courtney — Dark brown to black soil; Grayish brown to bluish gray subsoil mottled with iron stains; Gravel embedded in compact horizon; Yellowish brown gravel substratum; Drainage poor
- Waldo — Dull brown to dark brown soil; Light brown to reddish brown mottled slightly compact; Gray to yellowish brown mottled; Gray brown mottled with rusty brown very compact; Drainage poor

Derived from sedimentary rocks

- Grand Ronde — Brown to yellowish brown soil; Yellow to brownish mottled subsoil; Compact and heavy; Drainage poor
- Maxwell — Terrace Fans: Black, plastic clay; Drab, tough clay; Olive-drab tough clay; Yellowish clay; On Serpentine
- Sweeney — Terrace Footslopes: Dark brown to black granular; Dark brown, cloddy, vertical cracks; Drainage fair; On Diabase basalt and andesite
- Kerby — Old terrace: Light brown, reddish brown; Yellow-brown; Gray-brown hard basic gravels
- Drain — Low terrace: Dark gray-brown; Drab mottled stiff; Yellow-drab; Drainage poor
- Yoncolla — Old fans: Dull brown; Yellow-brown compact; Olive drab tight; Drainage impeded
- Band — Rich brown; Yellow-brown; Mottled Si. C. L.

Recent Alluvial Soils
(River and Stream Bottom Lands)

- Labish Peat — Organic soil; Dark brown granular; Brown fibrous; Fine sedimentary
- Chehalis — Derived from basaltic and sedimentary rocks: Brown soil; Brown subsoil; Drainage good
- Newberg — Sandy and porous; Drainage good
- Wapato — Dark brown to dark grayish brown soil; Drab to brown mottled subsoil; Drainage poor
- Cove — Dark brownish to black soil; Black to drab subsoil mottled; Heavy and impervious; Drainage poor
- Whiteson — Gray soil; Gray to drab mottled subsoil; Heavy and compact; Drainage restricted
- Sauvie — Dark brownish gray to gray soil; Gray brown and drab mottled subsoil; Substratum gray sandy material; Drainage poor
- Columbia — Brown soil; Brown subsoil; Drainage good
- Camas — Derived from basaltic rocks: Brown soil; Brown subsoil; Shallow gravel substratum; Drainage good
- Toutle — Gray to slate gray soil; Gray to slate gray subsoil; Drainage good to excessive
- Glide — Brown friable; Light yellow-brown tan pumiceous L. S; Gray L. S pumice loose; Yellow-gray; Rapid drainage
- Umpqua — Rich brown; Light brown; Deep; Drainage good (Darker than Chehalis)

Residual Soils
(Hill Lands)

Derived from Igneous Rocks

- Aiken — Red to pronounced reddish brown soil; Red subsoil; Drainage good
- Olympic — Brown to rusty brown or reddish brown soil; Brown subsoil; Drainage good
- Polk — Rich chocolate brown to reddish brown soil; Pronounced reddish brown to dull subsoil; Drainage good
- Cascade — Brown soil; Yellow brown to pale yellow subsoil; Yellow to dull yellow mottled sub-stratum; Friable in deeper part; Drainage good
- Irving — Gray to drab and mottled subsoil; Compact and heavy; Subdrainage restricted

Derived from Sedimentary Rocks

- Viola — Brown to grayish brown soil; Yellow brown to dull yellow upper subsoil mottled; Deeper subsoil of gray or drab heavy compact clay; Surface drainage good subsoil drainage poor
- Sites — Red to pronounced reddish brown soil; Red to yellowish red subsoil; Drainage good
- Melbourne — Brown to dark brown soil; Yellow to brownish yellow subsoil, mottled; Yellow mottled sub-stratum; Drainage good
- Dillard — Dark brown granular gravels; Smoky brown nut size clods; Tan or yellow brown fine gravels; Olive drab tough calcareous; Drainage impeded on basic intrusives
- Carlton — Light brown to light grayish brown soil; Light brown to light grayish brown sub-soils, mottled; Drainage fair to good

Soil Series Found in Humid Oregon Coastal Areas

Residual Soils
Hill lands

Igneous rock

- Daniels (Aiken-like) — Red to pronounced reddish brown soil; Red subsoil; Drainage good
- Coates — Dark brown mellow silty clay loam, contains small quantity of "shot"; Yellowish-brown moderately compact silty clay loam mottled in upper part; Bluish gray clay, highly mottled as above with yellow, orange, and rust-brown angular breakage

Sedimentary rock

- Astoria (Melbourne-like) — Dark brown; Yellowish brown; Drainage good
- Riverton — Light to chocolate brown silty clay loam to light clay; Reddish brown or yellowish clay to silty clay; Rests on sandstone or loose shale; Drainage good
- Myrtle — Dark-gray or reddish-brown clay; Bedrock shale and sandstone; Light brown to bright yellow clay; Drainage fair to good
- Winema — Black heavy loam to silty clay loam; Yellowish colored, heavy textured; Rust mottling and yellow and gray tough compact clay
- Meda — Rich brown mellow granular loam; Rich brown somewhat more compact loam containing a small quantity of sandstone fragments; Yellowish brown clay loam containing some rock fragments under one-half inch across; Light reddish or yellowish colored sandy clay loam like sandy loam until rubbed down when it assumes a slick or soapy feel; Deep materials are open and porous; Drainage excellent

Old Valley Filling Soils
Bench lands

- Necanicum (Willamette-like) — Brown; Brown friable; Drainage good
- Klaskanine (Salem-like) — Brown soil; Brown to light brown subsoil; Gravel substratum; Drainage good
- Cinnabar — Brown; Brown to yellow gravel highly weathered; Drainage fair
- Arago — Light brown friable; Brown to light brown; Red rock shale and sandstone; Drainage good
- Grande Ronde — Dark grayish brown; Gray brown highly mottled compact; Drainage poor
- Hebo — Black; Brownish gray highly mottled with gray and yellow stiff clay; Drainage poor
- Empire — Brown or reddish brown fine sandy loam friable; Dull yellow or yellowish brown (mottled gray-rust) sandy loam somewhat more consistent—many rounded concretions of iron cementation; Imperfectly stratified materials, sandy to clay loam much mottled, thin cemented dark brown seams representing an indistinct ortstein development; Drainage good

Recent Soils

Stream and river bottoms

- Nehalem (Chehalis-like) — Rich brown; Brown-yellow brown faintly mottled; Drainage good
- Dolph (Camas-like) — Brown soil; Brown subsoil; Shallow gravel substratum; Drainage good
- Brenner (Wapato-like) — Dark brown; Mottled grayish brown; Drainage poor
- Coquille (Sauvie-like) — Dark grayish brown; Brown, drab or bluish gray clay of silty texture frequently stratified, layers of peaty material and lighter textured sediments; Drainage poor

Windlaid

Derived from marine sand

- Blacklock — Ao 4-14; A 4-14; Gray 14-16 iron pan, iron stained and coated to 40 inches, olive drab under water
- Westport — Recent sand dunes: Gray to grayish brown; Gray low on O.M. sand (beach); Drainage excessive
- Gearhart — Old sand dunes: Dark grayish black; Brown fine sand with gray beach sand in deeper horizon; Drainage excessive
- Empire — Old dunes: Grayish brown; Gray mottled; Drainage rapid
- Warrenton — Very recent sand dunes: Dark grayish brown; Chocolate brown; Light-rusty brown mottled with iron stains; Drainage—often high water table

Tide flats

- Clatsop — Gray mottled, high in O.M.; Mottled gray clay heavy; Drainage poor

Organic Soils

Cumulose (peat)

- Spaulding peat — Forest litter, spongy mosses, brown woody peat; Yellowish-brown slightly decomposed mixed fibrous and woody peat; Yellow coarse fibrous peat; Drainage poor
- Brallier peat — Dark fibrous acid and sedge peat; Mossy brown raw acid peat on gray sand; Drainage poor, high water table

Semi-Humid (*Rogue River*) Soils

I. Residual Soils

A. From Igneous Rock Slopes

- Siskiyou — Granitics; Gray; Reddish-gray; Drainage good; On granitics
- Tolo — Metamorphics slate and greenstone; Light brown; Grayish to reddish-brown + gravels

B. From Basaltic Rock

- Holland — Brown to red-brown + iron pellets + granite stones; Yellow-brown; Red-brown; Drainage good; On granite
- Climax — Black; Dark gravels; On basalt
- Brownsboro — Light brown; Yellowish-brown + grit; Igneous rocks

C. From Sedimentary Rocks

- Hugo — Brown to dark brown + iron pellets + shale fragments; Reddish-brown compact; Drainage good; Shale, slate or sandstone
- Josephine — Pale yellow to reddish-yellow; Pale red, moderately compact; Drainage, good to fair; On shale

II. Alluvial Fans and Footslopes

A. From Granitic Material

- Barron — Brownish-gray; Yellowish-brown; On shale; Fair drainage
- Hanford — Light brown + gravels; Grayish-brown; On granitic gravels and rocks; Good drainage
- Clawson — Dark to black; Dark gray + gravels; On shales (or granitics)

B. From Greenstone

- Coleman — Light grayish brown and gravelly; Yellowish brown and gravelly; Good drainage
- Medford — Dark brown to black; Dark yellowish brown and gravels; Good drainage

C. From Basaltic Material

- Meyer — Light grayish brown; Yellowish brown; On sandstone and shale
- Coker — Dark brown; Dark yellowish brown + gravels; Gray calcareous at 36 inches +; On Basaltics

D. On Shale and Sandstone

- Phoenix — Dark brown to black + gravels; Yellowish brown

III. Old Terraces

- Agate — Hummocky reddish or yellowish brown + gravels; Yellowish red to br. cemented gravel; Light yellowish sandy loam; Poor drainage
- Antelope — Grayish black + gravels; Brown gravelly pan; Poor drainage
- Bellavista — Light grayish brown + gravels; Light brown; Waterworn gravels; Good drainage
- Jerome — Gray to light-brownish-gray gritty; Drab compact; Drainage impeded; On Granitics
- Kerby — Light brown, brown on yellow-brown concretionary; Reddish-yellow; Drainage good; On mixed rocks
- Corning — Dull red to brownish or yellowish red concretionary; Dull to bright red + dark gravels, heavy texture and compact; Drainage fair; On granitic and mixed gravels

IV. Recent Alluvial Soils

- Neil — Dark brown micaceous; Brown; On granitic mixed; Drainage good
- Evans — Buff to dark brown + gravels; Light brown; On sand and gravels granitic and mixed; Fair to good drainage
- Sams — Dark grayish brown; Light brown; Drainage fair