Vertisols are clay-rich soils that shrink and swell with changes in moisture content. During dry periods, the soil volume shrinks, and deep wide cracks form. The soil volume then expands as it wets up. The shrink/swell action creates serious engineering problems and generally prevents formation of distinct, well-developed horizons in these soils.

Globally, Vertisols occupy ~2.4% of the ice-free land area. In the US, they occupy ~2.0% of the land area and occur primarily in Texas.

Vertisols are divided into 6 suborders: Aquerts, Cryerts, Xererts, Torrerts, Usterts, and Uderts. Click here for more information about these suborders. Click here to view a map of their distribution in the US.

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SUBORDERS

Aquerts - Vertisols with a water table at or near the surface for much of the year

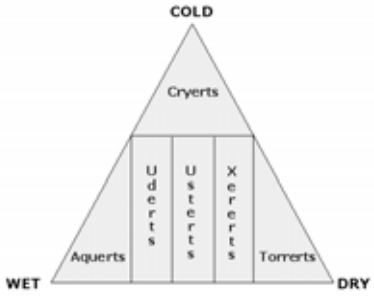
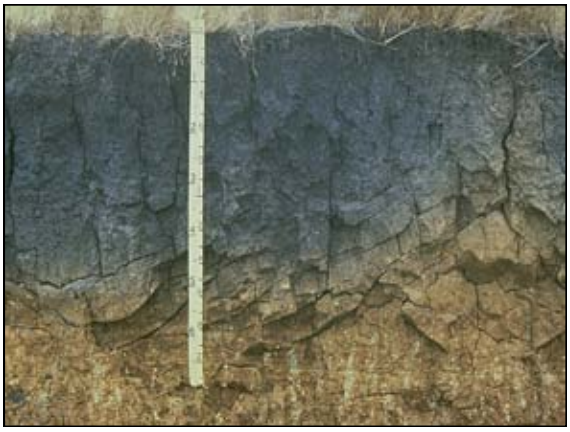
Cryerts - Vertisols of cold climates

Xererts - temperate Vertisols with very dry summers and moist winters

Torrerts - Vertisols of dry climates

Usterts - Vertisols of semiarid and subhumid climates

Uderts - Vertisols of humid climates

Click here to view suborder diagram

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