

# Vertisols

(from Latin *vertere*, meaning to turn)



(EM)

Soils having a clayey subsurface layer with polished and grooved ped surfaces (*slickensides*) or wedge-shaped or parallelepiped structural aggregates (*vertic horizon*) within 100 cm from the soil surface.

Vertisols have thirty percent or more clay between the soil surface and the vertic horizon. In addition, Vertisols exhibit wide cracks which open and close periodically upon drying and wetting.

In the Sudanese Vertisol above, the calcium carbonate-rich subsoil (the whitish substrate) is pushed upwards through the expansion and contraction of the clay minerals in the soil, leading to an irregularly shaped surface (*gilgai*).

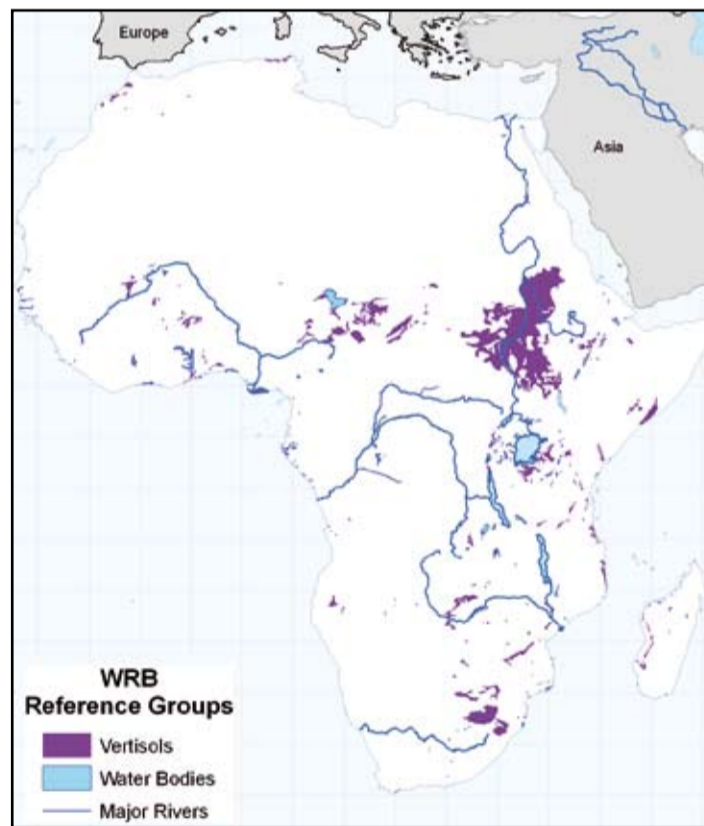
Vertisols occur dominantly in level landscapes under climates with a pronounced dry season. Vast areas occur in northeastern Africa (Sudan, Ethiopia) and southern Africa (Zambia, Zimbabwe and South Africa).

# March 2010



(BP)

Dry or rainfed farming on a Vertisol with surface cracking near Gezirah, Sudan.



Location of areas where Vertisols are the dominant soil. Vertisols cover around 4% of Africa.

## Monday Tuesday Wednesday Thursday Friday Saturday Sunday

1	2	3	4	5	6	7 ☾
8	9	10	11	12	13	14
15 ☺	16	17	18	19	20	21
22	23 ☾	24	25	26	27	28
29	30 ☺	31				