

ferralsols

(from Latin ferrum, iron, and aluminium)



Ferralsols are formed by the breakdown of silicates over long periods of time in humid tropical climates. The subsequent leaching of silicon, together with calcium, magnesium and potassium, results in the formation and accumulation of stable kaolinitic clay. Iron and aluminium oxides give Ferralsols their strong red and yellow colour. Levels of calcium and magnesium ions are very low.

This profile from Brazil shows the typical reddish colouring of Ferralsols. It displays a darker and less red surface horizon where the organic carbon content is high but may have been lost due to deforestation and agricultural practices.

Ferralsols have a distinctive soil structure (weak macro-aggregates but strong micro-aggregates) that makes them fairly porous and less susceptible to erosion than other soils of the tropics. Because of their limited capability to hold nutrients, they have low fertility. If they are to be used for agriculture, lime and fertilizer must be added. Agroforestry can help to enhance the organic matter and nutrient contents.

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Ferralsols occur in a wide variety of landforms and climates. This photograph shows tropical rainforest in the Amazonian basin.



Ferralsols are relatively common in Latin America and are often associated with Acrisols: they cover around 20% of the area shown on the map.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
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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 ☾					