

Tropical deforestation - Fig. 24.12



Nutrients often must be held within living biomass in tropical climates

1. Extensive shallow root mats, even running up the trunks.
2. Prevalence of mycorrhizal relationships.
3. Evergreen leaves, ...perhaps an anti-leaching mechanism. (release nutrients slowly so plants can benefit from all of them)
4. Alga/lichen epibiota: nitrogen fixation on the leaf surfaces. (surface leaf) Epiphyllous communities.
5. Very important for old, highly weathered, oligotrophic soils. Compare to eutrophic soils.

+ OLIGOTROPHIC SOILS = LOW in plant nutrients

+ EUTROPHIC SOILS = HIGH in plant nutrients

+ LATERITIC SOIL = an oligotrophic soil; an extensively weathered, geologically old soil

+ VOLCANIC SOILS = younger, less weathered, & loaded w/ mineral nutrients

Coweeta Lab Experimental Watershed

Fig. 24.13

