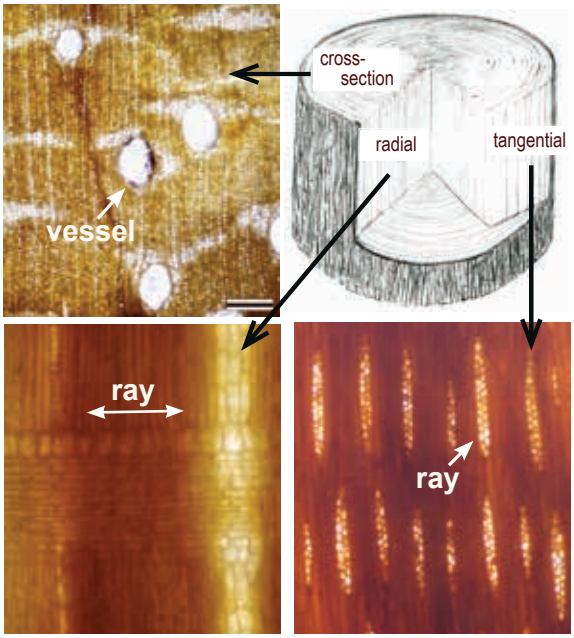
Diversity of Fossil Woods

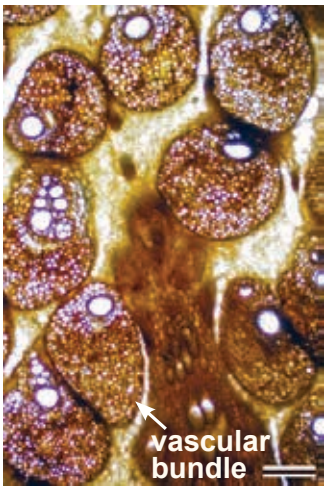
Home

Over 40 species of plants can be recognized among the permineralized specimens. All are flowering plants (Angiosperms), the largest and most diverse group of plants living currently. Two broad categories can be distinguished based on the anatomy.

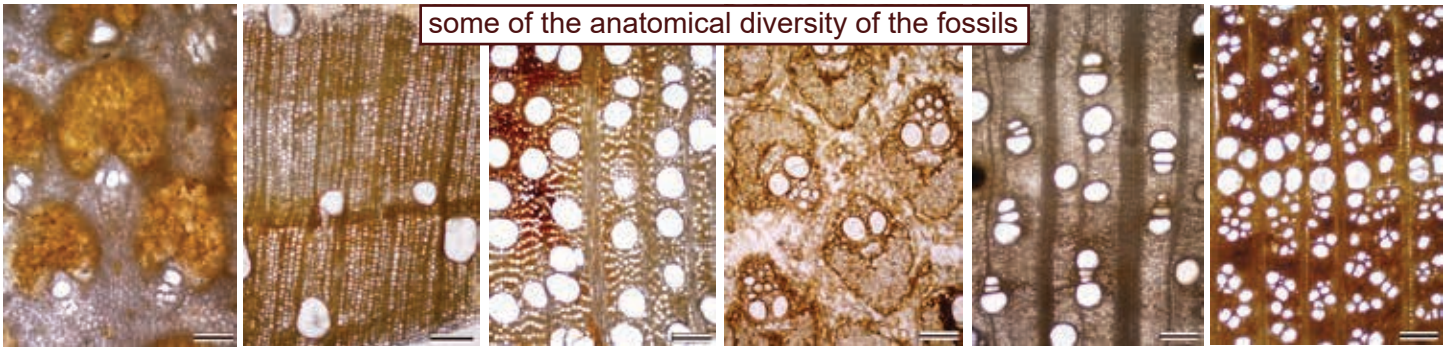


The majority of species have wood made up of vessels, fibers, and rays. The microscope sections on the left show a wood with large, widely spaced vesels (cross section) and rays arranged in a regular pattern (tangential section). The radial section shows a ray along its long side extending from the inside to the outside of the tree. The largest specimen in the fossil forest (below), with a trunk 0.75 m in diameter and more than 10 m long, has wood of this type. Scale is 0.25 mm.

About one-third of the species have water-conducting elements (vessels or xylem) in vascular bundles, as in the cross section on the right. In fossils of this type (monocots), surface features are often present that can aid in distinguishing species. The specimen on the left has persistent leaf bases whereas the one on the far left is smooth and has leaf scars. Both are palms.



some of the anatomical diversity of the fossils



Fossil wood only tells part of the story. Learn more by reading about the fossil leaves of Sexi.

Eocene Trees of the Piedra Chamana Petrified Forest, Sexi, Peru
Árboles Eocenos del Bosque Petrificado Piedra Chamana, Sexi, Perú

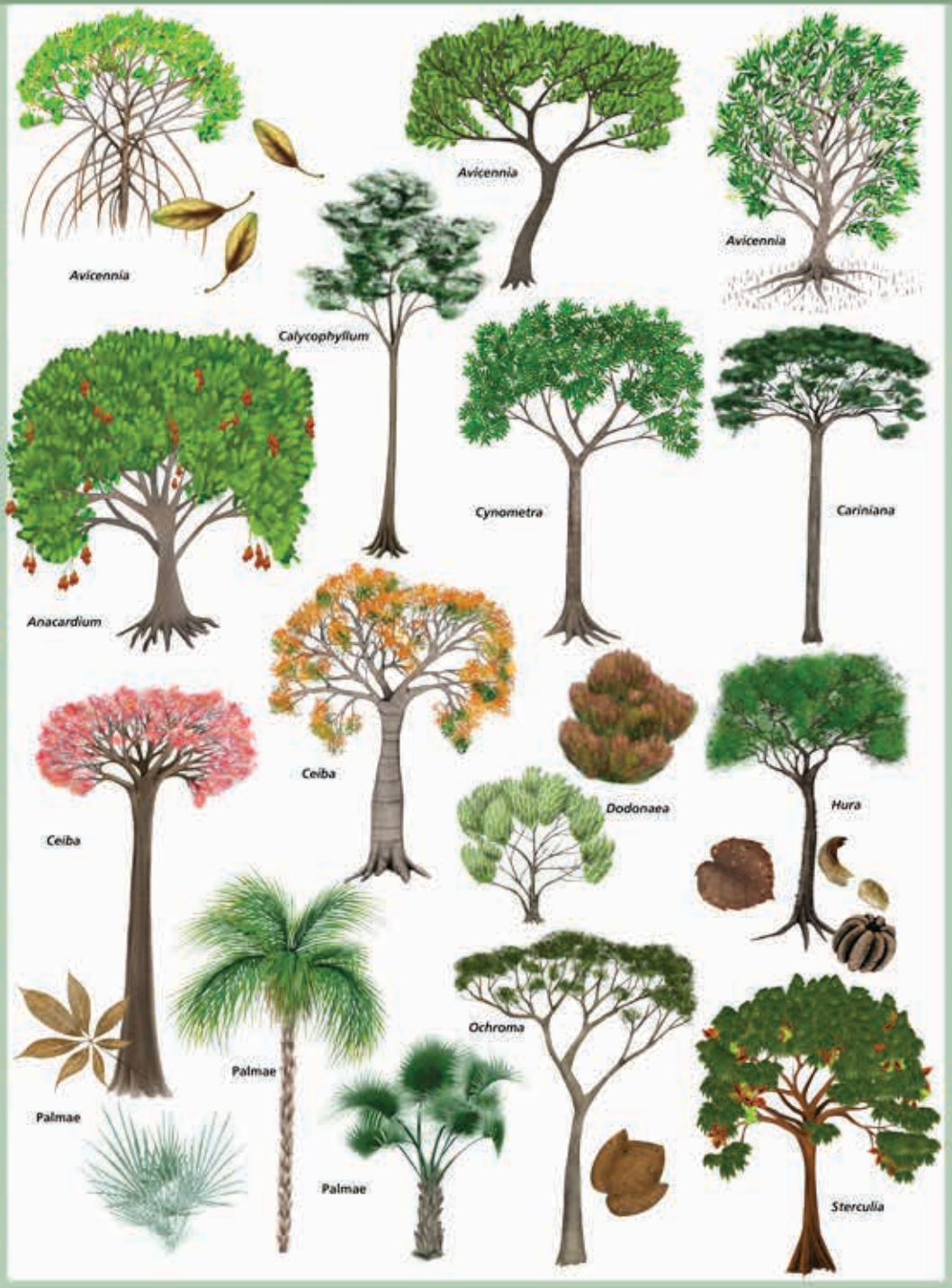

Avicennia


Anacardium


Calycophyllum


Cariniana


Ceiba




Cynometra


Dodonaea


Hura


Ochroma


Sterculia
0.250µm


Palo Tendido-*Cynometra*


Avicennia leaf-hoja de *Avicennia*


Palm trunk-tronco de palmera