

Calamites



<https://www.britannica.com/plant/Calamites#/media/1/88767/1624>

- Extinct form of horsetail fern
- Lived along sandy banks, in coal swamps
- Thrived during the Carboniferous and Permian Periods
- Found at near-equatorial paleolatitude
- Common across much of the world during their temporal range. See **Figure 1**



<https://www.catawiki.com/1/28826379-carboniferous-annularia-leaves-of-calamites-horsetail-plant-on-matrix-annularia-5x85x110-mm>

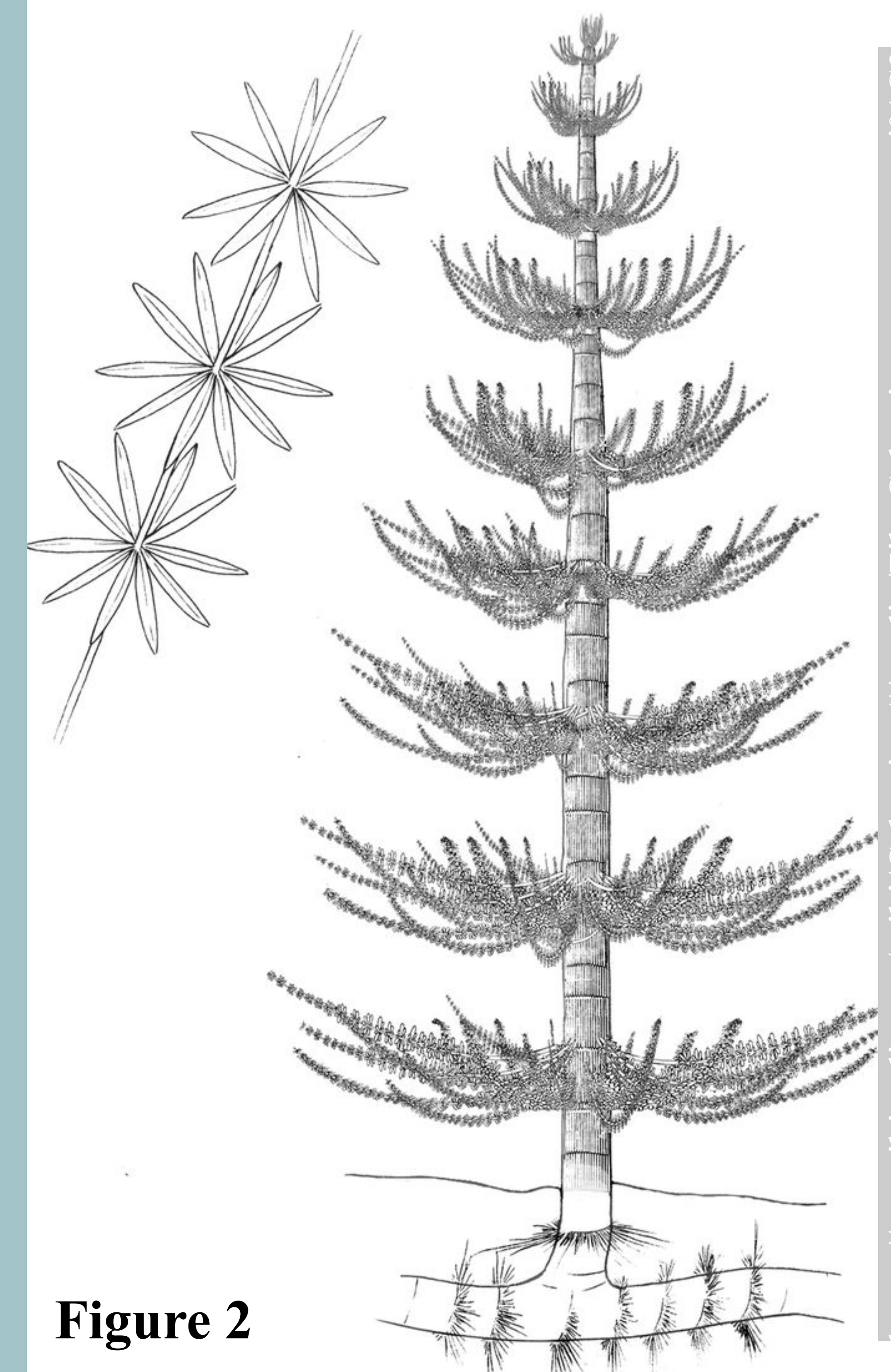


Figure 2

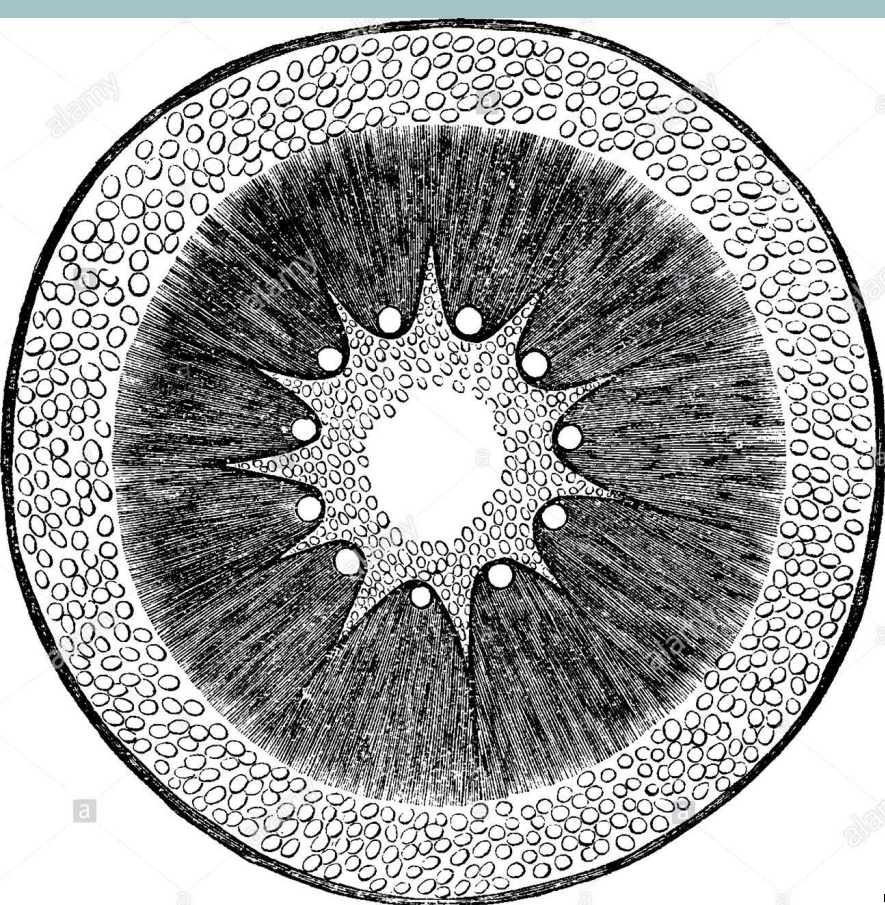
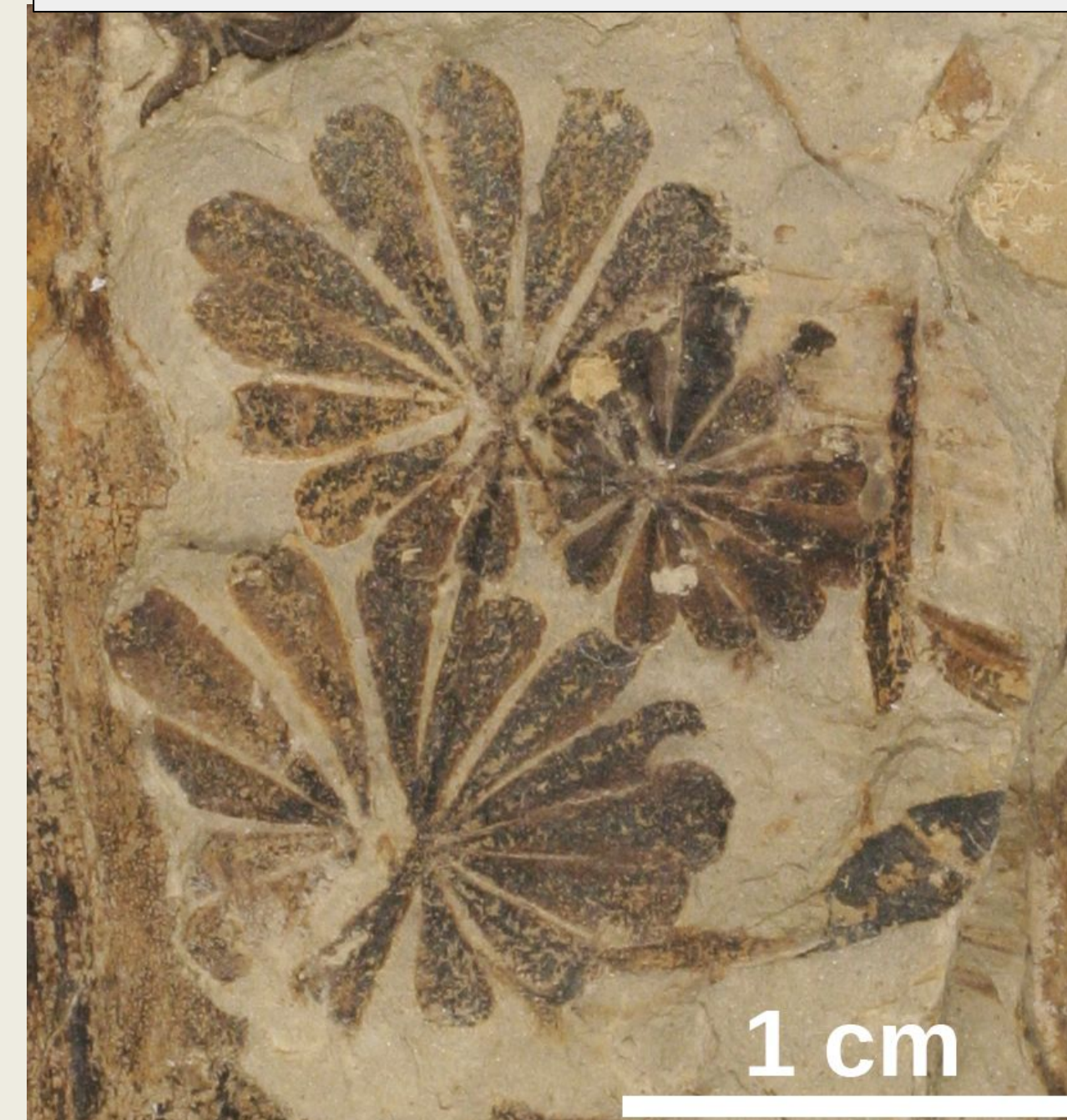


Figure 3
Transverse section of Calamite

- Grew up to 30 meters (100 feet) tall
- Hollow trunks were segmented, had bamboo like appearance & vertical ribbing
- Whorl structure of branches, leaves, and cones (similar to concentric circles)
- Reproduced via spores, with sacs located in their cones
- Spread massive network of rhizomes underground; allowed them to clone, much like bamboo
- Grew in very close proximity to each other

Annularia

Cluster of leaves (8 or more)
Long and narrow leaves
“Starburst” appearance



1 cm

Asterophyllites

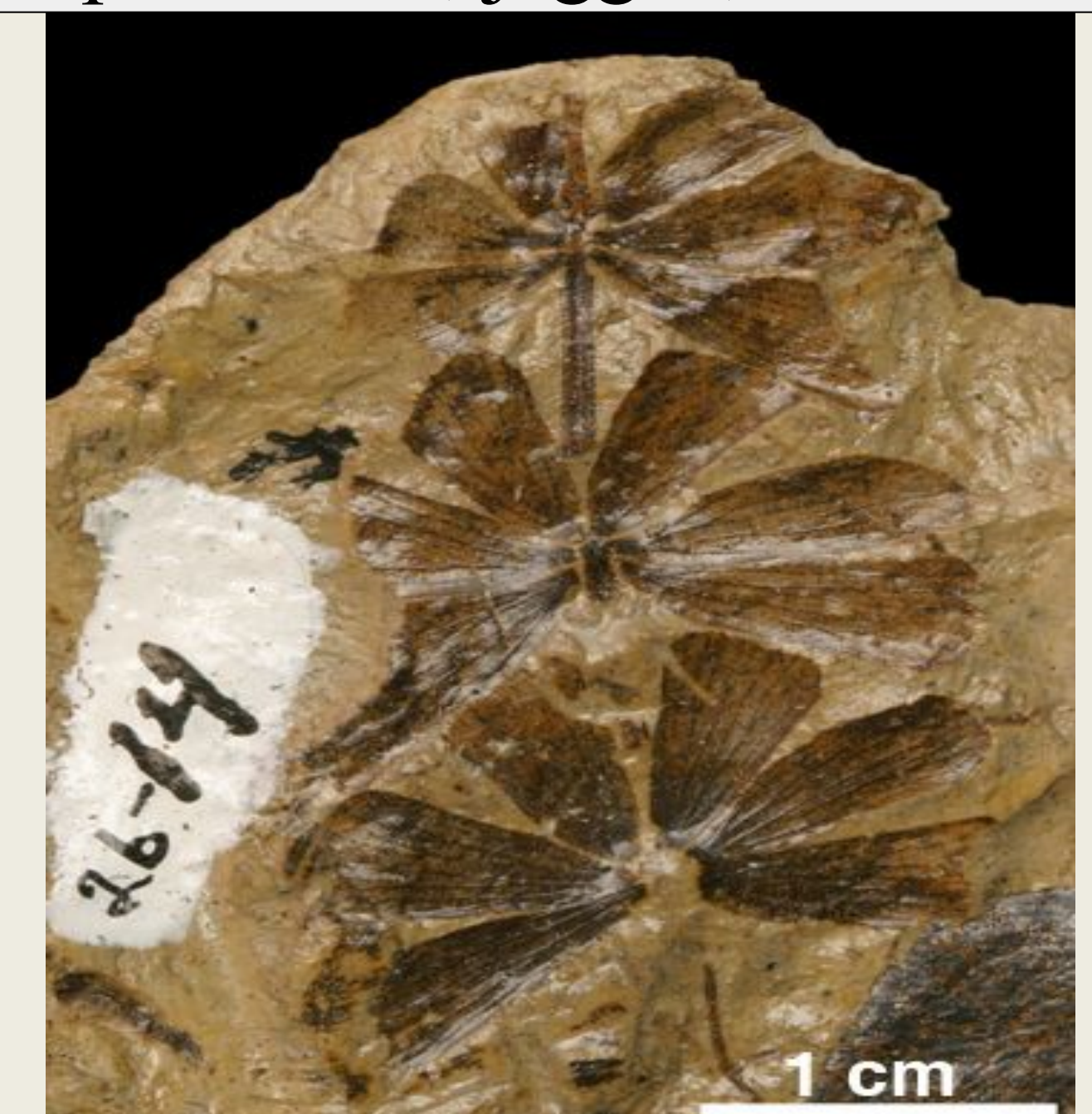
Cluster of leaves (8 or more)
Midvein running the length
Curved upwards to form a cup shape



1 cm

Sphenophyllum

Circle of triangular leaves (8 or fewer)
1 or 2 veins from base to tips
Tips smooth, jagged, or forked



1 cm

<https://samnoblemuseum.ou.edu/common-fossils-of-oklahoma/plant-fossils/fossils-by-plant-group/fossil-sphenophytes/>

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