

Topic: Lyginodendron; Morphology & Anatomy
B.Sc. Botany Hons. II
Paper: III Group: A

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Systematic Position of *Lyginodendron*

Class - Cycadopsida

Order - Pteridospermales

Family - Lyginopteridaceae

Genus - *Lyginodendron*

The genus *Lyginodendron* also known as *Lyginopteris*.

Morphological Features

- The stem of *Lyginodendron* was slender and covered with large scaly leaves. Near the base of the plant adventitious roots developed. The plant seems to have been a climber.
- *Lyginopteris oldhamia* also known as *Calymatotheca hoeninghausi* was described in detail by Williamson, Scott, Brongniart, Binney, Potonie, and Oliver and Scott. It was

found abundantly in the coal ball horizon of Lancashire and Yorkshire.

Anatomical Features

- The Primary structure was an ectophloic siphonostele with large pith round a number of primary mesarch bundles.
- The older plants showed normal secondary growth.
- In some specimens, however, the xylem portion of primary vascular bundles was in a continuous ring.
- In some there was an abnormal type of secondary growth.
- This abnormality was of two forms, either there was an inner ring of secondary phloem developed or it was that the cambium appeared in strips found separately in vascular bundles giving rise to a polystelic appearance.

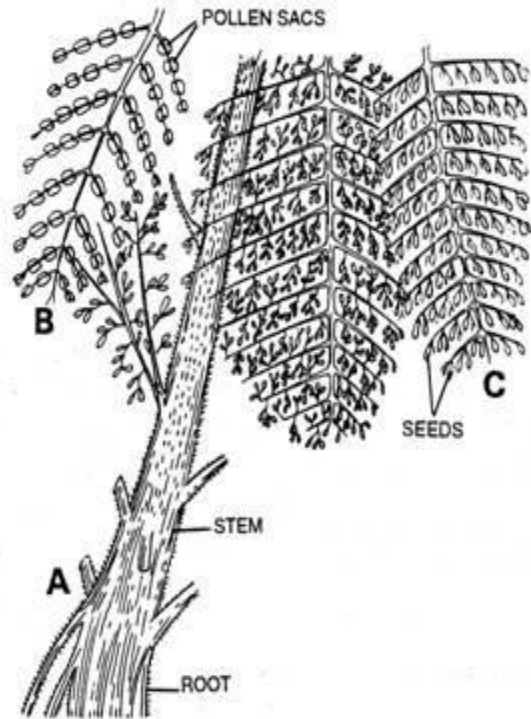


Fig. *Lyginopteris oldhamia*. Restoration showing external characters. The frond on the left bears the pollen sacs on peltate leaflets (*Crossotheca*); that on the right bears seeds. Stem and roots also present.

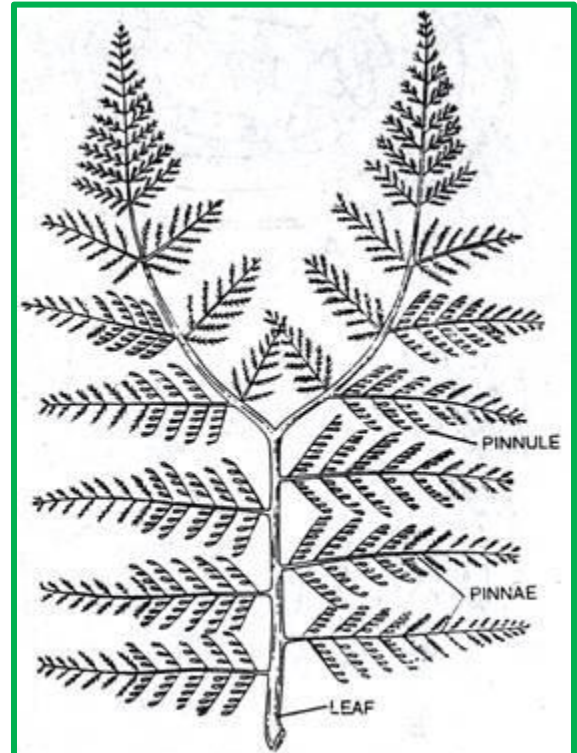


Fig. *Lyginopteris oldhamia*. A frond.