

ACCOUNT OF THE SEED OF LYGINODENDRON. DII (H) - III

DR. AMIT KUMAR PRAKASH

DEPTT. OF BOTANY.

S.N.S. R.K.S. COLLEGE SAHARA.

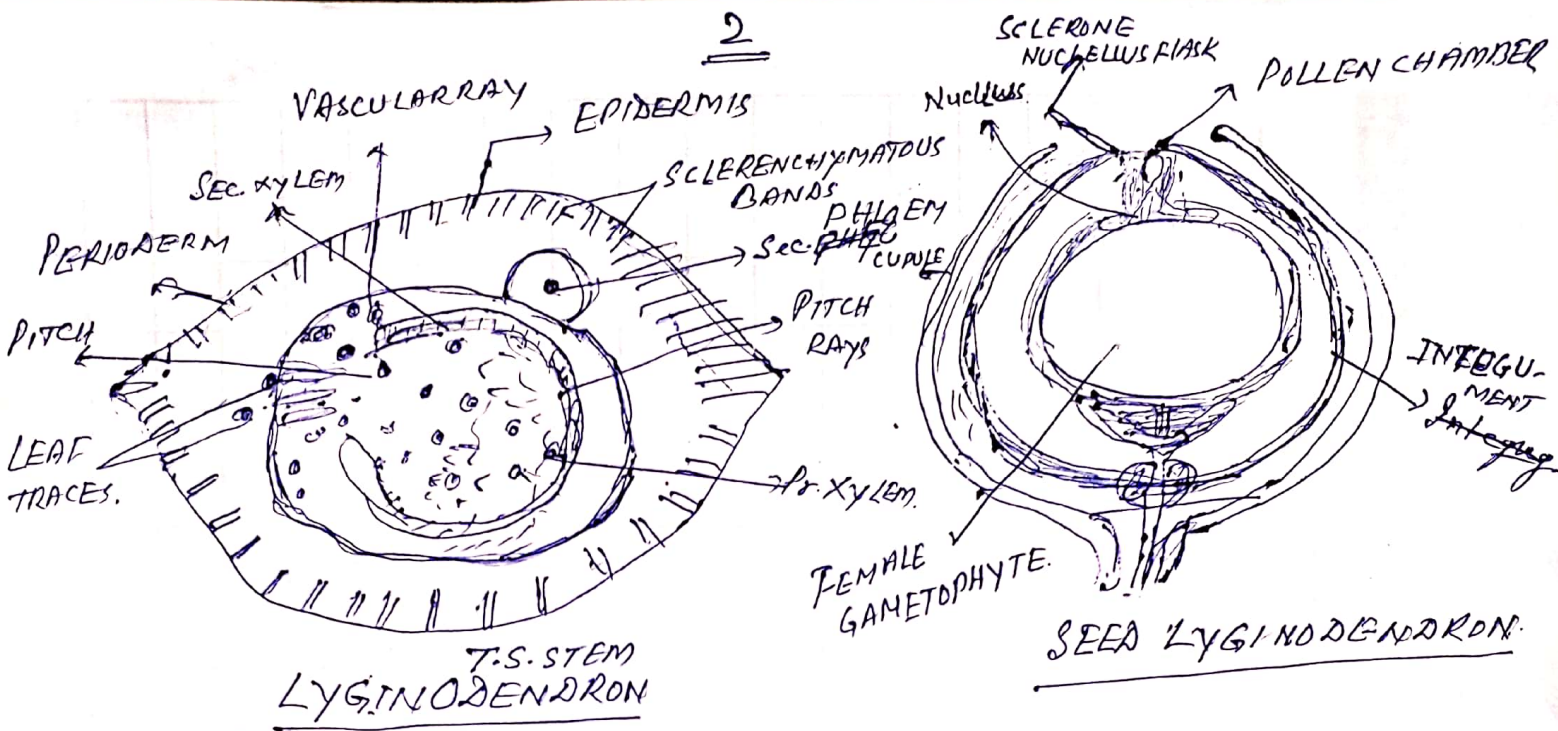
The stem of *Lygopteris* which is called *Lyginodendron*. The seed genus of *Lyginodendron* was known as *Lagenostoma*. It was also named as *Calymmatotheca* *hoeninghousei*. It was reported in the lower coal measure of the Carboniferous period. The seed structure of *Lagenostoma Lomaxii* was first described by Oliver and Scott in 1903.

The seeds were about 5mm. long which were terminal on the ultimate ramifications of the frond. Each seed looked like a bud covered by a cupule which dehisced longitudinally into about six coriaceous segments. The outer surface of the cupule was covered by capitate glands.

The ovules were orthotropous. The seed were invested with cup like cupule arising from the solid pedicel. The cupules extending above the microphyle of the seed were lobed above and ribbed below. It was covered by an integument which was attached to nucellus except at the apical pollen chamber. The outer part of the integument was stony, while the inner was soft with clear vascular supply. The nucellus was tapering at the tip leaving a cylindrical pollen chamber.

It has outer cortex in T.S. of the stem which covered with radial patches of sclerenchyma, an inner cortex and then a ring of secondary wood which become radially arranged multi-seriate bordered pitted tracheid. Mesarch become primary xylem strands below secondary wood. It has been shown leaf traces. Pith become big and made up of parenchyma.

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The above mentioned account clearly indicates that the seed genus of Lyginodendron resembles the seeds of living cycads. It is also revealed that Lagaeonostoma exhibits less primitive characters.