

Dracaena

Dracaena - a monocot stem. shows typical structure i.e. sclerenchymatous hypodermis and scattered closed vascular bundle.

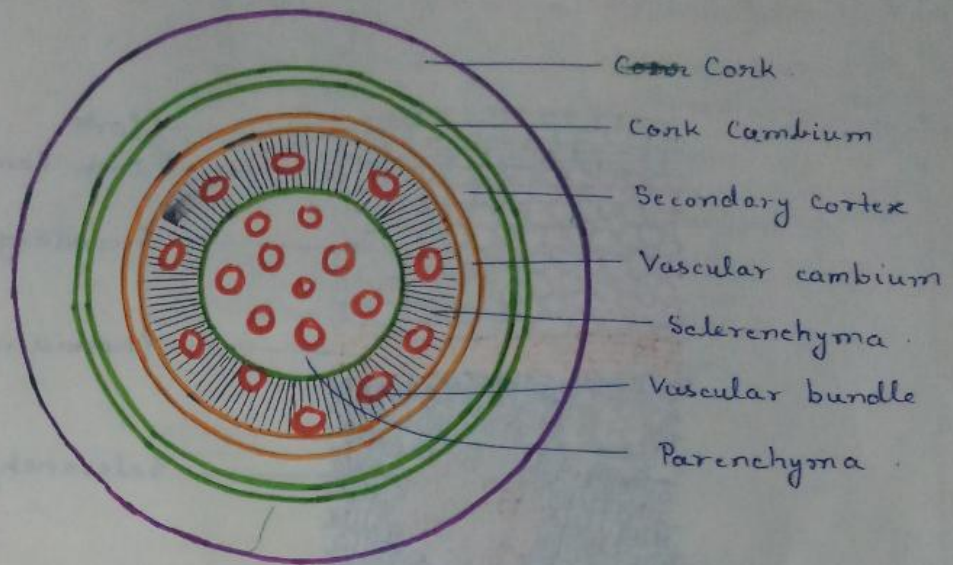
In Dracaena - cambium is abnormal in disposition and unusual in function. The cambium ring arises in the parenchyma outside the vascular bundles, either in the cortex or in the pericycle.

The unusual activity of cambium goes on producing secondary vascular tissues i.e. both the secondary phloem and xylem - and parenchymatous conjunctive tissue internally and little parenchyma externally. After a short while the cambium changes its activity and forms phloem in place of xylem and then again xylem resulting the formation of a ring of oval and amphivasal vascular bundles. Around, each vascular bundle, a sclerenchymatous sheath develops.

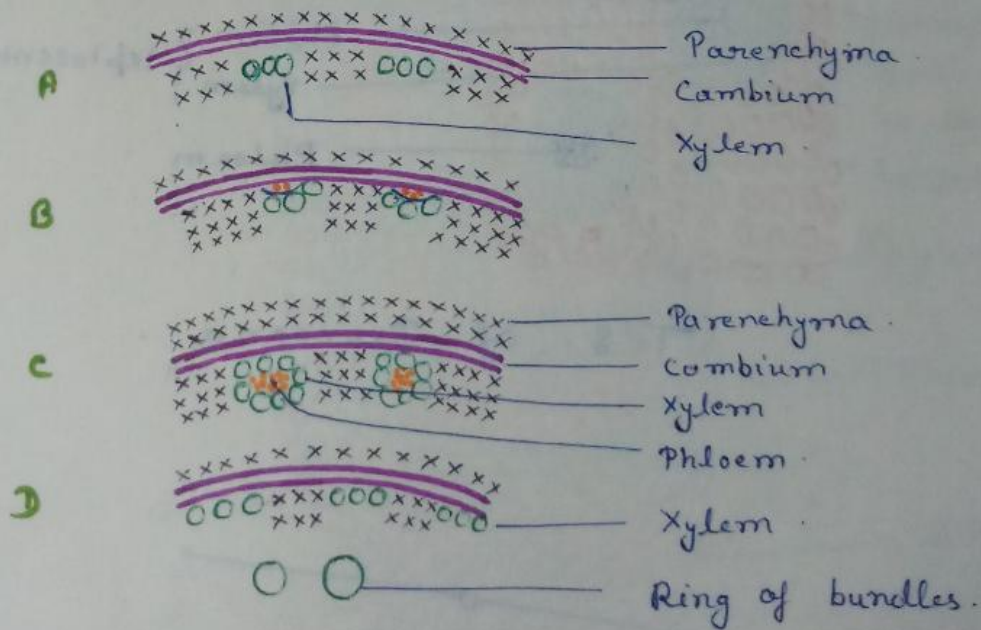
After a short time, the cambium alters its activity and forms amphivasal vascular bundle as the previously formed, bundles at the place of previously formed parenchyma and parenchyma at the place of xylem. In this way several rings of V.Bs are formed. The last one or two rings of V.Bs are embedded in lignified conjunctive tissue.

Periderm is formed in the extrastelar region by the repeated periclinal division of the cortical cells. Beneath the epidermis and hypodermis the cork cambium arises which gives rise to the cork towards outside. Below the cork cambium, well developed parenchyma is present.

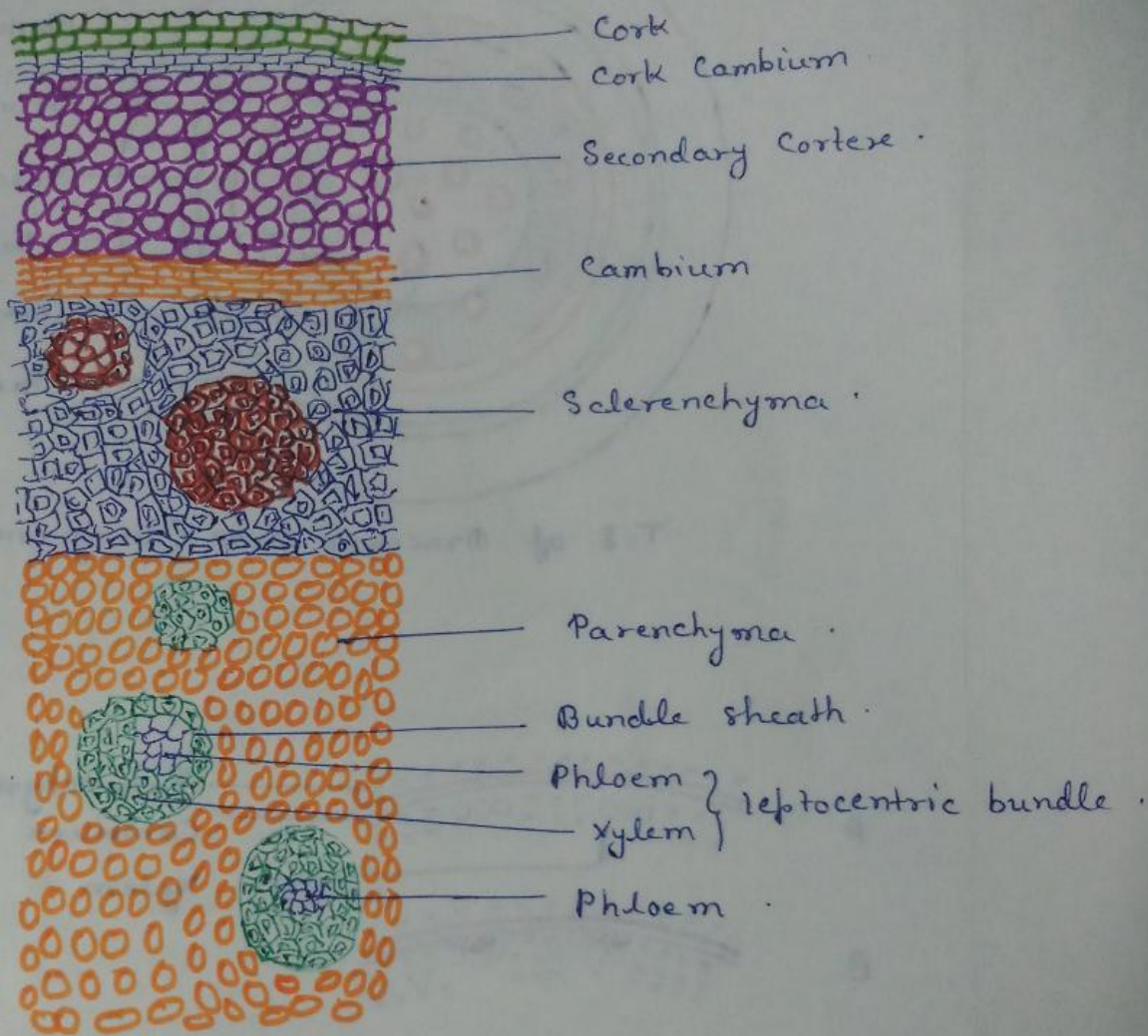
Draceana



T.S. of Draceana stem (Diagramatic)



Stages of secondary growth in Draceana.



T. S. of Dracaena .

