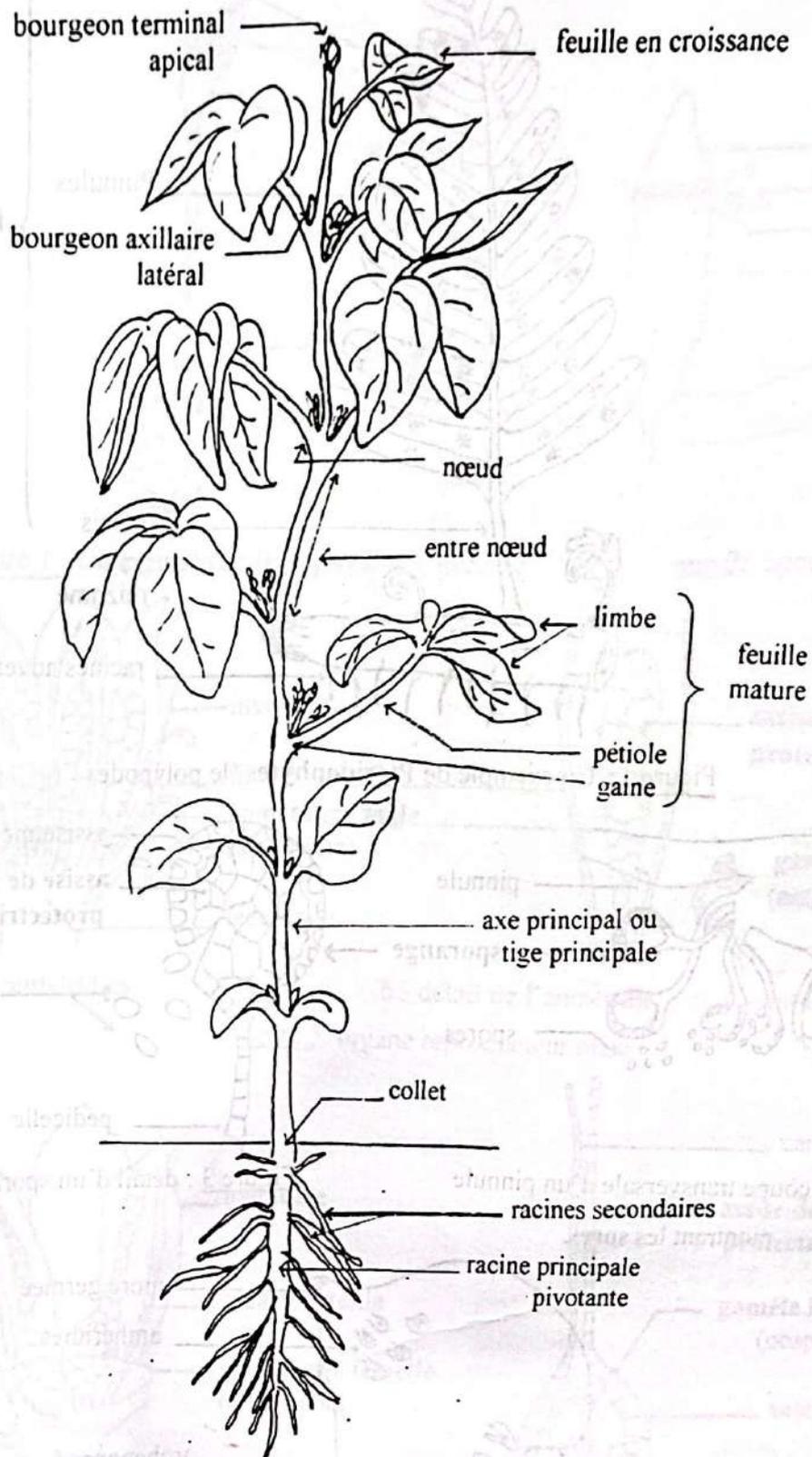


Planche 6. LES SPERMAPHYTES



Morphologie générale de l'appareil végétatif d'une Angiosperme Dicotylédone :

le soja (*Glycine max*).

Planche 7. MORPHOLOGIE DES GYMNOSPERMES

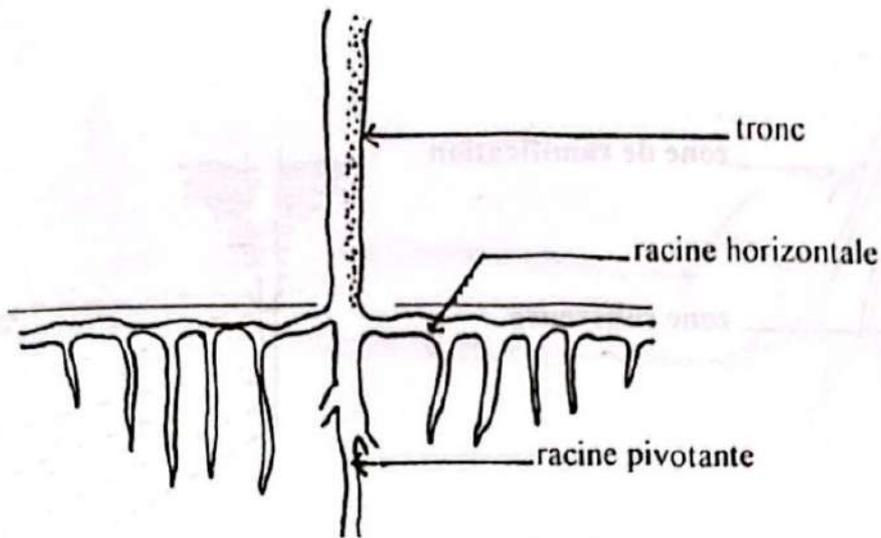


Figure 1: système racinaire du pin sylvestre.

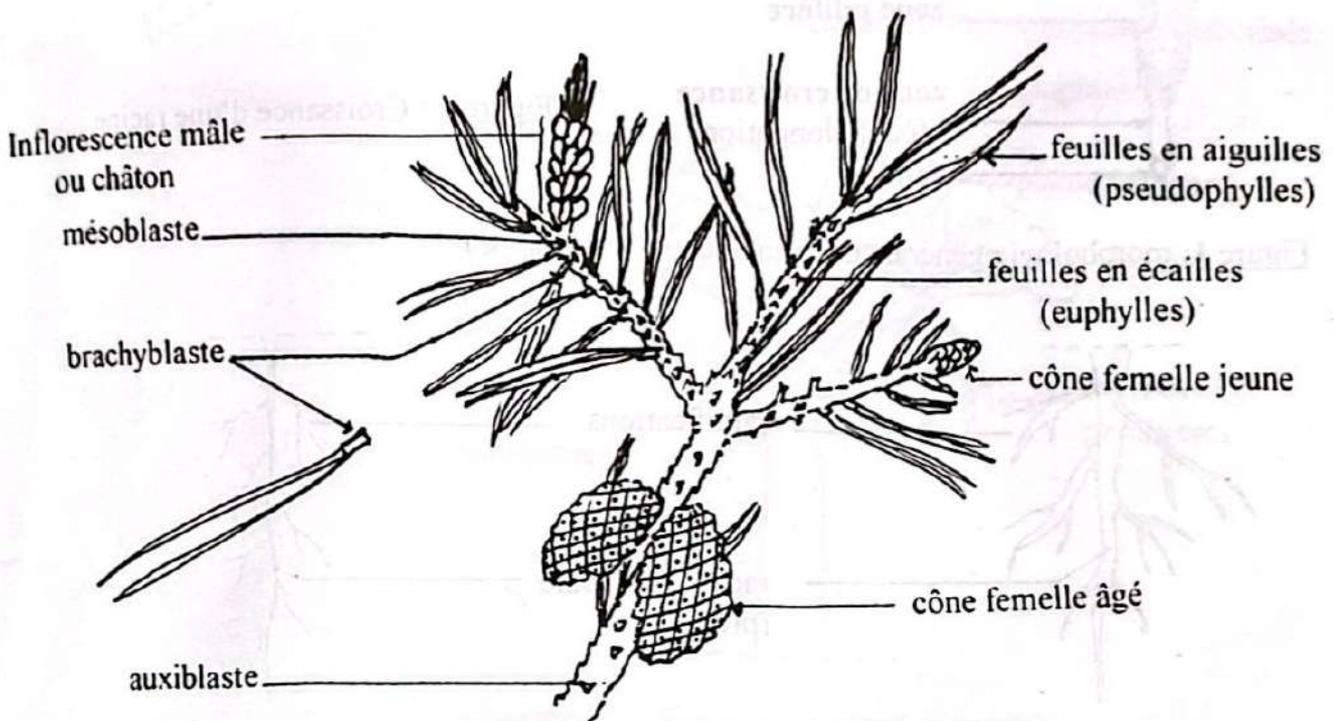


Figure 2: rameau feuillé de pin d'alep.

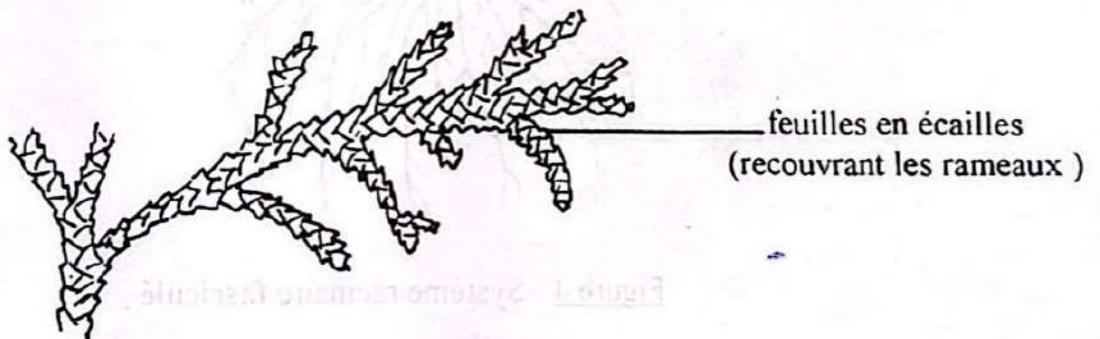


Figure 3: rameau feuillé de cyprès.

Planche 8. MORPHOLOGIE DU SYSTEME RACINAIRE

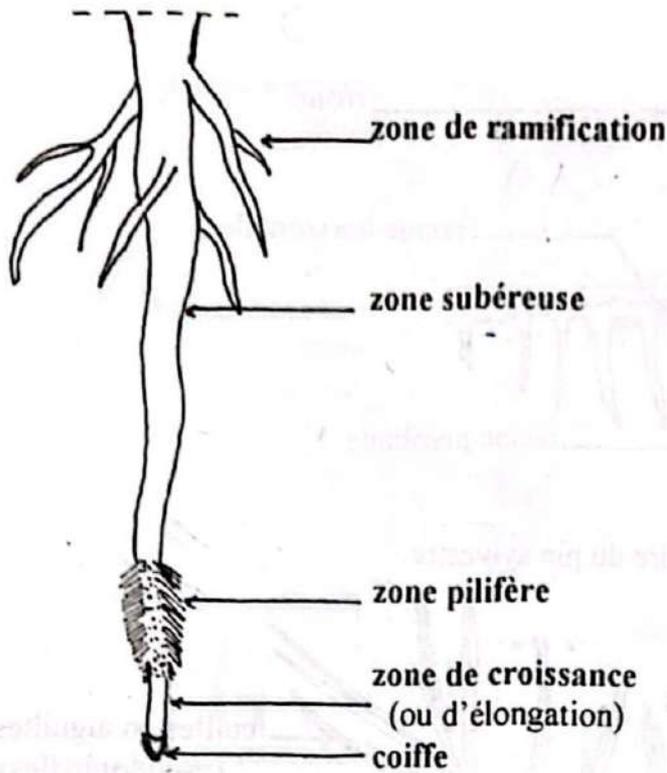


Figure 1 : morphologie générale de la racine.

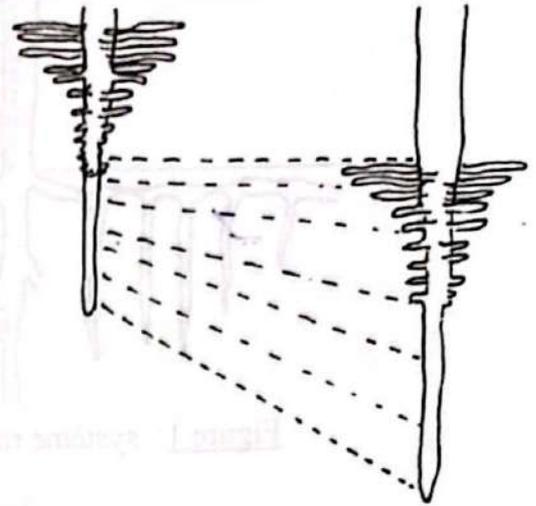


Figure 2 : Croissance d'une racine.

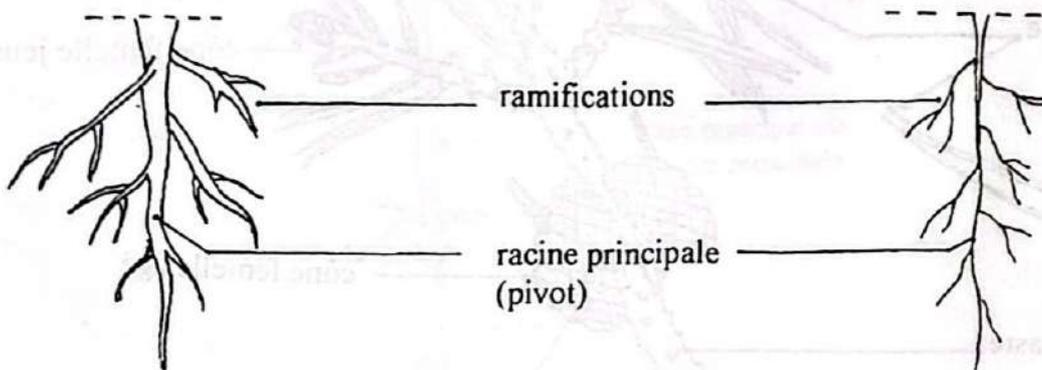


Figure 3 : Systèmes racinaires pivotants.

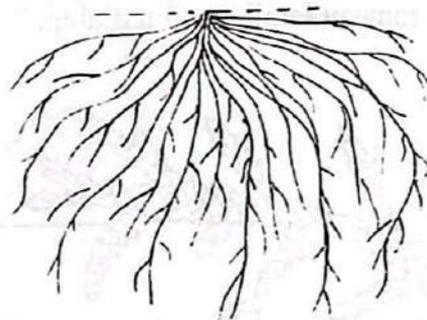


Figure 4 : Système racinaire fasciculé.

Planche 9. QUELQUES ADAPTATIONS DES RACINES

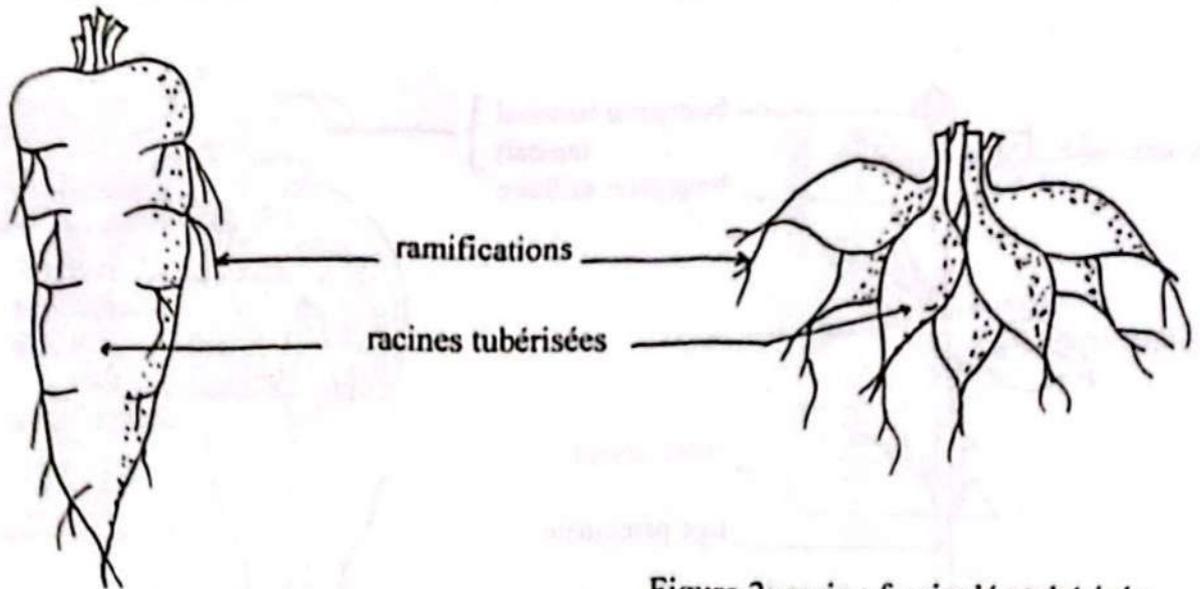


Figure 1: racine pivotante tubérisée.
(carotte)

Figure 2: racine fasciculée tubérisée.
(asphodèle)

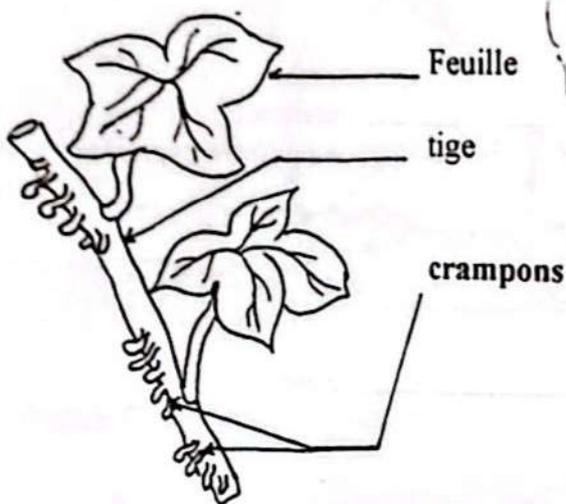


Figure 3: racines adventives ou crampons.
(lierre)

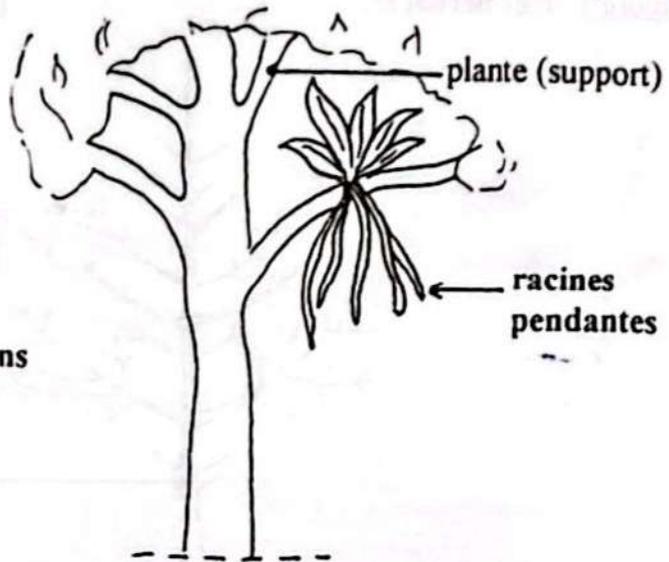


Figure 4 : racines aériennes.
(plantes épiphytes)

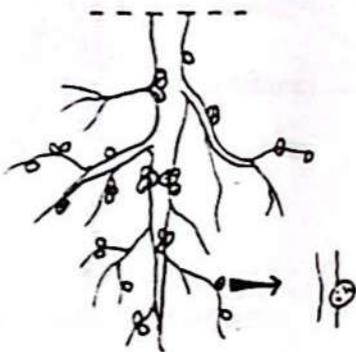


Figure 5: nodosités (racine + bactérie).

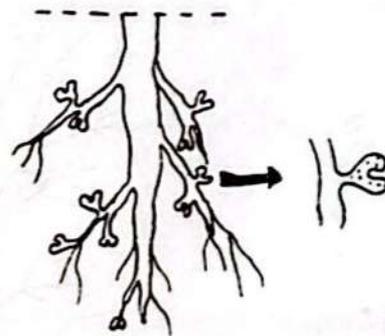


Figure 6: mycorhizes (racine + champignon).

Planche 10. MORPHOLOGIE DU SYSTEME CAULINAIRE

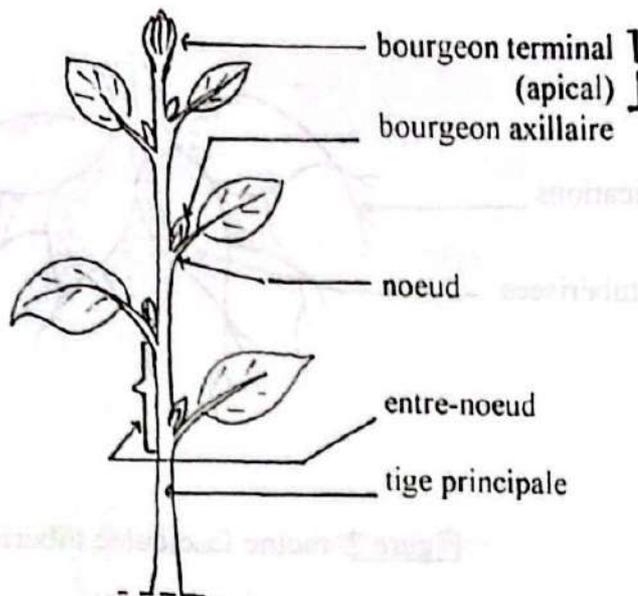


Figure 1 : Tige herbacée.

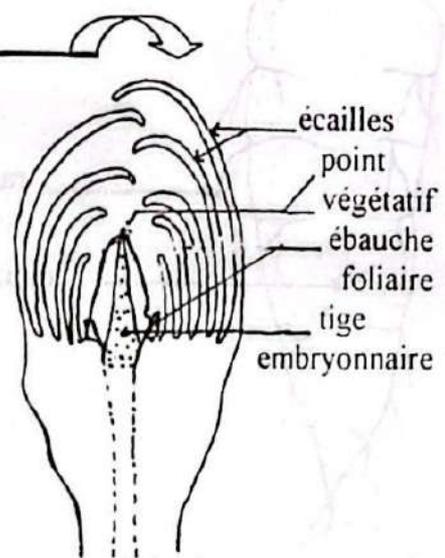


Figure 2 : Bourgeon apical en coupe longitudinale .

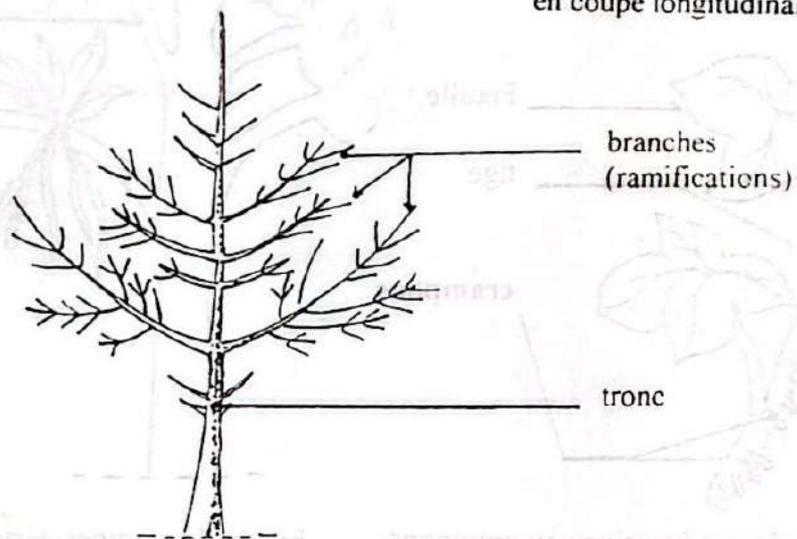


Figure 3 : Tige ligneuse (types arbre, arbuste, arbrisseau).

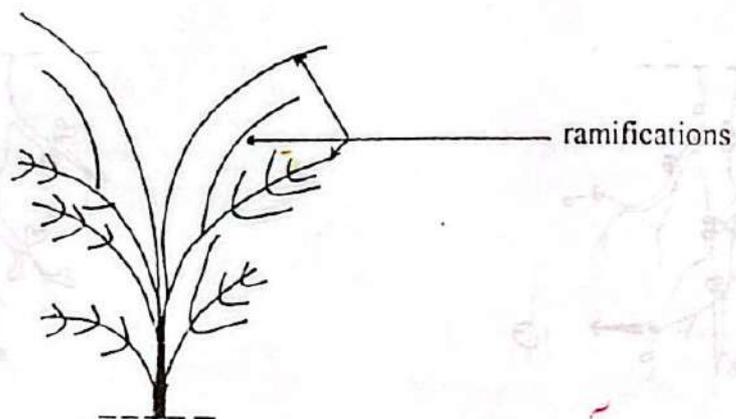


Figure 4 : Tige ligneuse (type buisson).

Planche 11. DIVERSES SORTES DE TIGES

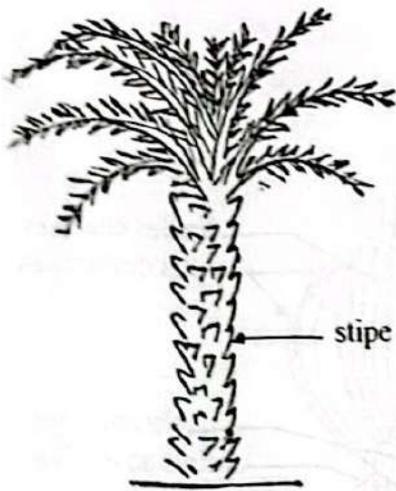


Figure 1 : stipe (palmier dattier).

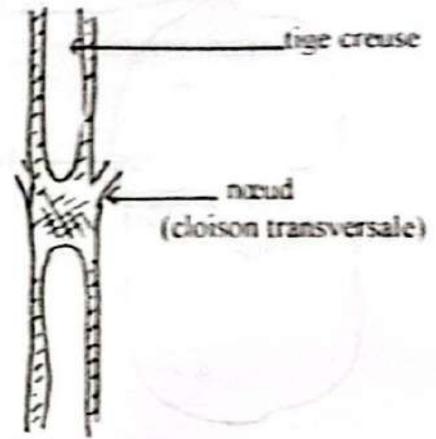


Figure 2 : coupe longitudinale du chaume (blé).

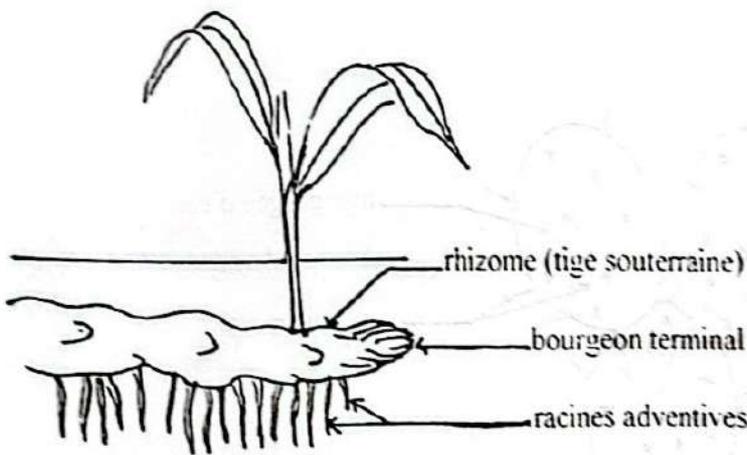


Figure 3 : rhizome (roseau).

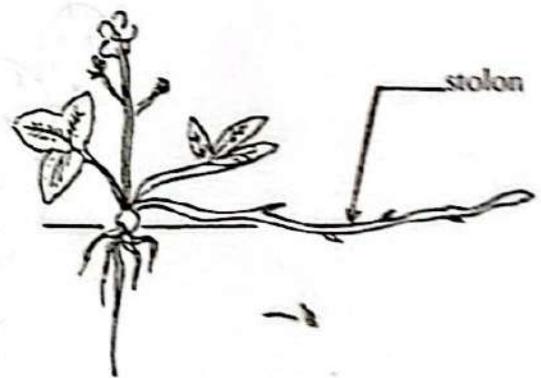
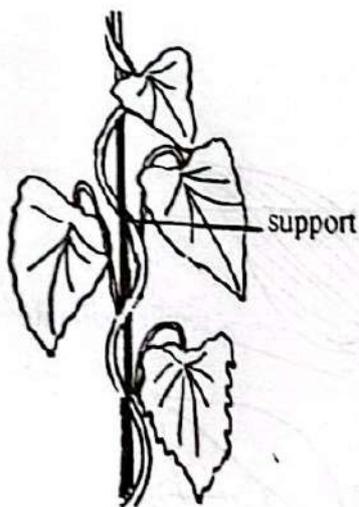
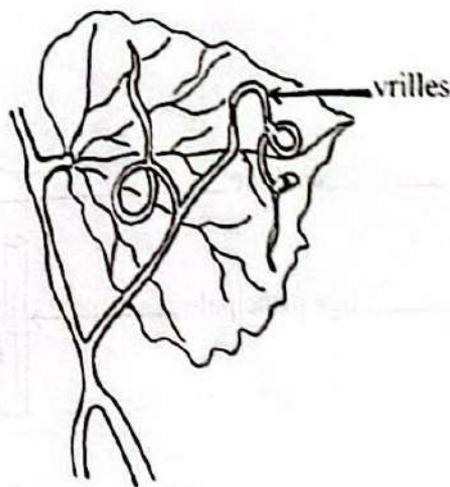


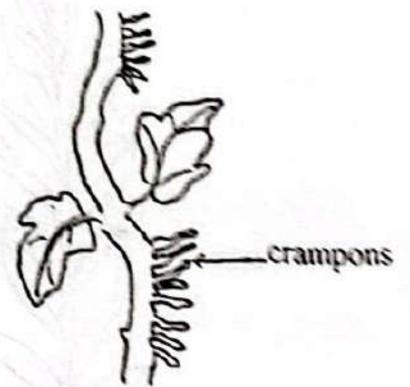
Figure 4 : tige rampante (fraisier).



a - volubile (liseron)



b - à vrilles (vigne)



c - à crampons (lierre)

Figure 5: tiges grimpantes

Planche 12. QUELQUES ADAPTATIONS DES TIGES

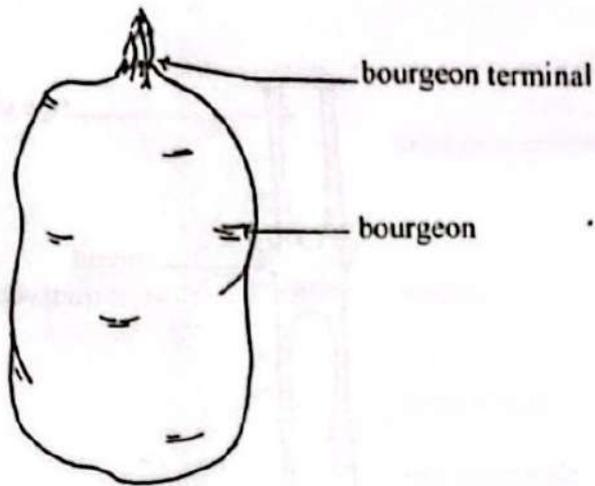


Figure 1 : tubercule (pomme de terre).

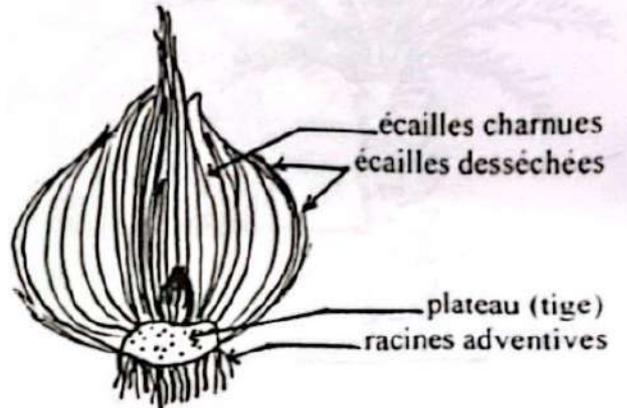


Figure 2: coupe longitudinale d'un bulbe (oignon).

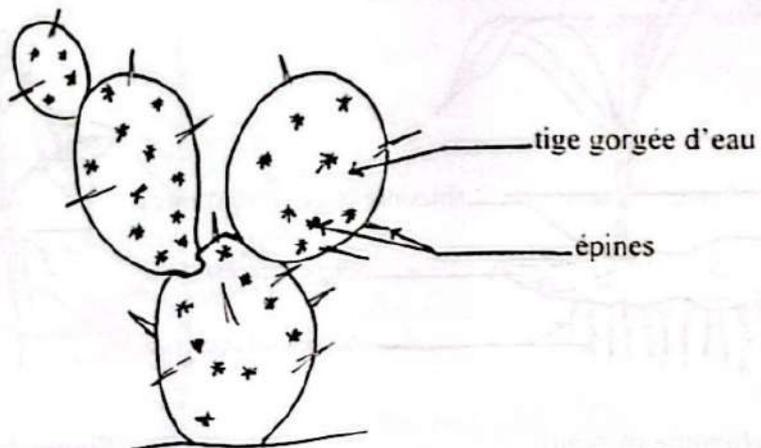


Figure 3 : tige charnue (cactus).

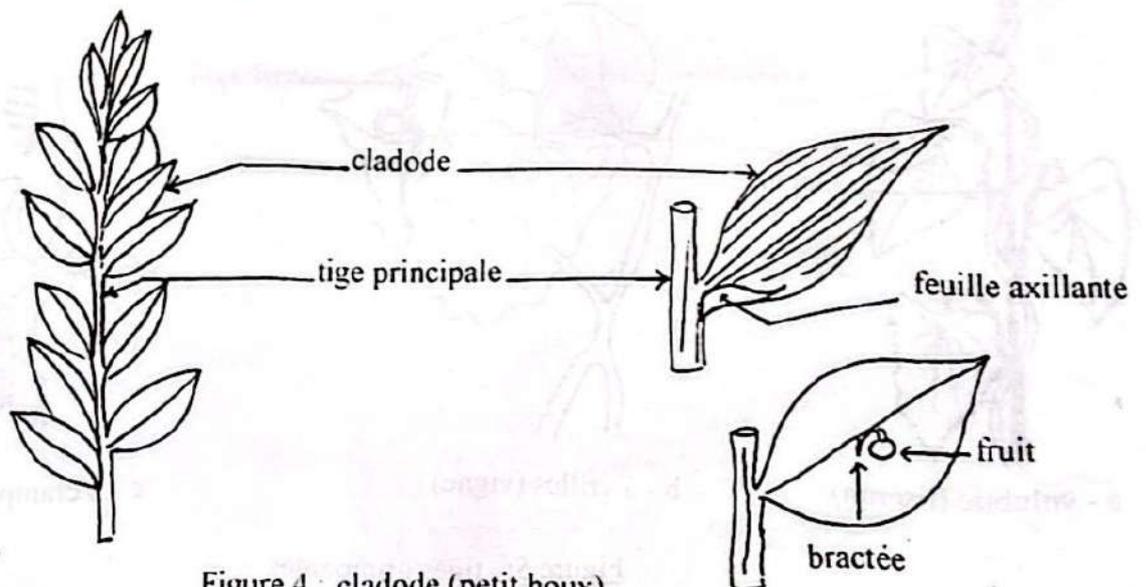


Figure 4 : cladode (petit houx).

Planche 13. MORPHOLOGIE FOLIAIRE

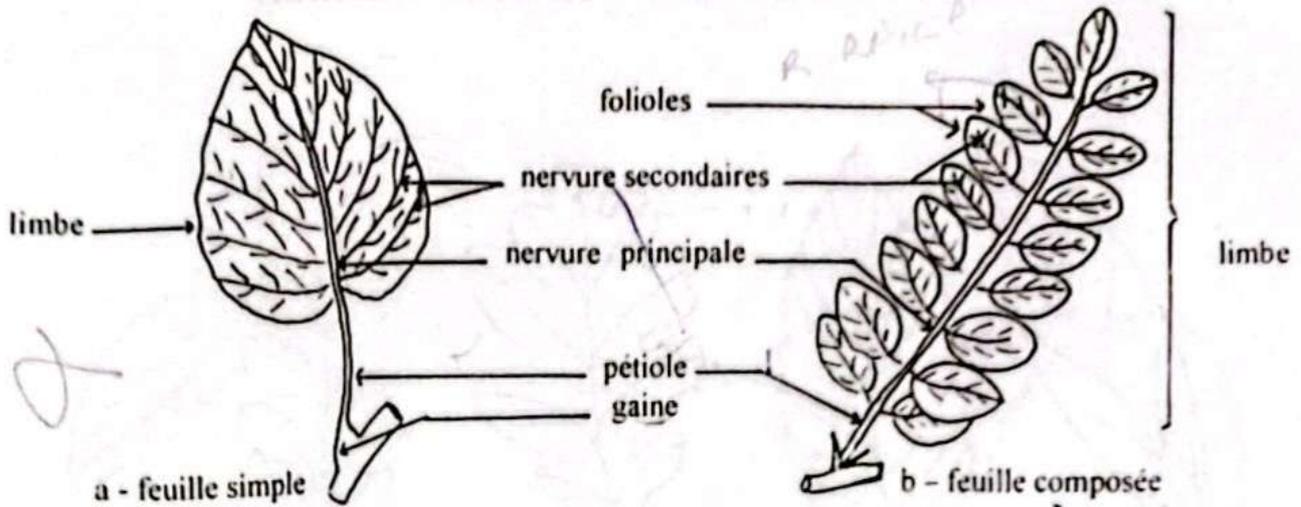


Figure 1 : Feuilles à nervation pennée (Angiospermes Dicotylédones)

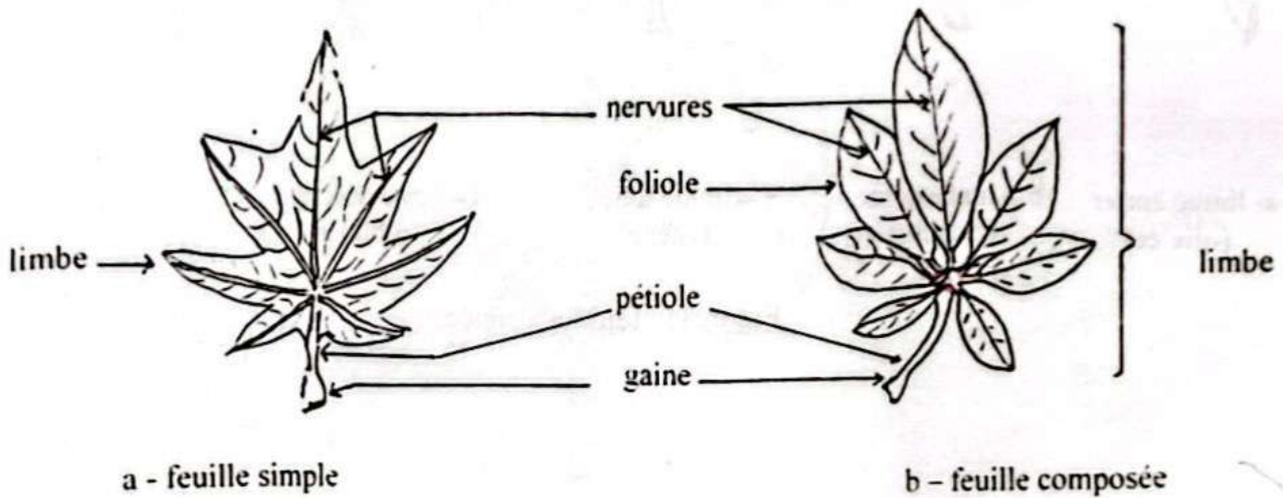


Figure 2 Feuilles à nervation palmée (Angiospermes Dicotylédones)

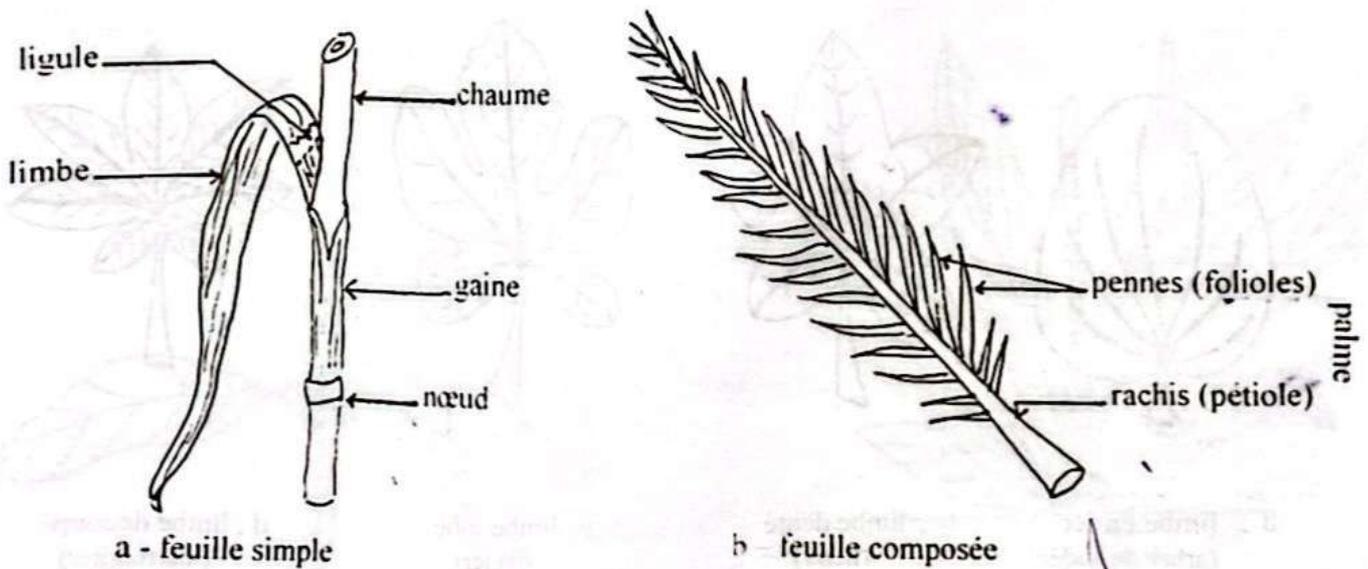
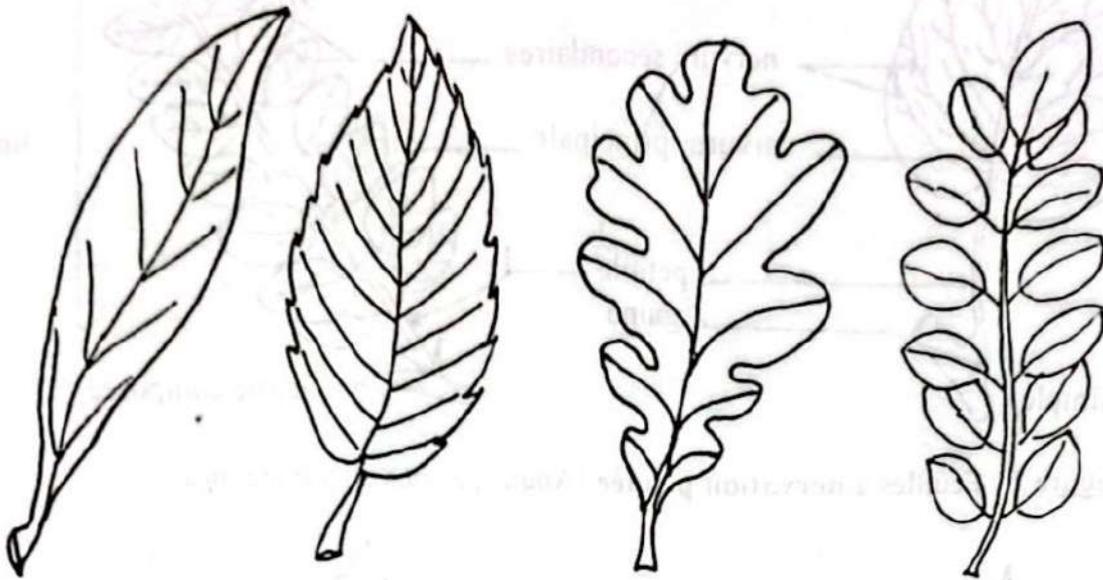


Figure 3 Feuilles à nervation parallèle (Angiospermes Monocotylédones).

Planche 14. DIVERSES SORTES DE LIMBES



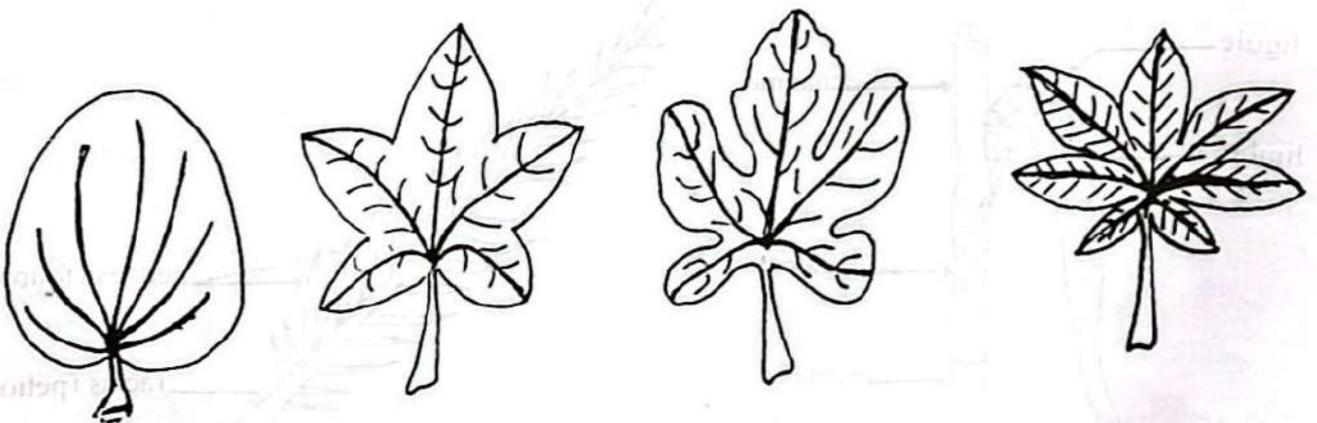
a- limbe entier
(olivier)

b - limbe denté
(chataignier)

c - limbe lobé
(chêne)

d - limbe découpé
(robinier)

Figure 1: feuilles pennées.



a - limbe entier
(arbre de Judée)

b - limbe denté
(lierre)

c - limbe lobé
(figuier)

d - limbe découpé
(marronnier)

Figure 1: feuilles palmées.

Planche 15. DISPOSITION DES FEUILLES SUR LA TIGE

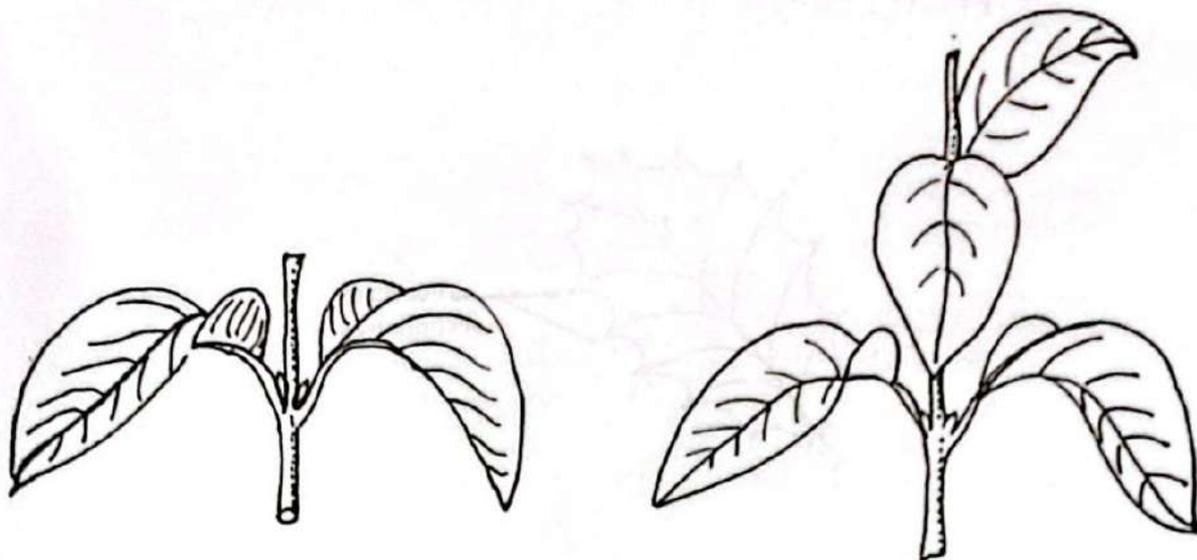


Figure 1: feuilles opposées et feuilles opposées décussées.

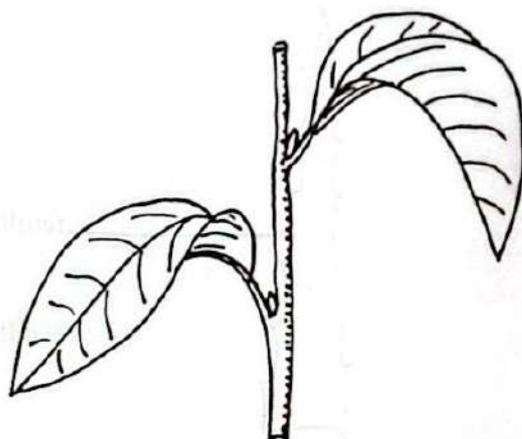


Figure 2: feuilles alternes.

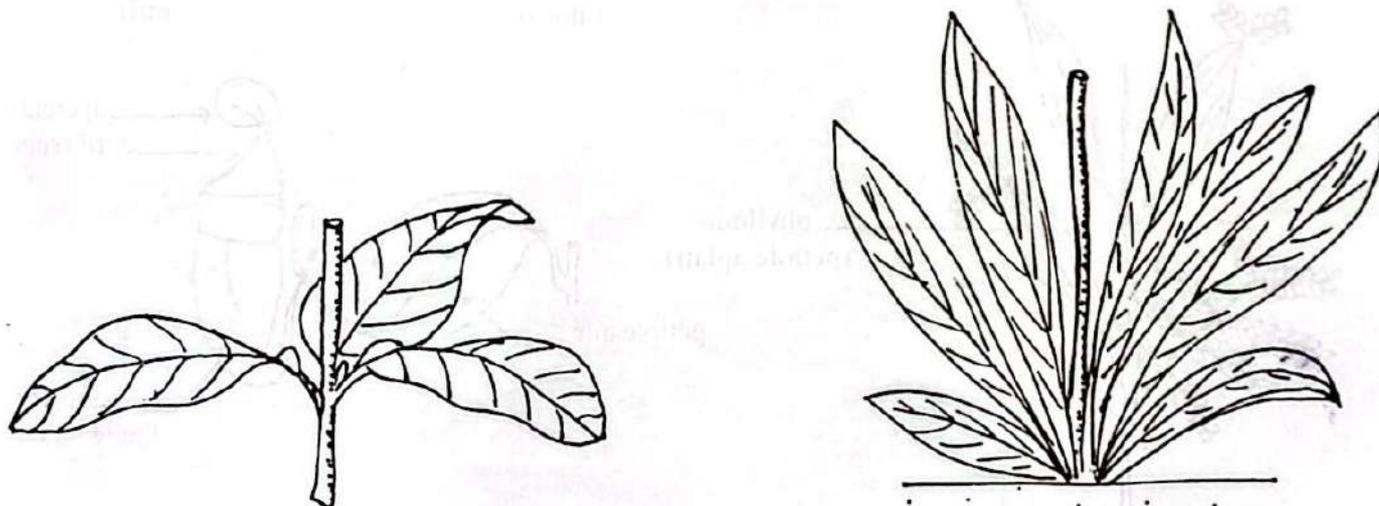


Figure 3: feuilles verticillées et feuilles en rosette.

Planche 16. QUELQUES ADAPTATIONS DES FEUILLES

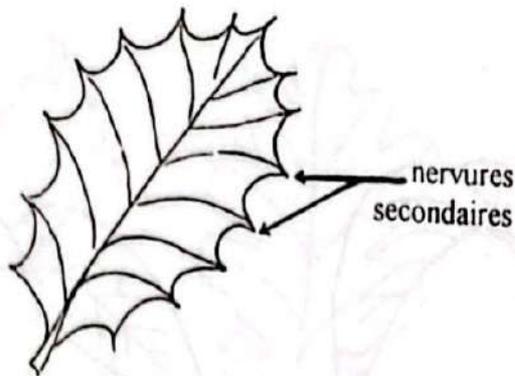


Figure 1 : Les feuilles épinées.

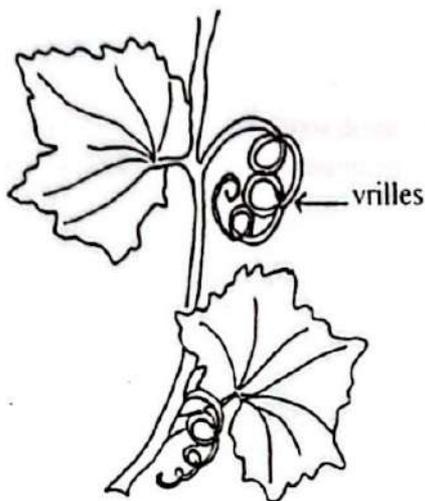


Figure 2: feuilles en vrille (bryone).

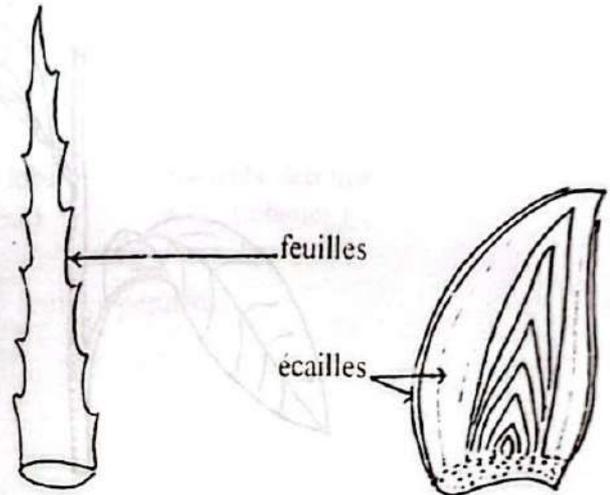


Figure 3: feuille charnue (aloès)

Figure 4: écailles charnues (ail)

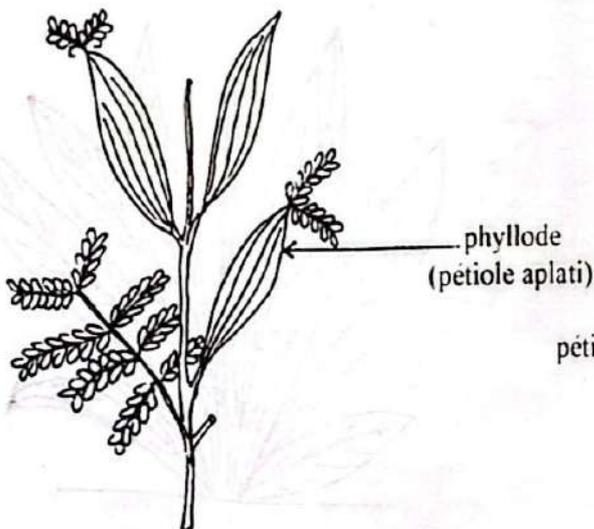


Figure 5: phyllodes (acacia).

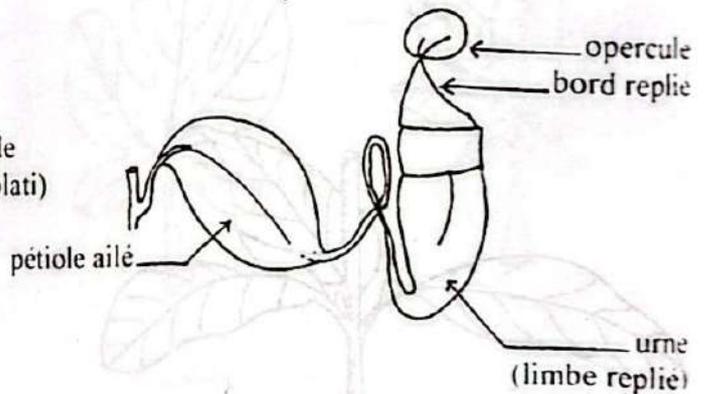


Figure 6: feuille en urne (plantes carnivores).

Planche 17. MERISTEMES PRIMAIRES

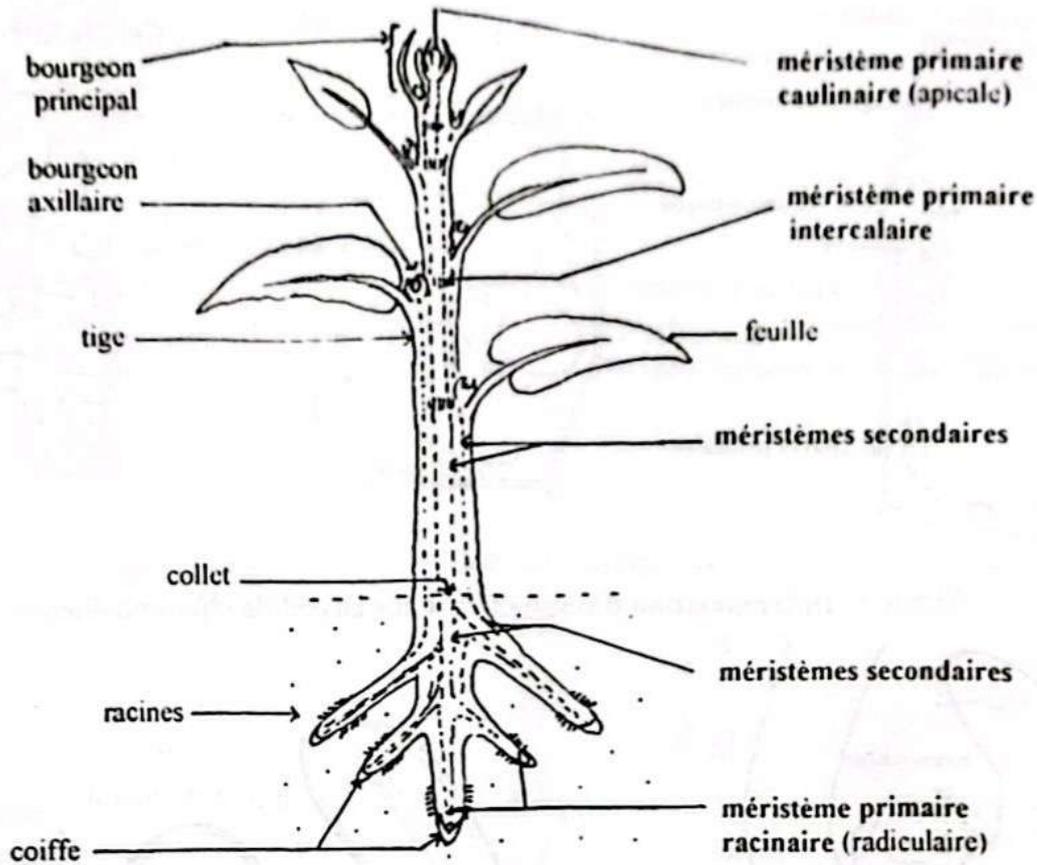


Figure 1 : Localisation des méristèmes dans une plante (Angiosperme dicotylédone).

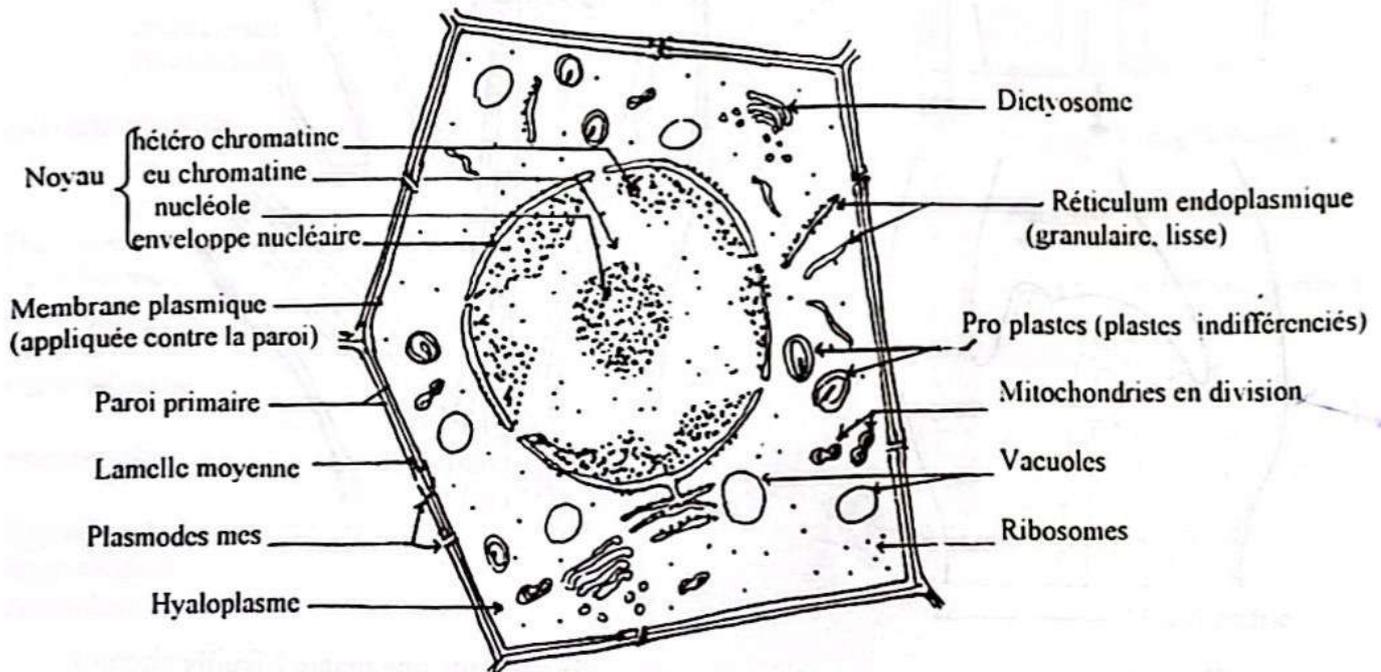


Figure 2: cellule d'un méristème primaire.