

The root

Function : The root system anchors the plant in the soil , absorbs water and minerals from the soil , and stores the products of photosynthesis received from the leaves .

Difference between monocot and dicot root

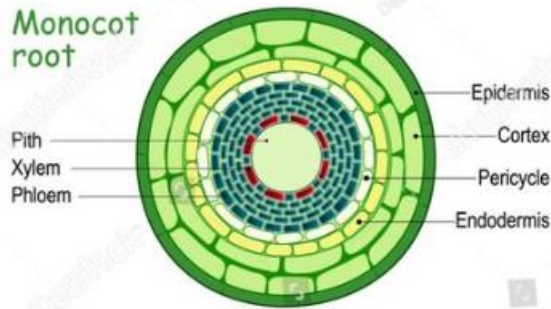
Monocot root	Dicot root
-Xylem is polyarchy	-Xylem is usually tetrarch
-Pith is usually at the center	-Pith is usually absent
-Found casparian strip	-Non
-Fibrous roots	-Tap roots

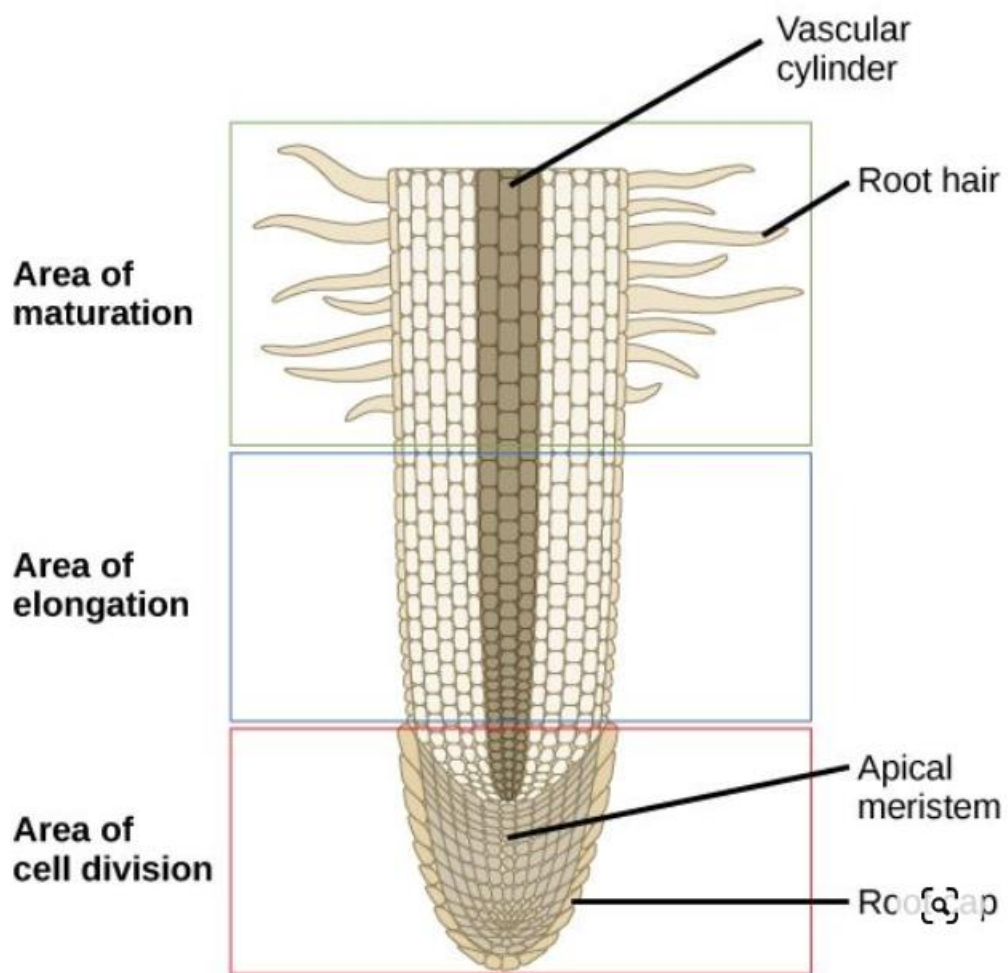
Root structure

Dicot root



Monocot root





Types of roots

There are essentially two types of roots .:

(tap root and fibrous root)

1- Tap root system .: (carrot root)

Consisting of a simple long conical root with side branches often develop from the main root (most dicots have a tap root system).

2- Fibrous root system .: (grasses plants)

Consisting of a mass of similarly sized roots and complex form network . (most monocots have a fibrous root system).

-In addition to their primary root system , many plant have (adventitious) root which (root that development from any parts except the root) .

-Food storage root .: Roots are often sites of storage (carrot root) .