

between the root cap and the zone of elongation [minimize communication] - root grows sideways- the root cap sends an inhibitory signal and when this signal is blocked, expansion occurs. Normally the root would grow down- block communication between elongation and root cap zone by adding a myco-cylinder- nothing can move or diffuse between them and thus see an increase in elongation which means that the root cap typically sends an inhibitory signal that causes the root to grow side ways.

- Quiescent cells can become part of the xylem or phloem and does not have to be dedicated to the root cap.

Question for the test/exam:

What is a quiescent zone and why do plants have them?

- a) Quiescence minimizes the possibility of DNA mutations. —> answer
- b) A region where root cells can rest [part of decisional determination and development].
- c) Where cell division occurs.
- d) Quiescent cells are small and therefore don't divide.
- e) Quiescent cells are the top layer of the root cap.
- f) a and c
- g) a and e
- h) none of the above