

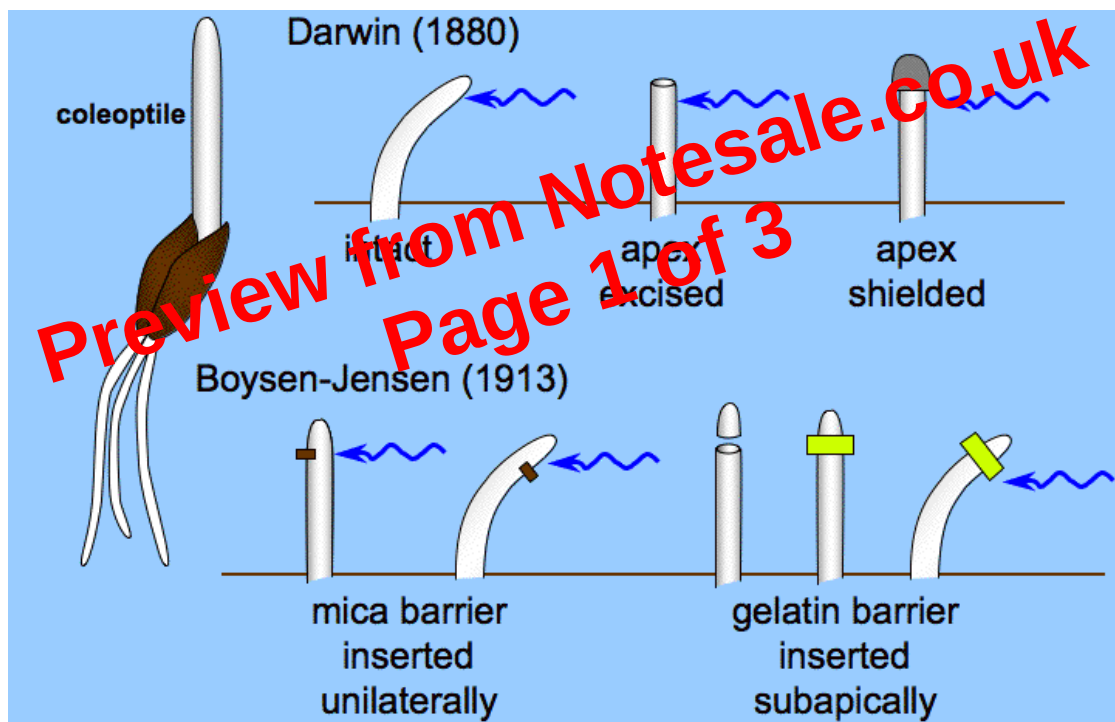
Stimulus Reception in Plants

Sensitivity: the ability to detect changes in the internal/external environment and respond to them.

- Animal responses: quick movements
- Plant responses: less evident, slow growth/ turgor movement

Tropism: movement of part of a plant in response to and directed by an external stimulus. They can be positive (towards) or negative (away).

Growth substances do not move from their site of photosynthesis e.g. auxin, gibberellins, ethene. (coleoptiles: surrounds and protects the apical meristem and young leaves)



Darwin: coleoptiles are phototropic, they bend towards light. If the tip is covered no bending occurs. If the tip is cut off, no bending occurs.

Therefore the tip of the coleoptiles is responsible for receiving light and produces a signal for the bending to occur.