



# 5.4 PLANT HORMONES (biology only)

Initiate seed germination and end seed dormancy. Causes bolting in adult plants, leading to flower and seed production

- Used to artificially end seed dormancy
- Used to promote flowering
- Used to increase fruit size

Gibberellins

Ethene

Controls cell division and fruit ripening

Uses of plant hormones

Used to control ripening. Fruit is ripened after transport to prevent spoiling

Auxins

Used as a weed killer – makes weeds grow too quickly, leading to plant death

Used in rooting powders to promote root growth

Can promote growth of tissue cultures

Phototropism

Response to light

Control and coordination

Geotropism, aka gravitropism

Response to gravity

Both controlled by the hormone auxin

Control growth and coordination

**KEY**  
‘Higher tier only’ written in orange.

**AQA**