High Yield Facts – Flowering

CIRCADIAN RHYTHEM

It is a biological activity that shows rhythmic activities depending on the regular periodicity of 24 hours.

Flowering is induced when light exposure coincide with the appropriate phase of the biological rhythm. The stimulus for flowering is transmitted to the floral buds in the form of Hormone.

FLORIGEN

It is the flowering hormone identified by **M.K.Chailakhyan** in 1937.
Gibberillin and Ethylene can also induce flowering.

ANTIFLORIGEN

These are inhibitors that prevent flowering

Gibberillin induce flowering in Arabidopsis by activating certain genes.
Ehylene induce flowering in Pineapple

VERNALISATION

Flowering in response to cold temperature. Plants are subjected to cold treatment to the growing point and exposed to the photoperiod.
Vernalin is the hormone that causes Vernalisation
Devernalisation is caused by high temperature.

SENESCENCE

Period between reproductive maturity and death of plants.

Whole plant senescence Whole plant dies after seed formation.
Sequential senescence Older leaves and lateral organs die and tip of plant continue to grow.
Shoot senescence In Banana and Gladiolus, the shoot die and underground parts survive.
Synchronous senescence Leaves are shed in a season. Egs. **Mapple tree.**
Cytokinins delay senescence Abscisic acid promotes senescence.

HIGH YIELD FACTS

1. Photomorphogenetic responses, the most important pigment absorbs Blue and Red lights.
2. Studies on seed germination led to the discovery of Phytochromes.
3. Pfr is the physiologically active Phytochrome.
4. Day neutral plants are beneficial to farmers because more than one crop of the same plant can be raised in a year.
5. Growing point of the plant receives stimulus for cold treatment in vernalisation.
6. Auxins also induce flowering in some plants.