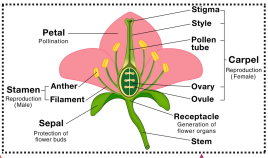
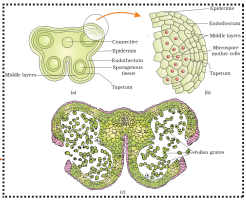
GGSRDN
Educational Services Private Limited
NEET, JEE(Mains/Advanced)
अभ्यास ने सबसे बड़ा गुरु है।

Class : 12th Biology
Chapter- 2 : Sexual Reproduction in Flowering Plants





Occurrence of more than one embryo in a seed

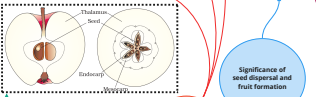
Polyembryony

Production of seed without fertilization

Apomixis

Development of fruit without fertilization

Parthenocarpy



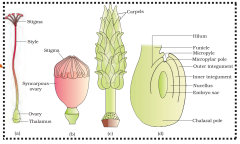
Seed dispersal help the species to colonize in other areas and many fruits have mechanisms for dispersal of seeds

Significance of seed dispersal and fruit formation

Flower Structure

Male gametophyte

Female gametophyte



Pre-fertilisation events

Special modes

When parts other than ovary contribute to the fruit formation. Ex : Apple

False Fruit

True Fruit

Post-fertilization Events

Formation of fruit

When fruit develops from ovary Ex : Mango

Development of endosperm

Development of embryo

Development of Seed

Sexual Reproduction in Flowering Plants

Double fertilization

Syngamy + Triple fusion = Double fertilization

Pollination

Types

Autogamy

Xenogamy

Geitonogamy

Agencies

Abiotic

Wind

Water

Biotic

Animals

Example

Pollen-pistil interaction

Outbreeding Devices

Winter Pollinated: Grasses Water Pollinated: Vallineria and Hydrilla Insect Pollinated: Yucca

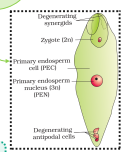
Devices for promoting cross pollination

Self-incompatibility

Arrangement of anther and stigma at different positions.

Production of unisexual flowers (Decline)

Pollen release and stigma receptivity not synchronised.



It is a dynamic process involving pollen recognition followed by pollen tube growth

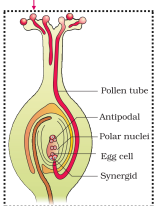
Artificial Hybridisation

It is one of the major approaches of crop improvement by using desired pollen grains for pollination.

Achieved by

Emasculation

Bagging

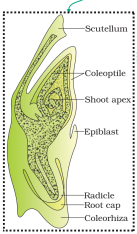


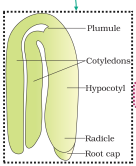
L.S. of Monocot embryo

Albuminous seeds (Endospermic)

Non-albuminous seeds (Non-endospermic)

Dicot embryo





GGSRDN
Educational Services Private Limited
NEET, JEE(Mains/Advanced)
अभ्यास ने सबसे बड़ा गुरु है।