

Seed Reproduction

What You'll Learn:

Examine the life cycle of typical gymnosperms and angiosperms.

Describe the structure and function of the flower.

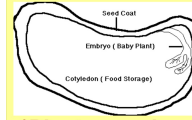
Discuss methods of seed dispersal in seed plants.

The Importance of Pollen and Seeds

*Pollen can be carried by gravity, wind, water, or animals.



*It does not require water for fertilization.

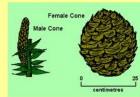


*Seeds consist of an embryo, stored food and a protective covering.

*Plants can develop more quickly from a seed than a spore.

Gymnosperm Reproduction

*Cones are the reproductive structures



*Pine tree is the sporophyte stage that produces male and female cones.

*The cones are in the gametophyte stage and produce the sperm and egg.

Gymnosperm Seeds

*Pollen is carried to female cone by wind or gravity.



*Fertilization takes place when the sperm combines with the egg.

*The process can take two or three years.

Angiosperm Reproduction

*All have flowers produced by the sporophyte stage.

*Flowers contain the gametophyte structures to produce sex cells.

*The four main parts of the flower are petals, sepals, stamen, and pistil.

Importance of Flowers

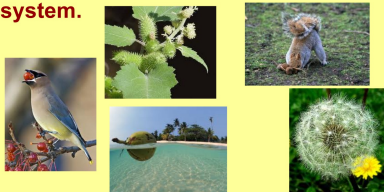
*Their appearance, color, and aroma attract animals to aid in pollination.

*Pollen sticks to their bodies and is carried from flower to flower.

*Those that rely on the wind will have small petals.

Seed Dispersal

*Seeds can be dispersed by wind, trapped in fur/feathers, carried by water, buried by animals, or pass through the digestive system.



Germination

*Takes place when the right temperature, amount of sunlight, availability of water and amount of oxygen are present.