

Dispersal of Fruits and Seeds

Introduction

- • Dispersal is the process by which fruits and seeds are spread away from the parent plant.
- • Ensures species survival, reduces competition, and allows colonization of new areas.
- • Dispersal is aided by various agents like wind, water, animals, and mechanical forces.

Dispersal by Wind (Anemochory)

- • Fruits and seeds are light, small, and may have wings, hairs, or other adaptations to float in air.
- Examples:
 - 1. Winged fruits – e.g., maple (samara).
 - 2. Hairy seeds – e.g., cotton, Calotropis.
 - 3. Very light seeds – e.g., orchids.

Dispersal by Water (Hydrochory)

- • Adapted to float on water with fibrous husks or air-filled cavities.
- Examples:
 - 1. Coconut – fibrous mesocarp aids floating.
 - 2. Lotus – seeds remain viable in water for long periods.

Dispersal by Animals (Zoochory)

- • Seeds and fruits have adaptations to attach to animals or to be eaten and later excreted.
- Examples:
 - 1. Hooks and spines – e.g., Xanthium, burdock.
 - 2. Fleshy edible fruits – e.g., mango, guava, tomato.

Mechanical Dispersal (Autochory)

- • Fruits burst open when dry, scattering seeds by mechanical force.
- Examples:
 - 1. Pea, bean – pods split open (dehiscence).
 - 2. Balsam – fruit bursts and throws seeds away.

Summary

- • Dispersal mechanisms: Wind, water, animals, and mechanical forces.
- • Adaptations in fruit/seed structure help in effective dispersal.
- • Dispersal ensures plant survival, diversity, and colonization of new habitats.