

Learning Objective: Understanding different agents of seed dispersal.

Skills: Development of environmental sensitivity.

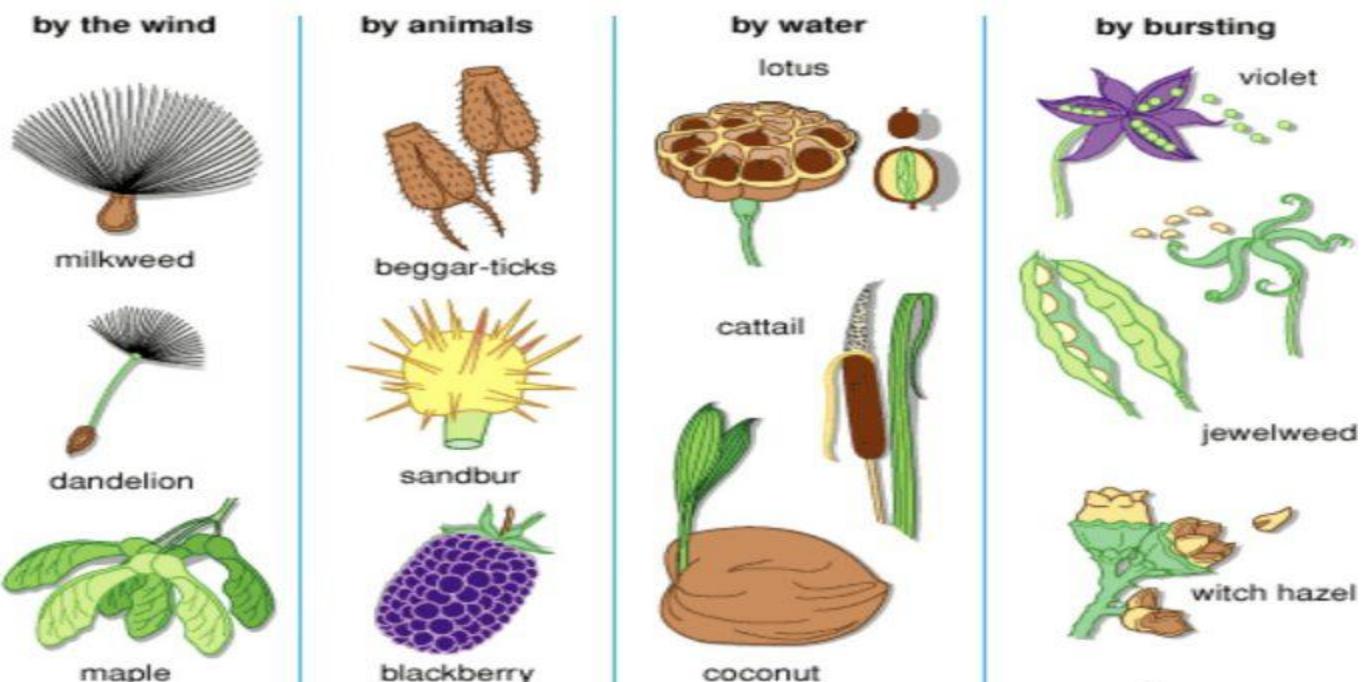
Seed Dispersal

Seed dispersal is the term coined for the movement of the seed from one place to another. This movement generally occurs with the help of dispersal agents. These dispersal agents can be wind, animals, water.

Thus, seed dispersal is the movement, spread or transport of seeds away from the parent plant.

Seed dispersal is beneficial to the plant because

- it prevents overcrowding of plants in a particular area thus preventing the competition for water, nutrients and sunlight.
- it helps the plant to grow in new places (habitat).



➤ Dispersal by Water

In this mode of seed dispersal, seeds float away from their parent plant in rivers or ponds due to their light weight. Plants which grow near water bodies usually rely on water to transport their seeds to different places. The seeds of such plants are light in weight and thus float. Some examples of plants whose seeds are dispersed by the water are Coconut, palm, mangroves, water lily.

➤ Dispersal by Wind

This process of dispersal is mainly seen in those plants which bear very light seeds. The seeds of the orchid plant, dandelions, swan plants, cottonwood tree, hornbeam, ashare all examples of plants whose seed are dispersed by the wind. The seeds of these plants are either feathery or winged, so that they are easily carried away from parent plant.

➤ Dispersal by Animals

Animals and humans eat fruits like apple, watermelon and throw away the seeds. These seeds on getting favourable conditions grow into new plants. Some birds and animals disperse the seeds in different manners. They eat these fruits only the pulpy part is digested in their bodies and the seeds are excreted out by their systems in the form of their dropping, which eventually gives birth to new plants. Blackberry, cherry, tomato and apple seeds are usually dispersed in this way.

There are some species of squirrels that collect nuts from different plants like acorns and bury them under the ground as they store food for the winter season, these squirrels usually forget the place where they have previously buried the nuts and the seeds germinate into new plants.

Some plants bear seeds with hooks. A common example for such a type of plant is the Burdock plant. The seed of these plants gets attached on the fur of animals with the help of these hooks and are carried away to different places, far from their parent plants.

➤ Dispersal by Explosions

In this case, as the fruits get ripened, it shoots out its seeds into the external environment. This type of seed dispersal is mainly seen in those plants having pods.

Okra, Lupins, gorse, and broom are a few examples of plants whose seeds are dispersed by Explosions. Pea and bean plants also have pods and the seeds burst out when they ripen and pod has dried.

Homework:

After maintaining the index, write the answers of below mentioned questions on your Ev.Sc. notebook, neatly.

Q1: Name two seeds which are dispersed by animals.

Q2: Name two seeds that have spines.

Q3: What is meant by dispersal of seeds?

