



TOPIC-Plants Increasing The Numbers Sub Topic – Dispersal of Seeds -PART 2B

NAME - _____ CLASS V/ SEC ____ Date – 23.04.20

You have learnt in the previous part of the lesson how seeds are dispersed or carried away by WIND and WATER.

Highlights/Summary of the Topic

ANIMALS too play an important role in scattering away the seeds to far off places.

Let us now see how they help to scatter the seeds

➤ **Dispersal by Animals**

- Many fruits and seeds are spread by animals, birds, insects and humans.
- Some seeds have hooks or spines which help them to stick to the body fur or hair of animals and also to the clothes of humans and are thus carried away. For example: Cocklebur, Burdock, Xanthium, Tigers' nail and Spear grass etc.



Burdock

Xanthium

- Some juicy and fleshy fruits are eaten up by animals, birds and humans and their seeds are thrown away far, eg. mangoes, cherries, oranges etc.



- Some animals and insects (squirrels, ants etc.) collect nuts and grains and bury them in different places or keep them in heaps for later use. These may germinate later.



- Some birds and animals swallow the seeds along with the fruits which come out undigested with their droppings and are dispersed to other areas.

Did You Know?

Swiss engineer George de Mestral invented velcro after studying the burrs (seeds) that used to stick to clothes and animal fur. He noticed that the burrs had hooks that caught on anything with loops. The same mechanism is used in making velcro.

➤ **Dispersal by Explosion of Fruits**

- Fruits of some plants like peas, beans and balsam burst open or explode when they are ripe and dry. The forces of explosion help to scatter the seeds far.



Peas



Balsam

Recap Zone

Seed dispersal:

Scattering of seeds away from the parent plant is called seed dispersal. It can happen by wind, water, animals, and explosion.

Wind: Light and feathery seeds, e.g., dandelion and silk cotton



Dandelion seed



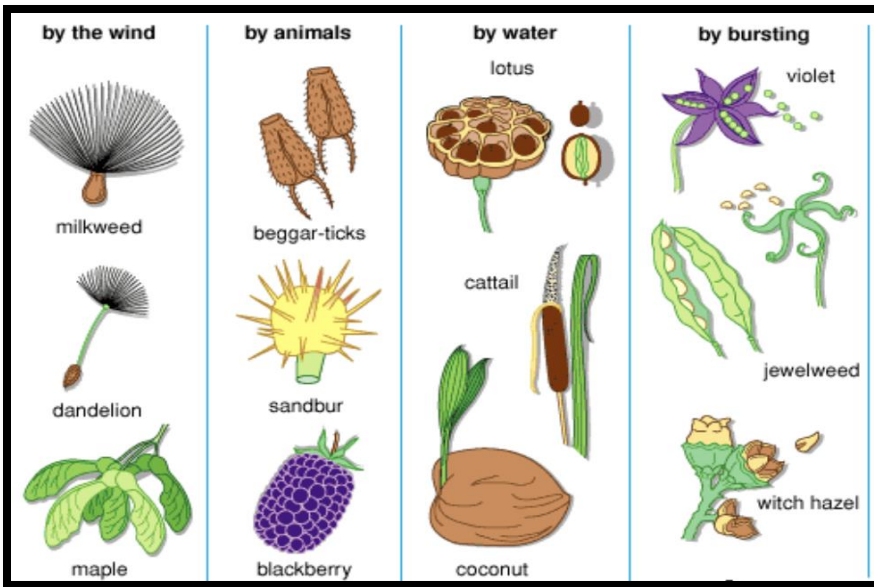
Two winged maple seeds attached to the stem

Water: Seeds have a fibrous or spongy coating and can float on water, e.g., coconut

Animals: Seeds have hooks or spines, e.g., burdock and cocklebur

Explosion: Pods split open, scattering the seeds, e.g., pea and violets










Do It Yourself.....
Collect as many seeds as possible. Collect them according to the way they disperse. Paste them in your nature albums or notebooks.

Now tickle your brain

C How are these seeds dispersed? Tick (✓) the correct option.

1. Coconut	wind	water	animal	explosion	
2. Drumsticks	wind	water	animal	explosion	
3. Peas	wind	water	animal	explosion	
4. Jacaranda	wind	water	animal	explosion	
5. Mango	wind	water	animal	explosion	

Practice Time

(Q1 to 3 are to be done in the notebook)

- Give one word for the following:-
 - The method of seed dispersal in the pea plant _____
 - Cocklebur seeds have spines on its cover for dispersal by _____
 - A plant growing in the pond whose fruits are dispersed by water _____
 - Transfer of seeds from one place to another _____.

2. Choose the correct option :-

A. The seeds of Dandelion are:-

- i. heavy with spines
- ii. light and feathery
- iii. in pods
- iv. hard and Fibrous

B. Which feature helps a coconut fruit to disperse: -

- i. a fibrous outer covering
- ii. presence of hooks
- iii. a spongy cover
- iv. presence of spines

C. Seeds of Papaya are dispersed by:-

- i. wind
- ii. animals
- iii. water
- iv. explosion of fruit

D. Which one of the following does not act as an agent for dispersal?

- i. wind
- ii. water
- iii. sunlight
- iv. human Beings

3 Correct the incorrect statements by changing the underlined words:-

- I. The process by which seeds are scattered away from the parent plant is called agriculture.
- II. Seeds of burdock have wings that easily get stuck to the fur of animals.
- III. Dandelion seeds have wing like attachments on them.
- IV. Mango fruits burst open when ripe to scatter their seeds.

LIFESKILLS ACTIVITY

We have seen in this lesson how it is important to keep some distance while sowing the seeds to grow healthy seedlings. Similarly, these days we are being advised to practise SOCIAL DISTANCING in public places. What is social distancing and how is it important at this point of time?

Design an appropriate slogan on the importance of SOCIAL DISTANCING to create public awareness.