

WELCOME TO THE ONLINE CLASS

SESSION NO.: 4 CLASS: 5 SUBJECT: SCIENCE CHAPTER NUMBER: 1 CHAPTER NAME: PLANTS: INCREASING THE NUMBER SUB TOPIC: DISPERSAL OF SEEDS, AGENTS OF DISPERSAL

CHANGING YOUR TOMORROW

Website: www.odmegroup.org Email: info@odmps.org Toll Free: **1800 120 2316** Sishu Vihar, Infocity Road, Patia, Bhubaneswar- 751024

LEARNING OBJECTIVE

To enable the learner to know different types of seed and how the shape of a seed help in dispersal of them.



WARM UP

- The development of seed into a seedling is called
- What are the conditions required for germination of seed?
- Seeds having two seed leaves are called ______seeds.
- Seeds that are kept inside a refrigerator do not germinate. Why?
- Define seedling.
- Distinguish between a seedling and a sapling.



DISPERSAL OF SEEDS

The scattering of seeds away from the parent plant is called seed dispersal.





NECESSITY OF DISPERSAL OF SEEDS

- Dispersal of seeds is very important for the survival of plant.
- If plants grow too close together, they have to compete for light, water and nutrients from the soil.
- Seed dispersal allows plants to spread out to a wide area and avoid competing with one another for the same resources.



AGENTS OF DISPERSAL

- Wind
- Water
- Animals
- Explosion











DISPERSAL BY WIND

• Usually small and light seeds are scattered by wind. Example- grass.







DISPERSAL BY WIND

• Some seeds are easily carried away by the wind due to the presence of long and fine hairs around them. Exampledandelion, cotton.







DISPERSAL BY WIND

• Wings of some plants help them to float in air easily. Example- maple, drumsticks.







DISPERSAL BY WATER

- Seeds of plants that grow in or near flowing water may be dispersed by water.
- These plants fruits and seeds can float on water because they trap air in them which makes them light and easy to float in water.
- Example water lily, lotus and coconut.







DISPERSAL BY ANIMALS

• Human beings eat the fleshy fruits and throw the seeds away. In this way we help the plants to disperse their seeds. Example -mango, papaya, cherry and guava.

• Birds and animals' excreta out the seed in their waste and help in dispersal of seeds.

Example-guavas and berries.





DISPERSAL BY ANIMALS

• Some seeds stick to the clothes or bodies of animals by their stiff hair, spines or hooks and help in dispersal. Example- Xanthium and martynia (tiger nail).



DISPERSAL BY EXPLOSION

Some fruits burst open or explode when they are dry and scatter the seed away from the mother plant. Example-balsam, pea, geranium etc.

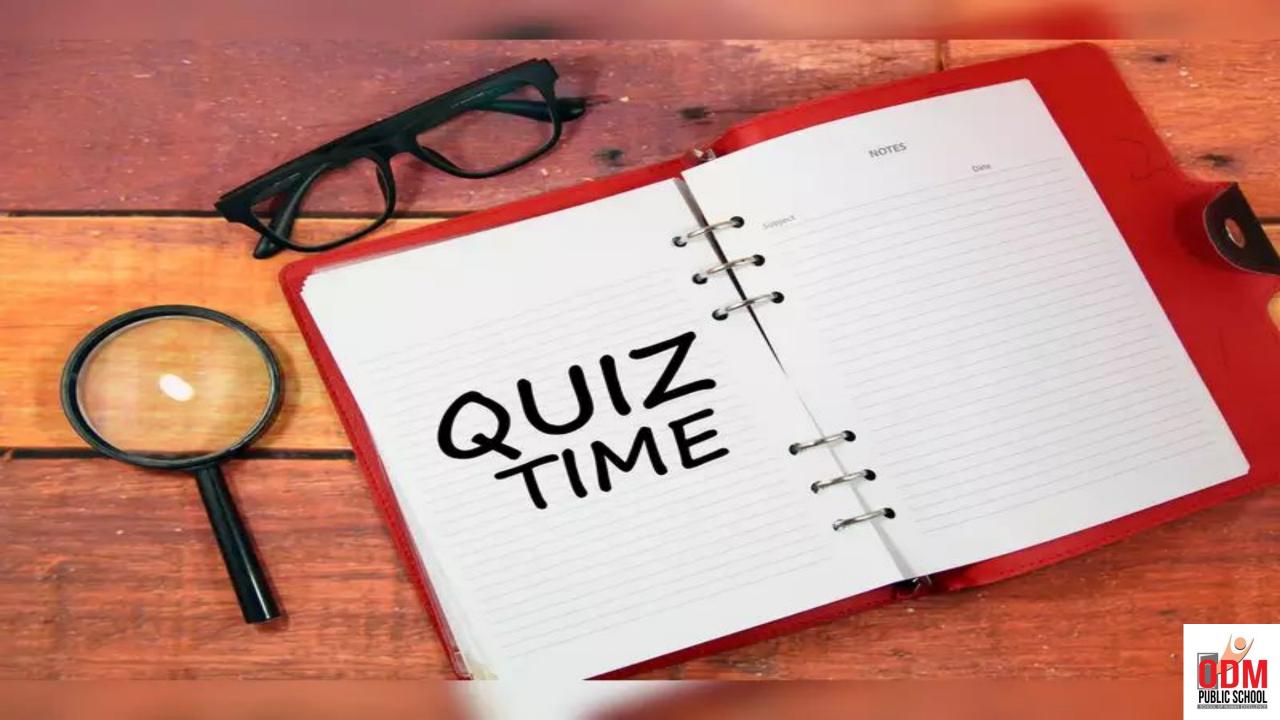




SUMMARY

- The scattering of seeds away from the parent plant is called seed dispersal.
- Wind, water, animals and explosions are the agents of dispersal of seed.





1. Why are coconut trees found in coastal areas?

ANS: Seeds of coconut tree trap air in them which makes them light and easy to float in water. Therefore, coconut trees are found in coastal areas. 2. The scattering of seeds away from the parent plant is called

ANS: Seed dispersal



- 3. Identify the seed that can be dispersed by water.
- a. mango
- b. coconut
- c. drumstick
- d. cotton

ANS: b. coconut



4. Identify the agent of dispersal of the seed shown below.



ANS: Dispersal by wind



5. What is the necessity of dispersal of seed?

ANS: Dispersal of seeds is very important for the survival of plant.

- If plants grow too close together, they have to compete for light, water and nutrients from the soil.
- Seed dispersal allows plants to spread out to a wide area and avoid competing with one another for the same resources.



HOMEWORK

Draw the pictures of seeds dispersed by different agents



LEARNING OUTCOME

The learner will be able to know how the structure of a seed affects the dispersal of a seed.



THANKING YOU ODM EDUCATIONAL GROUP

