

germination. If anything (out of air, water and warmth) is missing, seed does not germinate. **Cotyledons** of a seed stores food which is utilized by the developing seedling for its growth.



Germination of a seed

Let us perform an activity to find out conditions required to germinate seeds.



Activity 3

Take some gram seeds separately in three petri dishes. Label these dishes as A, B and C. Keep the seeds for 4–5 days under the conditions mentioned in the table given below.

Dishes	Conditions
 A	Keep the seeds in a moist cotton at room temperature in an open dish. Maintain the moisture for few days.
 B	Keep the seeds without water in an open dish at room temperature.
 C	Keep the dish containing seeds in moist cotton in a trough containing ice or in a refrigerator.

What do you observe after 4–5 days?

You will observe that only the seeds in dish 'A' show germination. This happens because the seeds in dish 'A' get all the favourable conditions (air, water and warmth) needed for germination. On the other hand, in dish B, moisture is missing and in dish C, warmth is missing, therefore, the seeds in these two dishes will not germinate.

DISPERSAL OF SEEDS



Let's View

A plant generally produces a large number of seeds. Imagine, what will happen if all the seeds fall under the mother tree and germinate there? Will the seedlings get sufficient amount of sunlight, water, space and nutrients to grow? No, they will not get them. This will lead to the growth of weaker plants.

So, seeds have to be scattered or spread across in such a way that seedlings developed from them can get enough sunlight, air, nutrients and space to grow. The process of spreading of seeds across wide areas away from the mother plant is called **dispersal of seeds**.

How does Dispersal of Seeds Take Place?

There are some agents or helpers which help in carrying away and spreading the seeds. They are wind, water and animals. In some plants, dispersal of seeds takes place by explosion of fruits.

Let us study these agents of dispersal of seeds.



Search Mirror

moisture: a small amount of water in air or any material