

Subject: Science

Activity - How to select healthy seeds?

Chapter- Crop Production and Management

Class: VIII

Duration:30 minutes

Nature of the activity: Group

Learning Outcome: Students will be able to differentiate between healthy and damaged seeds.

What we have to do?

To demonstrate how to select healthy seeds from damaged seeds.

What do we need?

Seeds, beaker and water.

What do we need to know?

Seed is a fundamental requirement to grow most crops. It is that part of a plant which is used for propagation, planting, or regeneration purpose.

How to proceed?

- **Teacher's Activity:**

Teacher will give instructions to the students to carry out the activity in groups.

- **Student's Activity:**

Collect some seeds of various food grains. Fill a beaker up to half and drop the seeds in the half- filled beaker.



What do we observe?

1. The seeds which float are _____, therefore they can/cannot be sown.
2. The seeds which sink are _____, therefore they can/cannot be sown.

What have you learnt?

The healthy seeds_____ (sink/float),because_____.

The unhealthy seeds_____ (sink/float),because_____.

What more can we do?

1. Collect three different kinds of spoiled grains (contaminated) of seeds—any pulse, rice and wheat. 2. Keep a fistful of each type of seeds in a container and mark the containers, A, B and C.

2. Carefully observe the following in the seeds – Are there small holes in some seeds? – Is there a powdery material at the bottom of the container? – Are there net-like threads around the grains? – Do the seeds emit a foul/sour smell?

3. Now observe if there are any kind of organisms— worms/insects—in the container? In case they are present, observe if there is only one kind of organism or do you find different types of worms/insects in the container? Note the colour, shapes and structure of the insects/worms.

EXTENDED LEARNING WORKSHEET:

1. What are the different ways in which seeds can get spoilt?

2. What will happen to the seeds if we do not store them properly?

3. Name a few storage structures used in your house. Find out if they are safe for storage?

4. Have you observed how grains are stored in huge godowns?

5. Sometimes when we soak chick pea seeds in water, a few of them float, whereas other seeds sink to the bottom. Give reasons.
