



## Germination Testing

Working out if the seed you are planning to plant germinates is essential for a successful crop. Many factors can impact seedling germination, including where and how the seed has been stored and for how long, what conditions the seed was harvested in, potential chemical damage and insect damage whilst in storage. To determine this we can undertake a germination test to determine the germination percentage to make sure the majority of your seed is viable, and will germinate when sown.

Determining the germination percentage will allow you to make decisions on seeding rate (seeding rate may need to be increased if the germination percentage is too low).

To conduct your own germination test, you can ask an adult on your farm to give you some grain that they are planning to use at seeding time, or you can ask MIG for your own samples.

Germination tests can be undertaken on all crop types.

To conduct your own germination test:

1. Gather up 100 seeds from your seed source.
2. Use a waterproof tray to conduct your tests on and line it with a few sheets (3-5) of paper towel.
3. Dampen the paper towel, but do not flood.
4. Arrange the 100 seeds on the paper towel, around 1cm apart.
5. Water the seeds every few days to make sure the paper towel stays wet.
6. After 2-3 days most of the seeds should have germinated.
7. After 6-8 days the seeds should be showing signs of roots and green shoots.
8. Now the germination percentage can be calculated:
9.  $\% \text{ Germination} = \frac{\text{number of seeds tested} - \text{number of seeds that did not germinate}}{\text{number of seeds tested}} \times 100$
10. This process can be repeated.

## Growing Seed

For a plant's root system to grow successfully, it will need to be planted in soil. The soil contains nutrients that allows the wheat to continue growing well.

Use the remainder of the seed to grow your own crop. You will need to set up an area, which has some nice soil, or use potting mix in pots.

You will need to create a small trench to place the seeds in, and space the seeds out so they are at least 10cm apart. Cover the seeds with soil (the seeds should be around 3cm deep).

Water the area regularly (every few days to make sure the soil is moist).

Keep track of the plants throughout the year. There will be lots of different stages the plant goes through before it will be ready to harvest.

Keep us updated by sending photos of your crop. Prizes will be awarded throughout the year!