

### **Agar method**

Agar is an alternative substrate to paper, particularly for testing germination in small and medium-sized seeds. Agar dissolves slowly in hot water and forms a viscous solution, which forms a stiff jelly upon cooling.

1. Sterilize the surface of the containers by wiping them with 70–95% alcohol or soaking in 20% bleach or hot water at 55°C for 10–15 minutes.
2. Label 9-cm Petri dishes and their covers (for small seeds), or any other heat-resistant germination test containers, with accession number, number of replicate and testing date.
3. Prepare 1% agar solution (WA) by dissolving 1 g of agar powder in 100 ml of warm distilled water heated on a hot plate.
4. Allow the solution to boil until the agar is completely dissolved, then cool slightly to 50°C and pour into the labelled Petri dishes or the other containers. The thickness of the substrate should be twice the thickness of the seeds. Arrange the seeds equidistantly on the surface of the agar.
6. Cover the dishes with their lids and place them in an incubator maintained at the recommended temperature for the species (see guidelines for testing germination of the most common crop species).
7. Run the test for the recommended period (see guidelines for testing germination of the most common crop species) and count the number of seeds that have germinated.