

Germination in sand

This method is most appropriate for large seeds (with a diameter greater than 1 cm), which are difficult to germinate in Petri dishes or too heavy for the between-paper method.

1. Pack sterile, moist sand into pots or deep-bottom plastic trays with drainage. A single sheet of paper can be placed in the base of the tray to keep the sand from pouring out through the drainage holes.
2. Water the sand until it is moist. Do not use excess water.
3. Make holes in a regular equidistant pattern at about the same depth as the size of the seeds. Ideally, the distance between holes should be at least three to five times the seed diameter.
4. Prepare a plastic or wooden label with the accession number, date of sowing and replicate number, and place it in each tray.
5. Place one seed in each hole and cover the holes with sand.
6. Water the sand again by sprinkling to ensure that the sand layer is not displaced or the seeds are not disturbed when watering. Bottom-watering is better than top-watering—it is achieved by placing the test containers in larger plastic trays with water for about one hour.
7. Place the trays in appropriate light and temperature for the species.
8. Keep the substrate moist during tests by adding water, but do not over-water.
9. Run the test for the period recommended for the species and count the number of seeds that have sprouted.