



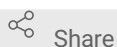
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Arabidopsis seeds priming V.1

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In Development



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ABSTRACT

The treated seeds can grow in medium or bulk soil to determine the impact of novel materials on plants.

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KEYWORDS

Arabidopsis thaliana, Seed priming, Beneficial microbe, Plant stress, Root structure architecture

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GUIDELINES

Seed treatment of arabidopsis seeds is a suitable, simple method for many plant-microbe interactions.

MATERIALS TEXT

Arabidopsis thaliana seeds (Col-0)
50% Bleach
Distilled water

SAFETY WARNINGS

The only harmful chemical is 50% bleach. Please make sure wear gloves when in the seed sterile steps.

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BEFORE STARTING

Seed priming is an important method that increases the health of the plant.

Seeds sterilisation 15m

- 1 The arabidopsis seeds are immersed with 50% bleach in 1.5 µL tubes.
- 2 10m
 100 rpm, 28°C, 00:10:00
- 3 10s
 100 rpm, 28°C, 00:00:10
- 4 Gently remove the supernatant and leave the seeds in the tube.
- 5 The sterile seeds are immersed in distilled water.
- 6  go to step #3
Repeat the process of step #3 to #5 for 10 times

Seeds treatment 1d

- 7 The seeds were immersed in the specific concentration of treatment
 1. Bacteria treatment: OD value to 0.1 and diluted 10 times.
 2. Fungus treatment: final concentration of spore suspension is 100 spores mL⁻¹.
- 8 1h
 100 rpm, 28°C, 01:00:00
- 9 23h
 150 rpm, 4°C, 23:00:00

Wash seeds 10s

- 10 The treated seeds are moved in a filter column with a collection tube.

11  100 rpm, 28°C, 00:00:10

10s

12 Remove the filter through in collection tube

13 Add 500 µL of distilled water to the filter column and resuspend the seeds.

14  go to step #11

Repeat the process of step #11 to #13 for 10 times