

Sep 18, 2022 Version 1

Arabidopsis seeds priming V.1

DOI

dx.doi.org/10.17504/protocols.io.kqdg394z1g25/v1



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DOI: dx.doi.org/10.17504/protocols.io.kqdg394z1g25/v1

Protocol Citation: Tao-Ho Chang 2022. Arabidopsis seeds priming. **protocols.io**

<https://dx.doi.org/10.17504/protocols.io.kqdg394z1g25/v1>

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Protocol status: In development

We are still developing and optimizing this protocol

Created: September 18, 2022

Last Modified: July 10, 2023

Protocol Integer ID: 70192

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



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Abstract

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

Guidelines

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

Materials

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.

Before start

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

🌀 100 rpm, 28°C, 00:10:00

10m

3

🌀 100 rpm, 28°C, 00:00:10

10s

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

🌀 100 rpm, 28°C, 01:00:00

1h

9

🌀 150 rpm, 4°C, 23:00:00


23h

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 μ L 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