Arabidopsis germination

MEDIUM per liter

2.25 g MS salts (Sigma M5524) (in fridge)
10 g sucrose
pH 6.0 with KOH

for plates: add 2 g phytagel (final conc: 0.2%)
or: add 7 g agar (plant cell culture tested)

Antibiotics: 50 µg/ml kanamycin
(to select for transformed plants, stock is 20 mg/ml in H₂O)

Surface sterilization of Arabidopsis seeds:

30 % bleach
0.1 % Triton X-100
for 5 to 10 min
rinse well at least 3 times with sterile H₂O
(can do direct stratification, or plate first)

Spreading of seeds:

Agarose method (0.1% in water):
Prepare sterile 0.1 % agarose (in water)
Add seeds to agarose (5 ml for large plates, 3 ml for small plates)
pour entire slurry onto plate, try to distribute seeds evenly

Single seed method:
Pick up sterile seeds in sterile 1000 µl pipette tip
Let seeds settle to tip
Tap tip lightly on agar – this typically releases single seeds
If necessary, spread seeds with tip
After several seeds, need to set volume of pipetter down to release more seeds.

Stratification:

1 to 2 days in fridge.

updated on 04.12.28 by Andreas