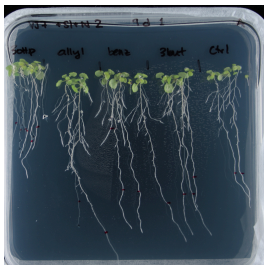
Jul 23, 2019

# Arabidopsis growth medium with varying sulfur and nitrogen content



DOI
dx.doi.org/10.17504/protocols.io.5q6g5ze

Meike Burow[1]

[1]University of Copenhagen

Verena Jeschke





**DOI: https://dx.doi.org/10.17504/protocols.io.5q6g5ze**

**Protocol Citation:** Meike Burow 2019. Arabidopsis growth medium with varying sulfur and nitrogen content. **protocols.io https://dx.doi.org/10.17504/protocols.io.5q6g5ze**

**Protocol status:** Working
**We use this protocol and it's working**

**Created:** July 23, 2019

**Last Modified:** July 23, 2019

**Protocol Integer ID:** 26110

**Keywords:** medium, low sulfur, low nitrogen, seedling, arabidopsis growth medium, nitrogen content media receipe, varying sulfur, variaiton, concentration

## Abstract

Media receipe to grow A. thaliana seedlings on plates.
Variaiton in S and N concentrations.

## Troubleshooting

## stock solutions

1

| | Media solution | stock solutions |
|---|---|---|
| | **+S/+N** | A+C+G |
| | **+S/-N** | A+D+G |
| | **-S/+N** | B+E+H |
| | **-S/-N** | B+F+H |

media recipes.xlsx

## for 1 L medium

2

| | **General media recipe** | **Volume** |
|---|---|---|
| | Minor salts (100x) | 10 mL |
| | Major salts (10x) | 100 mL |
| | Ferrous solution (100x) | 10 mL |
| | Vitamin mix (1000x, Murashige and Skoog, Prod. No. M0409.0100, Duchefa Biochemie) | 1 mL |
| | | |
| | water to 1L | |
| | adjust pH to 5.8 with 1M KOH | |
| | divide 1L to 2× 500 mL (into 1L bottles) | |
| | add 4g agar per 500mL | |
| | autoclave | |
| | | |

## Concentrations of S and N in final medium

3

| | |
|---|---|
| | Concentration of Sulphate |
| | in +S: 1.68 mM |
| | in -S: 0.015 mM |
| | |
| | Concentration of Nitrate |
| | in +N: 3 mM |
| | in -N: 0.3 mM |