

Modified Desmidiacean Medium Recipe

Directions

The final medium is prepared on a tube by tube basis, using 15 mL glass tubes, stoppered with rubber-lined screw caps.

For 1 L Total

Liquid media:

1. To approximately 900 mL of dH₂O add the first 7 components in the order specified while stirring continuously.
2. Bring total volume to 1 L with dH₂O.
3. Cover and autoclave medium.
4. Allow to cool.
5. Add 1 sterile barley grain per test tube then store at refrigerator temperature.

| # | Component | Amount | Stock Solution Concentration | Final Concentration |
|---|-----------------------------------------------------------------------------|---------------|------------------------------|---------------------|
| 1 | KNO ₃ (Baker 3190) | 10 mL/L | 1 g/100 mL | 0.9 mM |
| 2 | (NH ₄) ₂ HPO ₄ (Fisher A686) | 5 mL/L | 0.2 g/100 mL | 0.075 mM |
| 3 | MgSO ₄ ·7H ₂ O (Sigma 230391) | 10 mL/L | 0.1 g/100 mL | 3.3 μM |
| 4 | CaSO ₄ ·2H ₂ O saturated solution (Mallinckroft 4300) | 10 mL/L | | |
| 5 | Soilwater: GR+ Medium | 20 mL/L | | |
| 6 | Soilwater: Peat Medium | 10 mL/L | | |
| 7 | MWC Metal Solution | 5 mL/L | | |
| 8 | Barley grains autoclaved | 1 grain/10 mL | | |