



West and McBride's Medium

Marine medium adapted from ES medium for the culturing of Seaweeds

Reference: West, J. A. and McBride, D. L. (1999). Long-term and diurnal carpospores discharge patterns in the Ceramiaceae, Rhodmelaceae and Delesseriaceae (Rhodophyta). *Hydrobiologia*. 398/399, 101-113

R. A. Andersen (Ed) *Algal Culturing Techniques*, Elsevier, USA, pp 503-504.

Note: Specific stock solutions and stock solutions from other media are used in ANACC to prepare this media.

STOCK SOLUTIONS	CONCENTRATION: g L ⁻¹ DEIONISED WATER (dH ₂ O)	AMOUNT FOR STOCK
1. NaNO ₃	140 g	5.5 mL
2. Na ₂ glyceroPO ₄	<i>add reagent directly to stock</i>	0.08 g
3. Fe-EDTA mix:	<i>see recipe below</i>	20 mL
4. W&B Trace mix:	<i>see recipe below</i>	4.0 mL
5. Thiamine HCl	0.1 g	8 mL
6. Biotin	0.1 g	0.8 mL
7. Vitamin B ₁₂	0.1 g	175 µL

Store all stock solutions in the refrigerator.

Fe-EDTA mix

Add constituents to 1 L of dH₂O and autoclave to dissolve. Store solution in the dark.

CONSTITUENT	QUANTITY
Na ₂ EDTA.2H ₂ O	6.0 g
NH ₄ Cl	1.9 g
FeSO ₄ .7H ₂ O	5.0 g

W&B Trace mix

Add each of the constituents to ~750 mL dH₂O, mixing thoroughly between additions to dissolve. Make solution up to 1 L.

CONSTITUENT	QUANTITY
Na ₂ EDTA.2H ₂ O	2.548 g
H ₃ BO ₃	2.240 g
MnCl ₂ .4H ₂ O	0.240 g
ZnSO ₄ .7H ₂ O	0.044 g
CoSO ₂ .7H ₂ O	0.010 g

To prepare West and McBride concentrated nutrients

- Add each of the stock reagents/solutions (1 – 7) in the stated quantities to 161 mL of dH₂O.
- Makes 200 mL of conc. nutrient stock.
- Filter sterilise using a 0.22 µm filter into a sterile Schott bottle.
- Add 150 mL of sterile dH₂O to 850 mL of sterile seawater aseptically to make 1-L 30-ppt seawater.
- Use 10 mL of concentrated nutrients per 1 L sterile 30-ppt seawater adding the nutrients aseptically.

CONTACT US

t 1300 363 400
+61 3 9545 2176
e csiroenquiries@csiro.au
w www.csiro.au

For further information

Australian National Algae Culture Collection
w www.csiro.au/en/Research/Collections/ANACC

Ian Jameson
Director
t +61 3 6232 5117
e ian.jameson@csiro.au

**Australian National Algae
Supply Service**

Cathy Johnston
Manager
t +61 3 6232 5316
e cathy.johnston@csiro.au