

WALNE'S MEDIUM FOR ALGAL CULTURES

Recommended for large volumes of aquaculture strains

Stocks	per 100 ml
(1) Trace metal solution (TMS)	
ZnCl ₂	2.1 g
CoCl ₂ .6H ₂ O	2.0 g
(NH ₄) ₆ Mo ₇ O ₂₄ .4H ₂ O	0.9 g
CuSO ₄ .5H ₂ O	2.0 g
Make up to 100 ml with distilled water. This solution is normally cloudy. Acidify with a few drops of conc. HCl to give a clear solution.	
(2) Vitamin solution	
Vitamin B ₁₂ . (Cyanocobalamin)	10.0 mg
Vitamin B ₁ (Thiamine.HCl)	10.0 mg
Vitamin H (Biotin)	200.0 µg
Make up to 100 ml with distilled water.	
	per litre
(3) Nutrient solution	
FeCl ₃ .6H ₂ O	1.3 g
MnCl ₂ .4H ₂ O	0.36 g
H ₃ BO ₃	33.6 g
EDTA(Disodium salt)	45.0 g
NaH ₂ PO ₄ .2H ₂ O	20.0 g
NaNO ₃	100.0 g
TMS (1 above)	1.0 ml
Make up to 1 litre with distilled water.	
Medium	per litre
Nutrient solution (3)	1.0 ml
Vitamin solution (2)	0.1 ml
Sterilised seawater	1.0 litre

Dispense nutrient and vitamin solutions separately into 10 ml and 1 ml respectively and autoclave at 15 psi for 15 minutes. Add an aliquot of each aseptically to 10 litres of sterilised seawater.

Reference

Walne PR (1970) Studies on the food value of nineteen genera of algae to juvenile bivalves of the genera *Ostrea*, *Crassostrea*, *Mercenaria*, and *Mytilis*. Fish. Invest. **26**, 1-62.

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