

## BOLD'S BASAL MEDIUM (MODIFIED)

This medium is highly enriched and is used for many of the green algae.

Reference: Stein, J. (ED.) Handbook of Phycological methods. Culture methods and growth measurements. Cambridge University Press. 448 pp.

STOCK	STOCK SOLUTION	ml/Litre
1. $\text{KH}_2\text{PO}_4$	8.75 g/500 ml	10 ml
2. $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$	1.25 g/500 ml	10 ml
3. $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$	3.75 g/500 ml	10 ml
4. $\text{NaNO}_3$	12.5 g/500 ml	10 ml
5. $\text{K}_2\text{HPO}_4$	3.75 g/500 ml	10 ml
6. $\text{NaCl}$	1.25 g/500 ml	10 ml
7. $\text{Na}_2\text{EDTA} \cdot 2\text{H}_2\text{O}$	10 g/L	1 ml
KOH	6.2 g/L	
8. $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$	4.98 g/L	1 ml
$\text{H}_2\text{SO}_4$ (concentrated)	1 ml/L	
9. Trace Metal Solution	See below	1 ml
10. $\text{H}_3\text{BO}_3$	5.75 g/500 ml	0.7 ml

Adjust the pH to 6.8. OPTIONS: For 10% BBM, use 100 ml of 100% BBM/Litre of distilled water. The addition of 5 ml of soil extract is also beneficial to some algae.

### Trace Metal Solution:

Substance	g/Litre
1. $\text{H}_3\text{BO}_3$	2.86 g
2. $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$	1.81 g
3. $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$	0.222 g
4. $\text{Na}_2\text{MoO}_4 \cdot 2\text{H}_2\text{O}$	0.390 g
5. $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$	0.079 g
6. $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$	0.0494 g

Dissolve each of the above substances separately prior to adding the next on the list.