

QF 09 Media Preparation Recipe Template

Revision: 001 Approved: 30APR20

MHY (modified *Hydrodictyon* medium)

Stocks

(1) MHY Stock (10x):	per litre
KNO ₃	0.25 g
$Ca(NO_3)_2.4H_2O$	1.00 g
KH_2PO_4	0.25 g
K₂CO₃	0.345 g
MgSO ₄ .7H2O	0.25 g
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Autoclave at 15 psi for 15 minutes.

(2) Trace elements (PIV):	per litre
Ensure elements are added in the following	ng sequence:
Na₂EDTA	0.75 g
FeCl ₃ .6H ₂ O	0.097 g
$MnCl_2.4H_2O$	0.041 g
$ZnCl_2$	0.005 g
CoCl ₂ .6H ₂ O	0.002 g
$Na_2MoO_4.2H_2O$	0.004 g

Once elements are dissolved autoclave at 15 psi for 15 minutes.

(3) Soil Extract (See SE2 Recipe)

	per 100 mi
(4) Vitamin B ₁ (Thiamine hydrochloride) Filter sterile	0.12 g
(5) Vitamin B ₁₂ (Cyanocobalamin)	0.1 g

Take 1 ml of this solution and add 99 ml deionised water. Filter sterile.

Stock solution 1 (Mix before use)	100 ml
Stock solution 2 (Trace elements)	6 ml
Stock solution 3 (SE2)	30 ml
Stock solutions 4 – 5	1 ml each

Make up to 1 litre with deionised water. Adjust pH to $\bf 6.8$ with 1M NaOH or 1M HCl prior to autoclaving. Autoclave at 15 psi for 15 minutes.

Reference

Medium

Bischoff, H. W. & Bold, H. C. 1963. Phycological Studies IV. Some soil algae from Enchanted Rock and related algal species. U. Texas Pub. No. 6318. – adapted for CCAP

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per litre