

## MHY (modified *Hydrodictyon* medium)

### Stocks

(1) MHY Stock (10x):	<b>per litre</b>
KNO <sub>3</sub>	0.25 g
Ca(NO <sub>3</sub> ) <sub>2</sub> .4H <sub>2</sub> O	1.00 g
KH <sub>2</sub> PO <sub>4</sub>	0.25 g
K <sub>2</sub> CO <sub>3</sub>	0.345 g
MgSO <sub>4</sub> .7H <sub>2</sub> O	0.25 g

Autoclave at 15 psi for 15 minutes.

(2) Trace elements (PIV):	<b>per litre</b>
Ensure elements are added in the following sequence:	
Na <sub>2</sub> EDTA	0.75 g
FeCl <sub>3</sub> .6H <sub>2</sub> O	0.097 g
MnCl <sub>2</sub> .4H <sub>2</sub> O	0.041 g
ZnCl <sub>2</sub>	0.005 g
CoCl <sub>2</sub> .6H <sub>2</sub> O	0.002 g
Na <sub>2</sub> MoO <sub>4</sub> .2H <sub>2</sub> O	0.004 g

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

(3) Soil Extract (See SE2 Recipe)	<b>per 100 ml</b>
(4) Vitamin B <sub>1</sub> (Thiamine hydrochloride)	0.12 g
Filter sterile	
(5) Vitamin B <sub>12</sub> (Cyanocobalamin)	0.1 g
Take 1 ml of this solution and add 99 ml deionised water. Filter sterile.	

### Medium

	<b>per litre</b>
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 **6.8** with 1M NaOH or 1M HCl prior to autoclaving. Autoclave at 15 psi for 15 minutes.

### Reference

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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Created on: 05 Nov 2019	CCAP (Culture Collection of Algae and Protozoa), SAMS Ltd, Scottish Marine Institute, Oban, Argyll, PA37 1QA, UK Tel: +44 (0)1631 559000 Fax: +44 (0)1631 559001 Email: ccap@sams.ac.uk Web: www.ccap.ac.uk	1 Page
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