# ABM (Acidic Bold-Basal Medium with Vitamins; modified)

| **Stocks** | | **per 100 ml** |
|---|---|---|
| (1) | $NaNO_3$ | 7.5 g |
| (2) | $CaCl_2.2H_2O$ | 2.5 g |
| (3) | $MgSO_4.7H_2O$ | 7.5 g |
| (4) | $K_2HPO_4.3H_2O$ | 7.5 g |
| (5) | $KH_2PO_4$ | 17.5 g |
| (6) | NaCl | 2.5 g |

| (7) Trace elements (PIV): | **per litre** |
|---|---|
| Ensure elements are added in the following sequence: | |
| $Na_2EDTA$ | 0.75 g |
| $FeCl_3.6H_2O$ | 0.097 g |
| $MnCl_2.4H_2O$ | 0.041 g |
| $ZnCl_2$ | 0.005 g |
| $CoCl_2.6H_2O$ | 0.002 g |
| $Na_2MoO_4.2H_2O$ | 0.004 g |

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

| | | **per 100 ml** |
|---|---|---|
| (8) | Vitamin $B_1$ (Thiamine hydrochloride) | 0.12 g |
| | Filter sterile | |
| (9) | Vitamin $B_{12}$ (Cyanocobalamin) | 0.1 g |
| | Take 1 ml of this solution and add 99 ml deionised water. Filter sterile. | |

| **Medium** | **per litre** |
|---|---|
| $(NH_4)_2SO_4$ (Ammonium sulphate) | 0.25 g |
| Stock solution 1 | 10 ml |
| Stock solutions 2 – 6 | 1 ml each |
| Stock solution 7 (Trace elements) | 6 ml |
| Stock solutions 8 - 9 | 1 ml each |

The stock solutions are those for 3N-BBM+V. Make up to 1 litre with deionised water and adjust the pH to **3.0** with 1M NaOH or 1M HCl. Autoclave at 15 psi for 15 minutes.

**Reference**

Pollio A, Cennamo P, Ciniglia C, De Stefano M, Pinto G & Huss VAR (2005) *Chlamydomonas pitschmannii* Ettl, a Little Known Species from Thermoacidic Environments. Protist **156**, 287-302. – adapted for CCAP

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