### Supplementary File 1: Bold's Basal Medium (BBM) Recipe (Bischoff & Bold 1963)

Quantity	Component	Stock Solution	
10 ml	Macronutrients	(see recipe below)	
1 ml	Alkaline EDTA stock solution	(see recipe below)	
1 ml	Acidified iron stock solution	(see recipe below)	
1 ml	Boron stock solution	(see recipe below)	
1 ml	Trace metals solution	(see recipe below)	
Bring up to 1000 ml	Distilled water	-	

a. Composition of BBM medium in 1000 ml

#### b. Composition of macronutrients in 1000 ml

Component	Stock solution (g/L)	Quantity used	Concentration in final medium
			(M)
NaNO <sub>3</sub>	25.00	10 ml	2.94 x 10 <sup>-3</sup>
CaCl <sub>2</sub> ·2H <sub>2</sub> O	2.50	10 ml	1.70 x 10 <sup>-4</sup>
MgSO <sub>4</sub> ·7H <sub>2</sub> O	7.50	10 ml	3.04 x 10 <sup>-4</sup>
K <sub>2</sub> HPO <sub>4</sub>	7.50	10 ml	4.31 x 10 <sup>-4</sup>
KH <sub>2</sub> PO <sub>4</sub>	17.50	10 ml	1.29 x 10 <sup>-3</sup>
NaCl	2.50	10 ml	4.28 x 10 <sup>-4</sup>
Distilled water	-	Bring up to 1000 ml	-

## c. Composition of alkaline EDTA stock solution in 1000 ml

Component	Stock solution (g/L)	Quantity used	Concentration in final medium
_		-	(M)
EDTA Na <sub>2</sub>	50.00	-	1.71 x 10 <sup>-4</sup>
КОН	31.00	-	5.53 x 10 <sup>-4</sup>
Distilled water	-	Bring up to 1000 ml	-

### d. Composition of acidified iron stock solution in 1000 ml

Component	Stock solution (g/L)	Quantity used	Concentration in final medium
_			(M)
FeSO <sub>4</sub> ·7H <sub>2</sub> O	4.98	-	1.79 x 10 <sup>-5</sup>
$H_2SO_4$	-	1 ml	-
Distilled water	-	Bring up to 1000 ml	-

#### e. Composition of boron stock solution in 1000 ml

Component	Stock solution (g/L)	Quantity used	Concentration in final medium
-			(M)
H <sub>3</sub> BO <sub>3</sub>	11.42	-	1.85 x 10 <sup>-4</sup>
Distilled water	-	Bring up to 1000 ml	-

# f. Composition of trace metals solution in 1000 ml

Component	Stock solution (g/L)	Quantity used	Concentration in final medium
			(M)
ZnSO <sub>4</sub> 7H <sub>2</sub> O	8.82	-	3.07 x 10 <sup>-5</sup>
MNCl <sub>2</sub> .4H <sub>2</sub> O	1.44	-	7.28 x 10 <sup>-6</sup>
MoO <sub>3</sub>	0.71	-	4.93 x 10 <sup>-6</sup>
CuSO <sub>4</sub> .5H <sub>2</sub> O	1.57	-	6.29 x 10 <sup>-6</sup>
$Co(NO_3)_2.6H_2O$	0.49	-	1.68 x 10 <sup>-6</sup>
Distilled water	-	Bring up to 1000 ml	-