

## 929. RHODOVULUM IODOSUM AND R. ROBIGINOSUM MEDIUM

NaCl	26.40	g
MgCl <sub>2</sub> x 6 H <sub>2</sub> O	5.70	g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O	6.80	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	1.50	g
KCl	0.66	g
KBr	0.09	g
Distilled water	1000.00	ml

Prepare the medium anaerobically under an atmosphere of N<sub>2</sub>:CO<sub>2</sub> (9:1 vol:vol) and then add:

NaHCO <sub>3</sub> solution (84 g/l autoclaved under a CO <sub>2</sub> atmosphere)	30.00	ml/l
KH <sub>2</sub> PO <sub>4</sub>	0.40	g/l
NH <sub>4</sub> Cl	0.25	g/l
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	0.50	mM
Trace elements	1.00	ml/l
Selenite/tungstate solution	1.00	ml/l
Vitamin solution	1.00	ml/l
Vitamin B12 solution	1.00	ml/l
Vitamin B1 solution	1.00	ml/l

The pH is adjusted to 6.8

### *Trace elements:*

FeSO <sub>4</sub> x 7 H <sub>2</sub> O	2.10	g
Na <sub>2</sub> EDTA	5.20	g
H <sub>3</sub> BO <sub>3</sub>	30.00	mg
MnCl <sub>2</sub> x 4 H <sub>2</sub> O	100.00	mg
CoCl <sub>2</sub> x 6 H <sub>2</sub> O	190.00	mg
NiCl <sub>2</sub> x 6 H <sub>2</sub> O	24.00	mg
CuCl <sub>2</sub> x 2 H <sub>2</sub> O	2.00	mg
ZnSO <sub>4</sub> x 7 H <sub>2</sub> O	144.00	mg
Na <sub>2</sub> MoO <sub>4</sub> x 2 H <sub>2</sub> O	36.00	mg
Distilled water	1000.00	ml

Adjust the pH to 6.0

### *Selenite/tungstate solution:*

Na <sub>2</sub> SeO <sub>3</sub> x 5 H <sub>2</sub> O	6.00	mg
Na <sub>2</sub> WO <sub>4</sub> x 2 H <sub>2</sub> O	8.00	mg
NaOH	200.00	mg
Distilled water	1000.00	ml

*Vitamin solutions: See next page!*

*Vitamin solution:*

Para-aminobenzoic acid	4.00	mg
Biotin	1.00	mg
Nicotinate	10.00	mg
Pantothenate	5.00	mg
Pyridoxin	15.00	mg
Distilled water	100.00	ml

*Vitamin B12 solution:*

Cyanocobalamine	5.00	mg
Distilled water	100.00	ml

*Vitamin B1 solution:*

Thiamine	10.00	mg
Distilled water	100.00	ml

To the medium add 5 mM acetate and 10 mM FeSO<sub>4</sub> (from a 1 M stock solution kept under nitrogen). When the iron is added to the medium a white flocculant precipitate may appear. In the initial stages of growth the precipitate turns orange/brown as the ferrous ions are oxidised to ferrihydrite. Cultivation may take 2-3 weeks at a distance of 30 cm from a 25 W light bulb.