

### **Growth Conditions for PCC7002**

Liquid cultures of PCC7002 were grown at 38 °C in a New Brunswick Scientific E24 shaking incubator at 250 rpm, supplemented with light (10,000 lux, 6400K) and CO<sub>2</sub>. The media used was A+ supplemented with 20 µg/l vitamin B12. 10 mM glycerol was occasionally added to the media as it has been shown to lead to modest improvements in growth rate without shunting cells away from photosynthetic pathways ([citation](#)). PCC 7002 cultures were plated on A+ plates in 1.5% w/v Bacto™ agar plus 3 g/l Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> x 5 H<sub>2</sub>O, and grown at 34 °C under white LED illumination (as well as 3 % CO<sub>2</sub> and 80% relative humidity).

A+ Media recipe:

[http://unitedscientists.org/labs/norway/NTNU/PhotoSynLab/download/public/public\\_textdoc/A+Medium.pdf](http://unitedscientists.org/labs/norway/NTNU/PhotoSynLab/download/public/public_textdoc/A+Medium.pdf):