

Asparagopsis taxiformis

Note: The culturing conditions below are not necessarily the optimal growth conditions, cultures are not always kept in optimal growth conditions at CCAP for practical reasons. There may be more info in the individual strain data on the website.

On receipt of culture: cultures should be subcultured into fresh sterile medium as described below, ideally within a few days of receipt. If the culture vessel is very full on receipt and subculturing cannot be done immediately, we advise transferring half of the culture to a sterile container to provide air space.

ACDP Hazard Gp: 1 - Non pathogenic / non hazardous. Unlikely to cause human disease.

Culture Medium: NSS Low, f/2

Media recipes can be found on our website: www.ccap.ac.uk/index.php/media-recipes/

Salinity: 34 – 38 ppt

Lighting: Mix of cool and warm white fluorescent lighting; low or shaded lighting – red seaweeds do not like bright lighting. The lighting near our cultures is $0.117\mu\text{mol}/(\text{m}^2\cdot\text{s})$ with a PPFD (400-700nm) reading of 18.24.

Light Cycle: 12h light : 12h dark (for faster growth try 16h:8h)

Temperature: 15 – 20 degrees C

Sub Interval: This species uses up nutrients quickly, when growing larger volumes we add fresh media every 1-2 weeks. If keeping a smaller subculture going this can be extended to 4 weeks or possibly longer if kept at 15 degrees C in NSS Low.

Culture Vessel: Glass flasks. Placing flasks on a shaker (on a gentle setting) or/and aerating volumes over 1 litre will increase growth.

Culture Method:

Liquid cultures:

Subculture by splitting the culture, using sterile tweezers if necessary, and adding to fresh sterile medium.

See also our short video showing some of the techniques we use to subculture filamentous red seaweeds: <https://www.youtube.com/watch?v=CwNVZryWCFI>

Use strict aseptic techniques throughout and if possible carry out all subculturing within a laminar flow cabinet (particularly for axenic strains).