

## ***Paramecium bursaria* & related**

**Note:** The culturing conditions below are not necessarily the optimal growth conditions for each strain, as much variation is found between strains, and 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.

Storing the cultures in natural daylight at room temperature should also be fine, providing they are kept out of direct sunlight.

This group includes *Paramecium bursaria*, *P. deuterobursaria*, *P. tetratobursaria*, *P. tritobursaria*

**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:** strains CCAP 1660/21, CCAP 1660/22 and CCAP 1660/23 are grown in NCL:Volvic (3:1); CCAP 1660/13 is grown in SES:Volvic (3:1), all other strains in this group are grown in SES. Media recipes can be found on our website: [www.ccap.ac.uk/index.php/media-recipes/](http://www.ccap.ac.uk/index.php/media-recipes/)

**Lighting:** Most of these strains contain green algal endosymbionts and are kept under a mix of cool and warm white fluorescent lighting;

**Light Cycle:** 12h light : 12h dark

**Temperature:** 15-20 degrees C

**Sub Interval:** 10-12 weeks

**Culture Vessel:** Tissue culture flasks or glass tubes

### **Culture Method:**

Prepare media, roughly 10ml per tube.

Vessels containing the media are stored at 4 degrees C. One hour prior to use the required number of flasks or tubes are transferred to 15 degrees C.

To inoculate the fresh media, a dense culture is chosen from existing stocks. The state of the culture is ascertained by microscopical examination using an inverted microscope, x120 magnification. The ciliates swim close to the meniscus.

To sub-culture, the inoculating flask/tube is gently agitated to mix the cells evenly and a few ml is poured aseptically into each of the flasks/tubes.

**Use strict aseptic techniques throughout and if possible carry out all subculturing within a laminar flow cabinet.**