UV mutagenesis of Ectocarpus *gametes*

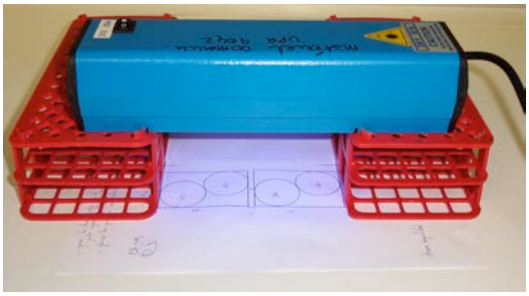
Akira Peters, Susana Coelho
Station Biologique de Roscoff, France

Reagents : Provasoli (Provasoli and Carlucci, 1974); Natural sea water (NSW)

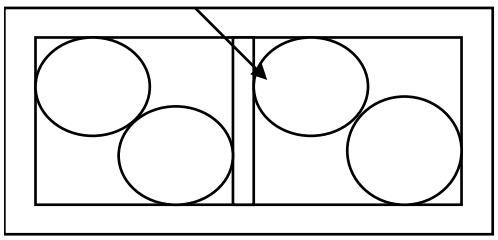
Equipment: Bunzen burner, alcohol bottle, matches, forceps (flame sterilised with alcohol), Petri dishes, pasteur pipettes.

1. Under a horizontal laminar flow hood, spot 150 µl of NSW supplemented with Provasoli onto a cover slip in a 3 ml Petri dish.
2. Add 50 µl of gametes to the drop and seal the dish with parafilm.
3. Place the UV lamp (2 separate screens with dimension 7 X 5 cm) on 2 tube racks at a height of 7.5 cm.
4. Place 4 Petri dishes under the lamp, with their lids closed and switch on the lamp at 254 nm (UV).
5. Irradiate for 40 minutes.
6. Add 3 ml of NSW and incubate the plates at 13°C under low light for 2 days.
7. Transfer to normal light conditions (29µmol.m-2.s-1).

254 nm UV lamp



Positions of the Petri dishes



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