

# Fern Prothallus Culture Medium

Catalogue Code: CM6

*We supply:*

- Living materials
- Culture media
- Frozen materials
- Preserved materials
- Skeletons
- Microscopes
- Wall charts
- Stains and Indicators
- Seeds
- Books
- CD-ROMs
- Forensic Equipment

*and lots more in our full  
colour catalogue*

Fern Prothallus Culture Medium comprises a sterile chemically defined mineral salts solution. Keep any unused medium in the refrigerator at 6-8°C for up to two weeks after opening in order to minimize bacterial/fungal contamination which may occur during sub-culturing.

For good results with Fern Prothallus Culture Medium, you should collect fresh fern spores and the growth medium should be maintained at the correct temperature. Select a small fern leaf (e.g. from a tree fern) with numerous bright chocolate brown intact sporangia on the under surface of the leaf. Spore collection can be easily achieved by placing the fern leaf, spore side down, on a sheet of newspaper and leaving it overnight at room temperature. By the next morning, yellow spores and brown sporangia will cover the paper. Separate sporangia from the spores before inoculating the Fern Prothallus Culture Medium. This can be done by folding the sheet of newspaper and gently tapping the contents onto another piece of paper. The spores, which are brighter yellow and finer than the sporangia, tend to remain on the folded paper. They can be collected with a fine paintbrush.

## **CULTURE**

Place 20-25ml of the Fern Prothallus Culture Medium in a clean 100mm diameter glass petri dish, taking care to shake the bottle first to evenly disperse the contents. Scatter a very thin layer of spores over the surface of the solution, replace the lid of the petri dish and maintain in normal indoor daylight at a temperature of 15-20°C. Examine frequently using low power microscope magnification.

It will take 8-12 weeks for the prothalli to form the characteristic heart shape, and regular inspection is required after this point to catch the development of antheridia and archegonia. Fertilization can be observed by placing a prothallus in water on a slide.

*Ref: CM6 11/11/09*