Plant Propagation Lab Exercise Module 2

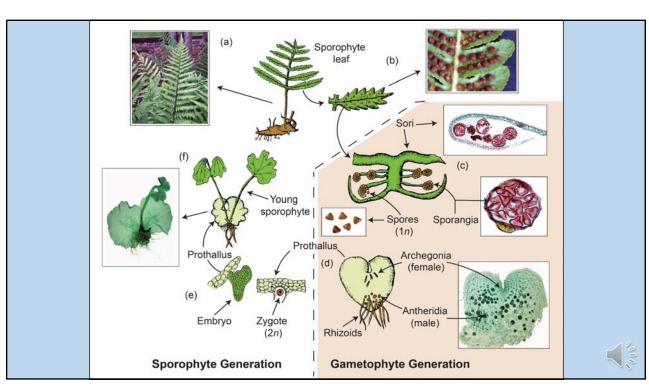


PROPAGATION OF SPORE BEARING PLANTS FERNS

An introduction to plant propagation laboratory exercises by: Gabriel Campbell-Martinez and Dr. Mack Thetford



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Lab Exercise

Materials

- Mature fern fronds with sporangia containing ripe spores
- Clear plastic container with a tight sealing lid
- Small pot of sterilized potting mix (peat, coir, or very fine bark) and clean water
- Clean piece of paper and/or envelope

• Procedure

- Place the mature fern frond on the clean sheet of paper with the sporangia facing down – allow to dry for a few days – tap the frond a few times until you observe spores (looks like dust) on the white paper.
- Place moistened potting mix in your container and distribute spores over the surface of the potting mix.
- Place the cover on the container and place in a bright but not hot window and observe the soil surface weekly for growth of gametophytes and keep observing until you see the sporophytes develop.



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Lab Exercise

- · View the following videos
 - The dark art of propagating ferns from spores | Wow to | Gardening Australia
 - https://youtu.be/Okvz09DpL w
 - Growing Ferns from Spore
 - https://youtu.be/IX3HA9QQZ2s
 - growing ferns from spore
 - https://youtu.be/4tYTz7ONMXU
- 1. Prepare a short report that will compare/contrast the differences between the approaches to fern production. Are there any incorrect uses of the fern reproductive terms?
- 2. Provide a conclusion that summarizes the steps you determine to be the most critical for developing and implementing your own fern spore germination experience.

