Growing Platyceriums from Spore

By Herb Halling

There are a number of videos on YouTube.com showing how to grow from spore. Basically they put peat moss and sponge rock in a container then microwave the container to kill and bacteria and mold that may grow and contaminate the container. The problem with this technique, it is believed this kills the good nutrients in the peat moss that are necessary for healthy growth.

The Los Angeles International Fern Society has experimented with many different growing mediums and has had the best luck with "Sunshine Mix #3". It is a very sterile medium to begin with and it used by commercial growers'. The only problem with this growing medium is the smallest amount you can purchase is a \$60 bail. Not many retailers carry the product, but you can purchase it from J. M. McConkey in Garden Grove California. There may be other suppliers in your area. I also offer small growing medium kits at <u>www.halling.com/Platyceriums/Spore.htm</u>

I am not sure about this fact, but one person described it as sterile sphagnum moss that has been run through a blender to make a very fine growing medium. Spagnum moss is known for being relatively sterile to begin with. I have not confirmed this fact.

Use a small 2 or 3 oz sauce cup with a tight lid. Fill it about half full with Sunshine Mix #3 and add bottled drinking water so you have a thick soup. Sprinkle the spore on top of the thick soup and close. Check the water lever frequently, but never add fertilizer or Super Thrive. The nutrients in Sunshine Mix #3 are all you need. The sealed sause cup will create its own micro climate where pure water forms on the lid, and rains down on the growing medium. One of the tricks is to find a place where temperature changes will create condensation on the lid. It may be in a kitchen window, a patio, or a green house. We recommend setting up several cups and placing one in 3 or 4 different locations and observe which location appears best.

As quickly as 2 or 3 months, or possibly 1 or 2 years, a green prothalia carpet will form in the sauce cup. Don't get frustrated and dispose of the cup for 2 years. The prothalia is like a heart shaped leaf with eggs at the top, and sperm at the bottom. The water condensing on the lid rains down on the prothalia and provides a means for the sperm to swim up and fertilize the eggs. Once fertilized, the egg will grow into a new platycerium. Time frame is 6 months to 2 years.

Eventually you will need to thin the growing platyceriums into more than one cup so they do not over crowd the younger ones. Once the new platyceriums start out growing the cups, you can relocate them to 1 inch pots/plugs. Eventually you will repot to 4 inch pots. Then when the shield fronds start outgrowing the 4 inch pots, you can consider mounting them on redwood board available at <u>www.Halling.com/Platyceriums/RedwoodBoards.htm</u>. At this time you will have at least 3 or 4 years invested in the growth cycle.