



Texas Gulf Coast Fern Society

June 2008

Vol. 10, No. 06

<http://www.tgcfersoc.org>

Note: There will be no meeting this month!!

Next Regular Meeting: Sunday, July 20, at 2:00 p. m. – Houston Garden Center in Hermann Park, 1500 Hermann Drive, Houston, TX 77044 – Phone: (713) 529-3960

A message from our President:

Hi Everyone

I'm sorry to report that we will have no meeting this month. There are a variety of reasons, but most of all this year's *Father's Day* holiday just took too big a toll on our membership availability and program scheduling.

Our next regular meeting will be in July at our normal place and time. We will have our annual "plant swap" meeting.

So to everyone; please have a nice holiday and I'm looking forward to seeing you in July.

Darla



Report on the May 2008 Field trip to Moody Gardens

By: Larry Rucker

I was not too enthused about doing another behind the scene tour of Moody Gardens last month, but much to my surprise the trip turned out beautiful. Twelve of us showed up and were greeted by Donita Brannon, the director for plants found in the rainforest. She was so gracious and attentive to all of our questions as we meandered through the greenhouses. We never seemed to be in a rush and several of us were lucky enough to be given plants when we asked what they were. This part of the tour took about an hour.

We then loaded back on to the bus and headed over to the rainforest. Unlike last time where we were on our own to go through the Pyramid, Donita guided us around the whole Pyramid explaining about the plants and animals as we went. She even let Pat take some spores from one of the ferns. Once again we were never rushed and this portion of the tour took approximately one and one half hours. Hats off to Donita! She made the tour a real special event.

Afterwards, five of us had a relaxing brunch buffet on the patio. My only wish is that more of you had been there to enjoy it with us.

Larry



TGCFS DUES

Dues amounts:

Individual: \$10.00

Family: \$15.00

Student: \$5.00

Our Treasurer will be available to collect them at the next meeting or you may mail your payment to:

Mary McConnell

6218 Wister Lane

Houston, TX 77008

Please make your checks payable to Texas Gulf Coast Fern Society or simply TGCFS.

Members: - Spread the word – encourage someone you know to visit us - we always have room for more!



Officers and Committees:

President:	Darla Harris
Vice President:	Laura Lee
Secretary:	Terri Dolney
Treasurer:	Susan Peacock
Board Members at Large:	Ted Richardson & Cecil Strange, Jr.
Membership Chair:	Mary McConnell
Newsletter:	Paul Geiger
Library:	Patrick Hudnall
Raffles:	Jean Keiser
Hospitality:	Jessica Sheldon
Welcoming at Door:	Emma Lee Payne



Library

Don't forget our library. At each meeting Patrick displays a wide variety of books and videos that are available for immediate checkout. You can visit our web site (see link in header, page 1) and click on **Library** to see the current list of books available. There you will see some pictures of the books we have and links to reviews at Amazon and elsewhere.



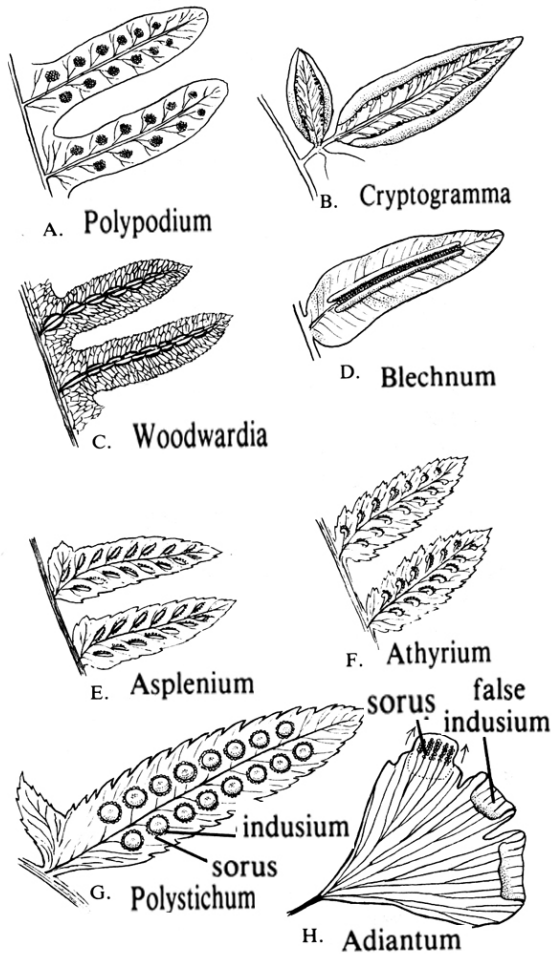


Identifying Your Ferns Using Spore Patterns

By: Donna McGraw

You may ask why it's important for you to be able to recognize the "scientific" name of your fern and that's a good question. The reason for me to know the name of my ferns is so I can research their cultural requirements. If I find the typical *Adiantum* (Maidenhair) spore pattern, I know it probably likes its soil to be a bit on the alkaline side and can be very unforgiving if allowed to dry out. I also know which section of my books to go to in order to try to find its specie name and further information on its preferred growing conditions. Of course there are other clues to identification. *Adiantums* are pretty easily recognized by their stipe and leaf structures but there are other ferns that share some of these characteristics and spore patterns are a good way to know for sure.

When we talk about spore patterns, we're really talking about sori patterns. The sori, (from the Greek word for piles or heaps), are tiny masses of spore cases (sporangia) which contain the spores. The pattern and placement of the sori are very important in the identification of the genus of ferns. The indusium is a protective membraneous covering over the sori. Whether this covering is present or absent helps with this identification. As the spore cases develop within the sori they push off the indusium as it, in turn, begins to shrivel and change color. Some ferns produce what is called a false indusium. The leaf edge rolls inward to cover a row of sori. The most common ferns to do this are the *Adiantums* (Maidenhair ferns).



The illustration to the left was taken from "How to Know the Ferns and Fern Allies" by John Mickel

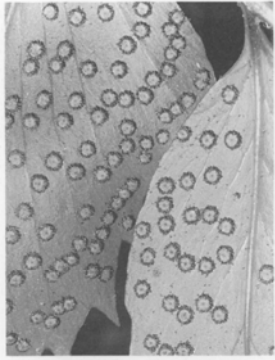
If the fern produces sori on fronds that look very different from the fronds that don't have sori, the fern is said to be dimorphic – another clue to its identity. The ones most of us are familiar with are the *Platyceriums*. The fronds that protrude out in front of these plants are the fertile fronds and the ones gripping the mounting structure are in this case the shield fronds. There are many more specie that are dimorphic but few quite so dramatic as the *Staghorns*.

What if there are no sori present on the fern? It's still possible to identify the fern; it'll just be more difficult. Some other important identifying features you can use are the leaf vein patterns, the leaf shape itself, the arrangement of the vascular bundles that run up and down the inside of the rhizome, its scales and/or hairs, where it came from if known, and it's growth habit – whether it clumps, spreads, or grows upright like a tree fern. If you know what country or part of the world your fern is from you can consult one of the many "Keys to Identification" found in the more scientifically oriented books. This is sometimes a laborious process but it's an excellent learning experience.

If all else fails, bring it to a meeting and ask if anyone can help. We have a lot of people who've been growing ferns for a while and may be able to identify it for you.

(Continued on following page)

Some additional common spore patterns



The circular indusia of *Cyrtomium falcatum*
Photo E. R. Rotherham



The sporangia of *Microlepia platyphylla* are enclosed in small cups
Photo E. R. Rotherham



The elongated sori of *Diplazium waerckianum*
Photo E. R. Rotherham



The chain-like soral arrangement of *Woodwardia orientalis*
Photo C. G. Goudey



The tiny sori of *Cystopteris fragilis*
Photo C. G. Goudey



Marginal sori of *Pteris kingiana*
Photo C. G. Goudey



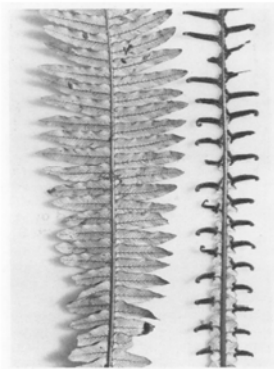
The circular, peltate indusia of *Rumohra adiantiformis*
Photo C. G. Goudey



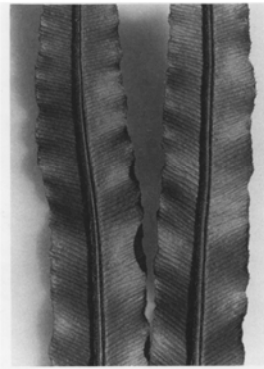
The naked sori of *Cyathea medullaris*
Photo C. G. Goudey



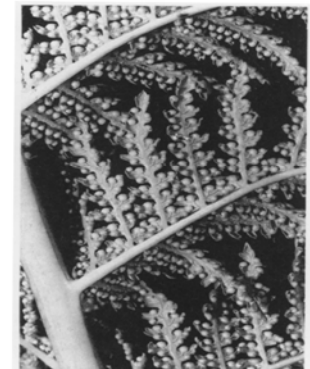
The specialized sporangial clusters of *Onoclea sensibilis*
Photo C. G. Goudey



The dimorphic sterile (LHS) and fertile frond of *Blechnum discolor*
Photo C. G. Goudey



The elongated sorus of *Blechnum brasiliense* is close to the midrib
Photo C. G. Goudey



Dicksonia antarctica showing prominent false indusia

These pictures above were taken from 'Encyclopedia of Ferns' by David Jones



