

Editors: Joan Nester-Hudson and David Schwartz

# The Spore Exchange

"The life of the Exchange depends on your spore contributions." Neill Hall,

Spore Exchange curator, serving from 1962 to 1988.

One of the goals of the American Fern Society is to promote the cultivation of ferns. The AFS Spore Exchange makes hundreds of ferns available that would otherwise be unobtainable for most members. Members can share spores from rare or endangered ferns thereby safeguarding the species so that our grandchildren may also enjoy these beautiful plants.

# The American Fern Society would like to thank Denia Mandt for her many years of service and dedication to the Spore Exchange.

### **Insporations**

by Brian Aikins, Spore Exchange Curator

This has been a year of transition for the spore exchange. In May I accepted the role of Spore Exchange Curator and shortly thereafter received two large boxes from Denia Mandt, the outgoing curator, who had aptly served since 2004. Prior to sending the boxes she painstakingly purged outdated material from the spore bank and prepared a complete inventory. The species count was about 300, each contained in a regular-sized envelope, and, altogether, enough to fill one full shelf of our refrigerator.

A few spore orders and donations started coming in and I quickly realized the exchange, in full operation, might require more time than I anticipated. I am already employed full time as an engineer, maintain a living collection of over 300 fern species, and work alongside my wife to keep our house from falling down around

us. My initial efforts as curator have been to streamline the entire system. It is my hope that the changes I am making will enhance the spore exchange for all its participants.

The first step was setting up a database for species information, current inventory, and transaction history. I decided to modify a fern database I started when I joined the AFS in 1987. It already had information for every fern offered on the AFS Exchange since '87 but some of the botanical names were out of date. Thus started my first task: looking up each of the ferns to confirm spelling and accepted name. I mostly used www.theplantlist. org and recent books from my fern book collection.

Next, I went through the spore bank to update botanical names, separate the most recent material from older donations, reduce the size and thickness of spore stock

#### **AFS OFFICERS**

PRESIDENT: Kathleen M. Pryer, Department of Biology, Duke University, Box 90338, Durham, NC 27709-0338. pryer@duke.edu

PRESIDENT-ELECT: James E. Watkins, Jr., Department of Biology, Colgate University, Hamilton, NY 13346-1338. jwatkins@mail.colgate.edu

SECRETARY: Mary C. Stensvold, P. O. Box 1042, Sitka, AK 99835-1042. kruzov@yahoo.com

TREASURER: James D. Caponetti, Division of Biology, M303 Walters Life Sciences Building, University of Tennessee, 1414 Cumberland Avenue, Knoxville, TN 37996-0830. jcaponet@utk.edu

MEMBERSHIP SECRETARY: George Yatskievych, Missouri Botanical Garden, P.O. Box 299, St. Louis, MO 63166-0299. george.yatskievych@mobot.org

CURATOR OF BACK ISSUES: James D. Montgomery, Ecology III, Inc., 804 Salem Blvd, Berwick, PA 18603-9801. jimm37@verizon.net

CURATOR OF THE SPORE EXCHANGE: Brian Aikins, 3523 Federal Ave., Everett, WA 98201. spores.afs@comcast.net

WEBMASTER: Stephen McDaniel, 1716 Piermont Ave., Hacienda Heights, CA 91745. webmaster@ amerfernsoc.org

OUTREACH COORDINATOR: Tom Stuart, PO Box 517, Croton Falls, NY 10519. tstuart@westnet.com

#### **EDITORS OF AFS PUBLICATIONS**

AMERICAN FERN JOURNAL: Dr. Warren Hauk, Department of Biology, Samson Talbot Hall 350 Ridge Road, Granville, OH 43023 phone: 740-587-5758. hauk@denison.edu

MEMOIRS: David B. Lellinger, 16 Nottingham Rd., Brevard, NC 28712-9785. dlellinger@ earthlink.net

FIDDLEHEAD FORUM: Joan Nester-Hudson, Box 2116, Department of Biological Sciences, Sam Houston State University, Huntsville TX 77341-2116 (jhudson@shsu.edu) and David Schwartz, 9715 Chirtsey Way, Bakersfield, CA 93312-5617 (xericferns@aol.com)

The Editors of FIDDLEHEAD FORUM welcome contributions from members and friends, including miscellaneous notes, and reviews of books on ferns. Articles may be submitted electronically by e-mail, on disk (PC compatible) or typed.

Regular membership in the American Fern Society is on a calendar-year basis and includes access to field trips and the spore exchange. Regular members receive the *Fiddlehead Forum*, but not the American Fern Journal, for \$15 (to U.S.A., Canada, and Mexico) Regular members in other countries receive the *Fiddlehead Forum* for \$22. Individuals interested in regular or journal membership should contact the membership secretary.

#### **AFS HOME PAGE**

www.amerfernsoc.org



packets, and prepare 4 to 6 packets of each to fulfill future spore requests. Having a ready supply of prepared packets greatly simplifies the processing of spore requests.

Once the spore bank was updated I assigned unique order numbers to each species and transferred the spore bank contents into smaller, refrigerator-friendly containers. I chose re-sealable pouches and totes with adjustable separators. The order numbers were derived from an alphabetical listing of all spores offered during the past 25 years plus any new additions as of September this year.

Another enhancement to the exchange I am hoping members will embrace is for spore donors to submit photographs of their source ferns. Since most people now have digital cameras and access to the internet, I think it is time to try this idea. The additional effort to snap a few pictures is minimal, yet has the potential to greatly improve the quality of the spore list. If you plan to donate spores, please refer to the updated spore collecting guidelines.

After developing a process to generate the spore list semi-automatically, I updated the on-line web site and order forms (order form on page 43). Now it is easy to provide new spore lists on a monthly basis, but there is no simple way to generate a semi-annual addendum to the Fiddlehead Forum spore list. Instead, I encourage members without internet access to send me a post card asking for the latest list. I'll print and mail a copy.

I have already received some terrific spore donations including a very generous contribution from Ro Walraven of seventeen tree fern

species. If that is any indication, the future of the Spore Exchange looks bright.





## How to Collect Fern Spores

The Spore Exchange welcomes spore donations from members and non-members. Any fern species or variant is much appreciated. Of course, donations that add new species or update existing species are preferred but any contribution will be accepted. Please try to collect enough spores to make three or more packets (approximately 15 cubic millimeters of cleaned spores, minimum). The other extreme, very large spore quantities, might fill research needs or allow trading with other fern societies.

If you think a fern is too common or ordinary to donate, it might be just what a beginner, researcher, or someone in another area is looking for.

Following these guidelines will help avoid some common problems with donated spores such as unripe or over-ripe spores, contamination, incorrect identification, and leaking of spores in transit.

1. If possible, take some digital photographs of the fern you are collecting spores from. Try to include an ordinary object in at least one picture for size reference. Links to donor-supplied pictures will be in-

cluded in the online list. If you do not know the botanical name of the fern or if you are unsure, please send pictures of the plant, both sides of the fronds and close-ups of the fertile fronds. Sending portions of the dried fronds is also helpful. The pictures and/or fronds should allow identification to the genus level for listing on the exchange.

2. Collect fertile fronds or portions of fertile fronds with ripe sori (spore bearing patches). Refer to picture above for *Polystichum tsus-simense*. Ripe sori contain sporangia (tiny capsules) that are fully developed but have not yet released their spores. Unripe sori are generally green or somewhat colorless while over-ripe sori have spent sporangia which look like dull fuzz. If in doubt, collect portions at various stages of development. Also, it is better to error toward over-ripe fronds than under-ripe ones because good spores are more likely found among spent sporangia than among unripe sporangia.

- 3. If the source fern is in a location where it may have received wind-blown spores from other species, or if its fronds are dirty, then thoroughly rinse the cut fronds in a strong stream of cool water and shake off the excess.
- 4. Place the collected fronds in a thin white paper envelope a business envelope will do and allow it to dry at room temperature for a few days. Another method is to sandwich the fronds between sheets of white paper held down with a weight. You can reduce the drying time to a few hours by scraping the sori off the frond into the envelope or onto a sheet of paper, making sure the scrapings are spread out. Since the spores are thrown one or two inches from the sporangia during the drying process, close the envelope or provide baffles to contain the spores.
- 5. After the fronds have shriveled and the sporangia have shed their spores, there will be a dusty mixture of spores and chaff (spent sporangia, dried indusia, scales, etc.). Brush off or tap any remaining material from the fronds before discarding. Remove most of the chaff from the spores by holding the paper at a slight angle and tapping it so that the chaff bounces forward while the spores stay behind. Don't worry if some chaff remains. If your attempt to clean the spores does not work or you are unsure if there are any spores, go ahead and send all the released or scraped material. All donations will be cleaned using a fine metal sieve when processed for the spore bank.
- 6. Seal the spores of each donation in a folded paper packet. There are many packet folding methods but the trick to successful sealing is making a packet where the only route of escape is a sequence of at least two very sharp folds. Also, the packet needs to lay flat, otherwise the trapped air inside will blow the spores out if it is squeezed. Ideally, the paper should be thin, smooth, and white, or translucent. Heavy duty aluminum foil also works well but waxed paper has been shown to decrease spore longevity. Please do not put the spores directly in a plastic bag and do not use tape to provide a seal. Spores and chaff tend to statically cling to plastic and adhere en masse to tape residue. Instead, consider enclosing each folded packet in a small sealed bag. It will hold the packet from unfolding and contain any mess if it leaks.

- 7. Label each packet, or the bag containing the packet, with the botanical name, collection month and year, your initials, and a "g" if the fern was grown (cultivated) or a "w" if it was wild collected. If collected in the wild, please also include the location (country, state, province, etc.). Any additional information would be helpful such as habitat, elevation, soil type, hardiness zone, etc.
- **8.** If the packets are thin, less than 1/8th inch thick, tape them to a sheet of paper using clear (preferably removable) tape, fold the paper and mail in an ordinary business envelope. Otherwise, send the packets in bulk using a padded shipping envelope.
- **9. Mail spores to**: Brian Aikins, AFS Spore Exchange, 3523 Federal Ave., Everett, WA 98201-4647
- 10. **Email pictures**, or better yet, links to the pictures to spore.afs@comcast.net. Please be sure to identify which pictures go with which packets.

# Spore Donors

The following donors contributed spores to this list: Brian Aikins (BA), Bart Hendrikx (BH), Barbara Joe Hoshizaki (BJH), Don Callard (DC), Denia Mandt (DE), Doug Eckel (DE2), D. K. Strapp (DKS), Dirk Wiederstein (DW), Daniel Yansura (DY), Dr. E. Sheffield (ES), H. Manus (HM), John Knouse (JK), Joyce Miller (JM), Kevin Briegel (KB), Kylie Stocks (KS), Lois Rossten (LR), Mike Freeman (MF), Neville Crawford (NC), Phyllis Bates (PB), Richard Brinkman (RB), Richard Carl (RC), Ro Walraven (RW), Stephen McDaniel (SMD), Sheila Tiffin (ST), Tom Richardson (TR), and Walter Pharr (WP).

Donor names have been lost for the following: (BB), (BK), (CY), (DA), (DH), (DL), (KM), (NT), (RS), and (SF). If you know who any of these are, please contact the spore curator.

### We are in need of fresh spores.

If you are interested in donating spores, please follow the instructions above or visit our spore collecting page on the website.

## AFS Spore Exchange List as of 25-Nov-2012

Listed below is a snapshot of the entire spore bank inventory. It is arranged alphabetically by botanical name and includes unique order numbers to simplify requesting and processing orders. The numbers also allow easy name changes if an unknown fern is identified or if the botanical name is updated.

#### **Key to column headings:**

Most rcnt dt-donor: The year and donor initials of the most recent spore donation.

**Packets rcnt (tot):** The number of spore packets available of the most recent donation and the total number of packets available including past donations. Each packet contains approximately 3 to 15 cubic millimeters of spores (several thousand spores). Those marked as "few spores" in the notes column contain less than 2 cubic millimeters.

**Fr SZ:** Approximate maximum frond size. Very Small = less than 4 inches; Small = 4 inches to 1 foot; Medium = 1 to 3 feet; Large = 3 to 6 feet; Very Large = greater than 6 feet.

**USDA Zone:** Minimum and maximum growing zones based on many books and the internet. If different sources gave different zone ranges, the warmest cold range and the coolest warm range were used. Zones with question marks are estimates based on the climate of the fern's most northern boreal range or southern austral range, taking into account a 2 degree Celsius temperature drop for each 1000 ft of elevation. Hardiness comments in the notes column give the coldest winter temperature the cultivated fern is known to survive, as reported by the donor.

Notes: Common synonyms and miscellaneous notes.

Order Num	Genus	species	variant	Most rent dt - donor	Packets rcnt (tot)	Fr SZ	USDA Zone	Notes
6	Adiantum	aethiopicum		2004 - JM	12 (12)	SM	8	
7	Adiantum	aleuticum		2012 - BA	3 (3)	SM	48	Adiantum pedatum subsp. Aleuticum
12	Adiantum	aleuticum	Subpumilum	2012 - BA	3 (3)	S	68	Greenhouse grown, low light.
20	Adiantum	caudatum		2008 - BA	1 (11)	SM	9	
25	Adiantum	diaphanum		2012 - BA	2 (2)	S	8	Few spores per packet.
32	Adiantum	hispidulum		2012 - BA	3 (3)	S	811	
90	Adiantum	tenerum		2005 - BA	1 (1)	SM	10	Collected in Puerto Rico.
106	Adiantum	venustum		2012 - BA	18 (18)	S	58	
118	Alsophila	polystichoides		2008 - DY	7 (7)	VL	13?	Syn: Nephelea polystichoides
128	Anemia	phyllitidis		2005 - RS	15 (20)	SM	9	
129	Anemia	phyllitidis	large form	2010 - BA	19 (19)	М	9	
131	Anemia	tomentosa		2010 - *	10 (20)	SM	89	* Most recent donation by Cal. State Univ.
134	Angiopteris	evecta		2007 - DY	10 (10)	VL	11	
139	Arachniodes	aristata		2009 - BJH	8 (8)	М	68	Syn: Polystichum aristatum
142	Arachniodes	davalliaeformis		2012 - BA	30 (42)	S	710	Aspidum aristatum var. davalliaeforme
146	Arachniodes	miqueliana		2012 - BA	6 (16)	М	58	
151	Arachniodes	simplicior	variegata	2012 - BA	40 (86)	М	7	
158	Arthropteris	monocarpa		2010 - LR	6 (6)	SM	11?	
165	Asplenium	adiantum-nigrum		2010 - BA	20 (36)	S	79	
173	Asplenium	antiquum		2006 - DE	12 (12)	М	10?	
176	Asplenium	auritum	bipinnatifidum	2010 - BA	5 (5)	SM	12?	
177	Asplenium	australasicum		2007 - DW	30 (34)	L	9	Asplenium australis in hort.
210	Asplenium	flexiusum?		2006 - DKS	2 (2)		11?	"Weeping, Lord Howe"
220	Asplenium	hemionitis		2008 - BA	1 (1)	S	9	
225	Asplenium	incisum?		2010 - BA	15 (15)	S		Hardy to at least 20F. From Yantai China.
229	Asplenium	juglandifolium		2010 - BA	9 (22)	ML	12?	
243	Asplenium	marinum		2008 - BA	5 (5)	S	9	
253	Asplenium	nidus		2006 - ?	8 (8)	ML	911	
261	Asplenium	oblongifolium		2007 - BJH	6 (13)	ML	8	Syn: Asplenium lucidum
264	Asplenium	ocoense		2010 - BA	3 (3)	М	12?	Origin: Puerto Rico.
267	Asplenium	pekinense		2010 - BA	7 (7)	S	69	From Kunming China.

Order Num	Genus	species	variant	Most rent dt - donor	Packets rcnt (tot)	Fr SZ	USDA Zone	Notes
268	Asplenium	phyllitidis		2007 - NT	3 (3)	L		Syn: Asplenium nidus var. phyllitidis
274	Asplenium	polyodon		2010 - BB	1 (1)	M	11?	Syn: Asplenium falcatum. Few spores/pkt.
287	Asplenium	ruta-muraria		2010 - BA	10 (10)	VS	48	
301	Asplenium	sp. 1		2012 - BA	10 (10)	S		
304	Asplenium	surrogatum		2009 - BA	3 (15)	М	9?	Syn: Asplenium mayii in hort.
307	Asplenium	trichomanes		2012 - BA	10 (31)	S	39	
333	Astrolepis	sinuata		2005 - ?	8 (8)	SM	89	Syn: Cheilanthes sinuata, Notholaena sinuata
335	Athyrium	alpestre		2006 - BA	11 (11)	М	59	Syn: Athyrium distentifolium var.americanum
336	Athyrium	angustum		2004 - KB	12 (12)	М	29	Syn: Athyrium filix-femina var. angustum
337	Athyrium	angustum	Lady In Red	2009 - BA	9 (11)	М	4	Syn: A. filix-femina cv. Lady In Red
343	Athyrium	cyclosorum		2012 - BA	20 (20)	ML	58	Syn: Athyrium filix-femina var. cyclosorum
349	Athyrium	filix-femina		2008 - ?	2 (14)	M	48	
367	Athyrium	filix-femina	Frizelliae	2012 - BA	15 (15)	S	48	
391	Athyrium	filix-femina	Victoriae	2010 - BA	8 (8)	M	48	
394	Athyrium	x 'Ghost'	Violotido	2006 - BJH	30 (45)	ML	4	A. niponicum cv. Pictum x A. filix-femina
402	Athyrium	niponicum		2005 - KB	15 (18)	M	49	7. Hipothodini ov. Flotani X7. Hiix Tohinid
403	Athyrium	niponicum	Burgundy	2005 - BJH	10 (10)	M	4	
408	Athyrium	niponicum	Pictum	2008 - ?	6 (15)	M	4	
422	Athyrium	sp. 1 Zhejiang C		2000 - ? 2012 - BA	15 (19)	L		Hardy to at least 18F.
440	Blechnum	australe	IIIIIa	2012 - BA 2012 - BA	12 (37)	SM	89	Hardy to at least for.
441			Red Form	2012 - BA 2006 - BJH		SM	89	
	Blechnum	australe	Rea Form		15 (15)		9	
444	Blechnum	brasiliense		2012 - BA	12 (22)	ML		Wild sellented been Francoise lebente
454	Blechnum	cycadifolium		2010 - DH	49 (49)	ML	10?	Wild collected Juan Fernandez Islands.
455	Blechnum	discolor		2005 - ?	10 (10)	M	89	Wild collected Kepler Track, NZ.
456	Blechnum	divergens		2005 - BA	5 (5)	SM	10?	Wild collected Puerto Rico.
458	Blechnum	falciforme		2010 - DY	20 (20)	L	9	
461	Blechnum	fragile		2005 - BA	5 (5)	М	11?	Syn: Blechnum binervatum ssp. Fragile
464	Blechnum	gibbum	Silver Lady	2008 - ?	4 (4)	М	10	
465	Blechnum	gracile		2007 - BJH	8 (8)	S	10?	
480	Blechnum	penna-marina		2012 - BA	18 (30)	S	58	
489	Blechnum	sp. S. Africa		2006 - DKS	3 (3)			Few spores per packet.
490	Blechnum	spicant		2008 - DY	12 (12)	M	58	
526	Botrychium	virginianum		2005 - KB	20 (50)	SM	39	
530	Camptosorus	sibiricus		2012 - BA	5 (7)	S	48	Syn: Asplenium ruprechtii
531	Campyloneurum	angustifolium		2012 - BA	15 (22)	M	9	
537	Campyloneurum	phyllitidis		2004 - BA	10 (13)	M	9	
556	Cheilanthes	argentea		2012 - BA	15 (23)	S	58	Syn: Aleuritopteris argentea
565	Cheilanthes	eatonii		2012 - BA	10 (25)	S	68	
574	Cheilanthes	gracillima		2010 - BA	11 (11)	S	58	Collected in S. Oregon at 7000 ft.
607	Cheilanthes	wootonii		2012 - BA	8 (8)	S	89	
611	Cibotium	barometz		2007 - BJH	40 (40)	VL	12?	
622	Coniogramme	sp. 1 Chengdu C	hina	2012 - BA	4 (8)	VL		Hardy to at least 25F.
623	Coniogramme	"sp. 2 Stone Fore		2012 - BA	7 (13)			Hardy to at least 30F.
637	Culcita	coniifolia		2006 - DY	5 (5)	VL	-	Subtropical.
643	Cyathea	arborea		2012 - RW	8 (50)	VL	11	
645	Cyathea	atrox		2012 - RW	40 (40)	VL	10?11	Syn: Sphaeropteris atrox
646	Cyathea	australis		2012 - RW	50 (50)	VL	9	Syn: Alsophila australis
650	Cyathea	brownii		2012 - DY	55 (180)	VL	10	Syn: Sphaeropteris excelsa
653	Cyathea	contaminans		2012 - RW	30 (65)	VL	12?	Syn: Sphaeropteris glauca
654	Cyathea	cooperi		2012 - TRV	10 (30)	VL	1011	Syn: Sphaeropteris gradua
656	Cyathea	cooperi	Brentwood	2010 - TR 2006 - LR	1 (70)	VL	10?	суп. орнасториена соорен
661				2006 - LR 2010 - BJH		VL	10?	
	Cyathea	cooperi	Highland Lace		10 (10)			
665	Cyathea	cooperi	Single Crested	2012 - KS	30 (30)	VL	10?	
666	Cyathea	cunninghamii		2012 - RW	15 (15)	VL	9	
667	Cyathea	dealbata		2006 - BJH	100 (100)	VL	911	

Fig.   Cyaffera   Cy	Order Num	Genus	species	variant	Most rent dt - donor	Packets rcnt (tot)	Fr SZ	USDA Zone	Notes
First   Cyarbes   glauca   2012 - RW   6(s)   VL   122-			· ·						
677 Cyelhes         glauca         2012 - RW         6 (6)         VL         122 - Sym. Alsophila ionicos-cerela           830 Oyathea         labocosa         2012 - RW         15 (15)         VL         10 - Sym. Alsophila indicos-cerela           831 Oyathea         leichhardiana         2012 - RW         15 (15)         VL         10 - Sym. Alsophila indicos-cerela           845 Oyathea         leichhardiana         2012 - RW         50 (50)         VL         10 - Sym. Alsophila inchors-cerela           865 Oyathea         leipflera         2002 - RB         40 (49)         VL         10 - Sym. Sphaaropteris supflera           867 Oyathea         mululata         2007 - RB         3 (5)         VL         12 - Sym. Sphaaropteris modullaris           868 Oyathea         miline         2012 - RW         15 (200)         VL         10 - 11         Sym. Sphaaropteris modullaris           868 Oyathea         miline         2012 - RW         19 (9)         VL         10 - 11         Sym. Sphaaropteris modullaris           868 Oyathea         perula         2012 - RW         19 (10)         VL         10 - 11         Sym. Sphaaropteris movae-caledoniae           870 Oyathea         milnie         2012 - RW         12 (20)         VL         11 - 12         Sym. Sphaaropteris movae-ca		•				. ,			оун. орниоторконо основнии
Section   Company   Comp		•				. ,			Syn: Alsophila glaucifolia, Few spores/pkt.
883         Cywthea         latebross         2012 - RW         15 (15)         V.         10         Synt. Alsophila I, Sphresorpters australis           685         Cywthea         lejnfera         2005 - LR         49 (49)         V.         10         Synt. Sophila I, Sphresorpteris lepfera           687         Cyathea         Lundsta         2007 - B.H         25 (65)         V.         12 - Synt. Sphresorpteris lepfera           687         Cyathea         Hundsta         2012 - RW         15 (200)         V.         12 - Synt. Sphresorpteris lepfera           698         Cyathea         medullaris         2012 - RW         15 (200)         V.         10 - 11         Synt. Sphresorpteris medullaris           695         Cyathea         minine         2017 - RB         29 (29)         V.         10 - 11         Synt. Shaperopteris neutraliaris           696         Cyathea         movez-catedorniae         2007 - RB         29 (29)         V.         11 - 11 - Synt. Sphresorpteris neutraliaris           698         Cyathea         parvula         2012 - RW         19 (10)         V.         11 - Synt. Shaperopteris neutraliaris           707         Cyathea         sp. 1 but shape PMG         2006 - RC         25 (25)         V.         10 - Synt. Shaperopteris neutr		•							<u> </u>
Separation   Sep		•				. ,			•
685 C yvsthea         lepinfera         2005 - LR         49 (49)         V.L         19 - Syri: Sphaeropteris leprifera           687 C yvsthea         lunulata         2007 - RB         3 (3)         V.L         127 - V.         128 - V.         128 - V.         128 - V.         128 - V.         129 - V.         129 - V.         128 - V.         129		•				. ,			
886 Cyzleke         Lunidate         2007 - B.H.         25 (65)         V.L.         127-2         Syn: Sphaeropteris lunulata           857 Cyzleke         Immile         2010 - T.R.         3 (3)         V.L.         127-2           850 Cyzlekea         medullaris         2012 - RW         15 (200)         V.L.         10-11         Syn: Sphaeropteris medullaris           950 Cyzlekea         myosuroides         2007 - B.H.         9 (9)         V.L.         10-10         Syn: Sphaeropteris movae-caledoniae           960 Cyzlekea         parvula         2012 - RW         28 (28)         V.L.         10-10         Syn: Alsophila pervula           960 Cyzlekea         parvula         2012 - RW         12 (12)         V.L.         10-10         Syn: Alsophila pervula           970 Cyzlekea         smithii         2012 - RW         9 (9)         V.L.         9-10         Syn: Alsophila pervula           970 Cyzlekea         sp. Dlack cozers         2012 - RW         9 (9)         V.L.         9-10         -10         -10         -10         -10         -10         -10         -10         -10         -10         -10         -10         -10         -10         -10         -10         -10         -10         -10         -10 <td< td=""><td></td><td>•</td><td></td><td></td><td></td><td>. ,</td><td></td><td></td><td></td></td<>		•				. ,			
Septence	-	•				. ,			
Southean		•	lunulata	vitiensis	2010 - TR	. ,			, , ,
695   Cyathea   myosuroides   2007 - RB   29 (29)	690	Cyathea	medullaris		2012 - RW	15 (200)	VL	1011	Syn: Sphaeropteris medullaris
Septence   Cyathea   Dovate-caledoniae   2007 - BJH   9 (9)	693	Cyathea	milnei		2012 - RW	25 (25)	VL	10	
Cyathea	695	Cyathea	myosuroides		2007 - RB	29 (29)	VL	13?	
703         Cyathea         robusta         2005 - LR         25 (25)         V.L         10-           706         Cyathea         smithii         2012 - RW         9 (9)         V.L         9-           707         Cyathea         sp. 1 blue sterns PNG         2006 - NC         39 (39)         -           708         Cyathea         sp. 1 blue korroziers         2012 - RW         2000 - NC         14 (14)         -           710         Cyathea         sp. from PNG         2009 - NC         9 (9)         -         Large fast growing*           711         Cyathea         sp. from PNG         2009 - NC         9 (9)         -         Large fast growing*           712         Cyathea         sp. from PNG         2009 - NC         9 (9)         -         Large fast growing*           712         Cyathea         sp. from PNG         2012 - RW         9 (9)         -         Large fast growing*           716         Cyathea         sp. from PNG         2012 - RW         9 (9)         -         Large fast growing*           713         Cyathea         sp. from PNG         2012 - RW         40 (40)         V.L         132         Syn: Alsophila spinulosa, spinulosa         1012 - RW         9 (34)	696	Cyathea	novae-caledoniae	)	2007 - BJH	9 (9)	VL	10	Syn: Sphaeropteris novae-caledoniae
Total Cyathea	698	Cyathea	parvula		2012 - RW	12 (12)	VL	11?	Syn: Alsophila parvula
707         Cyathea         sp. 1 blue stems PNG         2006 - NC         39 (39)          Hardy Cyathea         sp. 2 small slow         2006 - NC         14 (14)            708         Cyathea         sp. 1 black croziers.         2012 - TR         20 (20)          "Large fast growing"           710         Cyathea         sp. from PNG         2009 - NC         9 (9)          "Large fast growing"           711         Cyathea         sp. from PNG         2002 - RW         50 (50)            712         Cyathea         sp. from PNG         2012 - RW         40 (40)         VL         10-         Syn: Alsophila spinulosa." From Sikkim India."           713         Cyathea         squarrosa         2012 - RW         40 (40)         VL         12-         Syn: Sphaeropteris tomentosissima           717         Cyathea         tomostissima         2010 - TR         2 (2)         VL         127-         Syn: Sphaeropteris truncata. Few sporesipkt.           718         Cyathea         vaupelii         2010 - TR         2 (2)         VL         127-         Syn: Sphaeropteris trometosissima           717         Cyathea         valiediiril"         2010 - TR         2 (2)         VL         127-	703	Cyathea	robusta		2005 - LR	25 (25)	VL	10	
708         Cyathea         sp. Diack croziers.         2012 - ITR         20 (20)	706	Cyathea	smithii		2012 - RW	9 (9)	VL	9	
Top   Cyathea   Sp. Intern PMG   2009 - NC   9   9     "Large fast growing"	707	Cyathea	sp. 1 blue stems I	PNG	2006 - NC	39 (39)			
710         Cyathea         sp. from PNG         2009 NC         9 (9)         —         "Large fast growing"           711         Cyathea         sp. Orange croziers         2012 - RW         50 (50)         —         "Large fast growing"           712         Cyathea         spulosa         2012 - RW         40 (40)         VL         10 — Syn: Alsophila spinulosa. "From Sikkim India."           713         Cyathea         squarrosa         2012 - RW         40 (40)         VL         137 — Syn: Sphaeropteris turcala           716         Cyathea         tumentosissima         2010 - TR         2 (2)         VL         127 — Syn: Sphaeropteris turcala. Few spores/pkt.           718         Cyathea         vaupelii         2010 - TR         2 (2)         VL         127 — Syn: Sphaeropteris turcala. Few spores/pkt.           718         Cyathea         valelaidi?         2010 - TR         2 (2)         VL         127 — Few spores/pckt.           718         Cyathea         valelaidi?         2010 - TR         1 (1)         — Few spores/pckt.           719         Cyathea         wollsiana         2012 - RS         15 (15)         NL         10 — Syn: Alsophila woollsiana           720         Cytomium         caryotideum         Dark midribs         2012	708	Cyathea	sp. 2 small slow		2006 - NC	14 (14)			
711         Cyathea         sp. Orange croziers         2012 - RW         50 (50)         —           712         Cyathea         spinulosa         2012 - RW         12 (30)         VL         10         Sym: Alsophila spinulosa. "From Sikkim India."           713         Cyathea         squarrosa         2012 - RW         40 (40)         VL         137         Sym: Hemitelia squarrosa           716         Cyathea         tomentosissima         2012 - RW         29 (34)         VL         9         Sym: Sphaeropteris truncata. Few spores/pkt.           717         Cyathea         truncata         2010 - TR         2 (2)         VL         127         Sym: Sphaeropteris truncata. Few spores/pkt.           718         Cyathea         viellardii?         2010 - TR         2 (2)         VL         127         Few spores/packet.           720         Cyathea         viellardii?         2010 - TR         1 (1)          Few spores/packet.           721         Cyathea         viellardii?         2010 - TR         1 (1)         10         Sym: Alsophila woolisiana           721         Cytomium         carpoideum         2012 - BA         10 (128)         M         7-10         From Hanakaplai beach, Kauai.           730 <td>709</td> <td>Cyathea</td> <td>sp. black croziers</td> <td></td> <td>2012 - TR</td> <td>20 (20)</td> <td></td> <td></td> <td></td>	709	Cyathea	sp. black croziers		2012 - TR	20 (20)			
712         Cyathea         spinulosa         2012 - RW         12 (30)         VL         10-         Syn: Alsophila spinulosa. "From Sikkim India."           713         Cyathea         squarrosa         2012 - RW         40 (40)         VL         137-         Syn: Helmitella squarrosa           716         Cyathea         truncata         2012 - RW         29 (34)         VL         137-         Syn: Sphaeropteris tomentosissima           717         Cyathea         truncata         2010 - TR         2 (2)         VL         122-         Syn: Sphaeropteris truncata Few spores/pkt           718         Cyathea         vaupelii         2010 - TR         2 (2)         VL         122-         Syn: Sphaeropteris vaupelii. Few spores/pkt           710         Cyathea         viellardii?         2010 - TR         2 (2)         VL         122-         Syn: Sphaeropteris vaupelii. Few spores/pkt           721         Cyathea         viellardii?         2010 - TR         2 (2)         VL         10-         Syn: Sphaeropteris vaupelii. Few spores/pkt           721         Cyathea         viellardii?         2010 - TR         2 (2)         VL         10-         Syn: Alsophila wollsiana           721         Cytomium         Caryolideum         Dark         7- </td <td>710</td> <td>Cyathea</td> <td>sp. from PNG</td> <td></td> <td>2009 - NC</td> <td>9 (9)</td> <td></td> <td></td> <td>"Large fast growing"</td>	710	Cyathea	sp. from PNG		2009 - NC	9 (9)			"Large fast growing"
712         Cyathea         spinulosa         2012 - RW         12 (30)         VL         10-         Syn: Alsophila spinulosa. "From Sikkim India."           713         Cyathea         squarrosa         2012 - RW         40 (40)         VL         137-         Syn: Helmitella squarrosa           716         Cyathea         truncata         2012 - RW         29 (34)         VL         137-         Syn: Sphaeropteris tomentosissima           717         Cyathea         truncata         2010 - TR         2 (2)         VL         122-         Syn: Sphaeropteris truncata Few spores/pkt           718         Cyathea         vaupelii         2010 - TR         2 (2)         VL         122-         Syn: Sphaeropteris vaupelii. Few spores/pkt           710         Cyathea         viellardii?         2010 - TR         2 (2)         VL         122-         Syn: Sphaeropteris vaupelii. Few spores/pkt           721         Cyathea         viellardii?         2010 - TR         2 (2)         VL         10-         Syn: Sphaeropteris vaupelii. Few spores/pkt           721         Cyathea         viellardii?         2010 - TR         2 (2)         VL         10-         Syn: Alsophila wollsiana           721         Cytomium         Caryolideum         Dark         7- </td <td></td> <td>•</td> <td></td> <td>ers</td> <td>2012 - RW</td> <td></td> <td></td> <td></td> <td></td>		•		ers	2012 - RW				
713         Cyathea         squarrosa         2012 - RW         40 (40)         VL         13?         Syn: Hemitelia squarrosa           716         Cyathea         tomentosissima         2012 - RW         29 (34)         VL         9         Syn: Sphaeropteris tomentosissima           717         Cyathea         truncata         2010 - TR         2 (2)         VL         12?         Syn: Sphaeropteris troncate Few spores/pkt           720         Cyathea         viellardii?         2010 - TR         2 (2)         VL         12?         Syn: Sphaeropteris vaupelii. Few spores/pkt           720         Cyathea         viellardii?         2010 - TR         1 (1)          Few spores/packet.           721         Cyathea         voilsiana         2012 - BA         15 (15)         M         610         Syn: Alsophila woollsiana           726         Cyrtomium         caryotideum         2012 - BA         30 (30)         M         610         Syn: Alsophila woollsiana           727         Cyrtomium         falcatum         Mayi         2002 - BA         10 (28)         M         7-10         From Hanakapiai beach, Kauai.           733         Cyrtomium         falcatum         Mayi         2006 - BJH         6 (6)	712	Cyathea	spinulosa		2012 - RW	12 (30)	VL	10	Syn: Alsophila spinulosa. "From Sikkim India."
716         Cyathea         tomentosissima         2012 - RW         29 (34)         VL         9         Syn: Sphaeropteris tomentosissima           717         Cyathea         truncata         2010 - TR         2 (2)         VL         12?         Syn: Sphaeropteris truncata. Few spores/pkt           718         Cyathea         vaupelii         2010 - TR         2 (2)         VL         12?         Syn: Sphaeropteris truncata. Few spores/pkt           720         Cyathea         viellardii?         2010 - TR         1 (1)          Few spores/packet.           721         Cyathea         woollsiana         2012 - RA         15 (15)         M         6-10           726         Cyrtomium         caryotideum         Dark midribs         2012 - BA         15 (15)         M         6-10           727         Cyrtomium         falcatum         2012 - BA         10 (28)         M         7-10         From Hanakapiai beach, Kauai.           734         Cyrtomium         falcatum         2012 - BA         10 (28)         M         7-2           735         Cyrtomium         falcatum         2010 - BA         10 (11)         SM         6-10           744         Cyrtomium         facratum         2010 - B	713	•	squarrosa		2012 - RW		VL	13?	•
717         Cyathea         truncata         2010 - TR         2 (2)         VL         12?         Syn: Sphaeropteris truncata. Few spores/pkt.           718         Cyathea         vaupelii         2010 - TR         2 (2)         VL         12?         Syn: Sphaeropteris vaupelii. Few spores/pkt.           720         Cyathea         viellardii?         2010 - TR         1 (1)          Few spores/packet.           721         Cyathea         woollsiana         2012 - RS         15 (15)         VL         10         Syn: Alsophila woollsiana           726         Cyttomium         caryotideum         2012 - BA         15 (15)         M         6-0           730         Cyttomium         falcatum         2012 - BA         10 (28)         M         7-10         From Hanakapiai beach, Kauai.           734         Cyttomium         falcatum         Rochfordianum         2010 - B         00 (20)         M         7?-           735         Cyttomium         facatum         Rochfordianum         2010 - BA         10 (25)         M         6-10           744         Cyttomium         macrophyllum         2010 - BA         10 (11)         SM         6-10           745         Cyttomium         ps. 1 Che		•	tomentosissima		2012 - RW	. ,	VL	9	
718         Cyathea         vaupelii         2010 - TR         2 (2)         VL         12?         Syn: Sphaeropteris vaupelii. Few spores/pkt           720         Cyathea         viellardii?         2010 - TR         1 (1)          Few spores/packet.           721         Cystonium         earyotideum         2012 - BA         15 (15)         VL         10         Syn: Alsophila woollsiana           726         Cystonium         caryotideum         2012 - BA         15 (15)         M         6-10           727         Cystonium         caryotideum         2012 - BA         30 (30)         M         6           730         Cystonium         falcatum         2012 - BA         10 (28)         M         7           734         Cystonium         falcatum         Rochfordianum         2010 - DE         20 (20)         SM         7?-           735         Cystomium         falcatum         Rochfordianum         2010 - DE         20 (20)         SM         7?-           737         Cystomium         falcatum         Rochfordianum         2010 - BA         10 (21)         M         6-10           744         Cystomium         sp. 1 Chengdu China         2012 - BA         20 (20)	-	•	truncata			. ,			7
720         Cyathea         viellardii?         2010 - TR         1 (1)         —         Few spores/packet.           721         Cysthea         woollsiana         2012 - KS         15 (15)         VL         10         Syn: Alsophila woollsiana           726         Cystomium         caryotideum         2012 - BA         15 (15)         M         6-10           727         Cystomium         caryotideum         2012 - BA         30 (30)         M         6-           730         Cystomium         falcatum         2012 - BA         10 (28)         M         710         From Hanakapiai beach, Kauai.           734         Cystomium         falcatum         Rochfordianum         2010 - BA         10 (28)         M         710         From Hanakapiai beach, Kauai.           735         Cystomium         falcatum         Rochfordianum         2010 - BA         10 (25)         M         6-10           744         Cystomium         fortunei         2012 - BA         10 (25)         M         6-10           744         Cystomium         macrophyllum         2010 - BA         10 (11)         SM         6-10           744         Cystopteris         fragilis         2010 - BA         10 (21)	-	•	vaupelii		2010 - TR		VL	12?	
721         Cyathea         woollsiana         2012 - KS         15 (15)         VL         10-         Syn: Alsophila woollsiana           726         Cyrtomium         caryotideum         2012 - BA         15 (15)         M         6-10           727         Cyrtomium         caryotideum         2012 - BA         30 (30)         M         6-           730         Cyrtomium         falcatum         2012 - BA         10 (28)         M         7-10         From Hanakapiai beach, Kauai.           734         Cyrtomium         falcatum         Rochfordianum         2010 - DE         20 (20)         SM         77-         7-7	-	•							
726         Cyrtomium         caryotideum         Dark midribs         2012 - BA         15 (15)         M         610           727         Cyrtomium         caryotideum         Dark midribs         2012 - BA         30 (30)         M         6           730         Cyrtomium         falcatum         2012 - BA         10 (28)         M         710         From Hanakapiai beach, Kauai.           734         Cyrtomium         falcatum         Rochfordianum         2010 - DE         20 (20)         SM         7?           735         Cyrtomium         falcatum         Rochfordianum         2010 - DE         20 (20)         SM         7?           737         Cyrtomium         fortune         2012 - BA         10 (25)         M         6-10           744         Cyrtomium         sp. 1 Chengdu China         2012 - BA         29 (29)         M          Hardy to at least 18F.           751         Cystopteris         fragilis         2010 - BA         6 (6)         S         2-9         Collected in S. Oregon at 7000 ft.           768         Davallia         heterophylla         2012 - BA         5 (5)         S         117-         Syn: Atnaiostegia divaricata           755         Dava	-	•				. ,	VL	10	• •
727         Cyrtomium         caryotideum         Dark midribs         2012 - BA         30 (30)         M         6           730         Cyrtomium         falcatum         2012 - BA         10 (28)         M         7-10         From Hanakapiai beach, Kauai.           734         Cyrtomium         falcatum         Mayi         2006 - BJH         6 (6)         M         7?           735         Cyrtomium         falcatum         Rochfordianum         2010 - DE         20 (20)         SM         7?           737         Cyrtomium         fortunei         2012 - BA         10 (25)         M         6-10           744         Cyrtomium         macrophyllum         2010 - BA         10 (11)         SM         6-10           745         Cystopteris         fragilis         2010 - BA         29 (29)         M         -         Hardy to at least 18F.           751         Cystopteris         fragilis         2010 - BA         6 (6)         S         2-9         Collected in S. Oregon at 7000 ft.           768         Davallia         divaricata         2012 - BA         5 (5)         S         117-         Syn: Ariostegia divaricata           752         Davallia         spullia         spullia	-					. ,			-7
730         Cyrtomium         falcatum         2012 - BA         10 (28)         M         710         From Hanakapiai beach, Kauai.           734         Cyrtomium         falcatum         Mayi         2006 - BJH         6 (6)         M         7?-           735         Cyrtomium         falcatum         Rochfordianum         2010 - DE         20 (20)         SM         7?-           737         Cyrtomium         fortunei         2012 - BA         10 (25)         M         6-10           744         Cyrtomium         macrophyllum         2010 - BA         10 (11)         SM         6-10           745         Cyrtomium         sp. 1 Chengdu China         2012 - BA         29 (29)         M         -         Hardy to at least 18F.           751         Cystopteris         fragilis         2010 - BA         6 (6)         S         2-9         Collected in S. Oregon at 7000 ft.           768         Davallia         divaricata         2012 - BA         6 (10)         ML         12?-         Syn: Araiostegia divaricata           785         Davallia         sp. 1         2012 - BA         5 (5)         S         11?-         Syn: Humata heterophylla           805         Deparia         acrostichoides <td>-</td> <td><b>-</b></td> <td>•</td> <td>Dark midribs</td> <td></td> <td></td> <td></td> <td></td> <td></td>	-	<b>-</b>	•	Dark midribs					
734         Cyrtomium         falcatum         Mayi         2006 - BJH         6 (6)         M         7?           735         Cyrtomium         falcatum         Rochfordianum         2010 - DE         20 (20)         SM         7?           737         Cyrtomium         fortune         2012 - BA         10 (25)         M         6-10           744         Cyrtomium         sp. 1 Chengdu China         2012 - BA         10 (11)         SM         6-10           745         Cyrtomium         sp. 1 Chengdu China         2012 - BA         29 (29)         M          Hardy to at least 18F.           751         Cystopteris         fragilis         2010 - BA         6 (6)         S         2-9         Collected in S. Oregon at 7000 ft.           768         Davallia         divaricata         2012 - BA         6 (10)         ML         12?-         Syn: Arraiostegia divaricata           775         Davallia         heterophylla         2012 - BA         5 (5)         S         11?-         Syn: Humata heterophylla           785         Davallia         peraia         acrostichoides         2004 - KB         8 (25)         ML         4-9         Syn: Athyrium thelypteroides, Diplazium a.           812 <td></td> <td><b>-</b></td> <td></td> <td></td> <td></td> <td>. ,</td> <td></td> <td>710</td> <td>From Hanakapiai beach, Kauai.</td>		<b>-</b>				. ,		710	From Hanakapiai beach, Kauai.
735         Cyrtomium         falcatum         Rochfordianum         2010 - DE         20 (20)         SM         7?           737         Cyrtomium         fortunei         2012 - BA         10 (25)         M         610           744         Cyrtomium         macrophyllum         2010 - BA         10 (11)         SM         610           745         Cyrtomium         sp. 1 Chengdu China         2012 - BA         29 (29)         M          Hardy to at least 18F.           751         Cystopteris         fragilis         2010 - BA         6 (6)         S         2-9         Collected in S. Oregon at 7000 ft.           768         Davallia         divaricata         2012 - BA         6 (6)         S         2-9         Collected in S. Oregon at 7000 ft.           775         Davallia         heterophylla         2012 - BA         5 (5)         S         11?-         Syn: Atraiostegia divaricata           785         Davallia         sp. 1         2012 - BA         12 (12)         SM            805         Deparia         acrostichoides         2004 - KB         8 (25)         ML         4-9         Syn: Athyrium thelypteroides, Diplazium a.           812         Dicksonia         antarci		<b>-</b>		Mayi		. ,	М	7?	1 /
737         Cyrtomium         fortunei         2012 - BA         10 (25)         M         610           744         Cyrtomium         macrophyllum         2010 - BA         10 (11)         SM         610           745         Cyrtomium         sp. 1 Chengdu China         2012 - BA         29 (29)         M          Hardy to at least 18F.           751         Cystopteris         fragilis         2010 - BA         6 (6)         S         29         Collected in S. Oregon at 7000 ft.           768         Davallia         heterophylla         2012 - BA         5 (5)         S         11?-         Syn: Araiostegia divaricata           775         Davallia         heterophylla         2012 - BA         5 (5)         S         11?-         Syn: Humata heterophylla           785         Davallia         sp. 1         2012 - BA         12 (12)         SM            805         Deparia         acrostichoides         2004 - KB         8 (25)         ML         49         Syn: Athyrium thelypteroides, Diplazium a.           812         Dicksonia         antarctica         2012 - TR         15 (15)         VL         810         Zone 8 with protection.           817         Dicksonia	-	<b>-</b>		•		. ,	SM		
744         Cyrtomium         macrophyllum         2010 - BA         10 (11)         SM         610           745         Cyrtomium         sp. 1 Chengdu China         2012 - BA         29 (29)         M          Hardy to at least 18F.           751         Cystopteris         fragilis         2010 - BA         6 (6)         S         2-9         Collected in S. Oregon at 7000 ft.           768         Davallia         divaricata         2012 - BA         6 (10)         ML         12?         Syn: Araiostegia divaricata           775         Davallia         heterophylla         2012 - BA         5 (5)         S         11?-         Syn: Humata heterophylla           785         Davallia         sp. 1         2012 - BA         2 (5)         S         11?-         Syn: Humata heterophylla           805         Deparia         acrostichoides         2004 - KB         8 (25)         ML         49         Syn: Athyrium thelypteroides, Diplazium a.           812         Dicksonia         antarctica         2012 - TR         15 (5)         VL         8-10         Zone 8 with protection.           814         Dicksonia         sellowiana         2005 - KB         5 (5)         ML         10         Syn: Dicksonia signantea <td>-</td> <td>Cyrtomium</td> <td></td> <td></td> <td>2012 - BA</td> <td>. ,</td> <td>М</td> <td>610</td> <td></td>	-	Cyrtomium			2012 - BA	. ,	М	610	
751         Cystopteris         fragilis         2010 - BA         6 (6)         S         29         Collected in S. Oregon at 7000 ft.           768         Davallia         divaricata         2012 - BA         6 (10)         ML         12?         Syn: Araiostegia divaricata           775         Davallia         heterophylla         2012 - BA         5 (5)         S         11?         Syn: Humata heterophylla           805         Davallia         sp. 1         2012 - BA         12 (12)         SM            805         Deparia         acrostichoides         2004 - KB         8 (25)         ML         49         Syn: Athyrium thelypteroides, Diplazium a.           812         Dicksonia         antarctica         2012 - TR         15 (15)         VL         810         Zone 8 with protection.           814         Dicksonia         fibrosa         2011 - DY         5 (15)         VL         910           817         Dicksonia         sellowiana         2005 - KB         5 (5)         ML         10         Syn: Dicksonia gigantea           819         Dicksonia         squarrosa         2010 - TR         7 (7)         VL         10         "South Island, NZ"           820         Dic		Cyrtomium	macrophyllum				SM	610	
751         Cystopteris         fragilis         2010 - BA         6 (6)         S         29         Collected in S. Oregon at 7000 ft.           768         Davallia         divaricata         2012 - BA         6 (10)         ML         12?         Syn: Araiostegia divaricata           775         Davallia         heterophylla         2012 - BA         5 (5)         S         11?         Syn: Humata heterophylla           805         Davallia         sp. 1         2012 - BA         12 (12)         SM            805         Deparia         acrostichoides         2004 - KB         8 (25)         ML         49         Syn: Athyrium thelypteroides, Diplazium a.           812         Dicksonia         antarctica         2012 - TR         15 (15)         VL         810         Zone 8 with protection.           814         Dicksonia         fibrosa         2011 - DY         5 (15)         VL         910           817         Dicksonia         sellowiana         2005 - KB         5 (5)         ML         10         Syn: Dicksonia gigantea           819         Dicksonia         squarrosa         2010 - TR         7 (7)         VL         10         "South Island, NZ"           820         Dic	745	Cyrtomium	sp. 1 Chengdu Ch	nina	2012 - BA	29 (29)	М		Hardy to at least 18F.
768         Davallia         divaricata         2012 - BA         6 (10)         ML         12?         Syn: Araiostegia divaricata           775         Davallia         heterophylla         2012 - BA         5 (5)         S         11?         Syn: Humata heterophylla           785         Davallia         sp. 1         2012 - BA         12 (12)         SM            805         Deparia         acrostichoides         2004 - KB         8 (25)         ML         49         Syn: Athyrium thelypteroides, Diplazium a.           812         Dicksonia         antarctica         2012 - TR         15 (15)         VL         810         Zone 8 with protection.           814         Dicksonia         fibrosa         2011 - DY         5 (15)         VL         910           817         Dicksonia         sellowiana         2005 - KB         5 (5)         ML         10         Syn: Dicksonia gigantea           819         Dicksonia         squarrosa         2010 - TR         7 (7)         VL         10         "South Island, NZ"           820         Dicksonia         typicario         2010 - TR         13 (13)         L         10?           821         Dicksonia         typicario <td< td=""><td>751</td><td></td><td></td><td></td><td></td><td></td><td></td><td>29</td><td>•</td></td<>	751							29	•
775         Davallia         heterophylla         2012 - BA         5 (5)         S         11?         Syn: Humata heterophylla           785         Davallia         sp. 1         2012 - BA         12 (12)         SM            805         Deparia         acrostichoides         2004 - KB         8 (25)         ML         49         Syn: Athyrium thelypteroides, Diplazium a.           812         Dicksonia         antarctica         2012 - TR         15 (15)         VL         810         Zone 8 with protection.           814         Dicksonia         fibrosa         2011 - DY         5 (15)         VL         910           817         Dicksonia         sellowiana         2005 - KB         5 (5)         ML         10         Syn: Dicksonia gigantea           819         Dicksonia         squarrosa         2010 - TR         7 (7)         VL         10         "South Island, NZ"           820         Dicksonia         thyrsopteroides         2010 - TR         13 (13)         L         10?           821         Dicksonia         youngiae         2012 - RW         19 (19)         VL         10           827         Didymochlaena         truncatula         2006 - DE         2 (2) </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>. ,</td> <td></td> <td></td> <td></td>						. ,			
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812         Dicksonia         antarctica         2012 - TR         15 (15)         VL         810         Zone 8 with protection.           814         Dicksonia         fibrosa         2011 - DY         5 (15)         VL         910           817         Dicksonia         sellowiana         2005 - KB         5 (5)         ML         10         Syn: Dicksonia gigantea           819         Dicksonia         squarrosa         2010 - TR         7 (7)         VL         10         "South Island, NZ"           820         Dicksonia         thyrsopteroides         2010 - TR         13 (13)         L         10?           821         Dicksonia         youngiae         2012 - RW         19 (19)         VL         10           827         Didymochlaena         truncatula         2006 - DE         2 (2)         M         11?           844         Diplazium         l'herminieri         2005 - BA         1 (1)         VL         11?         Wild collected in Puerto Rico.           845         Diplazium         lonchophyllum         2010 - BB         1 (1)         M         9         Few spores/packet.           852         Diplazium         pycnocarpon         2009 - ?         30 (50)			acrostichoides					49	Syn: Athyrium thelypteroides, Diplazium a.
814         Dicksonia         fibrosa         2011 - DY         5 (15)         VL         910           817         Dicksonia         sellowiana         2005 - KB         5 (5)         ML         10         Syn: Dicksonia gigantea           819         Dicksonia         squarrosa         2010 - TR         7 (7)         VL         10         "South Island, NZ"           820         Dicksonia         thyrsopteroides         2010 - TR         13 (13)         L         10?           821         Dicksonia         youngiae         2012 - RW         19 (19)         VL         10           827         Didymochlaena         truncatula         2006 - DE         2 (2)         M         11?           844         Diplazium         l'herminieri         2005 - BA         1 (1)         VL         11?         Wild collected in Puerto Rico.           845         Diplazium         lonchophyllum         2010 - BB         1 (1)         M         9         Few spores/packet.           2006         Diplazium         maximum         2012 - BH         6 (6)         L          Syn: Athyrium pycnocarpon           423         Diplazium         sp. 1 Nanning China         2012 - BA         5 (5)	-	•			2012 - TR				
817         Dicksonia         sellowiana         2005 - KB         5 (5)         ML         10         Syn: Dicksonia gigantea           819         Dicksonia         squarrosa         2010 - TR         7 (7)         VL         10         "South Island, NZ"           820         Dicksonia         thyrsopteroides         2010 - TR         13 (13)         L         10?           821         Dicksonia         youngiae         2012 - RW         19 (19)         VL         10           827         Didymochlaena         truncatula         2006 - DE         2 (2)         M         11?           844         Diplazium         l'herminieri         2005 - BA         1 (1)         VL         11?         Wild collected in Puerto Rico.           845         Diplazium         lonchophyllum         2010 - BB         1 (1)         M         9         Few spores/packet.           2006         Diplazium         maximum         2012 - BH         6 (6)         L          Syn: Athyrium pycnocarpon           423         Diplazium         sp. 1 Nanning China         2012 - BA         5 (5)          Hardy to at least 40F.           859         Diplazium         subsinuatum         2012 - BA									•
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423 Diplazium sp. 1 Nanning China 2012 - BA 5 (5) Hardy to at least 40F. 859 Diplazium subsinuatum 2012 - BA 15 (21) SM 810 Syn: Athyrium dubium, D. lanceum		•						49	•
859 Diplazium subsinuatum 2012 - BA 15 (21) SM 810 Syn: Athyrium dubium, D. lanceum				ina					
							SM	810	•
						12 (12)			•

Order Num	Genus	species	variant	Most rent dt - donor	Packets rcnt (tot)	Fr SZ	USDA Zone	Notes
887	Doryopteris	palmata		2010 - BA	8 (8)	S	9	Syn: Doryopteris pedata var. palmata
889	Doryopteris	pilosa		2007 - DE	5 (5)	S	1111	Doryopteris cordata in horticulture.
896	Drynaria	sparsisora		2012 - BA	8 (8)	L	11?	
900	Dryopteris	affinis		2012 - BA	24 (24)	L	48	Syn: Dryopteris abbreviata, D. pseudomas
913	Dryopteris	affinis	Crispa Gracilis	2012 - BA	15 (17)	S	4	
933	Dryopteris	affinis	Stableri Crisped	2010 - BA	20 (20)	L	4	
940	Dryopteris	arguta		2009 - DY	8 (18)	М	89	
947	Dryopteris	bissetiana		2006 - BJH	10 (10)	М	58	Syn: Dryopteris setosa
928	Dryopteris	borreri	Polydactyla Dadds	2012 - BH	2 (2)	L	4?8?	D. affinis ssp. borreri 'P Dadds'. Few spores.
	Dryopteris	carthusiana	, ,	2012 - JK	30 (30)	М	27	Syn: Dryopteris spinulosa
	Dryopteris	championii		2012 - BA	15 (15)	М	58	origin: Nanjing China.
	Dryopteris	clintoniana		2011 - RC	1 (1)	М	38	D. goldiana x D. cristata
	Dryopteris	corleyi		2012 - BA	30 (48)	M	8	D. aemula x D. oreades
	Dryopteris	crassirhizoma		2010 - DE	3 (11)	L	58	B. dollidia X B. croddoo
	Dryopteris	cristata		2012 - JK	30 (80)	M	39	Wild collected in Beaumont, Ohio.
	Dryopteris	erythrosora		2010 - BJH	1 (1)	M	69	vviid conceted in Beddinont, offic.
	Dryopteris	erythrosora	red form	2007 - BJH	4 (4)	M	6	"Japan"
	Dryopteris	filix-mas	ieu ioiiii	2012 - BA	40 (40)	L	48	Заран
		filix-mas	Christiana Cristata	2012 - BA 2012 - BA			4?	
	Dryopteris		Fluctuosa Cristata	2012 - BA 2012 - BH	7 (7)	SM		Carramana nan nashat
	Dryopteris	filix-mas	Incisa Cristata		1 (1)		4?	Few spores per packet.
	Dryopteris	filix-mas	Linearis Polydactyla		19 (19)	L	4	
	Dryopteris	formosana		2010 - BA	12 (20)	M	69	
	Dryopteris	fuscipes		2006 - BJH	10 (10)	М	711	
	Dryopteris	fusco-atra		2005 - BA	5 (5)	M		Hardy to at least 20F.
	Dryopteris	goldiana		2012 - JK	12 (22)	L	38	
	Dryopteris	hawaiiensis		2010 - DE	19 (39)	ML	8?	
1053	Dryopteris	intermedia		2012 - JK	30 (30)	M	38	Syn: D. spinulosa var. intermedia
1064	Dryopteris	marginalis		2012 - JK	30 (55)	M	38	
1069	Dryopteris	munchii		2009 - BJH	1 (9)	M	711	
1076	Dryopteris	pacifica		2012 - BA	40 (40)	M	6	
1085	Dryopteris	purpurella		2009 - BA	6 (27)	SM	59	Syn: D. erythrosora var. purpurascens
1087	Dryopteris	ramosa		2012 - BA	18 (18)	L	6	
-	Dryopteris	sieboldii		2011 - BA	19 (19)	SM	79	
-	Dryopteris	sp. 3 Nanjing Chin	a	2012 - BA	24 (24)	М		Hardy to at least 18F.
	Dryopteris	sp. 4 Zijin Mtn. Chi		2012 - BA	9 (9)	М		Hardy to at least 18F.
	Dryopteris	sp. 5 Kunming Chi		2012 - BA	24 (24)	М		Maybe D. sublacera. Hardy <= 18F.
	Dryopteris	stenolepis?		2012 - BA	19 (19)	L	8	, 20 2. 000.000.00.
	Dryopteris	subarborea		2011 - DY	14 (24)	VL	12?	
-	Dryopteris	tokyoensis		2012 - BA	19 (43)	ML	48	
-	Dryopteris	uniformis		2007 - BJH	25 (25)	S	58	
-	Dryopteris	wallichiana		2007 - BJH	20 (20)	L	610	Syn: D. paleacea, D. parallelogramma
	Elaphoglossum	apodum		2012 - BA	6 (6)	S	12?	Oyn. D. paiedoea, D. paialielogiamma
1131		crinitum		2012 - BA 2007 - ES	20 (46)	SM	12?	Syn: Hymenodium crinitum
1132	Elaphoglossum			2007 - ES 2006 - BJH			12?	Syn. Hymenoulum chillicum
	Elaphoglossum	decoratum			2 (2)	S	10?	
	Elaphoglossum	metallicum		2011 - DY	10 (10)	S		
1141	Elaphoglossum	nigrescens		2010 - DY	3 (3)	SM	11?	
	Elaphoglossum	paleaceum		2011 - DY	3 (3)	SM		Ours Deltantaria III I
	Elaphoglossum	peltatum	9	2007 - DY	1 (1)	VS	11?	Syn: Peltapteris peltata
1152	Elaphoglossum	sp. blue from Braz	II	2006 - PB	4 (4)			
	Gymnocarpium	jessoense		2012 - BA	5 (11)	S	3	
	Hemidictyum	marginatum		2007 - BA	4 (4)	VL	12?	
	Lastreopsis	effusa		2007 - BJH	20 (20)	М	11?	
1212	Lecanopteris	sinuosa		2009 - BA	5 (11)	S	11?	Syn: Myrmecopteris sinuosa
	<u> </u>							
	Lemmaphyllum	microphyllum		2010 - BB 2010 - BB	1 (1)	VS	9 11?	Few spores per packet.

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Order Num	Genus	species	variant	Most rent dt - donor	Packets rcnt (tot)	Fr SZ	USDA Zone	Notes
1245	Lophosoria	quadripinnata		2011 - DY	10 (10)	VL	9	
1263	Lygodium	japonicum		2010 - DE	2 (9)	VL	710	
1271	Macrothelypteris	torresiana		2007 - BJH	20 (20)	L	810	Syn: Thelypteris torresiana, T. uliginosa
1283	Matteuccia	struthiopteris		2011 - RC	5 (5)	VL	28	Syn: M. pensylvanica, Pteritis nodulosa
1288	Microgramma	lycopodioides		2012 - BA	9 (9)	S	10	
1290	Microgramma	percussa		2012 - BA	10 (14)	S	10	Syn: Pleopeltis percussa
1295	Microlepia	marginata		2012 - BA	10 (14)	SM	9?	
1296	Microlepia	platyphylla		2007 - BJH	10 (30)	L	9	
1298	Microlepia	speluncae		2006 - BJH	3 (3)	ML	10	Wild collected in Hilo Hawaii.
1306	Microsorum	fortunei		2009 - BA	2 (4)	М	911	Syn: Polypodium normale
1310	Microsorum	lucidum		2012 - BA	40 (40)	SM	9	Phymatosorus cuspidatus
1313	Microsorum	membranifolium		2010 - BA	8 (8)	M	11?	Syn: M. alternifolium, Phymatosorus nigrescens
1324	Microsorum	pustulatum		2012 - BA	10 (20)	SM	9	Syn: Microsorum diversifolium
1325	Microsorum	scandens		2008 - DE	8 (8)	SM	10	Oyn. Microsorum arvorononum
1327	Microsorum	scolopendria		2010 - BB	1 (1)	M	11	Syn: Polypodium scolopendrium.Few spores.
1330	Microsorum	thailandicum		2010 - BB	3 (3)	S	12?	Few spores per packet.
1332	Microsorum	vieillardii		2012 - BA	9 (23)	<u> </u>	12?	Syn: Phymatodes viellardii
1338				2012 - BA 2006 - BJH	30 (30)	M	10?	Syn: Microsorum palmatopedatum
1383	Neocheiropteris	palmatopedata	nino		. ,			· · · · · · · · · · · · · · · · · · ·
	Onychium	sp. 1 Kunming Ch		2012 - BA	20 (20)	L	100	Hardy to at least 22F.
1413	Pecluma	sp. 1 Puerto Rico	l	2012 - BA	4 (4)	M	12?	Probably Pecluma pectinata.
1418	Pellaea	cordifolia		2006 - BJH	5 (5)	SM	811	Syn: Pellaea cordata, P. sagittata v. cordata
1429	Pellaea	ovata		2012 - BA	15 (25)	M	810	
1432	Pellaea	rotundifolia		2012 - BA	6 (6)	S	811	
1438	Pellaea	viridis		2010 - LR	19 (19)	SM	10	Syn: Cheilanthes viridis, Pellaea hastata
1441	Pellaea	wrightiana		2012 - BA	2 (6)	SM	79	P. truncata x P. ternifolia
1452	Phlebodium	aureum		2010 - HM	5 (12)	L	9	Syn: Polypodium aureum var. aureum
1455	Phlebodium	aureum	Ekstrand	2010 - HM	10 (20)	L	9?	
1458	Phlebodium	aureum	Mexican Tasseled	2010 - HM	5 (5)	M	9?	
1459	Phlebodium	decumanum		2010 - HM	5 (5)	L	10	Syn: Polypodium decumanum
1463	Phyllitis	scolopendrium		2012 - BA	12 (12)	M	410	Syn: Asplenium scolopendrium
1481	Phyllitis	scolopendrium	Kaye's Lacerate	2010 - BA	10 (17)	S	4?	
1482	Phyllitis	scolopendrium	Laceratum	2012 - BA	7 (7)	S	4?	
1498	Pityrogramma	calomelanos		2008 - MF	6 (6)	SM	10	
1511	Platycerium	bifurcatum		2010 - BA	11 (11)	M	10	
1515	Platycerium	bifurcatum	Gresham	2010 - HM	19 (29)	M	10?	
1518	Platycerium	bifurcatum	Majus	2010 - HM	29 (29)	M	10?	
1525	Platycerium	'Celebes'		2010 - HM	29 (29)	SM	10?	
1526	Platycerium	coronarium		2009 - ?	7 (9)	L	12?	Syn: Platycerium biforme
1527	Platycerium	elephantotis		2011 - DC	8 (8)	ML	12?	Syn: Platycerium angolense
1528	Platycerium	ellisii		2006 - CT	5 (5)	M	12?	Syn: Platycerium diversifolium
1529	Platycerium	grande		2011 - DC	7 (7)	VL	12?	
1531	Platycerium	hillii†	Bahia	2006 - DE2	5 (29)			Probably P. hillii 'Bahia'.
1537	Platycerium	ridleyi		2011 - DC	9 (9)	М	13?	Syn: Platycerium coronarium var. cucullatum
1540	Platycerium	superbum		2010 - SMD	28 (33)	VL	10	Syn: Platycerium grande var. tambourinense
1543	Platycerium	veitchii		2009 - DE	7 (7)	SM	10	Syn: Platycerium bifurcatum var. veitchii
1544	Platycerium	wallichii		2009 - ?	2 (2)	М	11?	Wild collected in Thailand.
1545	Platycerium	wandae		2011 - DC	8 (8)	VL	12?	
1546	Platycerium	willinckii		2010 - HM	19 (19)	L	10?	Syn: P. bifurcatum willinckii, P. sumbawense
1548	Platycerium	willinckii	Pygmaeum	2010 - HM	34 (34)	SM	10?	Cyn. 1 . bildi Cataini Willin Ckii, 1 . Sumbawense
1551	Pleocnemia	macrodonta	i yyiiiaeuiii	2010 - HIM 2007 - BJH	30 (30)		13?	
1552						SM	10?	Few spores per packet.
	Pleopeltis	angustata		2010 - BB	1 (1)			i ew spoies pei packet.
1559	Pneumatopteris	pennigera		2006 - ST	15 (15)	L	9?	
1567	Polypodium	californicum		2009 - DY	7 (7)	SM	89	Cura Dalumadium unterara cara a catalantata
1590	Polypodium	glycyrrhiza	One medition and	2011 - CY	6 (6)	SM	6	Syn: Polypodium vulgare var. occidentale
1591	Polypodium	glycyrrhiza	Grandiceps	2011 - DE	6 (6)	SM	6?	

Order Num	Genus	species	variant	Most rcnt dt - donor	Packets rcnt (tot)	Fr SZ	USDA Zone	Notes
1592	Polypodium	hesperium		2012 - BA	10 (21)	S	4	P. amorphum x P. glycyrrhiza
1603	Polypodium	pellucidum	pellucidum	2009 - BA	7 (7)	SM	9?	
1615	Polypodium	scouleri		2012 - BA	25 (31)	SM	89	
1618	Polypodium	squamatum		2012 - BA	12 (12)	М	10?	Syn: Pleopeltis squamata
1620	Polypodium	virginianum		2009 - ?	4 (4)	S	28	Wild collected in Canaan Township, Ohio.
1632	Polystichum	acrostichoides		2012 - JK	25 (45)	М	39	
1642	Polystichum	andersonii		2012 - BA	25 (25)	ML	68	
1658	Polystichum	imbricans	imbricans	2010 - BA	11 (11)	SM	5?	Collected in S. Oregon at 7000 ft.
1663	Polystichum	Ionchitis		2010 - BA	3 (9)	М	38	
1669	Polystichum	microchlamys		2005 - DW	20 (20)	М	6?	
1672	Polystichum	munitum		2012 - BA	40 (70)	ML	79	
1676	Polystichum	neolobatum		2012 - BA	40 (40)	М	68	
1678	Polystichum	plicatum		2005 - SF	10 (10)	SM	7?	Wild collected in Chile.
1689	Polystichum	rigens		2012 - BA	19 (36)	М	58	
1690	Polystichum	scopulinum		2010 - BA	11 (11)	SM	48	P. lemmonii x P. imbricans. Wild OR 7K ft.
1706	Polystichum	setiferum	Divisilobum	2012 - BA	20 (20)	ML	6	
1742	Polystichum	tetragonum		2005 - DY	5 (5)	ML	10?	
1773	Pteris	argyraea		2010 - LR	4 (4)	M	9	Syn: Pteris quadriaurita var. argentea
2005	Pteris	aspericaulis		2012 - BA	4 (4)			oy tono quadriadina van di gonton
1787	Pteris	cretica	Parkeri	2005 - BA	3 (3)	М	8?	
1796	Pteris	ensiformis	ranon	2009 - BJH	12 (12)	SM	910	
1798	Pteris	ensiformis	Victoriae	2010 - LR	5 (5)	SM	9?	
1800	Pteris	fauriei	Violonido	2006 - BJH	2 (42)	SM	9	
1802	Pteris	gallinopes		2012 - BA	10 (25)	SM		Hardy to at least 18F.
2008	Pteris	scabririgens		2012 - BH	5 (5)	M	10?	Few spores per packet.
1820	Pteris	semipinnata		2005 - BA	5 (5)	M	8	1 on opered per pasies.
1821	Pteris	sp. 1		2012 - BA	12 (12)	M		
1823	Pteris	tremula		2010 - DY	10 (10)	L	811	
1824	Pteris	tricolor		2010 - BB	1 (1)	M	11?	Syn: P. aspericaulis var. tricolor. Few spores.
1827	Pteris	vittata		2005 - KB	10 (10)	M	8	Cyn. 1 : doponoddio vai: arcoloi: 1 cw cporod.
1830	Pteris	vittata	Macrophylla	2005 - KB	2 (2)	141	8	
1831	Pteris	wallichiana	Madrophyna	2012 - BH	8 (14)	VL	9	
1842	Pyrrosia	lingua		2012 - BA	15 (15)	S	710	Origin: Hong Kong
1846	Pyrrosia	piloselloides		2010 - BA	6 (6)	VS	11?	Syn: Drymoglossum piloselloides. Few spores.
1847	Pyrrosia	polydactyla		2007 - BA	5 (5)	S	810	Cyn. Drymoglossum phoseholdes. I ew spores.
1852	Pyrrosia	stigmosa		2010 - BB	1 (1)	M		Few spores per packet.
1853	Pyrrosia	subfurfuracea?		2010 - BB	20 (47)	VL		Maybe P. calvata. Hardy to at least 30F.
1856	Rumohra	adiantiformis		2012 - BA	6 (6)	M	810	Syn: Polystichum adiantiforme. Wild, Chile.
1857	Sadleria	cyatheoides		2010 - DY	7 (7)	VL	9	Syn. 1 Gysticham adiantiforme. Wild, Offile.
1862	Schaffneria	nigripes		2010 - B1	3 (3)	S	13?	Syn: Asplenium nigripes. Few spores/pkt.
1872	Selliguea	feei		2006 - DE	1 (1)	S	9?	Syn. Aspienium nigripes. i ew spores/pkt.
1873	Selliguea	hastata		2012 - BA	5 (5)	SM	10	Syn: Crypsinus hastatus
1876	Serpocaulon	dissimile		2012 - BA	12 (24)	ML	12?	Syn: Polypodium dissimile
1880	Serpocaulon	"sp. 1 Porto-Aleg	ro Br"	2012 - BA	15 (15)	M	10	Syn. i diypodidiri dissiriile
1881	Solanopteris	brunei	ie, Di.	2012 - BA	1 (2)	S	11?	Few spores per packet.
1894	Stenochlaena	tenuifolia		2012 - BA 2010 - BJH	30 (30)	 M	9	i ew spores per packer.
2007	Sticherus	sp. 1 India		2010 - B311 2012 - BH	2 (2)	IVI		Very few spores per packet.
1909	Tectaria	coadunata		2012 - BH	2 (2)		10?	Few spores per packet.
1916				2012 - BH		S		
1924	Tectaria	hilocarpa		2007 - BA 2007 - NT	1 (3)	3	13?	Syn: Hemigramma latifolia
	Tectaria	sp. 1			1 (1)	1	12?	
1926	Tectaria	trifoliata		2012 - BA	15 (28)	L		Sup: Quaraifilis zoulonica
1927	Tectaria	zeylanica		2012 - BA	15 (42)	S	9	Syn: Quercifilix zeylanica
1934	Thelypteris	cheilanthoides		2012 - BA	6 (6)	L M		Amauropelta cheilanthoides
1937	Thelypteris	dentata		2010 - BB	2 (2)	M	8	Syn: Christella dentata, Cyclosorus dentatus
1940	Thelypteris	guadalupensis		2007 - BA	6 (6)	SM	12?	Syn: Cyclosorus guadalupensis

Page 38 ♦ Fiddlehead Forum ♦ Sept.- Dec. 2012

Order Num	Genus	species	variant	Most rent dt - donor	Packets rcnt (tot)	Fr SZ	USDA Zone	Notes
1943	Thelypteris	kunthii		2009 - BA	6 (6)	ML	710	Syn: Christella normalis
1944	Thelypteris	limbosperma		2005 - BA	2 (2)	ML	59	Syn: Oreopteris limbosperma
1949	Thelypteris	palustris		2005 - KB	3 (3)	M	310	
1957	Thelypteris	pennata		2012 - BA	10 (10)	ML	12?	Syn: Goniopteris pennata
1960	Thelypteris	puberula	sonorensis	2007 - BJH	15 (15)	L	8	
1964	Thelypteris	reticulata		2008 - ?	20 (20)	ML	10	Syn: Meniscium reticulatum
1965	Thelypteris	rheophyta?		2012 - BA	8 (12)	SM	12?	Syn: Amauropelta rheophyta
1968	Thelypteris	simulata		2011 - RC	2 (2)	М	46	Syn: Parathelypteris simulata
1978	Vittaria	lineata		2012 - BA	11 (17)	L	1011	Few spores per packet.
1993	Woodsia	pseudopolysticho	oides	2012 - BA	20 (42)	S	4	
1996	Woodwardia	areolata		2005 - KB	2 (2)	М	39	Syn: Lorinseria areolata
2001	Woodwardia	x†semicordata		2010 - BJH	8 (48)	L	9	W. martinezii x W. spinulosa
2003	Woodwardia	unigemmata		2009 - BJH	9 (9)	ML	811	

# Monograph of Moranopteris (Polypodiaceae) submitted by George Yatskievych

Now Available! After a long hiatus, the Society's series of longer monographs has a brand new volume in print:

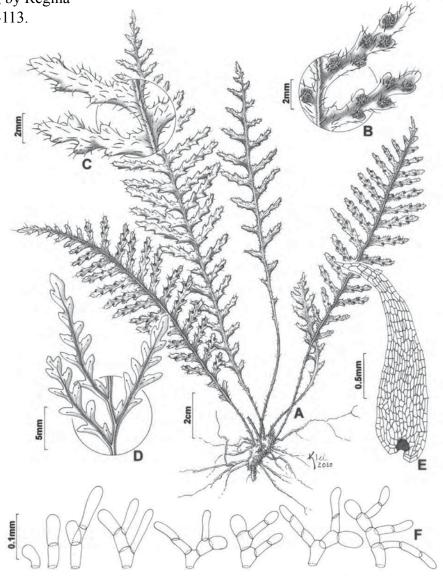
Monograph of Moranopteris (Polypodiaceae), by Regina Y. Hirai and Jefferson Prado. Pteridologia 4: 1-113. 2012.

Moranopteris (which honors our longtime member, Robbin Moran) is a segregate of the widespread *Grammitis* alliance that was officially named by the authors in 2011. The 29 species are found throughout the Neotropics. The new monograph is beautifully illustrated with line drawings and distribution maps, as well as an introductory section with several black and white photographs.

Those interested may order copies from the Society's authorized agent,

Missouri Botanical Garden Press P.O. Box 299 St. Louis, MO 63166-0299 tel. 314-577-9534 or 877-271-1930 (toll free) online www.mbgpress.info.

Per-copy cost is \$28.00 plus shipping, but AFS members should let the Press know that they are members to receive a 10% discount.



### Treasurer's Report for 2011

March 5, 2012

TREASURER'S REPORT FOR 2011

TO: A.F.S. COUNCIL AND OTHER MEMBERS OF THE SOCIETY

Ladies and Gentlemen:

I have the pleasure of presenting to you a report on the financial condition of the American Fern Society, Inc., for the year 2011.

Current receipts amounted to \$48,486.66. With \$9,404.59 in my checking account and \$1,971.34 in the Membership Secretary's savings account at the beginning of the year, the grand total of receipts was \$59,862.59. Receipts from the dues category amounted to \$17,620.15. This figure includes dues received by the Membership Secretary from the British Pteridological Society and dues received by the Treasurer from BSA by online transactions. The Membership Secretary received two life memberships this year. Gifts were about one-half the amount received last year. The society received no bequests and no net income from the Spore Exchange. Sales of back issues/volumes were much higher this year than last, and sales of Pteridologia were about double those of last year. Receipts for page charges were about the same as for last year, but interest earned from checking and savings bank accounts were slightly lower this year than last year's amounts. Revenue from Bio One, JSTOR, and the Copyright Clearance Center was slightly higher this year than last. The society received only about one-half of meeting revenue share this year than last. The amount received represents the positive difference between AFS income minus expenses incurred at Botany 2011. A statement on the financial status of the several accounts accompanies the Treasurer's Report along with a statement of assets and liabilities. Overall, the receipts for 2011 were about \$1,000.00 more than the receipts for last year. This slight increase may to be a reflection of a slight upturn in the national economy during the latter quarter of 2011.

Current disbursements amounted to \$53,256.81. With \$4,068.31 in the Treasurer's checking account and \$2,537.47 in the Membership Secretary's savings account at the end of the year, the grand total of \$59,862.59 balances with the grand total of receipts. Journal and bulletin printing costs were about the same as last year's figures due to no significant increase in printing and mailing costs. The journal and bulletin editors continue to do an excellent job in keeping expenses to a minimum, and the journal editors in encouraging the payment of page charges by publication authors. Other Council members' expenses were in the expected range as were other expenses. I am pleased to report to you that the society is in a sound financial condition, but there was not enough money left over in the treasury at the end of the year to add funds to the savings certificates.

I wish to thank the Membership Secretary, Dr. George Yatskievych; the Journal Editor-in-Chief, Dr. Jennifer Geiger; the Managing Editor, Dr. Jill Dill; the Bulletin Editors, Drs. Joan Hudson and David Schwarz; and the Publications Curator, Dr. James D. Montgomery, for their help in keeping the society treasury accurate.

Respectfully submitted,

James D. Caponetti Treasurer

## Treasurer's Report for 2011

REC	CEIPTS	
Cash on hand, January 1, 2011		
Treasurer	\$9,404.59	
Membership Secretary	\$1,971.34	
TOTAL		\$11,375.93
Current Year's Dues Received by Member- ship Secretary Directly	\$9,250.00	
Current Year's Dues Received by Treasurer from BSA by Online Transactions	\$6,340.75	
Prepayments for Future Years	\$25.00	
Current Year's Overpayments	\$24.65	
Life Memberships	\$600.00	
Gifts to the Society	\$1,251.00	
British Pteridological Society Dues	\$1,379.75	
Spore Exchange, Net	\$0	
Sales of Back Issues of the Journal Treasurer - \$304.00 Memb. Sect \$43.00	\$347.00	
Sales of Pteridologia	\$537.60	
Savings Interest from Memb. Secretary Bank	\$3.73	
Checking Interest from Treasurer's Bank	\$7.16	
Page Charges	\$1,650.88	
Funds Received by Treasurer from Membership Secretary	\$12,000.00	
Bio One Revenue Sharing	\$10,193.00	
JSTOR Publisher Pool Payment	\$3,800.25	
JSTOR Sales Service Revenue	\$52.00	
Copyright Clearance Center Royalty Payment	\$359.25	
BSA Botany 2011 Meeting Revenue Sharing	\$664.64	
Outreach Fund Contributions	\$0	
2011 Checks Outstanding	\$0	
CURRENT RECEIPTS		\$48,486.66
GRAND TOTAL		\$59,862.59

D	ISBURSEMI	ENTS	-
American Fern Journal (A	Allen Press)		
Vol. 100, No. 3	\$3,919.40		
Vol. 100, No. 4	\$4,285.56		
Vol. 101, No. 1	\$4,394.08		
Vol. 101, No. 2	\$5,164.11		
Vol. 101, No. 3	\$5,059.61		
TOTAL	90,000.01	\$22,822.76	
Fiddlehead Forum Printin	ng (S H U Press)	7 7	1
Vol. 37, No. 5	\$1,721.92		
Vol. 38, No. 1	\$1,200.44		
Vol. 38, No. 2	\$1,274.57		
Vol. 38, No. 3	\$1,150.30		
Vol. 38, No. 4	\$1,677.54		
TOTAL	4-,0,,,,	\$7,024.77	
Treasurer's Expenses		\$214.00	
Blanket Fidelity Bond		\$187.00	
Membership Secretary's	Office	\$868.28	
Expenses for AFS		******	
Membership Secretary's C Expenses for Pteridologia	\$0		
President's Expenses	\$0		
President-Elect's Expense	\$0		
Secretary's Expenses	\$0		
Publications Curator's Ex	\$21.73		
Journal Editor-in-Chief's	\$4,000.00		
Journal Managing Editor'	\$2,000.00		
Web Server Maintenance		\$0	
Domain Name Renewal		\$0	
Webmaster's Expenses		\$0	
Bulletin Editor's Expense	es	\$0	
Fern Foray Expenses		\$150.00	
A.I.B.S. Dues		\$200.00	
Refunds to Agencies and	Members	\$33.00	
British Pteridological Soc	ciety Dues	\$2,889.27	
Addition to CD in First T	enn. Bank	\$0	
Addition to CD in Home	Federal Bank	\$0	
Funds Transferred from C Savings	Checking to	\$0	
Funds Transferred from S Checking	Savings to	\$0	
Botany 2011 Student Tra	vel Awards	\$800.00	
Botany 2011 Symposium		\$0	
Botany 2011 Conference	\$0		
Outreach Coordinator's E		\$0	
Funds Transferred to Trea Membership Secretary	*	\$12,000.00	
Bank Charges			
Treasurer	\$35.00		
Membership Sec.	\$11.00		
	Ψ11.00	\$46.00	

Bad Checks	\$0	
CURRENT DISBURSEMENTS		\$53,256.81
Cash on Hand, January 1, 2012		
Treasurer		\$4,068.31
Membership Secretary		\$2,537.47
GRAND TOTAL		\$59,862.59

STATEMENT OF AFS ASSETS AND LIABILITIES AS OF DECEMBER 31, 2011								
Assets								
Cash in Treasurer's Checking Account		\$4,068.31						
Cash in Membership Secretary's Saving	gs Account	\$2,537.47						
Cash in Treasurer's Savings Account		\$10,613.80						
Savings Certificate in First Tennessee I	Bank	\$30,000.00						
Savings Certificate in Home Federal Ba	ank	\$56,967.40						
Journal Inventory		\$19,079.50						
TOTAL		\$123,266.48						
Liabilit	ies							
Prepayments for Future Years	\$25.00							
Current Year's Overpayments	\$24.65							
Savings Certificates	\$86,967.40							
General Fund	\$36,249.43							
TOTAL	\$123,266.48							
STATEMENT OF AFS I BALANCE OF FUNDS AS 2011, AND INTEREST EA	OF DECEM	BER 31,						
BANK ACCOUNTS	BALANCE OF FUNDS	INTEREST EARNED						
Membership Secretary's Savings Account in Commerce Bank	\$2,537.47	\$3.73						
Treasurer's Savings Account in First Tennessee Bank	\$10,613.80	\$5.26						
Treasurer's Checking Account in First Tennessee Bank	\$4,068.31	\$7.16						
Treasurer's Savings Certificate in First Tennessee Bank	\$30,000.00	\$90.00						
Treasurer's Savings Certificate in Home Federal Bank	\$56,967.40	\$348.27						
TOTALS	\$104,186.98	\$454.42						

## **Auditor Report**

March 5, 2012

I hereby certify that I have seen the books and accounts of James D. Caponetti, Treasurer of the American Fern Society, Inc., and have obtained confirmation of the correctness of the Society's balance on hand as set forth in detail in the accompanying report of the Treasurer.

Broker, G.R.I. Nathan E. Way

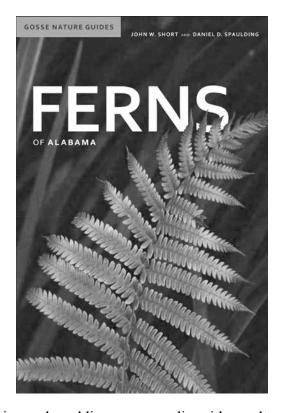
# Ferns of Alabama — Book Review submitted by George Yatskievych

Ferns of Alabama, by John W. Short and Daniel D. Spaulding. 2012. xiv, 368 pp., 391 photos and drawings. University of Alabama Press, Tuscaloosa. ISBN 978-0-8173-5647-7, paperbound. \$39.95.

When we think of states with high pteridophyte diversity, places like Florida and California come to mind. Yet, this attractive new guide includes more than 120 species of ferns and lycophytes! Sturdily bound with heavy paper covers, the latest contribution to the Gosse Nature Guides series is a collaboration between two of the most knowledgeable botanists on the state's fern flora. The book is nicely laid out, although the design is relatively lavish, with lots of empty white-space on the pages. This results in a larger, heavier book than some might wish for in a field guide.

For those unfamiliar with Alabama, the introductory material provides a nice summary of the geology, geography, and biogeography of Alabama ferns. The treatments of the species include brief descriptions, summaries of habitats and ranges, and useful natural history comments, as well as common names and major nomenclatural synonyms. Colored maps at the county level amplify the range summaries and the authors state that all occurrences are based on herbarium specimens examined by them. Several photographers and artists contributed to the illustrations of all of the species. Although most of the photographs are clear and informative, a few are printed rather darkly. Especially useful among the beautiful line drawings are the diagrams illustrating branching patterns and leaf arrangements in some of the lycopods. Where photos from the field were insufficient or unavailable, images of pressed specimens have been used.

Two things that may confuse neophytes are the nomenclature of species and the arrangement of genera, which follow those in the much-outdated system used in David Lellinger's out-of-print 1985 book, A Field Manual of the Ferns and Fern-Allies of the United States and Canada. This requires some mental adjustment for the user, as the names in some groups have been updated for so long that the older names are no longer widely used. Also, botanists have discovered much about the relationships among fern families, and the continued grouping of such things as the climbing ferns (Lygodium) and the maidenhair ferns (Adiantum) is misleading. The authors attempt to mitigate some of



these issues by adding an appendix with an alternative set of identification keys and names excerpted from the 1993 Flora of North America pteridophyte volume (itself now somewhat dated). Thus, users potentially have to run a plant through two different sets of keys, one to figure out where the species is described in the main text and a second to figure out what name the Flora of North America Project used for the plant. The user has to hope that an unknown plant keys to the same species in the less technical first key and the more technical second one. A better approach would have been to use the name considered most correct by the authors and to discuss alternative taxonomies and nomenclature under each species entry, or to adopt a more modern classification as a standard. In a few cases, the dependence on Lellinger's nomenclature results in the proliferation of errors. For example, the name Azolla caroliniana has been shown to be misapplied and technically a synonym of the western A. filiculoides, and the oldest valid scientific name for the eastern mosquito fern appears to be A. cristata.

Nevertheless, the first comprehensive account of Alabama's pteridoflora in more than 40 years is still a very useful and well-researched volume. Those who like to explore and botanize in the state's wild areas will find it to be an indispensible addition to their bookshelves.

## American Fern Society Spore Exchange

### Mail-in Order Form for AFS members

This form is for USA orders only. For international order, please contact Brian Aikins, spores.afs@comcast.net.

Your Name:			comcast.net.					
Date:								
Email Address (op Your email address wi	tional):_ ll only be used for corre	spondence related to th	is order. It will never be	published or shared.				
List spore requests	by order number:							
		<u> </u>	<u>I</u>					
In case some of yo	ur requests are no lo	onger available, plea	ase list alternates in	preference order (le	eft to right):			

**Include:** 1. This completed order form.

- 2. A self-addressed stamped envelope (SASE) to send back requested spore packets. Please use a #6 small(35/8 x 6½ inch) or #10 standard (4 x 9½ inch) business envelope with no markings such as "fragile" or "live material." A one ounce stamp (currently 45 cents) is enough to send up to 35 packets.
- 3. 50 cents for each fern requested. In lieu of postage, add appropriate amount to payment. Make check payable to Brian Aikins or send cash at your own risk.
- **4.** [Optional] Spore donation(s). When collecting spores, Please follow the guidelines on page 31 or the AFS spore collecting page (amerfernsoc. org/sporcoll.html).

Send to:

Brian Aikins 3523 Federal Ave. Everett WA, 98201-4647 Please include any questions, comments or suggestions on this form or send email to spores.afs@comcast.net.



# Excellent Powerpoint presentations on spore collecting and growing

A program has been prepared by the late Barbara Joe Hoshizaki and Wendy A. Born concerning spore propagation of ferns. If you would like to improve your success rate, this is for you. It is available at no charge as a PowerPoint presentation on a CD for Windows or Mac.

Also available is the presentation, Collecting Fern Spores. Also no charge. Send your postal address to Tom Stuart, coordinator@hardyfernlibrary.com. U.S. mail address on page 30.

### Renew your membership today!

We would like to thank all American Fern Society members for their contributions to the Fiddlehead Forum in 2012 and send out a request for members to submit articles for inclusion in the Fiddlehead Forum in 2013. We need your submissions! No article is too large or too small!

## Happy New Year!